

# Evolution and Sex Differences in Preferences for Short-Term Mates: Results from a Policy Capturing Study

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It is important to distinguish between short-term and long-term mating when considering evolutionarily relevant sex differences in mating strategies and preferences. Sex differences in short-term mating preferences were examined in the current study using a policy capturing methodology. College student men (n=106) and women (n=114) read 50 descriptions of potential short-term mates and rated the desirability of each. Six characteristics were experimentally manipulated within these descriptions: physical attractiveness, financial resources, generosity, sexual experience/interest, current relationship status, and desired level of relationship commitment. Afterward, respondents rated how important each of these characteristics was in their judgments. Results are presented with regard to actual characteristics influencing men's and women's judgments in comparison to self-reported importance of each of the characteristics. We conclude that researchers should exercise caution in interpreting sex differences in mate selection preferences based on direct self-report of the importance of particular mate characteristics. © 1998 Elsevier Science Inc.

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rom an evolutionary perspective, much has been written regarding sex differences in mating strategies and preferences (see Allgeier and Wiederman 1994; Buss 1992, 1994; Kenrick 1994; Wiederman and Allgeier 1994, for examples and reviews). Recent authors have stressed the importance of distinguishing short-term from long-term mating. Short-term mating refers to choosing partners and engaging in sexual activity when the probability of that relationship

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continuing indefinitely is relatively low. In contrast, long-term mating implies increased probability that the relationship will be long-lasting.

Some individuals appear to prefer one form of mating over the other (Simpson and Gangestad 1991, 1992), and many people use short-term mating in certain contexts (e.g., vacations) or particular phases of the life course (e.g., immediately after the dissolution of a long-term relationship). Also, there appear to be general sex differences in propensity toward short-term mating (Buss and Schmitt 1993; Schmitt and Buss 1996) such that, compared to women, men are more open to short-term mating with regard to both attitudes (Chara and Kuennen 1994; Wilson and Medora 1990) and actual behavior (Clark 1990; Clark and Hatfield 1989).

Such a sex difference makes evolutionary sense in that men had less to lose and more to gain from such pairings than did women (Buss and Schmitt 1993; Ellis 1992; Schmitt and Buss 1996). A male who engaged in uncommitted sex stood to sire an offspring with very little parental investment if he so chose (Trivers 1972). A female who engaged in uncommitted sex stood to raise an offspring potentially with little or no help from the father and risked developing a reputation such that males interested in long-term mating might be wary of such investment due to future doubts over paternity confidence (Buss 1994; Symons 1979).

Still, both men and women do engage in short-term mating, at least under certain circumstances (Herold and Mewhinney 1993; Townsend 1995; Townsend et al. 1995). What does appear to differ is what men and women look for, or require, in such short-term mates (Landolt et al. 1995). For example, men's standards for a short-term mate are generally much lower than their standards for a long-term mate, whereas women's standards in both contexts are remarkably similar (Kenrick et al. 1990, 1993; Nevid 1984).

When would it have been advantageous for women to engage in short-term mating during our ancestral past? Such mating might have been beneficial when used as a means to attain immediate material resources, produce more physically attractive sons, or assess a male for a potential long-term union (Cashdan 1993; Gangestad and Simpson 1990; Symons 1979). That is, mating casually with a male who was physically attractive, had resources, and was willing to bestow those resources on the female, or was being considered as a potential long-term mate, might have been adaptive. Given evolutionary predictions, several hypotheses emerge.

## HYPOTHESES REGARDING SEX DIFFERENCES IN SHORT-TERM MATING PREFERENCES

- Although physical attractiveness may be more important to both men and women in a short-term mating context than in a long-term one, men are expected to place more emphasis on the physical attractiveness of short-term mates compared to women (Buss and Schmitt 1993).
- Relative to women, men are expected to value sexual experience and interest more highly in short-term mates (Buss and Schmitt 1993). If women are more likely than men to view short-term mating as an opportunity to assess and possi-

bly secure a long-term mate, or as a means to attain material resources, then that partner's interest in immediate sexual activity is less important. Conversely, if the opportunity for sexual activity is the primary incentive for men seeking short-term mates, men would prefer potential partners who have had sexual experience and are more interested in sexual activity (Greer and Buss 1994; Oliver and Sedikides 1992; Sprecher et al. 1991).

- 3. Relative to men, women are expected to value financial resources and generosity more in short-term mates, just as is the case with long-term mating (Buss 1994; Cashdan 1993; Ellis 1992).
- 4. Last, relative to women, men are expected to prefer short-term mates who are not seeking a long-term partner, whereas women, relative to men, would be more likely to prefer short-term mates who are seeking a long-term mate. As the desired end result of short-term mating is expected to differ at least some of the time for men (sexual activity) and women (potentially obtaining a long-term mate), each might see the current relationship status and desired relationship status of potential short-term partners in a different light. That is, men may prefer a short-term mate who is not seeking a long-term relationship, and may even be concurrently involved in such a long-term relationship, to ensure that the short-term partner would not expect more than immediate sexual activity. Conversely, women may prefer a short-term mate who is interested in a long-term relationship, or at least not already involved in a long-term relationship, to allow for the possibility of such a relationship.

In considering these variables, some potentially important functional interactions were apparent to us. For example, we believed there may be a statistical interaction between the emphasis placed on physical attractiveness and interest in sexual activity such that men would most prefer a potential short-term mate who was both attractive and desirous of sexual activity. As these two characteristics were expected to be more important to men in the selection of a short-term mate, it was conceivable that possessing both qualities would result in greater attractiveness as a potential short-term partner over possession of either characteristic alone.

