

Attractiveness and Rivalry in Women's Friendships with Women

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Abstract Past research suggests that young women perceive their same-sex friends as both facilitating the pursuit of desirable mates and competing for access to desirable mates. We propose that similar levels of physical attractiveness between young adult female friends might be one explanation for the opposing forces in their friendships. Forty-six female friendship pairs completed questionnaires about themselves, their friend, and their friendship; in addition, each woman's picture was rated by a set of nine naive judges. Friends were similar in both self-rated and other-rated level of attractiveness. Within-pair analyses revealed that women agreed on which friend was more attractive, and the less attractive members of each friendship pair (by pair consensus as well as outside judges' ratings) perceived more mating rivalry in their friendship than did the more attractive members of each friendship pair. We offer directions for research on women's friendships over the lifespan.

Keywords Women's friendships · Same-sex friendship · Physical attractiveness · Rivalry

Bestselling novels in the United States and elsewhere, such as *The Jane Austen Book Club*, *Reading Lolita in Tehran*, *Memoirs of a Geisha*, and *A Thousand Splendid Suns*, celebrate the unique architecture of friendships between women. Scholarly books on friendship, too, are numerous, with more of them devoted to women's friendships than to men's. Books on women's friendships emphasize the opposing forces that appear to define these relationships. Three of the top Amazon.com (January 2009) hits for books on female friendships, for example, portray juxtaposed forces in women's friendships: *Secrets and Confidences: The Complicated Truth about Women's Friendships* (Eng 2004), *Between Women: Love, Envy and*

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Competition in Women's Friendships (Eichenbaum and Orbach 1989), and *Best Friends: The Pleasures and Perils of Girls' and Women's Friendships* (Apter and Josselson 1998).

Empirical research on emerging and young adults corroborates what literary scholars have suggested: Women perceive both benefits and costs in their friendships with women (Bleske and Buss 2000). On one hand, young women frequently report that their female friendships provide companionship and emotional support (Rose 1985), and that their female friends give them mating advice and accompany them in mate-seeking endeavors (Bleske and Buss 2000; Gottman and Mettetal 1986). On the other hand, women also report that their female friendships take up a lot of time and are emotionally draining (Hays 1988; Micke et al. 2008), and that their female friends make them feel bad about themselves and compete with them for attention from desirable potential romantic partners (Bleske and Buss 2000). We conducted the current study to test the proposal that similar levels of physical attractiveness between female friends is one factor underlying the opposing forces in women's friendships.

One reason to expect that female friends are similar in physical attractiveness is data showing that friends are similar on a variety of other dimensions, some of which may be linked to similarity in attractiveness. For example, friends tend to have similar interests and values, which may be tied to similarity in health-promoting or appearance-enhancing behaviors. Friends tend also to be similar in age, level of education, family background, income, religious views, political views, and the activities they enjoy (Johnson 1989; Tolson and Urberg 1993; see Fehr 1996 for a review).

There are multiple, related explanations for previously observed similarities observed among friends. First, according to theories of cognitive consistency (Heider 1958), humans are driven by a need for balance, and thus we prefer to be around individuals who perceive issues and other people the same way we do. Relatedly, the logic of Strategic Interference Theory (Buss 2004) suggests that we are oriented toward interaction partners who will help us achieve our goals. From this perspective, we are more likely to achieve our goals when we are allied with others who are moving toward those same goals. For example, it may be easier for women to find and meet potential long-term mates with certain qualities (such as financial capacity and high levels of commitment intent) if they ally themselves with another woman looking for those qualities, even if they might have to compete with her later for access to one or more of those mates.

A second explanation of observed similarities between friends comes from an individual differences perspective. Individuals' education, abilities, interests, and values guide the environments they select for themselves and so they are more likely to spend time with similar others than with dissimilar others (Scarr and McCartney 1983). This idea of "niche-seeking" may be important for friendship formation, because individuals increasingly like those with whom they come in frequent contact (Hamm et al. 1975; Morinaga and Matsumura 1987). For example, women who report less willingness to engage in casual sex differ from their unrestricted counterparts in the tactics they use to attract mates, such as dressing conservatively (Bleske-Rechek and Buss 2006). These women may come into contact with each other more frequently than expected by chance and develop friendly attitudes toward

each other as a product of their more frequent contact. In indirect support of this possibility, female friends report similar attitudes toward engaging in casual sex (Preder et al 2006).

The demands of mate attraction and competition might provide the best explanation for why we would expect female friends to be similar in their level of *physical attractiveness*. Because men place a premium on physical attractiveness, competition among women to attract men centers heavily on their level of attractiveness (Buss 2003); thus, women should not want a friend to be much more attractive than they are because then they might look less desirable in comparison to their friend, but at the same time women should not want a friend to be much less attractive than they are because that might inhibit their ability to gain attention or interest from men when together. Women should prefer friends who are attractive enough to attract desirable males, yet not so attractive that they steal all the attention of those desirable males.

