

# Effects of Gender and Sexual Orientation on Evolutionarily Relevant Aspects of Human Mating Psychology

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Sexual selection theory provides a powerful model for the analysis of psychological sex differences. This research examined (a) tests of several sex differences in mating psychology predicted from sexual selection theory, (b) broad developmental hypotheses about sex differences in mating psychology—through the relationship of mating psychology to sexual orientation, and (c) the structure of within-sex differences in mating psychology. Scales measuring aspects of mating psychology were administered to heterosexual and homosexual Ss of both sexes. The structure of scale intercorrelations was similar across groups. All scales yielded sex differences consistent with sexual selection theory. Homosexual Ss generally obtained scores similar to those of same-sex heterosexual Ss, though several scales were significantly related to sexual orientation. Findings constrain hypotheses concerning the origins of sex differences.

## Evolutionary Basis of Sex Differences

Sex differences were recognized as an evolutionary puzzle by Darwin (1871), who noted that, in many species, males alone possess a range of traits that function in competition for sexual partners. Species where females compete more intensely for mates than do males are rare but not entirely missing from the zoological record. The evolutionary theory that best explains these sex differences in sexual competitiveness implicates reproductive rate, not sex per se, as the key independent variable (Clutton-Brock & Vincent, 1991).

It might seem that neither sex would be differentially challenged in the search for mates, as long as a 1:1 sex ratio prevailed. But consider a species where males could potentially reproduce more rapidly than females. This would be the case in most mammals because males expend less on each offspring than do females. In such a case the typical male will complete a reproductive venture (which might merely consist of copulation) before his current partner (who must gestate and lactate, at a minimum) and could therefore start another reproductive venture if he could find an available female. Statistically speaking he will be unlikely to find that female because this same sex difference in reproductive rate pervades the population, with the aggregate result that males, being faster reproducers, find

the slower females in short supply. In contrast, any female finishing a reproductive venture finds many available males. Thus, access to available females more severely limits male reproductive output than access to males limits female reproduction. For this reason, any trait that gave a male an advantage in competition for the few available females would be favored by selection and spread through the population, but such traits would confer little advantage on females who find an oversupply of eager males. This theory passes a critical test; in species where females have the higher reproductive rate, females, not males, are the predominant sexual competitors (Clutton-Brock & Vincent, 1991).

This does not imply an absence of evolutionary competition among members of the slower sex. Selection is simply favoring different traits in the two sexes—this is why sex differences evolve. For members of the fast sex (for instance men) selection favors traits that augment the number of sexual partners; any man fertilizing a disproportionate number of women will spread his genes through the population. But the slow sex (women in this example) cannot increase offspring production through additional matings and so is not expected to evolve traits that augment mating success. Precisely because members of the slow sex are limited to a relatively small number of offspring, they suffer a relatively great reproductive loss if any of these offspring fail. For these reasons women are expected to evolve traits that maximize offspring quality rather than quantity. An important way of attaining this goal is to secure better sexual partners. “Better” means men who contribute either superior genes or superior resources to their offspring. In summary, traits that maximize the number of sexual partners are spread by selection acting on the fast sex, whereas traits that maximize the quality of sexual partners are spread by selection on the slow sex (Majerus, 1986; Maynard Smith, 1991).

Among mammals, gestation and lactation generally cause females to be the slower sex; thus, it is not surprising that males of most species have evolved sexually competitive traits. Even in *Homo sapiens*, where paternal care slows male reproduction somewhat, men still have higher maximum reproductive rates than do women (Betz, 1986; Borgerhoff Mulder, 1987; Chag-

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non & Irons, 1979; Charmie & Nsuly, 1981; Lockard & Adams, 1981; Mealey, 1985). In the domains of anatomy and physiology, the influence of sexual selection on *Homo sapiens* is unambiguous. Among mammals where males are unambiguously the faster sex, males tend to be larger and have greater muscle mass, higher metabolic rates, and higher mortality rates than do females; these same sex differences separate men and women (Daly & Wilson, 1983; Gaulin & Boster, 1985; Trivers, 1972, 1985), suggesting that sex differences in reproductive rate have also shaped the course of sexual selection in the human species.

