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What is This?
Beauty, Dominance, and the Mating Game: Contrast Effects in Self-Assessment Reflect Gender Differences in Mate Selection

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An experimental study examined the effects of exposure to physically attractive and dominant same-sex individuals on self-assessments. Consistent with prior findings on mate selection, it was predicted that women's self-assessments of their mate value would be adversely affected by exposure to highly physically attractive women and would be relatively unaffected by exposure to socially dominant women. Conversely, men's self-assessments of their mate value were expected to be more affected by the social dominance than by the physical attractiveness of the men to whom they were exposed. Findings for self-assessed judgments of desirability as a marriage partner were in line with hypotheses. Results fit with earlier findings suggesting that such effects may be caused by changes in the perceived population of competitors rather than direct changes in self-perceptions of physical appearance or dominance. Overall, findings are supportive of models assuming domain-specific rather than domain-general cognitive processes.

In recent years, evolutionary psychologists have begun to frame hypotheses about the possibly adaptive design of human cognition (e.g., Buss, 1995; Kenrick, Sadalla, & Keefe, 1998; Tooby & Cosmides, 1992). One assumption of evolutionary approaches is that cognition is driven not by a limited set of domain-general mechanisms but by a larger number of domain-specific processes designed to solve particular problems in particular ways. In this article, we explore an evolutionary hypothesis about a simple and domain-general process called a contrast effect.

Contrast Effects and Judgments of Others

A contrast effect is a tendency for judgments along a stimulus dimension (such as weight or temperature) to be shifted away from a prior set of extreme stimuli in the same class (e.g., the same 10-ounce stimulus is judged lighter after lifting a 3-pound weight and heavier after a 2-ounce weight). Contrast effects have been found not only for judgments of physical properties but also in the domain of social judgments. For instance, an average-looking stranger is rated as less physically attractive by participants who have been exposed to beautiful models or magazine centerfolds (Kenrick & Gutierres, 1980; Kenrick, Gutierres, & Goldberg, 1989).

Contrast effects also have been found to influence judgments of individuals' mates, although these studies indicate an interesting sex difference in this regard. Kenrick et al. (1989) found that, compared with men exposed to beautiful women, women exposed to handsome men showed relatively less decrement in ratings of their current relationships. In a later study, Kenrick, Neuberg, Zierk, and Krones (1994) reported that whereas men's feelings about their current relationships were adversely affected by exposure to physically attract...
tive women, women were not influenced by exposure to physically attractive men. Women, however, were less satisfied with their relationships after exposure to socially dominant men. These sex differences are compatible with cross-cultural findings of gender differences in mate selection criteria (e.g., Buss, 1989; Kenrick & Keefe, 1992). The findings have been discussed in relation to evolutionary models of differential parental investment and sexual selection, as described below.

If exposure to desirable members of the opposite sex can elevate our expectations for desirable partners, might exposure to desirable members of our own sex influence our perception of our own value as a partner? There are at least two possibilities. One might be called the “projection hypothesis”—perhaps each sex assumes that the other sex uses the same criteria as its own. If this were true, then men would be led to downgrade their own mate value after being exposed to good looking men, and women to downgrade their own mate value after being exposed to highly socially dominant women. A similar set of hypotheses would follow from the assumption that men are simply generally schematic for physical attractiveness, whereas women are generally schematic for dominance. Such simple schemata would be applied to the self in the same way that they have been found to be applied to mates. Although each of these models is a parsimonious one, positing the smallest number of mechanisms in each sex, a consideration of the differential function of self-assessment and mate assessment would postulate more complex and context-specific judgment processes in each sex. The assumption of functional domain-specific mechanisms would lead to the expectation that self-ratings would show a mirror image of the findings for ratings of members of the opposite sex. That is, women’s assessment of their value as a mate ought to be calibrated not to their own preferences in men but ought to accurately reflect men’s preferences in women, and the converse for men’s self-assessments. If that were so, then women’s self-assessments would be negatively affected by exposure to physically attractive women, whereas men’s assessment of their value as a mate ought to be negatively affected by exposure to socially dominant men.