Very little research has actually addressed the question of friends' similarity in attractiveness. The most reliable study (Cash and Derlega 1978), which involved 24 pairs of close female friends rated by two observers, showed a friendship pair-wise correlation of 0.40. In another study (McKillip and Riedel 1983), two groups of close and casual female friend dyads were rated by just one observer and yielded pair-wise associations of 0.01 and 0.13, respectively. Finally, Murstein (1971) describes a study of a girls' cooperative at a New England college in which 26 women ranked every other person in attractiveness; reciprocal best friends were actually dissimilar in ranked attractiveness ($r=-0.49$). Besides the potential for restricted range operating in any select sample of women living together, the sample size of 26 and requirement of reciprocal best friend nominations suggests that the exact number of dyads was no more than 13 and probably less than that (no specifics are offered in the original text). Overall, the previous studies do not provide a clear pattern of findings (Feingold 1988). Thus, we designed the current study to provide a sound test of the hypothesis that female friends are similar in both their self-perceived and other-perceived levels of attractiveness.

Similar levels of attractiveness would indicate that two female friends are more similar to each other in attractiveness than are two women paired at random (Cash and Derlega 1978). Such similarity, however, would not indicate identical levels of attractiveness, and in each friendship pair there is likely to be one friend who is (even slightly) more attractive than the other. As mentioned previously, women compete intensely over physical attractiveness to attract and keep their mates (Buss 1988, 2003; Buss and Dedden 1990; Buunk and Dijkstra 2004; Dijkstra and Buunk 2002; Tooke and Camire 1991), so friend asymmetries in attractiveness have the potential to create mating rivalry between two female friends. In support of this possibility, Tesser and colleagues (Tesser and Campbell 1982; Tesser et al. 1989) showed that individuals are threatened by having a friend perform better than them on characteristics that are important to their sense of self (in their research, for example, social sensitivity). Physical attractiveness is important to women's own perception of their desirability as well as others' perception of their desirability; therefore, having a friend who is more attractive might exert a negative contrast effect on women's perceptions of themselves as well as force them to put forth more costly effort to attract a mate. Given that it should be threatening and perhaps even

costly, then, for women to have a friend who is more attractive than themselves, we hypothesize that women who perceive themselves as less attractive than their friends perceive their friends as mating rivals. We predict that (1) Women who perceive themselves as less attractive than their female friend will perceive more mating rivalry in their friendship than will women who perceive themselves as more attractive than their female friend; (2) Within friendship pairs, the woman whom both friends say is less attractive will perceive more mating rivalry in the friendship than will the woman whom both friends say is more attractive; and (3) Within friendship pairs, the woman rated as less attractive by outside judges will perceive more mating rivalry in the friendship than will the woman rated as more attractive by outside judges.

Method

Participants

Forty-six pairs of female friends from a large Midwestern university in the United States participated. The 92 women were all heterosexual and of traditional college student age (19.3 ± 1.2 years). Their friendships varied from 2 weeks to 10 years of duration; the median friendship duration was 13 months ($M=21.5$ months, $SD=22.9$ months). Ninety-one women were Caucasian; one was Asian. Of the 92 women, 63 (68%) were single or casually dating and 29 were in a committed romantic relationship. Friends were not similar in relationship status, $\chi^2_4 = 3.14$, $p=0.53$.

Forty-six women participated in partial fulfillment of a course research participation requirement of several lower-level psychology courses. The study was advertised as an investigation of “sources of content and contention in women’s friendships,” and women signed up to participate under the requirement that a same-sex friend who was not a dating partner or family member would accompany them to the one-hour session.

Materials and Procedure

Friendship pairs were run in small group sessions. Pairs arrived at the session together. Each woman was given a friendship number and letter (e.g., “4A” and “4B”) and then pairs were separated and taken to different rooms to complete questionnaires that were pre-identified with the friendship numbers and letters. As part of a broader questionnaire about themselves, their friend, and the friendship, participants responded to several items to assess perceptions of attractiveness. They responded to the question, “Compared with other women your age, how physically attractive are you?” The nine-point scale ranged from “Not at all Attractive” to “Average” to “Extremely Attractive.” Later on in the questionnaire, they also responded to that question about their friend: “Compared with other women her age, how physically attractive is your friend?” The nine-point scale ranged from “Not at all Attractive” to “Average” to “Extremely Attractive.” At another point in the questionnaire, participants compared themselves with their friend: “Which of the

following best describes how you and your friend compare in physical attractiveness?" The seven-point scale ranged from "I Am Much More Attractive than She Is" to "We are the Same" to "She Is Much More Attractive than I Am." We used both seven-point and nine-point scales because students who piloted our questionnaires told us that varied scales prevented them from falling into a response set.