Similarly for women, we realized that there may be functional interactions between physical attractiveness and the male's desired level of relationship. Physical attractiveness may be most important to women when the short-term partner is desirous of a long-term relationship. We also expected possible interactions between financial resources and generosity, financial resources and current relationship status, and current relationship status and desired level of relationship. The most attractive potential short-term mate for women might be both generous *and* in possession of material resources, he might possess financial resources *and* not already be involved in a committed relationship (toward which these resources might be diverted), and he might be desirous of a long-term relationship *and* not already involved in one.

Several these hypotheses have been tested by asking young men and women to rate the value they place on each characteristic in a short-term mate. Typically, support for these evolutionary predictions has been found (Buss and Schmitt 1993; Schmitt and Buss 1996). However, several problems exist with asking individuals to

report on the factors that affect their own judgments. Researchers have convincingly shown that, although individuals typically believe otherwise, humans do not have good insight (or any insight at all) into the various influences involved in their decision-making processes (Brehmer and Brehmer 1988; Nisbett and Wilson 1977). Direct self-reports on mate selection preferences may be tapping into individuals' relationship schemas (Baldwin 1992), or beliefs about relationship development and processes (Fletcher and Kininmonth 1992), rather than actual influences. One novel, though imperfect, way to more directly assess the factors affecting judgments is referred to as policy capturing.

#### POLICY CAPTURING METHODOLOGY

The term "policy" has come to be used in the field of human judgment and decision making to refer to "the factors used in making a judgment and the relative weighting thereof" (Ullman and Doherty 1984; 179). Within that context, the term "policy capturing" refers to "studies that analyze judgments made on the basis of multidimensional stimuli by means of a linear model" (Brehmer and Brehmer 1988; 78). In a policy capturing study, the respondent is given a relatively large set of scenarios, each of which is composed of several stimuli, and the respondent is asked to make a judgment in response to each scenario (Stewart 1988). The numeric values corresponding to each level of each stimulus (cue) within each scenario are then entered into a multiple regression equation to "predict" the respondent's judgments. In this way, the relative importance of each cue in the respondent's judgments can be quantified. The regression equation, with its indices of the relative weight given to each variable (e.g., beta weights), represents the individual's judgment policy (Stewart 1988).

To be more specific, the analysis of individual policies involves treating each respondent's judgments as a separate sample. This is why a relatively large number of scenarios must be presented to each respondent, as such a number must be large enough to permit multiple regression analysis of the individual's judgments by regressing the judgments on the cues (Stewart 1988). For the sake of illustration, consider a task in which the respondent makes a series of judgments in response to 60 different scenarios, each of which consists of five cues (and each cue has several levels with corresponding numeric values). Let us represent the respondent's judgment in response to any given scenario by  $Y_s$ . The 60  $Y_s$  values are regressed on the 60 sets of five cues. The multiple correlation between the cues and the  $Y_s$  is a measure of how predictable (consistent) the respondent's judgments are given the cues provided. Although this approach is ideographic in nature, it is possible to aggregate individual policies to characterize the policies for a group of respondents (nomothetic approach).

In the current study, a policy capturing methodology was used to examine men's and women's preferences regarding short-term mates and to test the hypotheses listed previously. Additionally, we examined whether the proposed sex differences in mate preferences might be accounted for by men's relatively greater attitudinal and behavioral propensity toward casual sex or their relatively less restricted sociosexual orientation.

#### SOCIOSEXUAL ORIENTATION

Simpson and Gangestad (1991, 1992) have attempted to understand both intersex and intrasex variation when it comes to short-term mating. These authors refer to the tendency to engage in uncommitted sexual relations as *sociosexual orientation* and have developed the Sociosexual Orientation Inventory (SOI; Simpson and Gangestad 1991) to measure this propensity.

"Sociosexuality refers to individual differences in willingness to engage in sexual relations without closeness, commitment, and other indicators of emotional bonding. Individuals who have demonstrated *unrestricted sociosexual orientation* tend to engage in sex in the absence of such indicators, whereas those who have demonstrated a *restricted sociosexual orientation* typically do not" (Simpson and Gangestad 1992; 33, emphasis in original). Across Simpson's and Gangestad's studies, men have demonstrated an unrestrictive sociosexual orientation relative to women, yet there is substantial variation among men and among women (Gangestad and Simpson 1990). As Simpson and Gangestad (1992) pointed out, many of the sociosexuality effects they found were larger than the concurrent effects for biological sex. It may be that the concept of sociosexual orientation is more useful than biological sex per se in understanding individual differences in short-term mating preferences. Accordingly, we included sociosexual orientation, in addition to sex of respondent, as a relevant variable to study.

#### **METHODS**

#### **Participants**

Participants were 119 men and 134 women enrolled in introductory psychology courses at a mid-sized, midwestern state university. The mean age of respondents was 19.95 years (SD = 3.67) for men and 19.53 years (SD = 3.11) for women. The large majority of respondents (88.5%) were white, 22 (8.7%) of the respondents were black, and the remaining 7 (2.8%) of the respondents were of another ethnic/racial heritage.

