

THE INFLUENCE OF FEMALE ATTRACTIVENESS ON COMPETITOR DEROGATION

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Abstract. Female competitor derogation has been found to involve evaluations of facial attractiveness, such that women are more likely to derogate other women when they are most fertile (FISHER 2004). However, the ultimate purpose of this derogation remains unknown. In this article, we explore the possibility that women's derogations of rivals will influence potential mates, such that derogatory comments cause men to lower their attractiveness judgments of the rivals. Moreover, given that attractive women should be more preferred as mates by men, we investigate how a woman's facial attractiveness can affect her ability to influence men's perceptions. Our results indicate that the type of statements one makes significantly influences ratings of attractiveness, and that derogations by an attractive woman are more effective in their ability to influence men's evaluations of female facial attractiveness than are derogations by an unattractive woman. These effects do not hold for women, who are not significantly swayed by the attractiveness of the derogator. Several directions for future research are presented.

Keywords: intrasexual competition, facial attractiveness, mating, interpersonal relationships

Among humans, competition can be thought of as a rivalry between two or more individuals (BURBANK 1994), such that they pursue the same resource that is perceived to be insufficient in quantity. It is not necessary for the involved parties to be conscious of the rivalry or know the identity of their competitors; however, they must be actively behaving in a manner that draws them closer to attaining the wanted resource (HRDY 1999).

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Competition between members of the same sex (i.e., intrasexual competition) occurs when people use various strategies to compete for access to mates. These strategies may be overt, such as physically fighting or loudly arguing with a known rival, or they may be subtle, such as exercising to improve one's physical fitness or having one's hair styled. These less obvious activities can still be viewed as competitive strategies because their purpose is to assist one in winning a competition to obtain a resource, such as a highly valued mate. While overt activities are generally directed against a known rival, and thus are often viewed as instances of direct aggression, these less aggressive and subtler activities can be used against unknown rivals.

With respect to competition for mating access, two strategies have been explored in past research: competitor derogation and self-promotion. Competitor derogation refers to any act that is performed for the purposes of decreasing, relative to oneself, a rival's value, as a potential mate (BUSS and DEDDEN 1990). Alternatively, self-promotion refers to any act that is used to enhance the positive qualities of oneself, and hence, increase one's mate value, relative to same-sex others (BUSS 1988). Furthermore, competitor derogation and self-promotion are focused on the characteristics that are most preferred by the opposite sex, such as attractiveness for human females and the ownership of resources for human males (e.g., SCHMITT and BUSS 1996).

In the context of mating, intrasexual competition is likely to be beneficial for gathering the resources that are needed for reproduction and the care of any resulting offspring. For example, in some polygynous societies, co-wives intrasexually compete for food and money, paternal care for their children, and for their children's inheritance (BURBANK 1987). Thus, men who are good providers and possess the physical ability to serve as protectors are a resource for which women may intrasexually compete. However, it must not be inferred that only women are selective about prospective mates; in humans both sexes invest gametes, resources, and parental care and thus, both sexes must be discriminating in the choice of mates (TRIVERS 1972; WILLIAMS 1966).

Of the two strategies, self-promotion is more frequently performed (SCHMITT and BUSS 1996) presumably for three reasons. First, self-promotion does not require knowing the identity of rivals, and hence, it can be performed in almost any situation. For example, one merely needs to improve how they are dressed to use self-promotion, whereas one would need to modify how a rival is dressed or devalue the rival's appearance in some manner to perform competitor derogation. Second, self-promotion allows people to claim that they are merely interested in improving their own worth, and as a consequence, permit them to hide the fact that they are directly competing against others. American and Canadian culture is dominated by self-improvement (e.g., WHITE and LEHMAN 2005), so this explanation would likely be perceived as at least partially plausible. Third, competitor derogation may make people appear to be mean-spirited, in that they are behaving in ways that devalue others. People usually want to be seen as benevolent and kind-hearted, particularly

if they are attempting to find a mate, and hence, actions that make them seem mean or cruel should take place in only rarely occurring situations.