In the middle of the questionnaire, participants reported the degree to which they thought 87 different forms of confluence and conflict characterized their friendship (e.g., "I can trust her with my secrets" and "She doesn't always tell me the truth"). Embedded within the 87 statements were five of particular interest to this study because they assessed mating rivalry. These items were as follows: "She flirts with guys I am interested in," "It is harder to meet guys when she is around," "I feel undesirable when she's around," "I feel in competition with her for attention from members of the opposite sex" and "I feel unattractive in comparison to her." The seven-point scale ranged from "Disagree Entirely" to "Neither Agree nor Disagree" to "Agree Entirely." Responses to the five rivalry statements showed high internal consistency ($\alpha=0.80$) and so were averaged for primary analyses.

Upon completion of the questionnaire, and with their consent, participants were photographed against a white wall along a well-lit hallway. The photo was in color and of the head and neck only. In previous studies our lab found that women smiled unless told otherwise. Hence, to go with women's default tendency and to obtain some degree of consistency in expression, we instructed the women to smile. Photos were cropped so that no picture showed anything beyond the neck. Ninety of the 92 participants (the two dissenters were friends) consented to having their photos judged for subsequent research purposes.

Two years after data collection was complete, a naive set of five female and four male undergraduate students from lower-level psychology courses rated the 90 pictures. These judges were 19 and 20 years old, and therefore of the same general age as our original participants were when photographed. Judges did not know they were rating women who had come in as members of friendship pairs. In addition, pictures were shuffled so women in the same friendship pair were not judged immediately before or after one another. Three female and two male judges viewed the pictures in one order; two female and two male judges viewed the pictures in exact reverse order. Judges rated each woman on apparent intelligence, physical attractiveness, and sexiness (e.g., "Compared with other women her age, how *physically attractive* is this woman?"). Judges provided their responses on nine-point scales ranging from "Not at all" to "Average" to "Extremely." Judges were instructed to place an "X" through the rating form for any woman they had seen before, but they left no "X" marks and in the post-rating session debriefings we clarified that the judges did not recognize any of the women they had rated.

Attractiveness and sexiness ratings were highly correlated, $r_{90}=0.89$, $p<0.001$; however, in order to compare them directly with women's self-ratings, we used only the physical attractiveness ratings. Male and female judges' ratings of the women's physical attractiveness were highly reliable (male $\alpha=0.80$, female $\alpha=0.78$), so they were averaged (overall $\alpha=0.87$). The nine judges' ratings of sexiness demonstrated a similar degree of consensus ($\alpha=0.86$); however, judges did not demonstrate consensus in their impressions of intelligence ($\alpha=0.62$). Hence, analyses below involving intelligence include only self-reports from the original female participants.

Results

We first generated descriptive statistics on the variables of interest in this study: self-perceived attractiveness, other-perceived attractiveness, and self-reported mating rivalry in the friendship. On each of these variables, the women identified as “Friend A” (this was by chance, depending on which friend the researcher approached first when the friendship pair entered the lab) did not differ, on average, from the women identified as “Friend B” (paired-samples t -test p values > 0.28). Thus, we report descriptive statistics for the sample as a whole.

Women’s ratings of their own attractiveness ($M=5.70$, $SD=1.26$) were higher than judges’ ratings of their attractiveness ($M=4.45$, $SD=1.43$), $t_{89}=7.09$, $p<0.001$. However, women’s self-rated attractiveness levels were positively associated with judges’ ratings of their attractiveness, $r_{90}=0.36$, $p<0.001$. Women reported relatively low levels of mating rivalry in their friendships ($M=2.30$, $SD=1.15$). Women’s relationship status (involved versus not involved) was not related to their own or their friend’s perception of mating rivalry in the friendship, nor was women’s sexual history (reported number of sex partners) or discrepancy between friends in sexual history (all p values >0.11).

Similarity in Physical Attractiveness

Our first hypothesis was that women friends would be similar in both self-perceived and other-rated levels of attractiveness. This hypothesis was supported. Female friends’ self-rated levels of physical attractiveness were moderately and positively associated, $r_{46}=0.30$, $p=0.04$. This effect was verified via scatter plot; moreover, when we reassembled the data into twenty different sets of random friendship pairs (see Luo and Klohnen 2005), the correlation coefficients ranged from -0.22 to $+0.32$, with a mean coefficient of -0.003 . The positive association between friends’ self-rated attractiveness also does not appear to be a product of women perceiving themselves as similar to their friends, because women’s ratings of their own attractiveness correlated only weakly with their ratings of their friends’ attractiveness, $r_{92}=0.22$, $p=0.04$.

