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## Mate Preference Necessities in Long- and Short-Term Mating: People Prioritize in Themselves What Their Mates Prioritize in Them

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People were given highly constrained low budgets of mate dollars to allocate across various characteristics pertaining to their ideal partners and to their ideal selves for long- and short-term mating. First, results replicated findings from Li et al. (2002) and Li & Kenrick (2006). For ideal long-term mates, men prioritized physical attractiveness and women prioritized social status. For ideal short-term mates, both sexes prioritized physical attractiveness. Second, people's design of their ideal selves mirrored what the opposite sex ideally desired in their mates. For a long-term mating context, men prioritized social status in themselves and women prioritized physical attractiveness in themselves. For ideal short-term selves, both sexes prioritized physical attractiveness. Findings were consistent with a domain-specific view of psychological mechanisms, in that processes for valuing potential mates and processes for valuing one's own mate value may be specialized mechanisms.

**Keywords:** mate selection, long-term mating, short-term mating, self-ideals.

### 未来配偶偏爱的特征——选择长期配偶与短期配偶的条件

该研究中被试分配有限“配偶币”来抉择与理想配偶标准相符合的性交往对象。首先, 该研究重复验证了 Li 等人 (2002) 和 Kenrick (2006) 的发现, 男性理想的长期配偶需要外表出众, 而女性理想的长期配偶需要社会地位较高; 两性理想的短期配偶都必须外表出众。其次, 两性所投射出的理想自我与潜在配偶偏好的特征一致, 研究发现, 长期性交往条件下, 男性需要具有较高社会地位, 女性需要外表出众; 短期性交往条件下, 男性和女性都需要外表出众。评价潜在配偶的机制与评价现有配偶的机制可能是两种受到选择的不同的心理机制。

**关键词:** 配偶选择, 长期性关系, 短期性关系, 自我理想。

**分类号:** B84-069

According to evolutionary psychologists, ancestral men and women faced different adaptive problems when choosing romantic partners (e.g., Buss, this issue; Buss & Schmitt, 1993; Geary, 1998; Symons, 1979). In response to these different challenges, different evolved psychological mechanisms may have evolved in men and women that direct them to value different kinds of qualities in mates and in themselves. In this paper, I review a recent line of work that examines how those psychological mechanisms might operate in the evaluation of long- and short-term mates, and test how people value mate characteristics in themselves.

#### *Evolved Long-Term Mate Preferences*

Fixed egg production places an important constraint on women's reproductive viability. Female fertility tends to peak in the mid-20s and decline at an increasing rate until menopause. This constraint, together with concealed ovulation, may have provided

selection pressure for men to develop an attraction toward physical features that are correlated with sexual maturity and youth (Symons, 1979). As women age beyond their mid-20s, lips become thinner and less red, hair loses shine and softness, cheeks lose color, skin becomes less tight, muscle tone fades, the waist expands, and breasts and buttocks lose their shape. Thus, it may be adaptive for men to be attracted toward full lips, soft hair, smooth skin, colorful cheeks, good muscle tone, a low waist-to-hip ratio, and shapely breasts and buttocks (e.g., Cant, 1981; Johnston & Franklin, 1993; Manning, Scutt, Whitehouse, & Leinster, 1997; Singh, 1993; Symons, 1979, 1995).

Though men undergo similar physical changes from aging, male fertility declines much more gradually over the lifespan. Thus, male reproductive value is not as aversely affected by increasing age. However, ancestral men may have varied greatly in their ability to generate resources and influence social dynamics (e.g., Betzig, 1986). Because men who were higher in status had better access to resources for offspring, women are predicted to have evolved to value social status in long-term mates (e.g., Buss, 1989; Symons, 1979).

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Consistent with this evolutionary reasoning, studies on long-term mate preferences conducted over several decades have shown that men value physical attractiveness more than women do, and women value social status and resources more than men do (e.g., Buss & Barnes, 1986; Buss, 1989; Harrison & Saeed, 1977; Hill, 1945; McGinnis, 1958; Sprecher, Sullivan, & Hatfield, 1994; Wiederman, 1993). However, physical attractiveness and status commonly have been rated as moderate in importance, and even ranked at the bottom of many trait lists designed to tap mating preferences. For instance, Powers (1971) compiled six mate-preference studies that examined the relative importance of 14 traits (1 = most important, 14 = least important). “Good financial prospect” received an average rank of 9.5 from women, versus 13.1 from men, and “favorable social status” received an average of 11.5 from women, versus 12.8 from men. “Good looks” received a mean rank of 12.0 from men, versus 13.3 from women. Thus, while there were reliable sex differences in preferences for looks and status, the importance of these traits relative to other ones was low. Similarly, when participants from 37 cultures rated the importance of various characteristics in potential marriage partners, predicted sex differences were found for the value of good looks, good financial prospect, and ambition-industriousness; yet, neither sex considered them especially important in an absolute sense (Buss, 1989).

From these results, it would be reasonable to conclude that while neither sex especially values physical attractiveness or status in their partners, men desire status even less than women do, and women desire physical attractiveness even less than men do. Given the evolutionary importance ascribed to physical attractiveness and social status, this conclusion is less than satisfying.