Symons (1979) argued that sexual selection was likely to have shaped human psychology as well as human anatomy and physiology. Because a typical man could elevate his reproductive output if he were not limited by the slow reproduction of his current partner, men are expected to evolve traits that maximize access to sexual partners. Conversely, women seldom have their reproductive rates limited by slow partners. Thus, they could rarely elevate their reproductive output by adding sexual partners, although careful mate choice might allow superior genetic input, superior paternal care, or both, and thus produce fitter (i.e., more reproductively successful) offspring. A number of predictions about sex differences in human reproductive psychology follow from this perspective. Most of these predictions have received some prior empirical support (Buss, Larsen, Westen, & Semmelroth, 1992; Buss & Schmitt, 1993; Daly & Wilson, 1988a, 1988b; Feingold, 1992; Jankowiak, Hill, & Donovan, 1992; Kenrick & Keefe, 1992; Townsend & Levy 1990a, 1990b; Wiederman & Allgeier, 1992), and some have been shown to be cross-culturally valid (Buss, 1989). The first objective of this study is to provide systematic evidence on the reliability of and associations among six sexually differentiated aspects of human mating psychology.

The second objective is to investigate within-sex variation in mating psychology, particularly that associated with sexual orientation. Very few studies have systematically evaluated the mating psychology of homosexual persons; here we have used the same methodology with both heterosexual and homosexual subjects. This allows us to explore whether the reproductive psychology of homosexual persons most resembles that of same- or opposite-sex heterosexual persons, whether any relations with sexual orientation are symmetrical by sex, and whether any such differences are consistent across the six dimensions of mating psychology studied here. The answers to these questions bear on both evolutionary and developmental models of sexual orientation.

### Evolutionary Predictions About Sex Differences in Reproductive Psychology

#### *Interest in Uncommitted Sex*

Being the fast sex, men have been selected to maximize their mating opportunities. Women, however, do not benefit by increasing the number of their sexual partners and would risk producing offspring of low quality if they mated indiscriminately. Thus, men should show a greater interest in uncommitted sex. Buss and Schmitt (1993) have reviewed the available evidence and found support for this prediction. For example, when asked how many sexual partners they would ideally like to have for a given time period, men uniformly and greatly exceeded women.

Other work has shown that men have much lower standards than women in their short-term sexual liaisons (Kenrick, Groth, Trost, & Sadalla, 1993).

The effects of sexual orientation on interest in uncommitted sex are difficult to interpret because the available data are behavioral rather than psychological. Bell and Weinberg (1978) found that homosexual men have many more casual sexual liaisons than heterosexual men and women and homosexual women. Symons (1979) has suggested that this apparent hypermasculinization of homosexual male behavior may arise not because these men are more interested in casual sex than are heterosexual men, but because their opportunities to indulge their interest depend on the sexual inclinations of men rather than those of more sexually cautious women. Thus, unlike heterosexual men, they do not have to compromise their sexual preferences. As he must for logical consistency, Symons (1979) asserted that heterosexual men would display a pattern of sexual behavior similar to that of homosexual men if heterosexual women shared their interest in casual sexual encounters. Although plausible, Symons's argument remains speculative. The case of interest in uncommitted sex exemplifies the need to study putative adaptations at a psychological rather than a behavioral level (Kitcher, 1990; Sterelny, 1992; Symons, 1989; Tooby & Cosmides, 1990), because behaviors are a function of the interaction between psychological adaptations on the one hand and opportunities and constraints on the other.