Contrast Effects and Self-Judgments

Thus far, no research has been conducted examining the possible effects of exposure to socially dominant individuals on the self-ratings of either males or females. However, there is some empirical evidence suggesting negative effects of exposure to highly physically attractive others on females’ self-assessments (Brown, Novick, Lord, & Richards, 1992; Cash, Cash, & Butters, 1983). Richins (1991) found that women exposed to advertisements with physically attractive models did not rate themselves as less physically attractive than did women who saw the ads without the models but did rate themselves as less satisfied with their attractiveness than did the controls. This latter study suggests that although exposure to beautiful women might not reliably lead to a direct change in a woman’s rating of her physical attractiveness, such exposure may lead to a change in the standards she uses for evaluating the social meaning of that attractiveness. That is, a woman exposed to a series of beautiful women may remain stable in her self-assessment as a “7” but may now think that in a world with so many “8s” and “9s,” she is not so desirable as she previously believed herself to be.

The studies discussed above used female targets and female participants. From the evolutionary perspective we will discuss below, it makes sense that physical attractiveness would be an important dimension of female self-image. None of these studies have explored men’s reactions to exposure to physically attractive men, nor have they explored the reactions of either males or females to dominant members of their own sex. As we describe below, theory and research on human mate selection suggest the possibility of gender-differentiated self-assessments along these two dimensions.

Sex Differences in Mate Selection

From an evolutionary perspective, many gender differences in social behavior can be traced to differential parental investment (Trivers, 1972). Females invest more direct physiological resources in the reproduction and care of infants, whereas males invest indirect resources of money, protection, and security (Buss & Barnes, 1986; Daly & Wilson, 1983; Kenrick & Trost, 1989). The ultimate basis of this difference is presumed to be rooted in women’s greater “obligatory parental investment.” That is, women, as a minimum, must invest 9 months of gestation and a longer period of nursing and infant care if their child is to have any chance of survival. Theoretically, a man could father a child with a very small minimum investment—the time and energy it takes to impregnate a woman. According to this model, women evolved to be discriminating about male qualities that will contribute to their reproductive success and that of offspring. Women are expected to place relatively greater emphasis on social dominance in a potential male partner, presumably because this trait is associated with providing adequate resources and desirable genetic tendencies that can be passed on to their joint offspring (Sadalla, Kenrick, & Vershure, 1987). Men, in contrast, are presumed to seek mates based on physical qualities...
such as health and beauty because these are linked to reproductive potential in women (Buss, 1989; Buss & Barnes, 1986; Cunningham, 1986; Kenrick & Keefe, 1992; Symons, 1979). To attract mates, men and women must embody the characteristics sought in the opposite sex, that is, men must show signs of dominance and the potential to provide resources, and women must show signs of fertility (youthful and healthy physical attractiveness).

A number of studies have demonstrated the differential emphasis that women and men place on dominance and physical attractiveness. For example, Sadalla et al. (1987) showed that dominance increased men’s attractiveness to women but had no effect on women’s attractiveness to men. In addition, Kenrick, Sadalla, Groth, and Trost (1990) found that women rated characteristics linked to dominance and status as more important criteria for choosing partners than did men. On the other hand, Buss and Barnes (1986) and Kenrick et al. (1990) found that males placed relatively more emphasis on a potential partner’s physical attractiveness than did females assessing males. Furthermore, Townsend and Levy (1990) reported that women preferred a high-status, low-physically attractive man to a low-status, high-physically attractive man. On the other hand, men valued physical attractiveness but not status in women. In support of an evolutionary explanation, the relative emphases on social status for men, but not women, and on physical cues linked to reproductive potential for women, but not men, have been found cross-culturally (Buss, 1989; Hill, 1984; Kenrick & Keefe, 1992; Mealey, 1985; Turke & Betzig, 1985). These differences in mate assessment criteria can explain the sex-differentiated contrast effects in ratings of partners reported by Kenrick et al. (1994). As noted above, those authors found that women’s assessments of their partners were adversely influenced by the dominance, but not the physical attractiveness, of other men to whom the women were exposed, whereas men’s assessments of their partners were adversely influenced by exposure to physically attractive women.

How would such findings apply to self-assessment? One possibility, discussed above, is that men are simply generally attentive to physical attractiveness, whereas women are generally attentive to social dominance. If that were true, then men would lower their self-assessments after exposure to good-looking men and women would lower their self-assessments after exposure to high-status women. From an evolutionary perspective, which assumes functional and modular mechanisms designed to maximize reproductive success, it would make more adaptive sense for the members of each sex not to project their own criteria onto the opposite sex. From that perspective, both sexes should more or less accurately calibrate their self-assessments to the mate criteria of the opposite sex, leading men to be attentive to the dominance of other men and women to be attentive to the physical attractiveness of other women in the population of available mates.