### *An Economic Evolutionary Perspective*

To address this concern, my colleagues and I (Li, Bailey, Kenrick, & Linsenmeier, 2002; Li & Kenrick, 2006) examined the possibility that adaptive priorities may underlie mate preferences. Specifically, men and women may prioritize obtaining a certain level of physical attractiveness and social status in their respective long-term mates. Beyond initial prioritization of these traits, however, other characteristics may be more highly valued.

A limitation of prior studies is that they asked participants to consider the desirability of characteristics one at a time. As such, previous methods may have concealed underlying trade-offs that people make and priorities that people have when selecting mates (Li et al., 2002). Some studies have asked participants to rank the importance of traits (e.g., Buss & Barnes, 1986, Study 2), and others have

more directly tapped into mate-choice tradeoffs (e.g., Cunningham, Druen, and Barbee, 1997; Fletcher, Tither, O’Loughlin, Friesen, and Overall, 2004; Regan, 1998). However, these studies did not constrain participants’ choices, and thus, were not able to investigate how traits are prioritized.

For instance, consider the relative value of oxygen, water, and food. According to the amount of time, money, and effort typically spent pursuing these items, food may be the most valuable and oxygen the least valuable. Similarly, if asked to choose among high levels of each, one would likely forego excess oxygen in favor of extra food or water. However, a person will survive the least amount of time if deprived of oxygen, and the longest amount of time if deprived of food. Thus, a more complete account of the relative importance of these items should consider tradeoffs from the ground up: when deprived of all three, oxygen is most essential. Once a person has enough oxygen to breathe, attention then turns to acquiring water or food. All three are important, but they differ in their prioritization (Li & Kenrick, 2006).

To uncover priorities in mate preferences, a microeconomic framework has been useful (Li et al., 2002; Li & Kenrick, 2006). Microeconomics deals with the structure of consumer preferences, emphasizing costs and benefits, as well as a distinction between necessities and luxuries. Necessities are goods or activities that receive initial priority, but diminishing marginal returns occur as each additional unit is less valuable. As marginal returns diminish for necessities, preferences shift toward other items – luxuries, which then offer greater marginal benefits. For example, having enough oxygen to breathe is much better than having no oxygen, but having extra (marginal) oxygen is not much better than having just enough. Relative to oxygen, water and food are luxuries. When consumers have very little income, a large proportion of their expenditures tend to be allocated toward necessities such as electricity, rent, and basic food. However, as more income becomes available, a smaller proportion of income goes toward these types of items, and a greater proportion gets spent on luxuries, including vacations and private education.

The concept of diminishing marginal benefits underlies not only consumer behavior, but more generally, how living organisms adaptively allocate effort across alternative courses of action. For example, in behavioral ecology, the marginal value theorem (Charnov, 1976) is used to explain animals’ foraging patterns (e.g., Krebs & Davies, 1993). A forager will move to a new food patch when the value of moving on outweighs the value of staying at the current patch, which diminishes with further consumption.

### ***Long-Term Mating Priorities***

From an evolutionary perspective, marginal value is relevant to the mate-selection process. For example, mating with a non-fertile mate would be a reproductive dead end. Thus, when mating choices are highly constrained, men, in particular, should prioritize fertility. To the extent that an ancestral woman's fertility was related to her observable physical features (Symons, 1979), men may have evolved to strongly desire at least a moderate level of physical attractiveness in order to have a reasonable probability of fertility (Li et al., 2002). An ancestral woman who is considered moderately attractive is likely able to reproduce (e.g., Singh & Young, 1995). Though more attractiveness is desirable, additional attractiveness is increasingly more difficult to obtain (given mutual mate choice and one's own limited mate value) and provides fewer additional benefits in terms of higher fertility probability. Thus, as attractiveness is obtained, its marginal cost increases and its marginal value decreases so that other traits should be weighted more heavily as choices expand. In other words, trying to obtain an extremely attractive woman with little else to offer is likely less reproductively profitable than finding one who is moderately attractive and also has other positive traits, such as status. Nevertheless, looking first for status in a female mate makes less sense, because a high-status but infertile mate is less reproductively viable than a fertile but low-status mate (Li et al., 2002).

Similarly, to the extent that low-status men in the evolutionary past were not able to provide sufficient resources for offspring to survive (for a related review on parental investment, see Geary, 2000), women may have evolved to prioritize some level of male status before being concerned about other mate characteristics. That is, a destitute man with very low status may have been able to provide little or nothing for offspring, whereas a man with moderate status may have been able to generate a steady flow of resources. However, due to decreasing marginal value, a higher-status male may have offered only a slight improvement over a mid-status male in terms of offspring survival probabilities. Thus, women may be inclined to first verify that a man has sufficient status/resources, and then to seek positive levels of other traits (Li et al., 2002).

Using both a budget-allocation method and a mate-screening paradigm, we found that under the constraints of a low budget, men tended to spend the highest proportion of their budget on physical attractiveness, whereas women spent the highest proportion on status and resource-related characteristics. As budgets increased, spending decreased on these traits but increased on others, such as creativity. Put another way, both sexes tended to desire well-rounded mates when given the freedom to

make such choices. But when choices were highly constrained, men prioritized having a minimal level of physical attractiveness and women prioritized a minimal level of status (Li et al., 2002).