#### *Interest in Visual Sexual Stimuli*

Although both women and men are aroused by visual sexual stimuli (e.g., pornography), men are much more likely to purchase and view such material (Symons, 1979). They also appear to become more sexually aroused at the mere sight of nude women, and particularly of female genitals, than women become viewing analogous stimuli (Kinsey, Pomeroy, Martin, & Gebhard, 1953; Symons, 1979). Because male reproductive output is more dependent on the number of sexual partners than is female reproductive output, men may benefit by being more readily aroused (Symons 1979, p.180). Moreover, discriminating among available partners probably elevates female fitness (*sensu* Darwin) more than it does male fitness, and such discrimination would be compromised by rapid arousal to any easily projected signal, such as nudity. Consistent with the relative importance of visual stimuli for men, Ellis and Symons (1990) found that visual imagery was more important for men than for women in the context of sexual fantasy.

#### *Concern With Partner's Status*

A man's status often conveys information about the amount of resources he controls and may in some instances also be an indicator of his genetic quality. Both of these variables are highly relevant to adaptive partner choice by the slow sex, and thus women would be expected to be sensitive to a man's status in evaluating him as a sexual partner. Several empirical studies support this prediction either for status in general or for economic position (Buss, 1989; Buss & Schmitt, 1993; Feingold, 1992; Townsend & Levy 1990a, 1990b; Feingold, 1992; Wiederman & Allgeier, 1992).

### *Age Preferences*

Men generally benefit more than do women by indiscriminately accepting any mating opportunity, but to the extent that men mate selectively, their choice should be based on available signs of female fecundity. Typically, a woman's fertile years are more limited and more precipitously terminated than a man's, and age is therefore a visible and reliable predictor of female fecundity. This should make signs of aging in women unattractive to men. On the other hand, one of a man's key attributes, his ability to control resources, often increases with age. Thus, signs of age are considerably less negative in men and may even be seen as attractive. The empirical evidence seems to fit quite closely with these predictions (Buss, 1989; Buss & Schmitt, 1993; Jankowiak et al., 1992; Kenrick & Keefe, 1992).

Jankowiak et al. (1992) also explored the effects of sexual orientation on age preferences. Both heterosexual and homosexual men rated younger potential partners as better looking; conversely, among women only heterosexuals rated older partners as better looking. In other words, the typical sex difference was intact, and men seemed invariant in their preference for youthful partners regardless of whether they were evaluating men or women, but sexual orientation did affect the age preferences of women.

### *Importance of Partner's Physical Attractiveness*

Although the specification of what constitutes beauty has been especially difficult (Berscheid & Walster, 1974), recent work suggests that facial attractiveness can be defined and explained in terms of both evolutionary and cognitive processes (Langlois & Roggman, 1990). Symons (1979) and Buss and Schmitt (1993) have suggested that beauty, like age, is a cue to female fecundity. Recent studies by Singh (1993) support this claim: At least one measure of female attractiveness (the waist-hip ratio) is associated with both reproductively relevant endocrine states and long-term health risks. Although the association between beauty and fertility is presently more tenuous than the association between age and fertility, men do place greater emphasis than women on a potential mate's physical attractiveness (Buss, 1989; Townsend & Levy 1990a, 1990b; Wiederman & Allgeier, 1992).

### *Sexual Versus Emotional Jealousy*

One of the most serious threats to male reproductive success is cuckoldry. If a man's partner is impregnated by another man, then the former man loses not only the possibility of reproduction with his partner but also any resources that he invests in the resulting offspring. The converse problem does not exist: A woman is not burdened with unrelated children if her partner copulates with another woman, nor is she deprived of his genetic contribution to her offspring. This means that, all other things being equal, a man's fitness is more threatened by his partner's sexual infidelity than a woman's is by his. One possible adaptation to this problem is the greater susceptibility of men to sexual jealousy (Daly & Wilson, 1988a, 1988b).