This issue of social desirability is problematic for studies of behavior that violate social norms, including studies where individuals are asked how they compete with others. Casual observation suggests that, in Canada, people generally attempt to appear nice and noncompetitive in their interpersonal relations (FERGUSON, HORAN and FERGUSON 1998). Past research on competitive strategy use has almost exclusively relied upon surveys, where individuals must report either their own or a close friend's competitive behavior (BUSS 1988; BUSS and DEDDEN 1990; WALTERS and CRAWFORD 1994). Due to social desirability, as well as problems in the accurate recollection of behavior, people can respond differently when they are *reporting* a specific behavior versus when they are actually *performing* the behavior. This discrepancy has been documented in various areas of psychology, including women's mate preferences. FEINGOLD (1991) conducted two meta-analyses, one based on questionnaire-based self-report preference data, and the other based on self-report preference data from experimental manipulations using confederate targets. In both instances, the meta-analysis indicated that women expressed a greater preference for men who were similar to themselves, rather than for just overall attractiveness, but men expressed a greater preference for attractiveness depending on the context. FEINGOLD (1991) suggested that, "in both paradigms, emotionally uninvolved subjects make inconsequential responses in an isolated setting. Thus, it is questionable whether results from either paradigm are at all generalizable to real-life situations in which individuals who are motivated to 'meet someone' are actively engaging in opposite-sex interactions to achieve their goal" (p. 365).

One study that did not rely upon survey data was that of FISHER (2004). Using the framework of competitor derogation, women were asked to rate the attractiveness of female and male faces, and these ratings were then compared across the ovulatory cycle. In this study, competitor derogation was operationally defined as being a decrease in facial attractiveness rating. The results showed that maximally fertile women significantly decreased their ratings of female, but not male faces, compared to women who were in less fertile stages of their ovulatory cycle. This finding was used to support the theory that maximally fertile women were derogating potential rivals when it was most critical, from a reproductive stance, to do so. Similar findings have been more recently obtained by JONES et al. (2005), who document a decrease in women's ratings for feminine female faces during ovulation. Additionally, VUKOVIC et al. (in press) found pre-menopausal women decrease attractiveness ratings of potential competitors in relation to heightened fertility, and that post-menopausal women expressed stronger preferences for feminine female faces.

In her experiment on women's use of competitor derogation FISHER (2004) relied upon facial attractiveness ratings because attractiveness is thought to be the main arena in which women compete for mates. To clarify, the mate preferences of one sex should be the commodity for competition in the opposite sex (e.g., DARWIN

1871). There is a plethora of studies that clearly indicate that internationally men consider female attractiveness as one of the most important criteria when selecting a mate (e.g., BUSS 1989). Therefore, given the importance that men place on female attractiveness, women should intrasexually compete with respect to their attractiveness.

Although an interesting result, the ultimate explanation for why women lowered their ratings has not been fully established. One possibility, as suggested by FISHER (2004), is that it reflects an increased level of critical evaluation by the women, such that they are able to more accurately evaluate potential rivals, particularly at a time when it is critical for conception. This ability to judge a rival compared to oneself could have significant ramifications for assessments of mate value, and hence competition more broadly. If so, then there are at least three explanations for why accurate perceptions of a rival are necessary. First, a woman might want to indirectly influence a potential mate by leading him to think negatively about a rival. For example, if she says, "Wow, look at her! She looks like she was hit in the face by a bag of nickels! What an ugly nose!" she might be able to cause her mate to negatively view the rival. Second, a woman might derogate a rival or view her negatively for the purposes of increasing her own self-esteem. For example, she might critically view the rival and then think, "I'm not that unattractive at all – look at her! Her nose is awful! Compared to her, I'm quite attractive." This behavior has the potential to raise her self-esteem and confidence, and consequently might propel her to take actions that lead her closer to mating. Third, a woman might be attempting to influence a rival by leading the rival to believe she should not compete, or that she will lose because she is not as attractive as the derogator. The framework of COX and FISHER (2008) more fully describes how these three explanations can occur.