### ***Short-Term Partners***

For short-term mates (e.g., one-night stands and affair partners), Li and Kenrick (2006) found that both men and women prioritized physical attractiveness, though men even more so. Although preferences were relatively similar between the sexes, the underlying adaptive reasons may be different. When men pursue short-term sexual relationships, ensuring partner fertility should be even more critical than when they pursue long-term relationships.

For women, however, the necessity of physical attractiveness in short-term partners may have more to do with ensuring good underlying genes. According to the "good genes" theory (Thornhill & Gangestad, 1993), pathogens encountered in development can result in visible deviations from bilateral symmetry. Healthy genes and a strong immune system allow an individual to resist pathogens, but testosterone inhibits the immune system. Thus, men who simultaneously exhibit testosterone-rich features and bilateral symmetry effectively advertise having genes that are resistant to local pathogens. Consistent with this idea, men who are considered physically attractive by women exhibit more bilateral symmetry (e.g., Scheib, Gangestad, & Thornhill, 1999; Thornhill & Gangestad, 1994), facial masculinity (e.g., Johnston, Hagel, Franklin, Fink, & Grammer, 2001; Penton-Voak et al., 1999), and muscularity (Frederick & Haselton, 2005). Symmetrical and masculine men have more sexual partners, are more desirable as affair partners (Gangestad & Thornhill, 1997; Thornhill & Gangestad, 1994), and are especially preferred by women around the time of ovulation (e.g., Gangestad & Thornhill, 1998; Johnston et al., 2001; Penton-Voak et al., 1999). Indeed, women in our studies (Li & Kenrick, 2006) indicated an attraction toward muscularity and other testosterone-related features in short-term mates.

### ***The Current Study***

Results from our empirical investigations have thus far supported the hypothesis that people may have psychological mechanisms that incline them to value potential mates in ways that would have been adaptive in the ancestral past. Specifically, many traits may be important, but some are prioritized more highly than others, depending on a person's sex and the mating context. Status and resources are prioritized by women considering long-term mates, whereas physical attractiveness is prioritized by men considering long-term mates and by both sexes considering short-term mates.

These findings are also consistent with the idea that psychological mechanisms tend to be comprised of specialized solutions to domain-specific problems (Buss, 1995; Tooby & Cosmides, 1990). That is, an adaptive problem in one domain should have a different solution involving different inputs or processing features than an adaptive problem in another domain. To further investigate the domain specificity of the mating mechanisms reviewed thus far, the current study looked into how people design themselves as mates. One possibility is that people would design themselves as they would design the opposite-sex mates that they desire. Another possibility is that people would have no relative preferences when designing themselves. A third possibility, one that is more consistent with findings that cognitive functions may be adaptively domain specific, is that people's prioritization of what is important in themselves may reflect the priorities of the opposite sex. That is, men may prioritize physical attractiveness in themselves when considering short-term mating, but resources when considering long-term mates. Women, on the other hand, may prioritize physical attractiveness in themselves in both mating contexts.

### Method

Following Li et al. (2002) and Li & Kenrick (2006), a budget allocation task was utilized to measure mate preferences. Because the focus of the study was to examine initial priorities, and these are most apparent when choices are most constrained, one low budget was used throughout the study. In a 4-factor, mixed model design, the between-subjects variable was participant sex (men, women). Within-subject variables were duration (long, short), target (mate, self) and characteristic, which included 5 traits used by Li et al. (2002, Studies 2 & 3) and Li and Kenrick (2006, Study 1) – physical attractiveness, social level, creativity, kindness, and liveliness.

### Participant

Participants were 61 University of Texas undergraduates enrolled in a psychology course. There were 44 women, aged 19 to 35 ( $M = 21.8$ ) and 17 men, 20 to 26 ( $M = 22.0$ ).

### Materials and Procedure

Materials consisted of two mate design pages and a page for demographics. The demographics page had questions pertaining to age and sex. The top half of one mate design sheet asked participants to design their ideal long-term mate – “someone who you will be with for many years and possibly marry and have a family with.” The top half of the other mate design sheet asked participants to design their ideal short-term mate – “someone who you will have casual sex with, perhaps for one evening.” The bottom half of each mate design sheet asked participants to design themselves as an ideal mate for the mating context in question.

For each of the four mate design tasks (long-term ideal mate, long-term ideal self, short-term ideal mate, short-term ideal self), the five characteristics were listed across the sheet (presentation order counterbalanced). For each characteristic, the 0th percentile along with ten deciles (10th percentile, . . . , 100th percentile) were offered as choices. Each decile level corresponded clearly to a numerical level from 0 to 10, which was also the cost of obtaining the decile level in “mate dollars.” Therefore, “80th percentile = level 8 = 8 mate dollars.” Instructions stated that the relevant population for comparison consisted of individuals of the appropriate sex who might be observed during a typical week on a busy campus street known for its diversity. Participants chose percentile levels for their ideal mate- and self-design tasks with a restrictive budget of 10 mate dollars per task.