#### Measures

**Demographics and sexual orientation.** Respondents were asked to indicate sex, age, and ethnicity for description of the sample. Additionally, because our focus was on heterosexual preferences in short-term mates, respondents were asked to indicate their sexual orientation by choosing one of four phrases that best described the respondent's "sexual feelings": (1) sexual interest only in males; (2) sexual interest mostly in males, some sexual interest in females; (3) sexual interest mostly in females, some sexual interest in males; or (4) sexual interest only in females.

Cues, scenarios, and insight into judgments. The judgment task was introduced immediately following the demographic questions. Male and female forms of the judgment materials were provided, including instructions written specifically for each sex. That is, the materials the male and female respondents received were the same, except for the pronouns used. For illustration, consider the form given to male research participants (see Appendix). All participants responded to the same set of scenarios, and within that set, the depicted short-term mates were presented in the same order to all participants. The 50 descriptions were generated such that none of the cues was statistically significantly correlated (i.e., the cues were orthogonal to each other so that issues of multicollinearity among the cues was not a concern).

Immediately following the instructions, respondents were presented with 50 consecutive descriptions of a potential short-term partner (see Appendix). Immediately below each description, respondents were provided with a six-point scale with which to provide a judgment (ranging from 1 = Extremely Undesirable to 6 = Extremely Desirable).

Following the 50th description, respondents were provided with a list of the six attributes that had been manipulated within the scenarios. Respondents were asked to estimate the importance each dimension played in the respondent's judgments by distributing 100 points among the six dimensions in such a way that the score assigned to each dimension corresponds with the percentage of importance placed on that dimension during the judgment task. An example was provided to illustrate that 0 could be assigned to any particular dimension, that the cue receiving the highest rating should be the one that was most influential in the judgment process, and that the ratings should sum to 100. When the weights did not sum to 100, presumably through a mathematical error by the respondent, we adjusted the values so that the proportion of points associated with each weight remained the same but summed to 100.

**Sociosexual orientation.** The SOI (Simpson and Gangestad 1991) was presented last and consists of seven items tapping both attitudes and behavior. After scoring according to the formula provided by Simpson and Gangestad (1991), higher scores indicate a relatively unrestricted sociosexual orientation.

#### **Procedure**

Respondents completed the anonymous questionnaire and performed the judgment task in small, mixed-sex groups. Potential participants were unaware of the nature of the study at the point of initial sign-up, but were provided with a verbal description of the task upon arrival at the testing site. No one refused to participate upon learning the nature of the study. Upon completion of the questionnaire and judgment task, participants returned the materials by placing them in a box separated from the researcher by several feet, were thanked, and received research credit toward partial completion of the introductory psychology course.

#### **RESULTS**

Those respondents (one female participant) who indicated a primary or exclusive homosexual orientation were excluded. To ensure some degree of homogeneity with regard to age and relevant relationship experience, those respondents older than 21 years were excluded from analyses (11 men, 7 women). After computing regression equations for each participant, those participants who exhibited an  $R^2 < .60$  were excluded from subsequent analyses (2 men, 12 women). A relatively low  $R^2$  value most likely indicates unreliability on the part of the respondent, and .60 is a relatively liberal cutoff (Stewart 1988). The final sample consisted of 106 men and 114 women, all between the ages of 18 and 21 years, who were heterosexual and relatively reliable in their judgments regarding the desirability of the hypothetical short-term mates.

Considering first the overall ratings given across descriptions of potential short-term mates, the mean ratings were near the midpoint of the scale for both men and women. However, men rated the women described in the scenarios as more desirable (M = 2.99, SD = .46) than women rated the corresponding men described in the scenarios (M = 2.78, SD = .52), F(1, 218) = 9.36, p < .003. Also, the mean  $R^2$  value for the regression analyses performed on men's judgments (M = .82, SD = .09) was higher than the mean  $R^2$  value for the regression analyses performed on women's judgments (M = .78, SD = .08), F(1, 218) = 10.46, p < .002. Compared to the women, the men in the sample generally rated the potential short-term mates depicted in the scenarios as more desirable, and they were more consistent in their judgments across scenarios.

What about the relative emphasis placed on each of the six characteristics (cues) manipulated within each description? It is possible for two given respondents to place equal importance on a particular cue, yet do so in different ways. For one respondent, higher levels of the characteristic may make the described short-term mate more desirable, whereas another respondent could place equal *value* on the same cue, but in such a way that lower levels of the characteristic are equated with increased desirability.

For statistical tests in the current study, two separate issues are important: (1) the extent to which each mate characteristic is valued in an absolute sense; and (2) the direction of the relationship between the characteristic and ratings of mate desirability. Accordingly, we took the absolute value of the standardized beta weights for each respondent for each cue when testing for sex differences. Comparisons of these values by sex are presented in Table 1. Compared to women, men placed more emphasis on the physical attractiveness of potential short-term mates and women placed more emphasis on a potential mate's generosity. There were no sex differences in the absolute value placed on any of the other four cues.

Inspection of the means in Table 1 reveals that both men and women appear to have placed the most emphasis on the physical attractiveness of potential short-term mates when making their judgments, and the emphasis placed on the remaining five cues was approximately equal among them. Still, the information in Table 1 does not tell us anything about the *direction* of the effect the cues had on respondent

Characteristic (cue)	Men $(n = 106)$		Women $(n = 114)$			
	Mean	SD	Mean	SD	F	p <
Physical attractiveness	.72	.43	.52	.38	14.23	.001
Financial resources	.25	.21	.26	.19	.14	.72
Generosity	.20	.16	.25	.19	4.92	.03
Sexual experience/interest	.28	.22	.34	.27	2.94	.09
Current relationship status	.31	.24	.31	.22	.02	.89
Desired level of commitment	.28	.25	.25	.18	1.28	.26

Table 1. Comparison of the Absolute Value of Standardized Beta Weights Corresponding to Each Cue as a Function of Sex of the Respondent

Note: df = 1,218 for all F tests.

judgments. So, even though men and women did not differ in the absolute magnitude of the standardized beta weights associated with four of the six cues, they may have differed in the sign associated with these beta weights.