In the current study, we focus exclusively on the first explanation, as it lends itself most easily to an empirical design. Therefore, our hypothesis is that women will derogate potential rivals for the purpose of negatively influencing men's evaluations of these rivals. This behavior should be evidenced by men decreasing their ratings of rival women's facial attractiveness when these women are derogated. This decrease in attractiveness will be relative with respect to initial, baseline ratings, as individuals presumably vary in the way they will be affected by the statements. Similarly, for the purposes of comparison, we also predict that when positive comments about a particular aspect of rival's face are made, men will increase their ratings of facial attractiveness. We further hypothesize that the attractiveness of the woman who performs a derogatory act matters, such that attractive women will have more influence, and their comments will have a greater effect on men's evaluations of a rival's facial attractiveness. Since men place a premium on female attractiveness when selecting mates, we suggest that men will be more affected by statements from attractive, rather than unattractive, women. Furthermore, contemporary research in social psychology indicates that attractive individuals are more socially dominant and receive more attention (e.g., social attention holding

power, GILBERT 1989; visual attention, MANER et al. 2007), and hence, they may have more sway on others.

METHODS

We used a two-prong approach, as outlined in the Stimuli section in further detail. First, in order to generate statements to be used in our experiment, we asked 15 women to look at 60 female faces and to make a positive, negative, or neutral (i.e., descriptive) statement about that face. Then, at a later date, a second, separate group of people (i.e., participants of our actual experiment) rated the attractiveness of the faces individually, performed a distracter task, and re-rated the faces again but this time with the statements attached. As will be explained, participants of our experiment were deceived, in that they were informed that the statements were made by one of the people they had already rated. This person was a woman that the participant had rated as either the least or the most attractive.

Participants

We tested 50 men, with an age, in years $M = 21.64$, $SD = 2.14$. We excluded an additional four men who self-reported a non-heterosexual orientation. Of these, 30 men were single and 20 were currently involved in a romantic relationship. Approximately 75% of the participants were Caucasian.

For the purposes of comparison, we also included a sample of 54 women (age, in years $M = 21.04$, $SD = 2.03$) from the same university. Three additional women were excluded due to a self-reported non-heterosexual orientation. Of these women, 34 women were single and 20 were currently involved in a romantic relationship.

All participants were students enrolled in an undergraduate psychology course at any year of study at a university in Atlantic (i.e., Eastern) Canada. Participants received a small course credit as remuneration for their participation.

Stimuli

In order to generate the statements that were used in the study, we first took a large database of female facial photographs and, based on ratings obtained in a prior experiment, selected a subset of 60 female faces that centered around “average” attractiveness. These faces were randomly divided into three groups, which were called, “negative,” “positive,” and “neutral.” The groups of photographs were then placed within binders. It should be noted that the labels did not appear on the binders themselves, or on any of the photographs. The faces were of students at a major Canadian university several years prior to the current study. Models in the photographs were photographed at a set distance, displayed a neutral expression, wore a

black smock, and did not wear jewelry (see GELDART, MAURER and HENDERSON 1999).

To further develop the stimuli, we then asked 15 women (age, in years, $M = 21.01$, $SD = 2.07$) to review each of the binders, in random order. Furthermore, the researcher shuffled the order of the photographs within each of the binder prior to presentation for stimuli generation. As the binders were examined, a researcher recorded each woman's statements on a sheet of paper nearby.