A similarly serious threat to female reproductive success is loss of paternal investment. Women who get the best available paternal investment for their offspring are expected to outre-

produce other women. Thus, women are likely to have been designed by selection to guard against the loss of paternal investment, but sexual jealousy may not serve this end very effectively. Because a man's minimum contribution to reproduction is so small (mere copulation) men have been designed to seek such opportunities. As outlined above, this would be expected to produce sex differences in mating psychology such that men are more willing to engage in uncommitted sex than are women. The question for a woman is "is this a man who is only seeking a copulation, or is this a man who will continue to invest with me in any progeny he might father?" By definition the act of copulation does not provide a clear signal of his ongoing commitment. Similarly, his copulation with another woman may not signal the end of his commitment to the progeny of a prior partner. Women are likely to have been designed by selection to be sensitive to signs that a man's commitment is fading; jealousy about his forming emotional bonds with another woman may provide such a warning system. Buss et al. (1992) have demonstrated large sex differences in the relative unpleasantness of sexual versus emotional jealousy in men and women. Men were more affected by images evoking sexual jealousy than emotional jealousy, whereas women showed the opposite pattern.

### *Development of Sex Differences in Mating Psychology*

Although some research has integrated evolutionary and developmental psychology (Smith, 1987), such synthesis has been rare in the study of mating psychology. This is attributable, in part, to the fact that developmental research focuses on proximate mechanisms, whereas evolutionists are concerned with ultimate explanations (i.e., explanations based on natural and sexual selection for adaptive traits). This polarization is unfortunate because proximate mechanisms are also important to evolutionary analysis. One debate among evolutionists concerns the degree to which psychological adaptations are specialized rather than general, emotional, and cognitive mechanisms (Alexander, 1990; Buss, 1991; Tooby & Cosmides, 1990; Turke, 1990). Consider the sex difference in interest in casual sex. According to a more generalist view, women's relative disinterest might arise from a rational assessment of the potential consequences of casual sex (e.g., unwanted pregnancy or sexual violence) coupled with a general cognitive rule to avoid acts with potentially negative consequences. In contrast, many evolutionists would anticipate a more specialized mechanism, restricted to women, such as a lack of sexual arousal (or an increase in negative affect) in response to opportunities for casual sex. If the underlying mechanism were specialized in this way, even women who are at diminished risk for negative consequences will find casual sexual liaisons undesirable.

### *Homosexual Mating Psychology: A Window on Development?*

The mating behavior of homosexual persons is unlike that of same-sex heterosexual persons, and thus it is reasonable to question whether their mating psychology also differs. Most important, homosexual men and women resemble opposite-sex heterosexual men and women in terms of the sex of their preferred mating partners. As a consequence, homosexual individ-

uals typically have less mating experience with the opposite sex and more mating experience with their own.

Differences between homosexual and same-sex heterosexual persons may depend on differences in brain development. The most influential biological theory of sexual orientation, sometimes called the neurohormonal theory (L. Ellis & Ames, 1987; see also LeVay, 1993), argues that particular neural structures regulate sexual orientation. These structures are hypothesized to differ between heterosexual and homosexual persons of the same sex and to be similar in heterosexual and opposite-sex homosexual persons. There is reason to believe that the processes that cause gender-atypical development of sexual orientation also have more general effects. For example, some homosexual men and women exhibit other, nonsexual, behavior patterns more typical of the opposite sex, particularly during childhood, including their patterns of peer preference, aggression, interests, and dress (Bell, Weinberg, & Hammersmith, 1981; Green, 1987). Moreover, some sex-related cognitive abilities, such as mental rotation spatial ability, also seem to vary with sexual orientation (Gladue, Beatty, Larson, & Staton, 1990; McCormick & Witelson, 1991).