To investigate the direction of effect for each cue, we determined the proportion of men and women whose standardized beta weights for each cue were positive (compared to 0 or negative). These proportions, and the corresponding tests for sex differences, are presented in Table 2. Note that the large majority of both men and women rated physically attractive short-term mates and generous mates as more desirable, but there was still a trend for men to be more likely than women to demonstrate such a positive relationship for mate physical attractiveness. For three of the remaining four characteristics (cues), a slight majority of both men and women placed a positive value on the characteristic. A minority of both men and women viewed a short-term mate's increased sexual experience and interest as a positive attribute. There were no sex differences in the proportion of respondents who valued these characteristics positively (vs. neutral or negatively).

What about the possible statistical interactions? Table 3 contains proportions of men and women who demonstrated statistically significant interaction terms as tested in their respective multiple regression equations. Note that only a small minority of respondents exhibited each of the interactions tested, so results should be interpreted with extreme caution. It appears that more men than women displayed a statistically significant attractiveness by sexual experience/interest interaction as well as a current relationship status by desired relationship status interaction. Com-

Table 2. Comparison of the Proportions of Men and Women who Demonstrated a Positive Standardized Beta Weight Corresponding to Each Cue

	Men $(n = 106)$	Women $(n = 114)$		
Characteristic (cue)	%	%	$\chi^2$	p <
Physical attractiveness	90.6	81.6	3.66	.06
Financial resources	55.7	53.5	.10	.75
Generosity	71.7	78.9	1.56	.22
Sexual experience/interest	38.7	28.1	2.79	.10
Current relationship status	53.8	57.9	.38	.54
Desired level of commitment	53.8	56.1	.12	.72

*Note*: df = 1, N = 220, for all  $\chi^2$  tests.

	Men $(n = 106)$	Women $(n = 114)$		
Interaction	%	%	$\chi^2$	<i>p</i> <
Physical attractiveness × sexual experience/interest	23.6	10.5	6.70	.01
Financial resources × generosity	4.7	7.0	.52	.50
Financial resources × current relationship status	0.9	6.1	4.23	.04
Physical attractiveness × desired level of commitment	2.8	0.9	1.17	.28
Current relationship status $\times$ desired level of commitment	13.2	2.6	8.62	.004

Table 3. Comparison of the Proportions of Men and Women who Demonstrated a Statistically Significant Standardized Beta Weight Corresponding to Each Tested Interaction

*Note*: df = 1, N = 220, for all  $\chi^2$  tests.

pared to men, women were more likely to exhibit a statistically significant financial resources by current relationship status interaction.

What about the nature of any revealed statistical interactions? This information is not readily obtained from the sign of the standardized beta weights. However, given the small numbers of men or women displaying statistical interactions between particular cues, only a few comments will be made about the nature of some of the interactions. With regard to the first interaction involving physical attractiveness and sexual experience/interest, most (68.0%) of the men who exhibited this interaction rated potential short-term mates who were high in physical attractiveness and low in sexual experience/interest as most desirable. Six of the remaining men rated the short-term mates who were high in both physical attractiveness and sexual experience/interest as most desirable. Of the 12 women who exhibited a statistically significant interaction term involving these variables, all but one of them rated the short-term mates who were relatively high in physical attractiveness and low in sexual experience/interest as most desirable.

With regard to the second interaction involving financial resources and generosity, all eight women who exhibited this interaction rated the potential short-term mates who were relatively high in both financial resources *and* generosity as the most desirable. With regard to the statistical interaction involving current relationship status and desired relationship status, no clear pattern or consensus emerged among the 14 men who exhibited this interaction. However, 7 (50.0%) of them rated short-term mates who were not currently involved *and* did not desire relationship involvement as highly desirable and also rated potential mates who were currently involved *and* desired a high level of relationship involvement as equally highly desirable. The remaining men demonstrated idiosyncratic preferences. It is interesting to note that only one of these men displayed a preference for potential short-term mates who were not currently involved in a relationship but desired to be.

Although we did not make specific hypotheses regarding relationships among the emphases placed on the six characteristics in potential short-term mates, we investigated these relationships in an exploratory fashion. Correlations among the standardized beta weights associated with each of the six cues (retaining their respective signs) are presented in Table 4 separately for men and women. Focusing on the most substantial correlations (e.g., those > .30), note that both men and women who most valued physically attractive short-term mates most valued higher relative

	1	2	3	4	5	6
Physical attractiveness	_	05	22*	.58**	.02	.25*
2. Financial resources	.30**	_	.55**	19	.60**	.45**
3. Generosity	.06	.49**	_	11	.06	.03
4. Sexual experience/interest	.67**	.09	.10	_	25*	20*
5. Current relationship status	.10	.58**	.05	08	_	.81**
6. Desired level of commitment	.29**	.46**	.15	08	.67**	_

Table 4. Correlations Among Standardized Beta Weights Corresponding to Each of the Six Characteristics in a Potential Short-Term Mate for Men (n=106) and Women (n=114)

Note: Correlations for men are above the diagonal, those for women are below the diagonal.

levels of sexual experience/interest in such mates. Additionally, for both men and women, those who most valued short-term mates with financial resources also most valued short-term mates who were generous, currently involved in a relationship, and desirous of a long-term relationship. Last, again for both men and women, those who most valued short-term mates currently involved in relationships most valued such mates who were desirous of a long-term relationship (or conversely, those who most valued short-term mates *not* currently involved in relationships most valued such mates who were *not* desirous of a long-term relationship).