For each face in each binder, the women were asked to provide an appropriate statement, based on the category of the binder, that negatively, positively, or neutrally described a physical attribute of the face. Neutral statements were those that were merely descriptive and lacked any clearly identifiable evaluative qualities (e.g., "She has brown hair and dark brown eyes."). Negative statements provided a negative evaluation of some facial feature, and positive statements provided a positive assessment of a facial feature. Participants were allowed to provide comments on more than one facial feature, and if they could not think of something readily, they were allowed to say nothing and pass to the next image. However, no participant chose to "pass" on a photograph, and all women generated at least one appropriate statement for each photograph.

A research assistant who was not a part of this project and unaware of the hypotheses grouped the most commonly provided comments such that each photograph had a representative statement about two of the model's facial features. Then, the research assistant selected 15 of the 20 faces that had the most stable agreement with regard to the provided comments (i.e., the same features were commented upon by more than 50% of the women). Therefore, for the formal data collection in this study, we used 15 faces with negative statements (i.e., derogations), 15 with positive statements, and 15 with neutral statements, where the statements were generated by neutral observers and found to be generally stable by an unbiased researcher.

After statement generation was performed, the binders were discarded. The original photographs were digital in nature, and thus were available in a high quality electronic format. While it would have been possible to perform statement collection using computer software, as was done in the actual experiment, it was not considered time effective to generate separate software to support stimuli preparation.

Procedure

All participants were tested individually in a private room in one session that lasted about 40 minutes. To describe data collection, we divide the testing session into three phases. In Phase 1, participants were led to a laptop computer (with a 13 inch screen, fixed visual distance) by a female experimenter and asked to rate the 45 female faces using a Likert-type scale with the anchors, 1 = extremely unattractive and 7 = extremely attractive. The photographs were shown in random order using

portrait orientation (5:7 aspect ratio) and as large as was possible for the screen height. Rating was performed by clicking on one of seven buttons arranged in a vertical row beside the picture. Once a button had been clicked, it was not possible to change a rating.

In Phase 2, participants completed a paper-and-pencil demographic survey. While completing the survey, the software determined which woman's face would be selected as the "contender." The contender, who was always named "Julie," was randomly selected to be either attractive or unattractive (50% likelihood of either possibility). The identity of the contender was based on the individual ratings provided by the participant in Phase 1. An attractive contender was identified by finding the woman who received the highest rating. If there was a tie, the face with longest viewing duration was selected, as attractiveness ratings are positively correlated with duration (QUINSEY et al. 1996). Similarly, an unattractive contender was identified by finding the woman who received the lowest evaluation. In the case of a tie, the shortest viewing duration was used to select the contender.

In Phase 3, participants returned to the computer and were presented with a textbox that read, "We've asked one of our participants (the woman who you see on the left) to share her thoughts about some of the women you viewed earlier. Please read each of the following statements made by Julie and rate the attractiveness of each of the following faces." Then, on the following screens, the faces were shown again, in random order, along with the rating scale. At the top of the screen was a miniature photograph of Julie (i.e., the contender), and the statement (negative, positive, or neutral, based on the statement generation process) that she was supposed to have said about that face. Note that the contender ("Julie") was not re-rated using this approach, as she would have been commenting upon herself, rather than another woman.

RESULTS

Since we were comparing men's, and as a comparison group, women's initial baseline attractiveness ratings with the second rating made when the statement was presented, we calculated a difference value for each participants' pairs of ratings. We created a repeated measures Analysis of Variance (ANOVA) model, with the differences as the within-subjects factor (i.e., differences for negative, positive and neutral statements, for which the variable will be referred to as "statements"), and with the independent variables of contender (attractive vs. unattractive) and participant sex (male vs. female). This statistical model design has effectively been used in past research where statements influence facial attractiveness evaluations (e.g., WILLIAMS, FISHER and COX 2008).