At the same time, homosexual and same-sex heterosexual individuals are similar in other important respects that may also affect mating psychology. For example, homosexual and heterosexual individuals of the same sex appear to be socialized similarly by their parents during childhood (Bell et al., 1981). Furthermore, because most homosexual persons have the gender identity that is typical of their sex, they are subject to many of the developmental influences specified by gender schema theory (Bem, 1981), by which children may learn some gender-typical behavior. Although the neurohormonal theory predicts some innate brain differences between heterosexual and homosexual individuals of the same sex, it also allows for brain similarities, even in sexually dimorphic structures. If there is a critical period for the differentiation of sexual orientation, systems that differentiate earlier or later may not be subject to the same developmental influences. In this way some aspects of mating psychology might be gender typical even in individuals with gender-atypical sexual orientation.

Because of these differences and similarities between homosexual and same-sex heterosexual persons, studying the mating psychology of homosexual persons has the potential to distinguish between several broad developmental and etiological hypotheses regarding the mating psychology of heterosexual persons. There are three possible ways that sexual orientation might relate to sexually dimorphic aspects of mating psychology. First, homosexual individuals may respond identically to heterosexual individuals of the same sex. This finding would eliminate any explanation of the sex difference that emphasized the conscious reproductive intentions or anticipated consequences of relevant behavior as well as explanations focusing on the role of the opposite sex in eliciting relevant emotions or behaviors. An example of the former, as noted previously, concerns the role of pregnancy and violence risks in the inhibition of women's desire for casual sexual relationships. If homosexual women were as uninterested as heterosexual women in casual sex, this cognitive explanation of the baseline sex difference would clearly be inadequate. The idea that men's interest in pornography is driven by a desire to subjugate women (Dworkin, 1981) stresses the role of the opposite sex in eliciting the

sex difference. This explanation would become less plausible if homosexual men were shown to be as interested as heterosexual men in visual sexual stimuli. In both these cases explanations that emphasize either biological or social influences common to homosexual and heterosexual individuals of the same sex would remain viable.

Alternatively, homosexual individuals may resemble opposite-sex heterosexual individuals in a given aspect of mating psychology. The developmental implications of such a finding are opposite to those discussed immediately above. Thus, for example, if homosexual women were more interested than heterosexual women in casual sexual encounters, this would demonstrate that social and biological influences common to heterosexual and homosexual women were insufficient to account for the baseline sex difference. Any elevated promiscuity of homosexual women would be consistent with explanations of the sex difference that emphasize either the risks uniquely faced by women in heterosexual encounters or the characteristics of male sex partners that elicit caution. The latter type of explanation would also predict that homosexual men would be less promiscuous than heterosexual men.

There is a third possible outcome of the comparison between homosexual and same-sex heterosexual individuals. Homosexual persons might show a pattern that exaggerates the heterosexual sex difference. Homosexual men's elevated rate of casual sexual encounters is a behavioral example of this kind of pattern. As we have noted, this high behavioral rate could result even if homosexual men had only a "normal male interest" in casual sex but found it easier to indulge their interest because their potential partners are male and hence easily recruited. It is possible, however, that homosexual men's increased opportunities to engage in casual sex may lead to increased motivation to do so, resulting in psychological as well as behavioral hypermasculinization.

There is no strong reason to believe, *a priori*, that all sexually dimorphic aspects of mating psychology will conform to any one of these three possible patterns. Furthermore, a given characteristic may relate differently to male than to female sexual orientation. Finally, it is clear that the comparison of homosexual and heterosexual mating psychologies cannot, by itself, yield a detailed picture of development. It can, however, importantly narrow the field of candidate explanations.

### Within-Sex Variation in Sexually Dimorphic Mating Psychology

No aspect of evolutionarily relevant mating psychology has been found that correlates perfectly with sex. That is, where we have relevant data on mating psychology, there is considerable variation within each sex, and there is usually substantial overlap between the sexes. Within-sex variation in evolutionarily relevant psychological characteristics has most often been ignored. This is unfortunate, as within-sex variation represents an important outcrop for testing sexual selection theory. If the theory could explain both baseline sex differences and within-sex variation in mating psychology, then it would be empirically strengthened. For example, sexual selection theory could conceivably generate predictions about circumstances under which women manifest a more malelike mating psychology. Indeed,

this has been attempted for interest in casual sexual relations (Gangestad & Simpson, 1990).