### Results

The dependent measure was the amount of mate dollars spent on a characteristic. Analysis of variance (ANOVA) was used to analyze the data. Only those effects including characteristic were examined, as the data are not meaningful if spending is collapsed across traits and relative preferences for different traits are eliminated. To improve interpretability, the dependent variable is presented here as a percentage of budget spent (i.e., 4 mate dollars out of 10 total = 40%).

Table 1 *Allocations for Long- and Short-term Ideal Mates and Self as Mate – Mean Percentage Allocated to Each Characteristic*

Characteristic	Long-term				Short-term			
	Men		Women		Men		Women	
	Mate	Self	Mate	Self	Mate	Self	Mate	Self
Physical attractiveness	40.0 <sub>a</sub>	25.3 <sub>ab</sub>	21.4 <sub>b</sub>	35.5 <sub>a</sub>	66.5 <sub>a</sub>	52.2 <sub>a</sub>	50.7 <sub>a</sub>	59.6 <sub>a</sub>
Creativity	10.6 <sub>cd</sub>	13.5 <sub>bc</sub>	8.0 <sub>c</sub>	6.6 <sub>d</sub>	5.9 <sub>b</sub>	6.9 <sub>c</sub>	5.5 <sub>d</sub>	3.6 <sub>c</sub>
Kindness	22.9 <sub>b</sub>	18.8 <sub>abc</sub>	25.2 <sub>ab</sub>	23.2 <sub>b</sub>	8.2 <sub>b</sub>	9.9 <sub>c</sub>	13.4 <sub>bc</sub>	8.9 <sub>b</sub>
Liveliness	10.0 <sub>bd</sub>	10.6 <sub>c</sub>	12.7 <sub>c</sub>	13.6 <sub>c</sub>	10.6 <sub>b</sub>	7.6 <sub>c</sub>	11.1 <sub>cd</sub>	13.4 <sub>b</sub>
Social level	16.5 <sub>bc</sub>	31.8 <sub>a</sub>	32.7 <sub>a</sub>	21.1 <sub>bc</sub>	8.8 <sub>b</sub>	23.3 <sub>b</sub>	19.3 <sub>b</sub>	14.5 <sub>b</sub>

Note. Subscripts denote comparisons within a column. Means with different subscripts are significantly different from one another ( $p < .05$ , Bonferroni adjusted).

Table 1 shows expenditures across all five characteristics under the low budget for both sexes,

both durations, and for both ideal mate and self. A duration  $\times$  characteristic interaction,  $F(4, 236) = 60.396, p < .001, \eta^2 = .506$ , indicated that different characteristics were prioritized for long- vs. short-term mating. Simple effects tests with a Bonferroni alpha correction ( $\alpha = .05/5 = .01$ ) revealed a greater prioritization of creativity, kindness, and social level for long-term mating, and a greater emphasis on physical attractiveness for short-term mating.

Moreover, a participant sex  $\times$  target  $\times$  characteristic interaction,  $F(4, 236) = 32.023, p < .001, \eta^2 = .352$ , indicated that men and women favored different characteristics, and these differences varied for ideal mates versus ideal selves. To examine every possible sex difference in spending, I tested the effect of sex for each characteristic, using a Bonferroni alpha-correction ( $\alpha = .05/10 = .005$ ). For ideal mates, men spent more on physical attractiveness than women did, and women spent more on social level than men did. For ideal selves, men spent more on social level than women did. No other effects were significant.

Looking within each sex, when designing ideal long-term mates, men weighted physical attractiveness the most,  $F(1, 59) = 42.15, p < .001$ , whereas women weighted social level the most,  $F(1, 59) = 28.68, p < .001$ , with kindness as a close second. However, when designing ideal long-term selves, men

weighted social level the most,  $F(1, 59) = 11.11, p = .001$ , with physical attractiveness and kindness lagging close by, whereas women weighted physical attractiveness the most,  $F(1, 59) = 53.85, p < .001$ . For short-term mating, there was a different pattern. For ideal mates, physical attractiveness was weighted the most by both men,  $F(1, 59) = 81.84, p < .001$ , and women,  $F(1, 59) = 92.33, p < .001$ . Similarly, physical attractiveness was weighted the most by both men,  $F(1, 59) = 37.09, p < .001$ , and women,  $F(1, 59) = 144.86, p < .001$ , for their ideal selves.

Thus, what men prioritized in ideal long- and short-term mates was the same as what women prioritized in themselves for long- and short-term contexts, respectively. Likewise, what women favored in ideal long- and short-term mates was the same as what men prioritized in themselves for long- and short-term contexts, respectively. To more thoroughly examine the cross-similarities, men's specification for ideal mates and women's specification for ideal selves were recoded as male mate preferences, and women's specification of ideal mates and men's specification of ideal selves were recoded as female mate preferences. Thus, while the old "target" variable reflected mate versus self, a new "target sex" variable reflected male versus female.