The Current Study

The research to be reported here was designed to examine the influence of exposure to highly physically attractive and/or highly dominant members of the same sex on women’s and men’s self-judgments of desirability as a mate. Given the demonstrated sex differences in importance of physical attractiveness and dominance for partner selection, the following predictions were made: We expected that women exposed to highly physically attractive, as opposed to less attractive women, would view themselves as less desirable as a mate. Women’s ratings of their desirability as a mate were not expected to be affected by the dominance of the women to whom they were exposed. In contrast, men exposed to highly dominant, as opposed to nondominant men, were expected to rate themselves as less desirable as a mate. Men’s ratings of desirability as a mate were not expected to be influenced by the physical attractiveness of the men to whom they were exposed. The research also was designed to examine possible direct effects on self-ratings of physical attractiveness and dominance. Given the previous research by Kenrick et al. (1994) and Richins (1991), we expected that direct self-ratings of attractiveness and dominance would not be strongly affected by the manipulations.

METHOD

Overview

The study used a 2 (sex of participant) × 2 (physically attractive of target) × 2 (dominance of target) design. Participants were exposed to descriptive profiles and photos of same-sex others, ostensibly as part of an attempt to evaluate possible formats for a dating service. The profiles depicted same-sex individuals of either high or low social dominance with an attached photo of either high or low physical attractiveness. After perusing and evaluating eight profiles in one of the four conditions (high vs. low physical attractiveness crossed with high vs. low dominance), participants rated themselves on a number of dimensions, including their desirability as a partner, their own physical attractiveness, and their own dominance.

Participants

Participants were 190 undergraduate students at a large university (91 females and 99 males) who completed the study in partial fulfillment of an introductory
psychology class requirement. They participated in same-sex sessions of one to three males or females conducted by a female experimenter. Thirty-two additional participants were eliminated from the data analyses because they were of foreign nationality or a member of a racial or ethnic minority group (this exclusion criterion was used because the stimulus photos were of Anglo-American females and males and the research was examining the effects of exposure to relevant comparison others).

Materials

Descriptive profiles. The descriptive profiles included a name, a short list of hobbies and interests, and the individual’s “most notable accomplishment.” In addition, each profile included a paragraph ostensibly written by the person describing her or his academic and community involvement, employment, and accomplishments. The descriptions were written with similar statements for high- and low-dominance conditions, keeping interest areas the same, with differing levels of involvement and responsibility. For example, in the high-dominance condition, “Carl Powers” reported that his most notable accomplishment was as the editor of the University of Washington campus newspaper, whereas in the low-dominance condition, his most notable accomplishment was a “letter to the editor published in University of Washington campus newspaper.” Information in the accompanying paragraph included the following in one exemplary high-dominance profile:

I think that I have plenty of friends because people can count on me and I enjoy a good time. I like to plan new adventures for my friends and myself. I work out 5 days a week and teach trampoline to kids at the Y on the other days. I like to be with people and I often end up as group leader when someone needs to take charge. I like being in leadership positions, it comes easily to me, and I get to meet a lot of people that way. I’m told that I’m a natural leader when someone needs to take charge. I like being in leadership positions, it comes easily to me, and I get to meet a lot of people that way. I’m told that I’m a natural leader when someone needs to take charge. I like being in leadership positions, it comes easily to me, and it gets in the way of getting to know people, but I’m pretty good at carrying out the responsibilities that get delegated to me. I was really pleased to be chosen most helpful employee of the campus newspaper at the University of Washington before I transferred. I’ve been writing a couple of short pieces I’d like to get published in a magazine, both of them about the qualities that it takes to be content with yourself. I try to practice what I preach and that’s probably what accounts for my own contentment.

In contrast, the comparable low-dominance profile included the following information:

I think that I have plenty of friends because people can count on me and I enjoy a good time. I’m usually willing to go along with whatever adventures my friends plan for us. I try to go to the gym frequently and help out with the children’s trampoline program at the Y on other days. I like to be with people and I’m not too proud to run errands or help in anything that needs to be done. I don’t like being in leadership positions. It doesn’t come easily to me, and it gets in the way of getting to know people, but I’m pretty good at carrying out the responsibilities that get delegated to me. I was really pleased to be chosen most helpful employee of the campus newspaper at the University of Washington before I transferred. I’ve been writing a couple of short pieces I’d like to get published in a magazine, both of them about the qualities that it takes to be content with yourself. I try to practice what I preach and that’s probably what accounts for my own contentment.