The most immediate impediment to the investigation of within-sex variation in mating psychology has been the lack of attention to basic issues of measurement. With few exceptions (e.g., Simpson & Gangestad, 1991), psychological researchers have tested evolutionary hypotheses with single-item measures of the relevant variables. Although this has allowed preliminary confirmation of the sex differences hypothesized by evolutionary theory, it has been insensitive to within-sex variation simply because of the restricted range of possible variation on single-item measures. Furthermore, internal consistency reliability, which gauges the degree to which individual differences on a scale are due to true differences rather than measurement error, cannot be computed for single-item measures. Measurement error is likely to be great for single-item scales of psychological variables (Nunnally, 1967).

Another potentially important issue in addressing within-sex variation in mating psychology concerns the intercorrelations, within sexes, among different aspects of mating psychology. The pattern of intercorrelations could, in principle, illuminate the nature of alternative mating strategies used by different members of the same sex. For example, if some aspects of mating psychology (e.g., interest in uncommitted sex and preference for younger partners) correlated positively and substantially within either sex, this would support the picture of an adaptive complex more general than the constituent characteristics. It is also of potential interest whether the pattern of correlations among various aspects of mating psychology is independent of sex and sexual orientation. Prior studies have generally neglected intercorrelations among different aspects of mating psychology, primarily because most studies have focused on one aspect at a time. Furthermore, the unreliability of single-item measures is particularly problematic for correlational studies (Darlington, 1990).

The present study investigated the relationship between several aspects of evolutionarily relevant mating psychology and sexual orientation in both men and women. Multi-item a priori scales were assembled to measure six dimensions of mating psychology. This allowed the investigation of both within-group and between-groups variation in the respective traits.

## Method

### Subjects

Heterosexual subjects were recruited using advertisements in a free urban (alternative) publication. The advertisements stated that heterosexual men and women aged 20 to 40 were desired for a study of personality, cognitive abilities, interests, and sexual behavior. Homosexual subjects were recruited using nearly identical advertisements in gay and lesbian publications, the obvious difference being the desired orientation. The final sample included 69 homosexual women, 71 heterosexual women, 72 homosexual men, and 65 heterosexual men who completed our instrument. Subjects were classified according to their self-identification as "lesbian," "gay," or "heterosexual." Kinsey scores (Kinsey et al., 1953) were also reported for subjects for both sexual fantasy and behavior. Kinsey scores comprise a 7-point scale, with a score of 0 indicating complete heterosexuality and a score of 6 indicating complete homosexuality. Mean Kinsey scores (average of present sexual fantasy and behavior) were 5.6 ( $SD = 0.8$ ), 5.6 ( $SD = 0.9$ ), 0.4 ( $SD = 0.5$ ), and 0.1 ( $SD = 0.1$ ) for homosexual women and men and heterosexual

women and men, respectively, confirming that the self-defined homosexual and heterosexual groups were extremely different in their current sexual feelings and behavior. The heterosexual women ( $M = 25.0$ ,  $SD = 4.6$ ) were significantly younger than subjects from the other three groups ( $M = 28.9$ ,  $SD = 5.9$ ), who did not differ significantly from each other.