What about sociosexual orientation? As expected, men had substantially higher scores on the SOI (M = 62.46, SD = 33.47) compared to women (M = 39.81, SD = 24.86), F(1, 218) = 32.78, p < .0001. Could this sex difference in sociosexual orientation explain the earlier sex difference found with regard to overall higher ratings given to the depicted short-term mates by men compared to women, or the greater emphasis men placed on the physical attractiveness of potential short-term mates compared to women?

To address these issues, we conducted an analysis of covariance (ANCOVA) on the mean ratings of the 50 depicted short-term mates, as well as on the absolute value of the standardized beta weights associated with physical attractiveness, statistically controlling for SOI scores. In the first instance, involving the overall mean rating of the desirability of the depicted short-term mates, the main effect for sex remained significant (F = 4.65, p < .04). Also, in the analysis involving the importance placed on the physical attractiveness of short-term mates, the main effect for sex remained significant (F = 8.87, p < .003). So, even after controlling for sociosexual orientation, men rated the depicted mates as more desirable and placed greater emphasis on the physical attractiveness of the depicted mates compared to women.

What about relationships between sociosexual orientation and the standardized beta weights? We calculated such correlations separately for men and for women. Of the 12 total correlations, only three were statistically significant. Both men (r = .44, p < .01) and women (r = .23, p < .05) who were relatively unrestricted in their sexual orientation found short-term mates with higher levels of sexual experience and interest most desirable. For women only there was a negative relationship between SOI scores and beta weights associated with the current relationship of short-

<sup>\*</sup>p < .05; \*\*p < .01, both two-tailed.

bea of the Respondent							
Characteristic (cue)	Men $(n = 106)$		Women $(n = 114)$				
	Mean	SD	Mean	SD	F	p <	
Physical attractiveness	36.58	14.25	21.69	14.11	60.51	.0001	
Financial resources	6.73	6.52	11.28	7.96	21.36	.0001	
Generosity	12.15	8.72	16.59	9.21	13.41	.001	
Sexual experience/interest	7.87	8.02	10.38	8.36	5.14	.03	
Current relationship status	10.64	8.39	14.70	10.14	10.38	.002	
Desired level of commitment	25.94	14.06	25.36	17.77	.07	.79	

Table 5. Comparison of the Self-Reported Weights Corresponding to Each Cue as a Function of Sex of the Respondent

Note: df = 1,218 for all F tests.

term mates (r = -.21, p < .05). Relatively unrestricted women found potential short-term mates who were not currently involved in exclusive relationships to be most desirable.

Last, we analyzed the data having to do with the self-reported weight respondents placed on each of the six cues. The mean ratings for men and women are presented in Table 5, along with tests for sex differences. Note that, relative to women, men reported placing more value on the physical attractiveness of potential mates whereas, relative to men, women reported placing more value on financial resources, generosity, sexual experience/interest, and current relationship interest. In general, men indicated that the physical attractiveness of potential short-term mates was the most important characteristic, whereas women indicated that the desired level of commitment was the most important characteristic in potential short-term mates.

Having data on both the self-reported value placed on each characteristic and the beta weights associated with each characteristic from the actual judgments, we were able to examine how accurate respondents were in reporting their own cognitive policies regarding the desirability of short-term mates. The correlations between self-reported and actual weights associated with each characteristic (cue) are illustrated in Table 6. For both men and women, there was a statistically significant relationship between self-reported value placed on physical attractiveness of a potential short-term mate and the actual emphasis placed on physical attractiveness when making judgments. For men only there was a similar relationship involving current

Table 6. Correlations Between Self-Reported Weights and the Absolute Value of the Standardized Beta Weights Corresponding to Each of the Six Characteristics in a Potential Short-Term Mate for Men and Women

	Men $(n = 106)$	Women $(n = 114)$
Physical attractiveness	.30**	.44**
2. Financial resources	.13	05
3. Generosity	.03	.11
4. Sexual experience/interest	.09	.06
5. Current relationship status	.20*	.04
6. Desired level of commitment	14	03

*Note.* \*p < .05; \*\*p < .01, both two-tailed.

relationship status of potential short-term mates. Otherwise, the relative emphasis reportedly placed on each characteristic in potential short-term mates was *unrelated* to the actual emphasis placed on that characteristic when the respondents made their actual judgments of depicted individuals.

#### **DISCUSSION**

Compared to women, men rated the depicted short-term mates as more desirable overall, which is consistent with an evolutionary perspective in which men would be expected to exhibit greater interest in short-term mating. Interestingly, more women than men were excluded from the effective sample due to inconsistency in their judgments and, even after such exclusion, men were still more consistent in their judgments. This finding corresponds to other research demonstrating that men display less variation than do women in judgments regarding the sexual desirability of members of the other sex, primarily because such desirability is based on physical attributes of the mate (Townsend and Wasserman 1997). Even imagining oneself in the context of desiring a short-term mate simply may have been more difficult for the women than for the men.