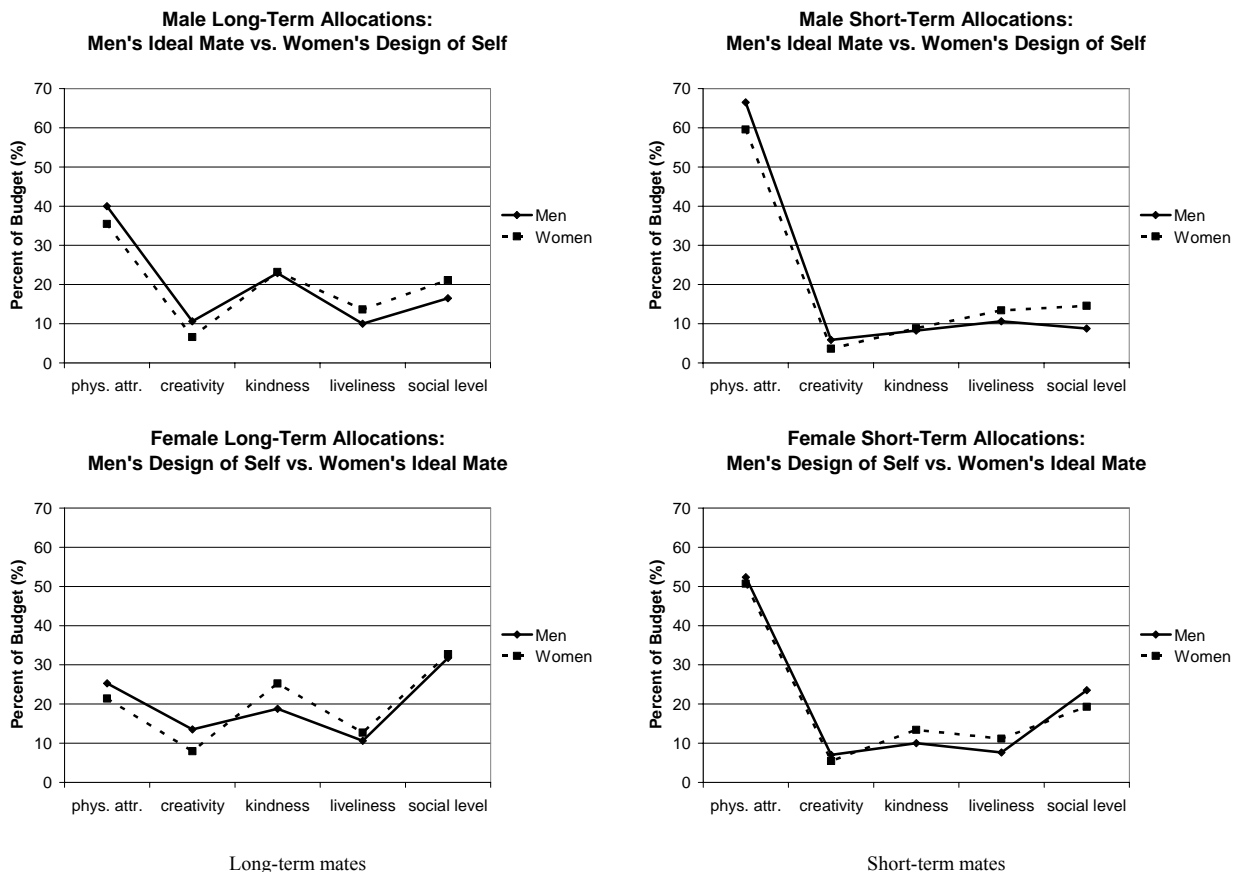


Figure 1. Women Prioritize in Themselves What Men Prioritize in Mates, and Men Prioritize in Themselves What Women Prioritize in Mates

As can be seen in Figure 1, men's ideal mate specifications were very similar to women's ideal self specifications, and women's ideal mate specifications were similar to men's ideal self specifications. Performing an ANOVA, I looked for interactions involving the newly-coded target sex variable (effects not involving this variable would be the same as in the previous analysis). There was an interaction of target sex  $\times$  characteristic,  $F(4, 236) = 32.023$ ,  $p < .001$ ,  $\eta^2 = .352$ , indicating that male mate preferences were different than female mate preferences. Testing for simple effects of target sex at each characteristic with a Bonferroni alpha-correction ( $\alpha = .05/5 = .01$ ), men and women favored more physical attractiveness for male mate preferences, and more social level for female preferences. The other simple effects were not significant. There was no main effect nor interactions for the participant sex variable, reflecting that the sexes did not differ in their specifications of male or female mate preferences. Put another way, men's ideal mates and women's ideal selves did not differ, and women's ideal mates and men's ideal selves did not differ.

### Discussion

Using the same methodology and the same characteristics, the results of the present study replicated previous findings from Li et al. (2002; Study 2) and Li and Kenrick (2006, Study 1). When constrained by low budgets, men prioritized physical attractiveness and women prioritized social status (and kindness to a somewhat lesser extent) in their long-term mates, and both sexes prioritized physical attractiveness in their short-term mates. In addition, this study examined how people ideally design themselves in mating contexts. Rather than valuing characteristics in themselves that they value in mates or in an unrelated manner, people in each context prioritized characteristics in themselves very closely to how the opposite sex specified ideal mates. In particular, men prioritized social status (and some kindness) in themselves and women prioritized physical attractiveness in themselves for long-term mating. For short-term mating, both sexes highly prioritized physical attractiveness in themselves.