### Measures

Seven scales were administered. Items for five scales (Interest in Uncommitted Sex, Interest in Visual Sexual Stimuli, Concern with Partner's Status, Preferred Partner Age, and Importance of Partner's Physical Attractiveness) were written by the authors. An effort was made to focus on psychological preferences rather than behavioral frequencies, because as previously noted, the latter are likely to be influenced by opportunities that may differ among the groups. With two exceptions, items for these five scales were written in a 7-point Likert-scale format from *strongly agree* to *strongly disagree*. The two exceptions were items from the Preferred Partner Age scale that asked the respondent to specify an age. Responses were subsequently transformed by subtracting the respondents' ages. The two items in the sixth scale (Sexual vs. Emotional Jealousy) were taken from Buss et al. (1992). The Appendix contains the items written for the present study (i.e., excluding Buss et al.'s items pertaining to Sexual vs. Emotional Jealousy). One additional scale, the Sociosexuality scale (Simpson & Gangestad, 1991) was included. This seven-item scale is similar in content to the Interest in Uncommitted Sex scale, with the exception that the Sociosexuality scale contains several items that inquire about behavioral frequencies. The inclusion of both of these scales provided a test of Symons's (1979) hypothesis that homosexual and heterosexual men are equally interested in uncommitted sex, despite the higher frequency of uncommitted sexual encounters among homosexual men. Following Symons, we hypothesized that the two scales would be highly correlated within groups, but would show a different pattern of means across groups. Specifically, heterosexual and homosexual men should differ on Sociosexuality but not on Interest in Uncommitted Sex. Items for all scales were first standardized across the four groups before summing. This allowed items to be weighted equally, while retaining mean differences on them.

Table 1 contains the internal consistency reliabilities of the seven scales for each of the four groups. Reliabilities were moderately high, with the exception of Sexual versus Emotional Jealousy, which contained just two items.

## Results

### *Relationships Between Scales, Sex, and Sexual Orientation*

Descriptive statistics for the seven scales are given in Table 2. For all scales, higher scores indicate a more (hypothesized) masculine response pattern. Figure 1 presents the group means of the seven scales in terms of effect sizes compared with the heterosexual female mean. This essentially places the scales on a common metric so that differences can be informally compared across scales. Scales are arranged in descending order of heterosexual sex differences.

Inferential tests were performed through multiple regression separately for each scale using the scale score as the dependent variable and three orthogonal contrasts as predictors. The first predictor contrasted women with men. The second and third predictors contrasted homosexual and heterosexual women and homosexual and heterosexual men. Thus, the first contrast tested for a sex difference, and the other contrasts tested whether, within sex, homosexual men and women differed from heterosexual men and women. Because the sample sizes of the

Table 1  
*Internal Consistency Reliabilities (alphas)*

Scale	No. of items	HTW	HSW	HSM	HTM
Interest in Uncommitted Sex	10	.90	.90	.90	.89
Interest in Visual Sexual Stimuli	12	.85	.86	.84	.83
Unimportance of Partner's Status	12	.82	.68	.65	.68
Sexual Versus Emotional Jealousy	2	.53	.51	.58	.72
Prefer Young Partner	11	.80	.67	.79	.63
Importance of Partner's Physical Attractiveness	10	.77	.77	.70	.75
Sociosexuality	7	.65	.64	.62	.67

*Note.* HTW = heterosexual women; HSW = homosexual women; HSM = homosexual men; HTM = heterosexual men.

four groups differed slightly, the orthogonal contrasts were slightly correlated in the combined sample. Significance tests were for the unique contribution of each predictor.

Results from these analyses are presented in Table 3. All seven scales showed significant sex differences in the predicted direction. Five of the scales showed within-sex relationships to sexual orientation, but no scale showed a sexual orientation effect for both sexes. Homosexual women were significantly more interested than heterosexual women in visual sexual stimuli and were significantly less concerned with partner's status. Compared with heterosexual men, homosexual men weighed sexual jealousy relatively less (and/or emotional jealousy more) and placed somewhat less emphasis on partner youth. Although homosexual and heterosexual men did not differ in their interest in uncommitted sex, homosexual men scored substantially higher on sociosexuality.

Because the heterosexual women were significantly younger than the other groups, we examined the effect of age. Age was not significantly correlated with any of the scales for any group. Furthermore, in the multiple regression analyses significance tests were unaffected by the inclusion of age as a covariate.