If the methodology used in the current study were simply self-reported preferences in short-term mates, several evolutionary predictions regarding sex differences would have been supported. That is, when asked to report the relative importance of each characteristic in a potential short-term mate, several sex differences emerged: men reported placing more emphasis on the physical attractiveness of such mates compared to women, whereas women reported placing relatively greater emphasis on the financial resources, generosity, sexual experience/interest, and current relationship status of potential short-term mates (Table 5). However, in the policy capturing methodology used, respondents were asked to make actual judgments regarding the desirability of the hypothetical short-term mates and the relative emphasis placed on each characteristic was determined through multiple regression analyses on the judgments. Based on these data, clear sex differences were less common.

The strength of the policy capturing methodology is that the researcher is not dependent on direct self-report of preferences. The fact that men's and women's self-reported preferences in short-term mating were more discrepant than were the characteristics each group used when making actual judgments regarding potential short-term mates leads us to recommend caution in drawing conclusions based on self-reported data regarding mate selection preferences. It may be that such self-reports are more prone to bias from cultural stereotypes regarding differences between men and women, or bias from social desirability concerns, than researchers typically assume. In the current study, the difference between self-reported preferences and actual judgments is highlighted by the nearly total lack of relationship between the two (Table 6). In other words, respondents in the current study appeared to have little or no insight into the factors that influenced their judgments regarding the desirability of short-term mates (similar to findings of policy capturing studies in other domains; Brehmer and Brehmer 1988).

With regard to actual judgments, men placed greater emphasis on physical attractiveness of potential short-term mates compared to women, whereas women placed more emphasis than did men on the generosity of such potential mates. Both findings are consistent with the hypotheses stated earlier. However, contrary to the hypotheses, women did *not* place relatively greater emphasis on the financial resources of potential short-term mates, nor did men place relatively more emphasis on the sexual interest and experience of short-term mates. Generally, the results of the current study demonstrated a fair degree of male-female similarity with regard to the importance of several characteristics when choosing a short-term mate, and where there were sex differences, the nature of those differences often was not easily characterized as there was much intrasex variation.

For both men *and* women, the physical attractiveness of potential short-term mates had the greatest influence on the perceived desirability of short-term mates. For the large majority of both men and women, increased physical attractiveness was associated with judgments of increased desirability as a potential short-term mate. As a group, men recognized that physical attractiveness of potential short-term mates was most important in their judgments, whereas this was not the case for women. The female respondents, as a group, reported that the desired level of relationship commitment was the most important characteristic in potential short-term mates (Table 5), which did not accurately reflect their actual judgments (Table 1). After physical attractiveness, the importance placed on each of the remaining five characteristics in potential short-term mates was roughly equal for the men and for the women. Interestingly, however, women reported that the sexual experience/interest of potential short-term mates was the *least* important characteristic, when actually it was the second most influential with regard to their judgments.

Although functional interactions among certain mate characteristics were hypothesized, only a small minority of respondents actually demonstrated such statistical interactions. Still, our report of the nature of those interactions highlights a primary finding in the current study: Within each sex, there was evidence of a fair degree of variation in policies regarding short-term mating.

For example, with the exception of physical attractiveness and generosity, there was little consensus regarding whether higher or lower levels of each of the characteristics were considered desirable (Table 2). Likewise, for many individuals who displayed statistically significant interactions among cues, there was no consensus or discernible pattern with regard to the nature of the statistical interaction. However, there were a couple of notable exceptions. For example, most individuals who displayed a significant interaction between physical attractiveness and sexual experience/interest found potential short-term mates who were physically attractive yet sexually inexperienced as most desirable. For these individuals, the short-term mating context may have been viewed as a possible route to long-term mating in which sexual fidelity would be more of a concern (Buss 1994; Symons 1979). When there was an interaction between current and desired level of relationship commitment by potential short-term mates, the respondents typically preferred a mate who was either currently involved and desirous of a long-term relationship. In both instances, the

potential short-term mate would be less likely to expect or demand relationship commitment from the respondent, which is consistent with a short-term mating strategy (Buss and Schmitt 1993).

In summary, the results of the current policy capturing study reveal some notable sex differences in short-term mating preferences and, perhaps more importantly, demonstrate a fair degree of intrasex variation. Policy capturing methodology affords a relatively distinct way to investigate individual differences in mating strategies, and the possibilities extend well beyond the design used in the current study. For example, we did not assess respondents' current relationship status or prior sexual or relationship experience. These variables may be important mediators when examining sex differences in short-term mating preferences. Similarly, there are a multitude of variables, including physical attractiveness, socioeconomic status, and personality characteristics such as dominance, that may be correlated with particular cognitive policies regarding short-term mating as assessed in future policy capturing studies. For that matter, a question left for future research is simply how do our findings with regard to a short-term mating context compare to a similar design using a long-term mating context.

Despite the advantages of policy capturing methodology and the potentially novel approaches it affords future researchers, policy capturing methodology is far from perfect. The limitations include the fact that the respondent is asked to make judgments about "paper-and-pencil people," which may not be representative of potential short-term mates in the "real world." Similarly, our respondents were presented with descriptions containing information limited to what we provided. Whether other information about potential short-term mates is more or less relevant to men and women remains a question for future research. Certainly, however, policy capturing offers an additional avenue for attempting to understand the nature of men's and women's psychological mechanisms regarding mating preferences and strategies, particularly as these may demonstrate individual variation. Policy capturing affords a way to examine relationships between an individual's mating strategies or preferences and other variables associated with that individual, and to do so with perhaps less likelihood of tapping into cultural stereotypes or social desirability response bias.