### *Mechanisms for Evaluating Mates and One's Own Mate Value*

The findings reported here help to further illuminate how psychological mechanisms for mate evaluation and self-as-mate evaluation might work. The evaluation of potential mates and selves as mates may be distinct yet related mechanisms that take into account one's sex and the mating context.

Because fertility may be the most crucial issue with regards to the reproductive viability of women, it makes sense that men would prioritize ensuring a

reasonable chance of fertility in their mates. As such, men should value some level of physical attractiveness (age-related visual cues) in long- and short-term mates much like an economic necessity (Li et al., 2002; Li & Kenrick, 2006). In contrast, variations in men's ability to contribute resources to offspring may have been a critical part of men's mate value in ancestral times. Thus, women may have evolved to have initial preferences for long-term mates who meet minimum thresholds of social status (Li et al., 2002). For short-term mating, where resources may not be relevant, a man's genetic quality (Gangestad & Simpson, 2000) may have been crucial. To the extent that this is indicated by certain features in his outward appearance, women may have evolved to prioritize physical attractiveness in short-term partners (Li & Kenrick, 2006).

Likewise, it is adaptive to have an accurate view of one's own mate value. By properly gauging one's own mate value, a person may be able to set sights on as high quality of a mate as possible without holding out for ones who are unattainable due to higher quality competition (e.g., Kenrick, Groth, Trost, & Sadalla, 1993; Symons, 1995; Tooby & Cosmides, 1990). Mechanisms for tracking one's own mate value should require implicit knowledge of how potential mates' mate-valuation mechanisms work (e.g., Gutierrez et al., 1999). The findings of the current study, that people's ideal mating selves reflect their mates' ideal mate specifications, are consistent with this possibility.

Evidence that people implicitly know and desire to be how the other sex values mates also comes from various other sources. For instance, Buss (1988) found that women tend to attract mates by enhancing their physical appearance. Indeed, the multi-billion-dollar cosmetics industry and the rapidly expanding cosmetic-surgery market reflect modern women's awareness of the benefits of aesthetically controlling the aging process and thus, the underlying adaptive value (and priority) that men place on physical attractiveness. In contrast, men attract mates more often by displaying and boasting about resources. When using deception to attract mates (Tooke & Camire, 1991) or poach them from their current partners (Schmitt & Buss, 2001; Schmitt & Shackelford, 2003), women tend to misrepresent themselves along the lines of physical appearance, whereas men tend to misrepresent their resources. Similarly, women more often derogate the physical appearance of same-sex competitors, whereas men more often derogate the financial (and physical) strength and ambition of male competitors (Buss & Dedden, 1990). It is interesting to note that men in such studies mostly advertised and competed on social status, suggesting a desired or feigned long-term mating strategy. It would be reasonable to expect

that men who openly pursue a short-term strategy would advertise and compete more on physical attractiveness.

### **Future Directions**

Because the current study only employed highly constrained low budgets, it did not examine what occurs beyond initial priorities. Previous research, however, shows that the sexes tend to be relatively similar in terms of what is valued when constraints are loosened and choices expand (Li et al., 2002; Li & Kenrick, 2006). Specifically, both sexes tend to value well-rounded mates as budgets increase. Thus, if given higher budgets, I would expect men and women to value a more even distribution of traits in themselves. Researchers may administer higher budgets to test this assertion.

Another idea for future study would involve examining the effects of media exposure on the prioritization of crucial characteristics in mates and oneself for each mating context. Mechanisms involved in setting mating standards may factor in the quality of mating alternatives and competitors in one's environment. Such processes may have been adaptive in the ancestral past, when people lived in small groups and encountered very few potential mates or competitors. In modern times, however, people encounter not only more individuals, but also numerous two-dimensional media images. Interestingly, people do not seem to be able to psychologically differentiate between their actual potential mates and ones they encounter in magazines, television, or computer screens. Seeing desirable media images may cause an upward shift in one's underlying assessment of the mating pool quality, which may in turn trigger higher mating standards and more discontentment in long-term relationships. For example, when women are exposed to mere descriptions of resourceful men, women tend to lower their commitment to current partners. Similarly, men downgrade their commitment when they are exposed to pictures of physically attractive women (Kenrick, Neuberg, Zierk, & Krones, 1994).

As such, it may be reasonable to expect that exposure to desirable mates may cause individuals to increase the prioritization of key characteristics in their mates. For example, when looking for long-term mates, men who are exposed to physically attractive women may place an even higher initial emphasis on an ideal mate's physical attractiveness. Women, on the other hand, after being exposed to socially dominant men may place a higher initial emphasis on resources in their ideal mates.