There was a main effect for the statements, $F(2,99) = 21.98, p < .000$. Collapsed across condition, pairwise comparisons revealed significant differences for the degree to which ratings changed for faces accompanied by a negative ($M = -.11, SD = .38$) or positive statements ($M = .19, SD = .36$), $p < .000$, negative or neutral

statements ($M = .04$, $SD = .35$), $p < .000$, and positive or neutral statements, $p < .000$. There was no significant main effect either for the contender's attractiveness, $F(1,100) = .009$, $p = ns$, or for participant sex, $F(1,100) = 1.57$, $p = ns$.

There was a significant interaction for the statement type and the attractiveness of the contender, $F(2,99) = 3.03$, $p = .05$. However, independent samples t -tests did not yield any significant differences according to the contender's attractiveness for faces accompanied by negative statements, $t(102) = 1.39$, $p = ns$, positive statements, $t(102) = 1.30$, $p = ns$, or neutral statements, $t(102) = .54$, $p = ns$.

There was also a significant interaction for the statement type and the sex of the participant, $F(2,99) = 3.27$, $p = .04$. Independent samples t -tests did not produce any significant differences according to participant sex for faces accompanied by negative statements, $t(102) = 1.38$, $p = ns$, positive statements, $t(102) = .28$, $p = ns$, or neutral statements, $t(102) = 1.25$, $p = ns$.

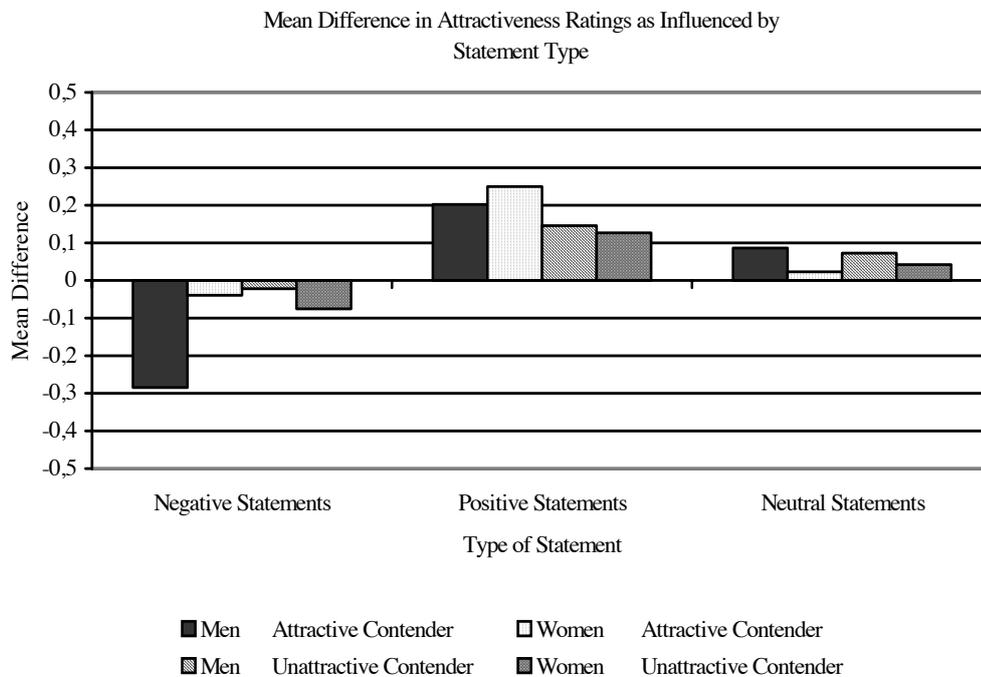


Figure 1. The influence of statement type on evaluations of attractiveness. Negative statements cause a significant decrease in ratings, positive statements cause a significant increase, and neutral statements cause no change. The attractiveness of the contender (i.e., the woman making the statements) affected men's change in ratings due to negative statements, neutral statements cause no change. The attractiveness of the contender (i.e., the woman making the statements) affected men's change in ratings due to negative statements