#### REFERENCES

Allgeier, E.R., and Wiederman, M.W. How useful is evolutionary psychology for understanding contemporary human sexual behavior? *Annual Review of Sex Research* 5:218–256, 1994.

Baldwin, M.W. Relational schemas and the processing of social information. *Psychological Bulletin* 112:461–484, 1992.

Brehmer, A., and Brehmer, B. What have we learned about human judgment from thirty years of policy capturing? In *Human Judgment: The SJT View*, B. Brehmer and C.R.B. Joyce (Eds.). New York: Elsevier, 1988, pp. 75–114.

Buss, D.M. Mate preference mechanisms: consequences for partner choice and intrasexual competition. In *The Adapted Mind: Evolutionary Psychology and The Generation of Culture*, J. Barkow, L. Cosmides, and J. Tooby (Eds.). New York: Oxford University Press, 1992, pp. 249–266.

Buss, D.M. The Evolution of Desire. New York: Basic Books, 1994.

- Buss, D.M., and Schmitt, D.P. Sexual strategies theory: an evolutionary perspective on human mating. *Psychological Review* 100:204–232, 1993.
- Cashdan, E. Attracting mates: effects of paternal investment on mate attraction strategies. *Ethology and Sociobiology* 14:1–24, 1993.
- Chara, P.J., and Kuennen, L.M. Diverging gender attitudes regarding casual sex: a cross-sectional study. Psychological Reports 74:57–58, 1994.
- Clark, R.D. The impact of AIDS on gender differences in willingness to engage in casual sex. *Journal of Applied Social Psychology* 20:771–782, 1990.
- Clark, R.D., and Hatfield, E. Gender differences in receptivity to sexual offers. *Journal of Psychology & Human Sexuality* 2:39–55, 1989.
- Ellis, B.J. The evolution of sexual attraction: evaluative mechanisms in women. In *The Adapted Mind: Evolutionary Psychology and The Generation of Culture*, J. Barkow, L. Cosmides, and J. Tooby (Eds.). New York: Oxford University Press, 1992, pp. 267–288.
- Fletcher, G.J.O., and Kininmonth, L.A. Measuring relationship beliefs: an individual differences scale. *Journal of Research in Personality* 26:371–397, 1992.
- Gangestad, S.W., and Simpson, J.A. Toward an evolutionary history of female sociosexual variation. *Journal of Personality* 58:69–96, 1990.
- Greer, A.E., and Buss, D.M. Tactics for promoting sexual encounters. *The Journal of Sex Research* 31:185–201, 1994.
- Herold, E.S., and Mewhinney, D.M. Gender differences in casual sex and AIDS prevention: a survey of dating bars. The Journal of Sex Research 30:36–42, 1993.
- Kenrick, D.T. Evolutionary social psychology: from sexual selection to social cognition. *Advances in Experimental Social Psychology* 26:75–121, 1994.
- Kenrick, D.T., Groth, G.E., Trost, M.R., and Sadalla, E.K. Integrating evolutionary and social exchange perspectives on relationships: effects of gender, self-appraisal, and involvement level on mate selection criteria. *Journal of Personality and Social Psychology* 64:951–969, 1993.
- Kenrick, D.T., Sadalla, E.K., Groth, G., and Trost, M.R. Evolution, traits, and the stages of human courtship: qualifying the parental investment model. *Journal of Personality* 58:97–116, 1990.
- Landolt, M.A., Lalumiere, M.L., and Quinsey, V.L. Sex differences in intra-sex variations in human mating tactics: an evolutionary approach. *Ethology and Sociobiology* 16:3–23, 1995.
- Nevid, J.S. Sex differences in factors of romantic attraction. Sex Roles 11:401–411, 1984.
- Nisbett, R.E., and Wilson, T.D. Telling more than we can know: verbal reports on mental processes. *Psychological Review* 84:231–259, 1977.
- Oliver, M.B., and Sedikides, C. Effects of sexual permissiveness on desirability of partner as a function of low and high commitment to relationship. *Social Psychology Quarterly* 55:321–333, 1992.
- Schmitt, D.P., and Buss, D.M. Strategic self-promotion and competitor derogation: sex and context effects on the perceived effectiveness of mate attraction tactics. *Journal of Personality and Social Psychology* 70:1185–1204, 1996.
- Simpson, J.A., and Gangestad, S.W. Individual differences in sociosexuality: evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology* 60:870–883, 1991.
- Simpson, J.A., and Gangestad, S.W. Sociosexuality and romantic partner choice. *Journal of Personality* 60:31–51, 1992.
- Sprecher, S., McKinney, K., and Orbuch, T.L. The effect of current sexual behavior on friendship, dating, and marriage desirability. *The Journal of Sex Research* 28:387–408, 1991.
- Stewart, T.R. Judgment analysis: procedures. In *Human Judgment: The SJT View*, B. Brehmer and C.R.B. Joyce (Eds.). New York: Elsevier, 1988, pp. 41–74.
- Symons, D. Evolution of Human Sexuality. New York: Oxford University Press, 1979.
- Townsend, J.M. Sex without emotional involvement: an evolutionary interpretation of sex differences. *Archives of Sexual Behavior* 24:173–206, 1995.
- Townsend, J.M., Kline, J., and Wasserman, T.H. Low-investment copulation: sex differences in motivations and emotional reactions. *Ethology and Sociobiology* 16:25–51, 1995.
- Townsend, J.M., and Wasserman, T. The perception of sexual attractiveness: sex differences in variability. *Archives of Sexual Behavior* 26:243–268, 1997.
- Trivers, R.L. Parental investment and sexual selection. In *Sexual Selection and the Descent of Man:* 1871–1971, B. Campbell (Ed.). New York: Aldine, 1972, pp. 136–179.
- Ullman, D.G., and Doherty, M.E. Two determinants of the diagnosis of hyperactivity: the child and clinician. In *Advances in Behavioral Pediatrics* (Vol. 5), M. Wolraich and D.K. Routh (Eds.). Greenwich, CT: JAI Press, 1984, pp. 167–219.