Descriptions for the female profiles were identical except for the use of female names (e.g., Amy Powers).

Stimulus photos. A 2 inch × 3 inch black and white head shot photograph was included with each descriptive profile. Photos for the high–physically attractive condition were of female and male models from a local modeling agency. Photos for the low–physical attractiveness condition were graduating seniors from yearbooks at out-of-state colleges. Stimulus photos were prerated by 15 male and female psychology undergraduates who did not participate in the experiment. The photographs were rated on a scale from 1 (least physically attractive) to 10 (most physically attractive). Eight female photos with a mean rating of 7.6 (SD = .43), and eight male photos with a mean rating of 7.4 (SD = .55), were selected for the high–physically attractive conditions. Eight female photos with a mean rating of 3.4 (SD = .19), and eight male photos with a mean rating of 3.4 (SD = .20), were selected for the low–physically attractive conditions.

Rating scales. The dependent measures were part of a 27-item questionnaire on which self-ratings were made on a scale of 0 (not at all characteristic of me) to 4 (very much characteristic of me). The dependent measures included the following statements: (a) “I believe that the opposite sex would find me desirable as a date,” (b) “I believe that the opposite sex would find me desirable as a marriage partner,” and (c) “I believe that the opposite sex would find me desirable as a sexual partner.” The self-rating of physical attractiveness was created using two items: “I would describe myself as very attractive” and “I am not very satisfied with the way I look” (reverse scored). Four items were combined to create a self-rating of dominance: “I believe that others would regard me as high in leadership abilities,” “I think that others would say I have a high potential for success,” “I would describe myself as highly respected by others,” and “I think that others would regard me as high status.” The remaining 18 items were self-descriptive statements such as, “I enjoy social gatherings just to be with people.” In addition to the above scale, participants were asked to provide...
demographic information. Participants also filled out a scale that asked for ratings of the presentation style of the descriptive profiles and a questionnaire that rated each stimulus person on a scale from 1 to 7 on characteristics of conscientiousness, warmth, desirability to members of the opposite sex, status, social dominance, and physical attractiveness. The latter two items served as manipulation checks for the experimental conditions.

Procedure

Participants were recruited for a study to evaluate the style of presentation of client information for a dating service. The sign-up sheets for the experiment allowed one to three same-sex participants per session. When groups of female or male participants arrived for the experiment they were randomly assigned to one of the four conditions (high physically attractive/ high dominance, high physically attractive/ low dominance, low physically attractive/ high dominance, low physically attractive/ low dominance). Participants were seated in individual cubicles separated from the other participants and facing the experimenter. They were informed that they would be reviewing self-descriptions of eight same-sex individuals who were interested in using a dating service. Participants were told that they would be asked to review the information in the self-descriptions and then to evaluate the description on several dimensions. Participants also were told that to control for the possible influences of individual differences on their judgements, they would be asked to complete some short questionnaires about themselves.

Participants were then handed a folder containing eight same-sex profiles. After reviewing the descriptions, participants completed the two questionnaires evaluating the stimulus profiles. Participants then were asked to complete the questionnaire assessing demographic information and the self-rating questionnaire. After completion of all questionnaires, participants were probed for suspicion. No participants were aware of the true hypothesis of the study, and no participants indicated suspicion of any aspect of the study. Participants were then debriefed and dismissed.

RESULTS

Manipulation Checks

A Participant Sex × Stimulus Physical Attractiveness × Stimulus Dominance ANOVA on the manipulation check for social dominance revealed the predicted main effect of stimulus dominance, indicating that participants viewed the persons profiled as more dominant in the high-dominance condition (mean rating on a 7-point scale = 5.12, SD = .88) than in the low-dominance condition (M = 3.30, SD = .78), F(1, 186) = 231.04, p < .0001. An ANOVA on the physical attractiveness manipulation check revealed the predicted main effect for stimulus physical attractiveness, indicating that participants viewed the persons profiled as more physically attractive in the high-physical attractiveness condition (mean rating on a 7-point scale = 5.60, SD = .75) than in the low-physical attractiveness condition (M = 4.01, SD = .81), F(1, 186) = 211.57, p < .001. Females also tended to rate profiles as generally more attractive (M = 4.91) than did males (M = 4.58), F(1, 186) = 8.59, p < .004. These data indicate that both the dominance and physical attractiveness manipulations worked, permitting investigation of our hypotheses.