The three-way interaction between the statement type, participant sex, and contender's attractiveness was not significant, $F(2,99) = 1.43, p = ns$. Although the three-way interaction was not significant, for exploratory purposes, and based on our directional hypotheses, we investigated whether men and women differ in how they are influenced by the statement type and the attractiveness of the contender. Men's ratings of faces accompanied by negative statements did produce significant differences, $t(48) = 2.51, p = .02$, such that men's scores decreased significantly when the statements were made by the attractive ($M = -.28, SD = .37$) or unattractive ($M = -.02, SD = .37$) contender. There were no significant differences for faces accompanied by positive statements, $t(48) = .61, p = ns$, as changes in scores for statements made by the attractive ($M = .20, SD = .29$) or unattractive ($M = .15, SD = .37$) contender were similar. Likewise, there were no significant differences for faces accompanied by neutral statements, $t(48) = .19, p = ns$, made by the attractive ($M = .09, SD = .19$) or the unattractive ($M = .07, SD = .31$) contender. For women, there were no significant differences for faces accompanied by negative statements, $t(52) = .35, p = ns$, made by the attractive ($M = -.04, SD = .38$) or the unattractive ($M = -.08, SD = .37$) contender. There was also no significant difference for faces accompanied by positive statements, $t(52) = 1.15, p = ns$, by the attractive ($M = .25, SD = .46$) or the unattractive ($M = .13, SD = .28$) contender. Finally, there was no significant difference for faces accompanied by neutral statements, $t(52) = .57, p = ns$, for the attractive ($M = -.02, SD = .47$) or the unattractive ($M = .04, SD = .35$) contender.

DISCUSSION

Our findings show that, overall, individuals can be influenced in their ratings of female attractiveness when assessments are made following a statement by that female's rival. Thus, our first hypothesis is supported. That is, when in competition, a woman can influence a potential mate's perceptions of her rival either negatively, using a derogatory statement, or positively, using a promotional statement. Therefore, our finding of a significant change in ratings according to whether positive, negative, and neutral statements were made provides evidence that judgments of facial attractiveness can be influenced. In general, our results indicate that it does not matter whether the statements are made by an attractive or an unattractive rival, nor does it matter if the person performing the attractiveness judgment is male or female.

However, an exploratory analysis of our data suggests while an overall effect for the attractiveness of the person making the statements is irrelevant, when only men are considered, attractiveness has a significant impact. Only for men did we find evidence that attractive women have more influence on judgments of attractiveness than do unattractive women. We speculate that the difference lies in the fact that men view attractive females as more desirable mates, and consequently pay

more attention to attractive females, while women view all females as potential competitors and thus give them equal attention.

Although our hypothesis was directed at men, we included a sample of women as a comparison group. Only men are influenced by the attractiveness of the contender, although both women and men alter their ratings of facial attractiveness according to the type of statement. One particularly interesting finding is that men's ratings of faces accompanied by negative statements decreased significantly when the statements were made by the attractive contender. The fact that attractive women are effective at manipulating men's evaluations is not surprising, but it is curious that this effect is most noticeable for negative statements. While gathering information about the genetic quality of a potential mate, which is what evaluations of attractiveness presumably represent, having a negative feature brought to light might cause men to significantly alter their evaluation. Given that there are sex differences in processing faces (e.g., EVERHART et al. 2001), it could be the case that men are more likely to view faces in a gestalt manner, and when a specific, unattractive feature is mentioned, their attention is diverted to that feature, which leads to a lower evaluation. However, the fact that this response does not occur in an analogous manner for positive statements suggests that other, unknown, factors might be relevant, and future research is needed.