Wiederman, M.W., and Allgeier, E.R. Male economic status and gender differences in mate selection preferences: evolutionary versus sociocultural explanations. In *Social Stratification and Socioeconomic Inequality* (Vol. 2), L. Ellis (Ed.). Westport, CT: Praeger, 1994, pp. 1–12.

Wilson, S.M., and Medora, N.P. Gender comparisons of college students' attitudes toward sexual behavior. Adolescence 25:615–627, 1990.

#### **APPENDIX**

#### **Instructions to Participants—Male Form**

On the following pages are 50 brief descriptions of a woman. You are asked to read each one and indicate how desirable that woman would be to you as a short-term dating partner. Short-term may mean one single occasion, or several days or weeks. Short-term partner does *not* mean a steady girlfriend or potential spouse.

Each description contains information regarding the woman's degree of physical attractiveness, financial resources, generosity, current relationship status, desired level of commitment, and sexual experience or interest. As you read the descriptions, assume that the woman described is about your age and does *not* have a sexually transmitted disease. Also, while reading each description, assume that you are interested in finding a short-term partner (even if you are not in reality).

Please use the scale printed immediately after each description to indicate how desirable the woman just described would be to you as a short-term partner. Please look through the first several descriptions to get a sense of the information provided, then go back to the first one and begin rating.

## Shell Used to Construct the 50 Brief Descriptions—Male Form

When it comes to physical attractiveness, this woman is Financially sp	eak-
ing, she Regardless of her financial situation, this woman Wit	th re-
gard to sexual experience, this woman has had sex Right now sl	he is
Regardless of her current relationship status, this woman	

# Potential Values for Each of the Six Manipulated Variables (Cues)

Physical Attractiveness ("When it comes to physical attractiveness, this woman is . . .")

- 1. very unattractive; some people might consider her ugly.
- 2. below average, but not terrible looking.
- 3. average looking; not really attractive or unattractive.
- 4. above average; appealing to look at.
- 5. extremely attractive; some people might think she is a model.

Financial Resources ("financially speaking, she . . .")

- 1. is rather poor and does not have money for things beyond the bare necessities.
- 2. earns enough money to get by, but sometimes has difficulty making ends meet.

- 3. earns an average amount of money compared to other women.
- 4. earns a healthy salary and can afford some of the extras in life.
- 5. earns a lot of money, and in most cases she can afford the best.

Generosity ("Regardless of her financial situation, this woman . . .")

- 1. is very stingy and refuses to spend her money on a dating partner.
- 2. is reluctant to share and does not frequently spend her money on a dating partner.
- 3. does not mind spending her money on a dating partner.
- 4. is rather free with money she spends on a dating partner and frequently gives gifts.
- 5. is very generous with her money and often splurges on nice gifts for her dating partner.

Sexual Experience/Interest ("With regard to sexual experience, this woman has had sex . . .")

- 1. only a few times with one partner and does not really care that much for sex.
- 2. with two different partners and thinks that, although sex is "O.K.," it is not that important.
- 3. with a total of five different partners and finds sex moderately enjoyable.
- 4. with a total of 10 different partners and is excited about sex with a new partner.
- 5. with more than 20 partners, is very comfortable being sexual, and believes that when it comes to sex, "more is better."

Current Relationship Status ("Right now she is . . .")

- 1. not dating anyone.
- 2. dating a few men on a casual basis.
- 3. dating one man for whom she cares, but is also dating other men.
- 4. dating only one man for whom she cares, but would be open to dating other men.
- 5. "going steady" with just one man.

Desired Level of Commitment ("Regardless of her current relationship status, this woman . . .")

- 1. is not really interested in an ongoing relationship with just one partner.
- 2. would not refuse an ongoing relationship with the right man, she is just not actively looking for such a relationship.
- 3. is interested in the possibility of forming a serious relationship with the right
- 4. would very much like to find a serious relationship that she could be sure would last
- 5. is looking for a potential spouse and hopes to get married before long.

### Sample Description Using Randomly Chosen Values for Each of the Six Manipulated Variables—Male Form

When it comes to physical attractiveness, this woman is above average; appealing to look at. Financially speaking, she is rather poor and does not have money for things

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beyond the bare necessities. Regardless of her financial situation, this woman is reluctant to share and does not frequently spend money on a dating partner. With regard to sexual experience, this woman has had sex with a total of five different partners and finds sex moderately enjoyable. Right now she is "going steady" with one man for whom she cares. Regardless of her current relationship status, this woman is looking for a potential spouse and hopes to get married before long.