Outside judges’ ratings of female friends’ levels of attractiveness were strongly correlated, $r_{45}=0.61$, $p<0.001$. Again, this effect was verified via scatter plot, as displayed in Fig. 1. In further validation of the effect, correlation coefficients from twenty sets of randomly constructed friendship pairs ranged from -0.34 to $+0.24$, with a mean coefficient of -0.01 .

Attractiveness Discrepancies and Rivalry

Our second hypothesis was that women who perceive themselves as less attractive than their friends perceive their friends as mating rivals. The first prediction to follow from this hypothesis is that women who perceive themselves as less attractive than their female friend will perceive more mating rivalry in their friendship than will women who perceive themselves as more attractive than their female friend. Indeed, women’s perception of their friend’s attractiveness, relative to their own, was associated with their perception of rivalry in the friendship, $r_{91}=0.47$, $p<0.001$. This

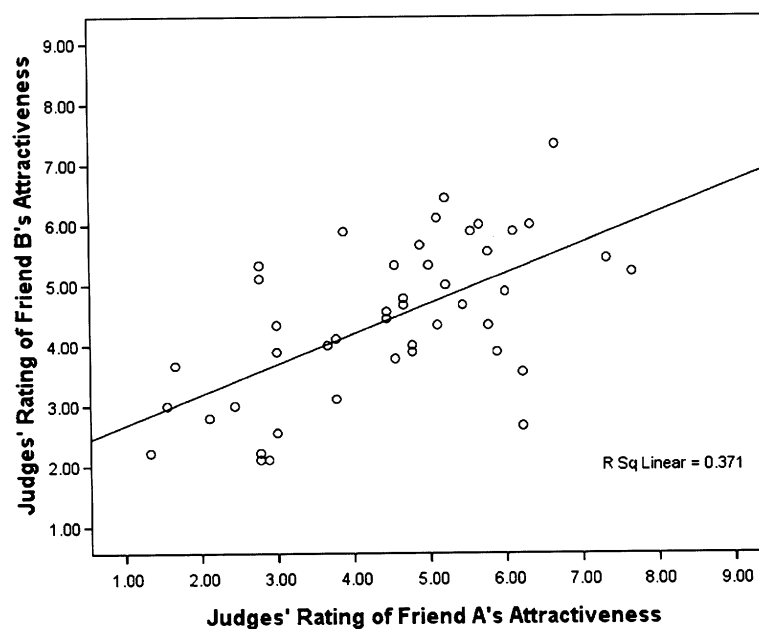


Fig. 1 Scatterplot of the similarity between female friends' levels of physical attractiveness, as rated by naive judges

effect replicated within each of the individual items comprising the mating rivalry composite (all p values < 0.06). Notably, and in support of the specificity of the predicted effect, women's perception of mating rivalry in their friendship was *not* linked to perceived discrepancy between their own and their friend's level of intelligence, $r_{91} = -0.07$, $p = 0.51$.

We also explored discrepant attractiveness and perceptions of rivalry by splitting the women into three groups according to their response to the question comparing their own and their friend's attractiveness. The original scale had seven check boxes ranging from "I Am Much More Attractive than She Is" (scored as 1) to "We are the Same" (scored as 4) to "She Is Much More Attractive than I Am" (scored as 7). We placed women who checked one of the first three boxes (1 to 3) in the self $>$ friend group, women who checked the fourth box in the self = friend group, and women who checked one of the last three boxes (5 to 7) in the self $<$ friend group. As displayed in Fig. 2, women's perception of their own attractiveness, relative to their friend's attractiveness, was tied to their perception of rivalry in the friendship, $F_{2, 88} = 15.23$, $p < 0.001$, partial $\eta^2 = 0.26$. Post hoc analyses revealed that women who thought their friend was more attractive felt more rivalry in their friendship ($M = 3.35$, $SD = 1.48$) than did women who thought they and their friend were equally attractive ($M = 2.35$, $SD = 1.04$), $p = 0.05$, and more rivalry than did women who thought they were more attractive than their friend ($M = 1.85$, $SD = 0.70$), $p = 0.001$. In contrast to what we expected on the basis of literature showing costly competition among closely matched non-human rivals (Enquist and Jakobsson 1986; Leimar et al. 1991), women who thought they and their friend were equally attractive did *not* report significantly more rivalry compared with women who thought they were more attractive than their friend, $p = 0.11$.