Self-Evaluations of Desirability as a Mate

To test our specific hypotheses for males and for females, planned comparison analyses were conducted on the dependent variables. Although the omnibus interaction term has been the conventional approach, it is not the most appropriate analysis in a case such as this (Keppel, 1991). The classic contrast weights used in an interaction are (a) designed to detect cross-over interactions particularly well but are not as sensitive to interactions such as those we predicted and (b) are generally low power. According to Keppel (1991), the omnibus F test would be “more appropriate in the absence of specific hypotheses” (p. 112). Not only did we have a priori hypotheses based on a nomological network of prior findings but those prior findings also led us to expect each sex to be somewhat sensitive to the variables affecting the other sex, thus requiring a carefully focused test.

The first set of analyses compared males and females in the high- and low-dominance conditions on self-assessments of desirability as a marriage partner, as a date, and as a sexual partner. One-tailed t tests (contrasts) were conducted on our predictions that women’s self-viewed mate desirability would be affected by exposure to attractive women and men’s self-viewed mate desirability would be affected by exposure to dominant men. Two-tailed t tests (contrasts) were conducted on the remaining comparisons. As predicted, men rated themselves significantly less desirable as a marriage partner when they were exposed to highly dominant men than when they were exposed to nondominant men, t(77) = 2.18, p < .02, effect size for this analysis, r = .24. Women’s self-ratings of desirability as a marriage partner, however, were unaffected by the dominance of the women to whom they were exposed, t(87) = 1.08, p = .28, r = .12. A similar pattern was found for men’s self-ratings of their desirability as a date, although in this case the effect of dominance was only marginally significant.
For male participants, there were no significant effects of exposure to either physically attractive or dominant men on self-ratings of dominance. For female participants, there were no significant effects of exposure to physically attractive or dominant women on self-ratings of physical attractiveness.

DISCUSSION

It was expected that men's and women's self-ratings of their mate value would be differentially influenced by exposure to physically attractive versus dominant members of their own sex. Although not all self-ratings were strongly affected, those effects that were found were consistent with predictions and were opposite for males than for females. When rating their own desirability as a marriage partner, men's self-evaluations were significantly lower after exposure to socially dominant men but were not significantly affected by exposure to physically attractive men. Women's self-ratings of their desirability as a marriage partner showed a complementary set of effects—significantly lower after exposure to physically attractive women but unaffected by exposure to socially dominant women. These findings are consistent with other studies that have shown the differential value placed on dominance and physical attractiveness for women's and men's mate preferences (Buss, 1989; Dijkstra & Buunk, 1997; Kenrick et al., 1990; Sadalla et al., 1987; Townsend, 1989). The current findings suggest that mate selection criteria of one sex dictate the self-evaluation criteria of the other sex.

The predicted effects on self-ratings of value as a date and as a sexual partner were, at best, marginally significant (although, in all cases, means were in the expected direction). One explanation for the lack of strong effects here could be that the characteristics that individuals perceive to be important to possess for long-term committed relationships may be less important for more casual short-term relationships. Some support for this explanation is suggested by results from several previous studies. In these studies (Kenrick, Groth, Trost, & Sadalla, 1993; Kenrick et al., 1990; Regan, 1998), the authors found that the minimum acceptable criteria related to status characteristics for a partner increased as the level of commitment of the relationship increased and that at all levels of a relationship, females indicated that this characteristic was more important than did males. For physical attractiveness, on the other hand, males' minimum acceptable criteria for a partner increased as the level of relationship commitment increased, with males' requiring substantially more physical attractiveness for a marriage partner than did females.
What Mechanisms Underlie These Effects?

An interesting question remains regarding what specific cognitive mechanisms underlie the findings of sex differences in self-judgments of desirability as a mate. One possible explanation is that people actually showed something parallel to a “perceptual contrast effect,” such that exposure to physically attractive or dominant others actually changes one’s own view of one’s physical attractiveness or dominance. After males were exposed to many highly dominant men, their own dominance would have seemed much lower, whereas females who viewed many beautiful women would have seen their own physical attractiveness diminished. This explanation, however, does not seem applicable in this circumstance. Although females lowered their self-assessed desirability as a marriage partner after exposure to other physically attractive women, they did not lower their self-ratings of physical attractiveness. Similarly, although males lowered their self-assessed desirability as a marriage partner after exposure to other socially dominant men, they did not lower their self-ratings of dominance.