It remains a possibility that women and men are changing their ratings due to different reasons. For example, it is possible that because women are more concerned with social desirability than men (HEBERT et al. 1997) they display a positive disposition by agreeing with the positive statement and conversely, avoid seeming negative by disagreeing with the negative statements and consequently disregarding them. That is, if one is open to negative statements, they could appear to be petty, cruel, or mean, which are all socially undesirable traits (e.g., BOCHNER and VAN ZYL 1985). Therefore, although women might agree at some level with the contender who makes a negative statement and highlights certain unattractive features, they might remain fixed in their assessment so as to not appear influenced by such negativity. An indirect way to examine this explanation is to investigate how those who derogate others are perceived; do people think of them as mean-spirited and petty? Alternatively, one could examine the change in attractiveness ratings for the contender to see if making positive or negative statements influences perceptions of the contender's attractiveness. And, relatedly, with respect to social desirability, one could examine the perceptions of those who agree with derogators to see if agreement is viewed as a socially undesirable trait. These are important directions for further research into competitor derogation, as the findings will illuminate many of the complex factors that are involved in intrasexual competition.

Although we supported our hypothesis, we must concede that we have not necessarily answered the original question of why women derogate the attractiveness of potential rivals. We sought to test the possibility that they do so in order to influence the perceptions of a potential mate and gained support for this contention. However, in hindsight, we realize that it still might be the case that a woman dero-

gates a rival or views her negatively for the purposes of increasing her own self-esteem. By increasing her self-esteem, a woman might be more inclined to initiate a mating relationship, or to advertise herself as having higher mate value. PENKE et al. (2007) recently documented the importance of female physical attractiveness for determining self-perceived mate value. Presumably social comparison is one of the primary ways to determine one's own attractiveness, and derogating same-sex others could be involved in this process. Second, a woman might use derogation in an effort to influence the rival by leading her to believe she should not compete, or that she will lose if she does engage in competition over a mate. Although an individual could be perceived as mean-spirited by uttering negative comments, if it avoids any further competition for a potential mate, it might be a useful strategy.

Derogating a potential rival is a risky strategy, as it draws attention to the rival and potentially increases one's number of competitors. This risk is compounded by the fact that one who derogates might be seen as mean-spirited (SCHMITT and BUSS 1996), and hence, one could inadvertently lower how they themselves are perceived as a mate. Although making a positive statement involves the same risk of drawing attention to a potential mate for one's partner, it does not involve the additional risk of self-derogation. Therefore, it might be the case that in real life, one would be exposed more frequently to the latter, rather than the former, phenomena. In future research, we intend to explore the perceptions of a contender when she makes positive and negative statements.

It is possible that the differences in assessments of attractiveness could have been more pronounced if the content of the comment was varied to include other characteristics. In our study, all the comments described physical traits for which one might disagree due to having different mate preferences regarding these features. For example, a comment that someone's nose is too large may have no impact on someone who finds large noses attractive. Furthermore, one could easily look at the photograph and disagree with the statement. Although our findings were significant, we might have obtained stronger results if the comments were about personality traits or sexual history for which one cannot immediately ascertain their accuracy by visual inspection. However, it should be noted that in previous work, WILLIAMS et al. (2008) showed that male ratings of female faces maintained a high degree of stability when the faces were rated both with, and without, descriptions of the model's sexual history and their desired relationship duration. In the present study, we found evidence that although attractiveness judgments are stable in some situations, comments about physical attributes can impact upon the evaluation of attractiveness. This finding, and that of WILLIAMS et al. (2008), suggests that in order to influence ratings of physical attractiveness, one must at least include some content about that person's physical attractiveness.

While we found that there were significant changes in ratings of attractiveness when positive and negative statements were made, these rating changes may be artificially high because of the random order in which the statements were presented. It is possible that negative statements might have had more valence due to a contrast

effect with the other statements. That is, the random ordering could have caused the positive statements to seem more positive, and the negative statements to be perceived as even more cruel. These perceptions of negativity and positivity may have maximized the effect of the statements and increased their impact on attractiveness judgments.