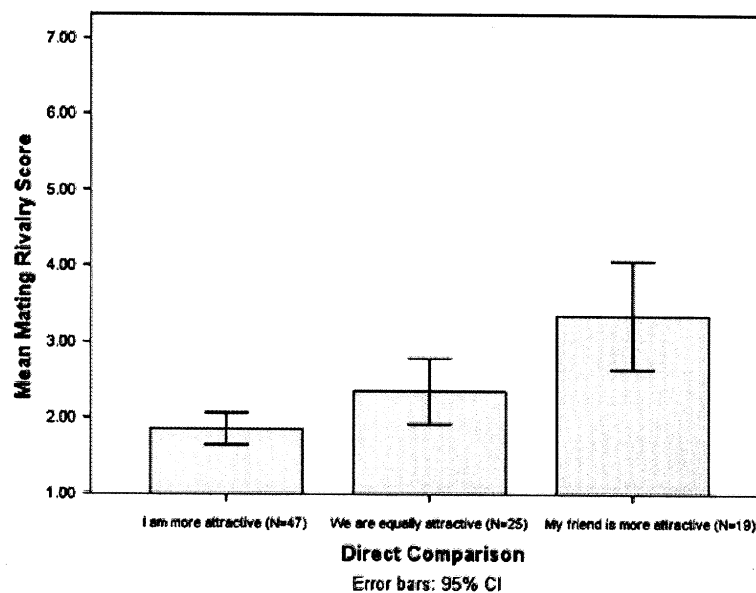


Fig. 2 Women's perceptions of rivalry in their friendship, as a function of whether they believe they are more attractive than, equally as attractive as, or less attractive than their friend

Our second prediction to follow from the hypothesis that attractiveness discrepancies are tied to rivalry is that, within friendship pairs, the woman whom both friends say is less attractive will perceive more mating rivalry in the friendship than will the woman whom both friends say is more attractive. Indeed, female friends did not report similar levels of rivalry in their friendship, $r_{45}=0.04$, $p=0.81$. We conducted comparisons to determine if differences in perceptions of rivalry within friendship pairs varied systematically according to perceived differences in attractiveness. To do this, we first created a variable that reflected the discrepancy between Friend A's and Friend B's reports of rivalry in the friendship. On this variable, which we call Rivalry Discrepancy Score (RDS), a positive (+) value indicates that Friend A perceives more rivalry than does Friend B, and a negative value (–) indicates that Friend B perceives more rivalry. We calculated the mean RDS for friendship pairs in which the friends agreed that Friend B is more attractive (RDS is predicted to be positive) and the mean RDS for friendship pairs in which the friends agreed that Friend A is more attractive (RDS is predicted to be negative). The results of these analyses are displayed in Fig. 3. As shown in the figure, friends' perceptions of rivalry differed systematically as a function of perceived differences in attractiveness, $F_{2, 42}=4.92$, $p=0.01$, partial $\eta^2=0.19$. Among the pairs who agreed that Friend B was more attractive, the mean rivalry discrepancy score ($M=0.76$, $SD=1.51$) was significantly above zero, one-sample $t_{16}=2.09$, $p=0.03$. Among the pairs who agreed that Friend A was more attractive, the mean rivalry discrepancy score ($M=-0.94$, $SD=1.60$) was significantly below zero, one-sample $t_{12}=2.11$, $p=0.03$. Among the 15 pairs who disagreed about who was more attractive, the mean rivalry discrepancy score ($M=0.16$, $SD=1.33$) was not significantly different from zero, $t_{14}=0.47$, $p=0.68$.

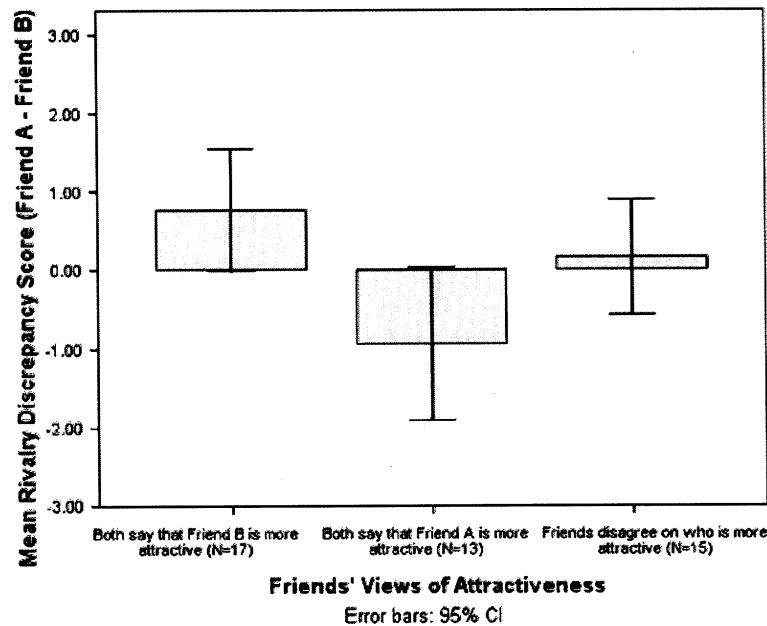


Fig. 3 Discrepancies in friends' perceptions of mating rivalry in the friendship, as a function of friends' reports of which friend is more attractive