As an alternative explanation, perhaps self-ratings of desirability as a marriage partner were mediated by the perception of the available population of desirable members of one’s own sex with whom one must compete. That is, exposure to highly physically attractive or highly dominant persons may skew an individual’s perception of the distribution of physically attractive or dominant people available to members of the opposite sex in one’s local community. Guttentag and Secord (1983) have documented a number of changes in mating behaviors that are linked to variations in the perceived population of alternative mates within each sex. Viewing a series of highly physically attractive or highly dominant members of one’s own sex may not result in a direct perception that one is less physically attractive, or less dominant, but may lead one to reconsider how one’s physical attractiveness or dominance compares with that available to members of the opposite sex. If there are a large number of desirable members of one’s own sex available, one may regard one’s own market value as lower. Thus, when females viewed a series of highly physically attractive women, even though their perception of their own physical attractiveness was not altered, the recognition that there is an abundance of highly physically attractive available women may have negatively influenced their perception of their value as a mate. Likewise, after males viewed a series of dominant males, although they did not directly change their absolute view of their own dominance, their perception of the number of highly competent available males may have negatively influenced their perception of their value as a mate.

Some support for this explanation comes from a previous study. Kenrick et al. (1994) found that female participants’ evaluations of their current relationships were lowered when they were exposed to a series of highly dominant men, but their direct ratings of their partner’s dominance were unchanged. Similarly, whereas males’ ratings of their partners’ physical attractiveness were unaffected by exposure to highly physically attractive women, their ratings on the more indirect measure of relationship satisfaction were lowered when the men saw beautiful, nondominant women.

It is interesting that exposure to physically attractive men did not have a clear effect on men’s self-assessments in the current study, or on women’s assessments of their mates in a prior study (Kenrick et al., 1994). Men’s physical attractiveness is not unimportant in women’s assessments, but women’s judgments of a man’s attractiveness are partly linked to their assessment of cues signaling dominance and not to the same cues that men use in assessing women’s physical attractiveness (Cunningham, Druen, & Barbee, 1997; Kenrick et al., 1993).

Domain Specificity and Social Judgment

Although the effects found here were limited to the variable tapping long-term mate value, they should not be viewed as trivial. Indeed, the specific effects, and the sex differences that were found, fit nicely into a larger nomological network of findings. In Figures 1 and 2, we compare the results of the earlier study of relational partner ratings (Kenrick et al., 1994) with the current study’s results on self-rated value as a mate. In Figure 1, for females rating their own partners after seeing other men, physical attractiveness had no effect on their ratings, whereas seeing dominant men did appear to undermine their commitment. In Figure 2, however, for females rating themselves, exposure to physically attractive women did have a significant effect, whereas exposure to socially dominant women did not. This suggests that women do not use the same schemas for social comparisons about themselves as they use for social comparisons about their partners. On the other hand (see Figure 1), seeing physically attractive women led men to lower rated commitment to their partners, whereas the main effect of seeing dominant women was nonexistent (the interaction suggested that, if anything, social dominance in other women reduced the impact of their physical attractiveness). In rating themselves after seeing other men, however (see Figure 2), only the dominance of the other men produced a significant effect in undermining self-ratings of marital desirability. What appears to be a potentially interesting interaction in males’ self-ratings is not statistically reliable, but the main effect of seeing dominant men is reliable.

Thus, the reliable effects found in self-ratings are opposite to those found for mate ratings. Given that women do value physical attractiveness in partners, we
might have expected a clearer effect of both attractiveness and social dominance for male self-ratings. However, other research suggests that physical attractiveness may be less important to women in choosing long-term mates as opposed to dates (Townsend & Levy, 1990). And a look at Figure 1 suggests that, on the somewhat unobtrusive measure provided by indirect contrast effects, good-looking men actually do not have much effect on women’s commitment to their mates, whereas dominant men do. Clearly, more research is needed to fully clarify the nature of these effects, but this whole network of findings suggests that measuring contrast may sometimes elucidate different processes than simply asking people to report what they would like to see in a mate.