Similarly, being exposed to desirable same-sex competitors has been shown to cause a person to downgrade his or her self-assessed mate value (Gutierrez, Kenrick, & Partch, 1999). That is, images

of physically attractive women cause a woman to lower her self-perceived mate value, whereas descriptions of resourceful men induce a man to lower his self-perceived mate value. Thus, it may also be reasonable to hypothesize that exposure to images of physically attractive females would cause women to increase the prioritization of physical attractiveness in themselves, and exposure to media representations of resourceful men would increase the prioritization of social dominance in men. In line with this reasoning, the prevalence of body image dissatisfaction and eating disorders among women in modern societies has been linked to exposure to attractive women in the media (e.g., Hargreaves & Tiggemann, 2002; Harrison, 2001; Heinberg & Thompson, 1995; Stice & Shaw, 1994; Tiggemann & McGill, 2004). More generally, high rates of depression and health problems may be linked to not being able to live up to standards set by modern day media inputs (Buss, 2000; Nesse & Williams, 1994).

Though this paper focuses on adaptive evolutionary processes, this does not preclude the influence of cultural factors. Indeed, future studies should examine budget choices in different subcultures or cultures to see how local norms might influence the prioritization of various characteristics. I would expect the general prioritizations found here to hold, though perhaps to varying degrees depending on local conditions. Such studies could contribute to a greater understanding of cultural similarities and differences, and how cultural and biological forces interact to shape people's mate preferences priorities. In this view, culture does not exist outside of human evolution, but rather it is an emergent dynamic that interacts with the adaptive proclivities of the individuals who make up societies (Kenrick, Li, & Butner, 2003).

### **References**

- Betzig, L. (1986). *Despotism and differential reproduction: A Darwinian view of history*. New York: Aldine de Gruyter.
- Buss, D. M. (1988). The Evolution of Human Intrasexual Competition: Tactics of Mate Attraction. *Journal of Personality & Social Psychology*, 54, 616-628.
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral & Brain Sciences*, 12, 1-49.
- Buss, D. M. (1995). Evolutionary psychology: A new paradigm for psychological science. *Psychological Inquiry*, 6, 1-30.
- Buss, D. M. (2000). The evolution of happiness. *American Psychologist*, 55, 15-23.
- Buss, D. M. & Barnes, M. (1986). Preferences in human mate selection. *Journal of Personality and Social Psychology*, 50, 559-570.
- Buss, D. M. & Dedden, L. A. (1990). Derogation of competitors. *Journal of Social & Personal Relationships*, 7, 395-422.
- Buss, D. M., & Schmitt, D. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204-232.
- Cant, J. G. H. (1981). Hypothesis for the evolution of human breast and buttocks. *American Naturalist*, 117, 199-206.
- Charnov, E. L. (1976). Optimal foraging: the marginal value theorem. *Theoretical Population Biology* 9, 129-136.
- Cunningham, M. R., Druen, P. B., & Barbee, A. P. (1997). Angels, mentors, and friends. In J. A. Simpson & D. T. Kenrick (Eds.), *Evolutionary Social Psychology* (pp. 109-140). Mahway, NJ:



- Erlbaum.
- Fletcher, G. J. O., Tither, J. M., O'Loughlin, C., Friesen, M., & Overall, N. (2004). Warm and homely or cold and beautiful? Sex differences in trading off traits in mate selection. *Personality & Social Psychology Bulletin, 30*, 659-672.
- Frederick, D. A., & Haselton, M. G. (2005). Male muscularity as a good-genes indicator: Evidence from men's self-reported sexual behaviors and women's preferences for muscularity. Presented at the *Human Behavior and Evolution Conference*, Austin, TX.
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences, 23*, 573-587.
- Gangestad, S. W., & Thornhill, R. (1997). The evolutionary psychology of extrapair sex: The role of fluctuating asymmetry. *Evolution and Human Behavior, 18*, 69-88.
- Gangestad, S. W., & Thornhill, R. (1998). Menstrual cycle variation in women's preferences for the scent of symmetrical men. *Proceedings of the Royal Society of London, B, 265*, 927-933.
- Geary, D. C. (2000). Evolution and proximate expression of human paternal investment. *Psychological Bulletin, 126*, 55-77.
- Geary, D. C. (1998). *Male, female: The evolution of human sex differences*. Washington, DC: American Psychological Association.
- Gutierrez, S. E., Kenrick, D. T., & Parth, J. J. (1999). Beauty, dominance, and the mating game: Contrast effects in self-assessment reflect gender differences in mate selection. *Personality and Social Psychology Bulletin, 25*, 1126-1134.
- Hargreaves, D. A., & Tiggemann, M. (2002). The effect of television commercials on mood and body dissatisfaction: The role of appearance-schema activation. *Journal of Social and Clinical Psychology, 21*, 287-308.
- Harrison, K. (2001). Ourselves, our bodies: Thin-ideal media, self-discrepancies, and eating disorder symptomatology in adolescents. *Journal of Social and Clinical Psychology, 20*, 289-323.
- Harrison, A. A., & Saeed, L. (1977). Let's make a deal: An analysis of revelations and stipulations in lonely hearts advertisements. *Journal of Personality & Social Psychology, 35*, 257-264.
- Hill, R. (1945). Campus values in mate selection. *Journal of Home Economics, 37*, 554-558.
- Johnston, V. S., & Franklin, M. (1993). Is beauty in the eye of the beholder? *Ethology and Sociobiology, 14*, 183-199.
- Johnston, V. S., Hagel, R., Franklin, M., Fink, B., & Grammer, K. (2001). Male facial attractiveness: Evidence for hormone mediated adaptive design. *Evolution and Human Behavior, 21*, 251-267.
- Kenrick, D. T., Groth, G. E., Trost, M. R., & Sadalla, E. K. (1993). Integrating evolutionary and social exchange perspectives on relationship: Effects of gender, self-appraisal, and involvement level on mate selection criteria. *Journal of Personality and Social Psychology, 64*, 951-969.
- Kenrick, D. T., Li, N. P., & Butner, J. (2003). Dynamical evolutionary psychology: Individual decision rules and emergent social norms. *Psychological Review, 110*, 3-28.
- Kenrick, D. T., Neuberg, S. L., Zierk, K. L., & Krones, J. M. (1994). Evolution and social cognition: Contrast effects as a function of sex, dominance, and physical attractiveness. *Personality and Social Psychology Bulletin, 20*, 210-217.
- Krebs, J. R., & Davies, N. B. (1993). *An introduction to behavioural ecology* (3rd edition). Blackwell Scientific Publications, London.
- Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. W. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology, 82*, 947-955.
- Li, N. P., & Kenrick, D. T. (2006). Sex similarities and differences in preferences for short-term mates: What, whether, and why. *Journal of Personality and Social Psychology, 90*, 468-489.
- Manning, J. T., Scutt, D., Whitehouse, G. H., & Leinster, S. J. (1997). Breast asymmetry and phenotypic quality in women. *Evolution and Human Behavior, 18*, 223-236.
- McGinnis, R. (1958). Campus values in mate selection: A repeat study. *Social Forces, 36*, 368-373.
- Nesse, R. M., & Williams, G. C. (1994). *Why we get sick: The new science of darwinian medicine*. Times Books: New York.
- Penton-Voak, I. S., Perrett, D. I., Castles, D., Burt, M., Koyabashi, T., & Murray, L. (1999). Female preference for male faces changes cyclically. *Nature, 399*, 741-742.
- Powers, E. A. (1971). Thirty years of research on ideal mate characteristics: What do we know? *International Journal of Sociology of the Family, 1*, 207-215.
- Regan, P. C. (1998). What if you can't get what you want? Willingness to compromise ideal mate selection standards as a function of sex, mate value, and relationship context. *Personality and Social Psychology Bulletin, 24*, 1294-1303.
- Schmitt, D. P., & Buss, D. M. (2001). Human mate poaching: Tactics and temptations for infiltrating existing relationships. *Journal of Personality and Social Psychology, 80*, 894-917.
- Schmitt, D. P., & Shackelford, T. K. (2003). Nifty ways to leave your lover: The tactics people use to entice and disguise the process of human mate poaching. *Personality and Social Psychology Bulletin, 29*, 1018-1035.
- Scheib, J. E., Gangestad, S. W., & Thornhill, R. (1999). Attractiveness, symmetry, and cues of good genes. *Proceedings of the Royal Society of London, B, 266*, 1913-1917.
- Singh, D. (1993). Adaptive significance of female physical attractiveness: Role of waist-to-hip ratio. *Journal of Personality & Social Psychology, 65*, 293-307.
- Singh, D., & Young, R. K. (1995). Body weight, waist-to-hip ratio, breasts, and hips: Role in judgments of female attractiveness and desirability for relationships. *Ethology and Sociobiology, 16*, 483-507.
- Sprecher, S., Sullivan, Q., & Hatfield, E. (1994). Mate selection preferences: Gender differences examined in a national sample. *Journal of Personality & Social Psychology, 66*, 1074-1080.
- Stice, E., & Shaw, H. E. (1994). Adverse effects of the media portrayed thin-ideal on women and linkages to bulimic symptomatology. *Journal of Social and Clinical Psychology, 13*, 288-308.
- Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.
- Symons, D. (1995). Beauty is in the adaptations of the beholder: The evolutionary psychology of human female sexual attractiveness. In P. R. Abramson, & S. D. Pinkerton, (Eds.), *Sexual nature, sexual culture* (pp. 80-118). Chicago: University of Chicago Press.
- Thornhill, R., & Gangestad, S. W. (1993). Human facial beauty: Averageness, symmetry and parasite resistance. *Human Nature, 4*, 237-269.
- Thornhill, R., & Gangestad, S. W. (1994). Fluctuating asymmetry and human sexual behavior. *Psychological Science, 5*, 297-302.
- Tiggemann, M., & McGill, B. (2004). The role of social comparison in the effect of magazine advertisements on women's mood and body dissatisfaction. *Journal of Social and Clinical Psychology, 23*, 23-44.
- Tooby, J., & Cosmides, L. (1990). On the universality of human nature and the uniqueness of the individual: The role of genetics and adaptation. *Journal of Personality, 58*, 17-67.
- Wiederman, M. W. (1993). Evolved gender differences in mate preferences: Evidence from personal advertisements. *Ethology & Sociobiology, 13*, 331-352.