The third prediction to follow from the hypothesis that attractiveness discrepancies are tied to rivalry is that, within friendship pairs, the woman rated as less attractive by outside judges will perceive more mating rivalry in the friendship than will the woman rated as more attractive by outside judges. To test this prediction, we computed a new variable to index the magnitude and direction of discrepancy in judges' ratings of Friend A versus Friend B for each pair of friends. To the extent that judges rated Friend A as more attractive than Friend B, the Rated Attractiveness Discrepancy Score was positive, and to the extent that judges rated Friend B as more attractive than Friend A, the Rated Attractiveness Discrepancy Score was negative. In confirmation of our prediction, Rated Attractiveness Discrepancy Score and Rivalry Discrepancy Score were negatively correlated, $r_{44} = -0.36$, $p = 0.02$. As displayed in Fig. 4, the more that judges' attractiveness ratings favored Friend A over Friend B (a positive attractiveness discrepancy score), the more rivalry was reported by Friend B relative to Friend A (a negative rivalry discrepancy score); likewise, the more that judges' attractiveness ratings favored Friend B over Friend A (a negative attractiveness discrepancy score), the more rivalry was reported by Friend A relative to Friend B (a positive rivalry discrepancy score).

Discussion

In the current research, we predicted and documented that young adult female friends are similar to each other in their level of physical attractiveness. Our prediction was founded in various theoretical perspectives (Cognitive Consistency

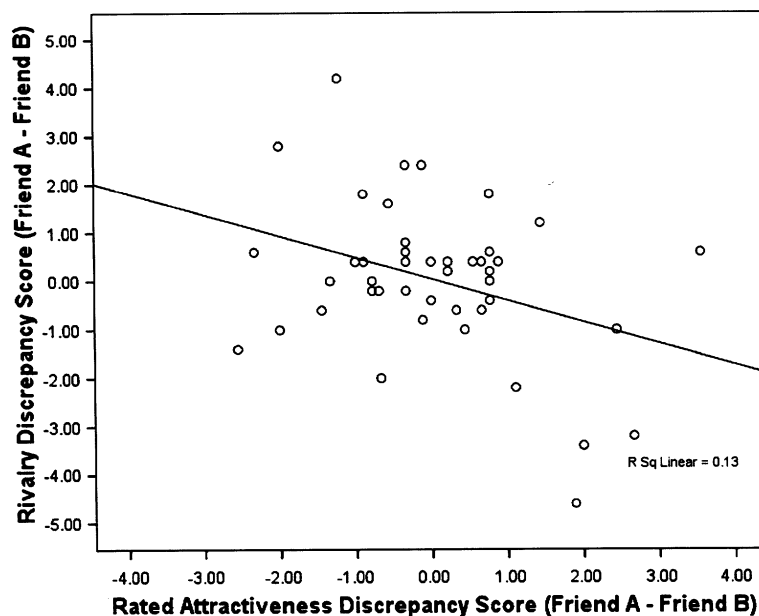


Fig. 4 Scatterplot of the association between discrepancies in judges' ratings of friends and discrepancies in friends' perceptions of mating rivalry in the friendship

Theories, Strategic Interference Theory) and the logic of mate attraction, which emphasize the interpersonal benefits associated with allying oneself with similar others. Our prediction also was founded in past research showing that friends are similar on other dimensions, such as their interests, social attitudes, and education level (see Fehr 1996 for a review). Similarity between romantic partners is quite substantial as well (e.g., Bleske-Rechek et al. 2009; Luo and Klohnen 2005; Vandenberg 1972); taken together with previous research on friend and romantic partner similarity on a variety of dimensions, our findings on friend similarity in attractiveness suggest that *similarity* is a defining characteristic of both friendships and mateships.

We also hypothesized that, although young female friends may be similar to each other in their level of attractiveness, the perception of any discrepancies between them in attractiveness would be tied to perceptions of their friendship as involving mating rivalry. In line with this prediction, we documented that less-attractive friends experience more rivalry in their friendship than do their more-attractive counterparts. Indeed, our association between female friends' reports of rivalry in their friendship and judges' ratings of female friends' attractiveness levels suggests that outsiders are likely to identify which member of a given pair of friends experiences more mating rivalry—merely through judgments of the women's physical attractiveness.