The narrow specificity of the effects found in this study, and the fact that they mirror rather than parallel findings on assessments of mates, are all consistent with the emerging evolutionary models of cognition, which posit domain-specific rather than domain-general processes (Buss, 1995; Kenrick, Sadalla, & Keefe, in press; Tooby & Cosmides, 1992). Those models assume that mate selection is not based on a broad and simple “one-process” affective or cognitive reaction but on a number of distinct cognitive processes for different problems. Differential results for self-ratings of long-term mate value (as opposed to general attractiveness or dominance or desirability as a short-term partner), the complementary pattern of effects found for males and females, and the fact that the effects for self-ratings are opposite of the earlier effects found for mate judgments are all consistent with assumptions of domain specificity of social cognition (Kenrick, Keefe, Bryan, Barr, & Brown, 1995). The gender differences found here further suggest the usefulness of evolution-based assumptions regarding mate selection, which have been found to have heuristic potential in generating predictions about overt social behaviors and that also appear to have some ramifications in the realm of cognition.

How Modern Media May Affect Self-Evaluations

In this study, experimental participants were exposed to eight profiles of attractive or dominant members of their own sex. Is such massed exposure to desirable others ecologically valid? In the ancestral past, we suspect that it would have been rare. Anyone living in the modern technological world, however, can easily expose himself or herself to numerous others who are highly physically attractive, immensely self-confident, and hugely successful. This can be accomplished in just a few minutes of watching a popular television program or movie, thumbing through a magazine, or tuning in to a televised sports or beauty contest. Our previous research suggests that standards for “real people” are not kept psychologically separate from standards for attractive individuals in the media (e.g., Kenrick & Gutierres, 1980; Kenrick, Gutierres, & Goldberg, 1989). Throughout most of history, it would have made sense to be attentive to attractive and desirable individuals that we saw on a daily basis and to adjust our standards for our own desirability based on those social comparisons. Now, however, we may see in 1 hour dozens of individuals who are more attractive and more successful than any of our ancestors would have seen in a year, or even a lifetime. The results of this program of research suggest that our mental mechanisms may trick us into using such extraordinary individuals as comparison standards for ourselves and our potential mates.
NOTES

1. Descriptions of each of the eight high- and low-dominance profiles are available from the first author.

2. There was an interaction of stimulus dominance with participant sex on the dominance ratings, F(1, 186) = 10.80, p < .001, indicating that the dominance manipulation had a somewhat greater influence on female participants (M = 4.88 vs. M = 2.65) than on male participants (M = 4.53 vs. M = 3.09). However, simple effects tests showed that the dominance manipulation worked powerfully for both female (p < .0001) and male (p < .0001) participants.

3. There was an interaction of stimulus physical attractiveness with participant sex on the physical attractiveness rating, F(1, 186) = 9.79, p < .002, indicating that the physical attractiveness manipulation had a somewhat greater influence on female participants (M = 3.94 vs. M = 4.00) than on male participants (M = 5.28 vs. M = 4.03). However, simple effects tests showed that the physical attractiveness manipulation had a strong effect for both female (p < .0001) and male (p < .0001) participants. There was also an interaction of stimulus dominance with participant sex, F(1, 186) = 6.75, p < .01, indicating that females rated the physical attractiveness of the highly dominant stimulus persons (M = 5.12) somewhat higher than males rated the dominant stimulus persons (M = 4.52).

4. For men’s self-ratings of physical attractiveness, the two-way interaction of Physical Attractiveness × Dominance showed an unpredicted effect, F(1, 97) = 7.69, p < .007. Simple effects tests showed that for men exposed to low-physically attractive men, those who viewed highly dominant men rated their own physical attractiveness lower than those who viewed low-dominant men, F(1, 94) = 5.15, p < .03. In addition, among men who viewed highly dominant men, those who viewed highly physically attractive men rated their own physical attractiveness higher than those who viewed low-physically attractive men, F(1, 94) = 6.01, p < .02.

5. For women, self-ratings of dominance showed a marginally significant two-way interaction of Physical Attractiveness × Dominance, F(1, 89) = 3.13, p < .08. Simple effects tests showed that, compared to females who saw low-dominant, low-physically attractive women, females who saw low-dominant, highly physically attractive women rated their own dominance lower, F(1, 86) = 3.78, p < .055.

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