Previous research (e.g., WILLIAMS et al. 2008) has found that, when retested, one generally increases one's rating of attractiveness for the same data set. We believe that this effect occurs when one realizes that the same data is being presented and is thus more familiar with the faces in that data set. Moreover, past research shows that feelings of familiarity often increases evaluations of attractiveness (MORELAND and ZAJONC 1982), and thus, one might perceive the faces as being somewhat familiar. The slight, but non-significant rise in scores for the group with neutral comments, can be explained by this expected small increase in a retest condition.

As aforementioned, there are two primary strategies for intrasexual competition: competitor derogation and self-promotion. Previous research has shown that self-promotion is more frequently used and is perceived to be more effective than competitor derogation (SCHMITT and BUSS 1996). One reason that we designed this study in this particular way was because we did not want to inadvertently and indirectly pit self-promotion against competitor derogation. However, it could be the case that making a positive statement about a potential rival is akin to self-promotion, in that it displays one's self-confidence and pleasing disposition. In other words, it shows a potential mate that one is secure enough in their own positive qualities that they can afford to draw attention to a potential rival's positive attributes. Furthermore, if the potential rival should overhear the comment, the speaker would be perceived as friendly rather than competitive, again a positive attribute. Therefore, to work around this issue, we had the same contender make all the statements. Future research could instead test the possibility that one is self-promoting when promoting a potential rival, and examine how that influences a potential mate. However, while self-promotion is considered more effective, we have shown that it is less effective when the promotive act has any element that compliments a competitor because it will significantly increase positive perceptions of the competitor. Furthermore, if one assumes that positive statements about oneself have an equal impact on attractiveness judgments as do positive statements about others, we have shown that verbal self-promotion is an effective technique when in competition. That is, if complimenting a rival's eyes will increase the attractiveness of the rival, a statement complimenting one's own eyes should be effective in increasing the attractiveness judgments of oneself.

We sought to explore why women derogate the attractiveness of potential competitors, as originally found by FISHER (2004). The explanation we tested was that women were attempting to persuade a potential mate into perceiving a rival as less attractive. Our results provide support for this conclusion and suggest that derogation of a rival's attractiveness is effective for influencing men's perceptions

of attractiveness. When the derogator is highly attractive, we have found that men in particular are more influenced than if the derogator is unattractive. Our findings suggest that, because men and women are differently affected by the attractiveness of a derogator, it is possible that derogation is serving a different purpose for men and women.

While we have shown that derogation is effective for influencing a potential mate's perceptions of a rival's attractiveness, derogation may be effective for influencing the perceptions of other factors such as the rival's personality. Furthermore, although we have shown that attractiveness judgments can be manipulated, we have not necessarily found that, overall, the desirability of a potential mate has been influenced by a derogatory statement. Although physical attractiveness is a key factor by which men evaluate a mate (e.g., BUSS 1989) other factors, such as popularity and enthusiasm, impact on overall judgments of desirability, as determined decades ago by BARKER (1942). Therefore, although we have found that derogation of physical attractiveness influences physical attractiveness assessments, future research should examine whether this effect holds for assessments of overall desirability.

In our research design, we created the stimuli such that the participant was the direct recipient of each comment. It is highly likely that women make derogatory comments about rivals that are intended to be heard by other women, including possibly the rival herself, for a totally different reason than the derogatory comments that are to be heard by potential mates. The differing impact on men and women by the attractiveness of the derogator suggests that the purpose of derogatory comments may vary according to the audience. Future research should examine the content of women's derogatory comments according to the sex of the recipient.

We have shown that perceptions of a person's attractiveness can be influenced by a potential rival's statements regarding the physical attributes of that person. For men in particular, the influence of these statements appears to be stronger when the person making the statements is an individual they consider attractive. While women are also influenced by such statements, they are not significantly affected by the attractiveness of the person making the statement, potentially suggesting that the comments are serving a different role. However, regardless of the role, women's competitor derogation of physical attributes has been shown as a significant factor in the evaluation of their rivals' attractiveness.

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