Self- and Others' Judgments of Attractiveness

Friends' self-ratings of attractiveness were moderately correlated ($r=0.30$), and friends' attractiveness ratings from outside observers were highly correlated ($r=0.61$); the

difference between these two correlation coefficients tends toward significance ($p=0.07$) and raises the question of what exactly is similar between women friends, or what exactly is perceived similarly. Friends' ratings of their own attractiveness, which were moderately similar, likely included not only their perceptions of their facial attractiveness, but also their perceptions of their bodily strengths and weaknesses. In addition, women's appraisals of their own facial and bodily attractiveness were likely weighed against various other factors we did not measure, such as women's perceptions of their own personality and recent interpersonal successes and failures. To the extent that women's self-evaluations of their attractiveness included their perceptions of their character and social behaviors, the moderate correlation coefficient between friends' self-ratings might represent, in some part, similarity between friends in self-perceived personality and behavior. We also cannot know the specific group of women that came to mind when women read the phrase "other women your age." Some may have thought of their closest friends, some may have thought of others they saw in class that day, and so forth. Given all the potential noise, it is perhaps impressive that women's self-ratings were, indeed, correlated.

In contrast to the situation for our original female participants, the judges who provided attractiveness ratings were naive to the friendship status of the women they were rating. Judges made their ratings on the basis of a single head shot. It is possible that they used a variety of cues: hair and hairstyle (Bereczkei and Mesko 2006; Mesko and Bereczkei 2004), makeup, genuineness of smile, and various facial features, such as skin, shape of face, and eye size and position (Paunonen et al. 1999). Some characteristics, such as apparent attention to appearance and genuineness of smile, can impact attractiveness ratings (e.g., Bleske-Rechek et al. 2008; Mehu et al. 2008); these same characteristics may also be actual expressions of women's personalities. Thus, future researchers could determine whether judges' impressions of female friends' personality traits, such as friendliness and extraversion, are correlated.

We did not ask or determine what judges attended to first or most as they viewed each picture; however, we observed while running the rating sessions that judges made their attractiveness ratings quickly and easily. So, despite the fact that judges viewed a mere headshot of each woman for no more than 15–20 s, their ratings of female friends were highly correlated (and their ratings of women paired randomly were not at all correlated). Thus, we would like in future research to determine whether naive observers rate friends as similarly in other conditions. For example, the extent to which judges use similarity in apparent care in appearance, such as hair and makeup and dress, could be tested by taking both facial and full-body shots of women dressed in their own clothes or in a neutral outfit worn by all.

Judges' ratings of women's attractiveness were as highly correlated with those women's self-ratings ($r=0.36$) as they were with ratings from the women's friends ($r=0.45$). In other words, if Jenni and Anna are friends, outside raters agree with Jenni about how attractive Anna is to the same degree that outside raters agree with Anna's rating of herself. This pattern of associations lends validity to the idea that perceptions of attractiveness are robust, regardless of who is making the judgment. As described above, judges made their ratings on the basis of a single head shot. Friends have a variety of privileged information about each other's personality and behavior, both good and bad, which may have factored into their judgments. In the

end, different judges of attractiveness—self, friend, outside observers—all have their own sources of error and bias, yet the judgments are intercorrelated. As has been demonstrated many times (for reviews, see Gangestad and Scheyd 2005; Langlois et al. 2000), humans show consensus in their perceptions of what is and is not attractive.

Attractiveness and Self-Evaluation Maintenance

One of the nuances of the data, displayed in Fig. 2, is that about half of the women thought they were more attractive than their friend was, and just 20% (19 of 92) thought they were *less* attractive than their friend was. Thus, although friends agreed on which woman was more attractive in 30 of the 46 friendship pairs (more than expected by chance, $p=0.01$), the majority of discrepancies occurred when both friends said they were the more attractive woman. Past research has shown that both men and women evaluate themselves, relative to their existing friends, in a self-serving manner (Morry 2005, 2007). In addition, Vigil (2007) documented that women prefer prospective friends who exhibited slightly higher capacity cues than they themselves exhibited except for when the cue was related to physical attractiveness; that is, women do not prefer their friends to be more attractive than themselves. According to Tesser's (e.g., Tesser and Campbell 1982) theory of self-evaluation maintenance, individuals are threatened by a close other outperforming them on a trait they value highly and, in response, evaluate that close other negatively on the valued trait. If women are threatened by having a female friend who is potentially more attractive than they are, a characteristic valued highly by women, then women's evaluations of their friends' attractiveness should be biased downward when pitted against themselves. We checked our participants' pattern of responses against this logic. When women evaluated their friend's attractiveness "compared to other women your age," women's mean rating for their friends was 6.4 of 9 (well above the theoretical midpoint of 5.0, which was given a text anchor of "average"), whereas their evaluations of their own attractiveness "compared to other women your age" were still favorable but hovered closer to the theoretical midpoint, at 5.6. When women evaluated their friend's attractiveness in direct comparison to *their own* attractiveness, however, women evaluated themselves as *more* attractive than their friend ($M=-0.51$, $SD=1.17$; the scale went from -3 to $+3$, with -3 being "I am much more attractive than she is"). Assuming a population value of zero, one-sample $t_{91}=4.25$, $p<0.001$. These mean comparisons suggest that "others" may be less of an immediate threat to women than their friends are, and that women may engage in judgment processes that protect them from the potential negative effects to self of appraising themselves negatively relative to a friend.

Limitations and Future Directions

Future research in this area might improve upon a couple of the primary limitations of the current study. One possible limitation, for example, is that our sample consisted only of college-aged women. Competition and rivalry occur among men and therefore are likely to occur in men's friendships with men, as well. Given women's mate preferences, we speculate that rivalry between male friends might

hinge less on physical attractiveness and more on men's perceptions of their own and their friends' levels of social dominance and physical prowess (Buss 2004).

Popular press books and scholarly books on the pleasures and perils of women's friendships with women do not focus exclusively on young adult women; if anything, they offer a lifespan perspective. Thus, future research on rivalry between female friends needs to extend beyond traditional college student samples. In our student sample, the young women were of limited life circumstance. For example, not one woman was married; in fact, the majority of women were not involved in a serious relationship. Although attractiveness levels varied widely in our sample and were tied to perceptions of rivalry, it is possible that the links between attractiveness and "rivalry" would operate differently among older young adults and middle-aged women, who are more likely (compared with the women of our sample) to be married, raising children, and struggling to find time for their female friendships at all. For example, some research has established that even among married middle-aged adults, romantic attraction occurs between opposite-sex friends (Micke et al. 2008; Sapadin 1988). Thus, we might expect that the threat of an attractive female is not limited to just young adulthood or just same-sex friendships. If a middle-aged married woman has a highly attractive friend, how much she invests in the friendship or how extensively she involves that friend in her and her spouse's life might be related to her perception of that woman's trustworthiness and the degree to which that woman is committed to her own relationship partner. Likewise, assuming that women are aware of the romantic attraction that can occur between opposite-sex friends, women should be especially sensitive to the attractiveness level of their mates' opposite-sex friends. Specifically, women's feelings of jealousy and distrust toward their mates' opposite-sex friendships should be positively correlated with the degree to which they perceive those women as more attractive than themselves.

A second potential limitation of the current study is our restricted ability to infer from our data whether and how rivalry impacts these women's friendship dynamics. Overall, levels of rivalry were very low, but a minority of women did report moderate levels of rivalry. We also did not ask whether women perceived rivalry *from* their friends (and those reports could have been a bit higher because they would not involve threat to self). We speculated at the beginning of this paper that rivalry might be a necessary, costly by-product of women allying themselves with others who are similar to themselves and who will attract mates at their level. Past research suggests that women do mention rivalry as a cost of their same-sex friendships (Bleske and Buss 2000). Research also suggests that exposure to pictures of highly attractive women has a negative effect on women's perceptions of their own attractiveness (Gutierrez et al. 1999). Thus, it is possible that having a friend who is more attractive than oneself may have negative effects on women's perception of their own attractiveness and, in turn, their psychological well-being. However, it is not clear that the rivalry from having a more-attractive friend is entirely costly; in fact, it is likely outweighed by substantial benefits. Having a more-attractive friend can increase one's contact with desirable, potential romantic partners; provide high-quality information about how to attract romantic partners; and heighten one's access to valued resources (such as other desirable friends). Indeed, competitive women, in particular, might actually seek out friendships with women who are more attractive than they are, especially if having a more attractive friend serves some motivating

function. For example, we did not ask our participants about this, but perhaps perceptions of friends' attractiveness are related to the extent to which women strive to improve their own level of attractiveness. We can note, in support of our speculation that the costs of mating rivalry may be outweighed by the benefits, that in the current sample neither mating rivalry nor the degree to which women perceived their friend as more attractive than them was related to their perception of how close the friendship was, how "true" the friendship was, or how long they expected the friendship to last.

Conclusion

In the current research we documented that young adult female friends are similarly attractive, as perceived by both themselves and others. Although similar, friends are not entirely the same in their levels of attractiveness, and less-attractive members within friendship pairs perceive more mating rivalry in their friendship than do their more attractive counterparts. It seems we have barely scratched the surface in this exploration of the complexities involved in women's friendships with women. We hope that our theoretically driven study of attractiveness and rivalry in young women's friendships will spur more investigations of the ties between attractiveness and friendship dynamics in both sexes, in both same-sex and opposite-sex friendships, over the lifespan.

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