### *Sociosexuality: Behavioral Versus Psychological Items*

One additional analysis was performed to investigate the hypothesis that heterosexual and homosexual men differ in their opportunities, but not in the intensity of motivation, to engage in casual sex. Sociosexuality items were placed into either of two subgroups: those ascertaining behavioral frequencies and those reflecting more psychological tendencies. Two subscales were formed by summing the standardized items, and each was analyzed through multiple regression using the same set of three orthogonal contrasts from the previous analyses. Both behaviorally and psychologically, men appeared more partial than women to uncommitted sex, behavioral subscale  $F(1, 273) = 23.0$ , and psychological subscale  $F(1, 273) = 8.4$  (both  $ps < .01$ ). Homosexual and heterosexual women obtained similar scores on both the behavioral subscale,  $F(1, 273) = 0.0$ , and the psychological subscale,  $F(1, 273) = 0.0$ . Homosexual men were significantly higher on the behavioral subscale,  $F(1, 273) = 28.3$ ,  $p < .001$ , but were almost identical to heterosexual men in the mean of the psychological subscale,  $F(1, 273) = 0.0$ .

### *Within-Group Analyses*

If each scale measures the same dimensions across the four groups, then they should yield a similar pattern of intercorrelations within each group. This was investigated by testing whether the off-diagonal elements of the correlation matrices differed significantly among the four groups using LISREL-7 (Jöreskog & Sörbom, 1979).<sup>1</sup> The pattern of correlations did not significantly differ among the groups,  $\chi^2[r](63, N = 277) = 76.5$ ,  $p > .10$ . Indeed, the goodness-of-fit index (GFI) recommended by Jöreskog and Sörbom (1979), the ratio of chi-square to degrees of freedom (1.21), suggests that the model constraining the correlations to be equal across groups fit quite well. The maximum likelihood estimates for the scale intercorrelations, assuming equal correlations across groups, are given in Table 4. These estimates can roughly be considered averages of the respective correlations across the four groups. The correlation between Sociosexuality and Interest in Uncommitted Sex (.76) was quite high, as expected. Otherwise, correlations ranged from low to moderate and in no other case approached the maximum possible correlation suggested by the reliabilities. It is noteworthy that although all scales were scaled in a masculine direction (i.e., scaled so that according to evolutionary theory, men should score higher), one scale (Unimportance of Partner's Status) related negatively to all the others within groups.

A scree test of the eigenvalues extracted from the correlation matrix presented in Table 4, minus Sociosexuality (because it appears essentially to be an alternative measure of interest in casual sex, which is already represented), strongly suggested the presence of one general factor, which explained 25% of the total variance of the scales. A subsequent principal factor analysis of the matrix found Importance of Partner's Physical Attractiveness to have, by far, the highest loading (.86) on the unrotated general factor, followed by Interest in Visual Sexual Stimuli (.50), Interest in Casual Sex (.44), Preference for Younger Partners (.40), and Sexual Versus Emotional Jealousy (.22). Unimportance of Partner's Status had a negative loading on the gen-

<sup>1</sup> In LISREL-7 this test can be performed by specifying seven latent variables perfectly related to the seven observed variables (i.e., lambda X is an identity matrix) and constraining the phi matrix (the correlations among latent variables) to be invariant across groups.

Table 2  
Group Means and Standard Deviations for Scales

Scale	HTW		HSW		HSM		HTM	
	M	SD	M	SD	M	SD	M	SD
Interest in Uncommitted Sex	0.0	7.2	-0.6	6.9	4.4	7.0	4.9	6.6
Interest in Visual Sexual Stimuli	0.0	7.4	3.6	7.8	8.6	6.2	9.1	6.0
Unimportance of Partner's Status	0.0	6.7	2.8	5.8	3.3	5.2	3.0	5.7
Sexual Versus Emotional Jealousy	0.0	1.2	0.4	1.5	0.3	1.5	1.4	2.1
Prefer Young Partner	0.0	6.2	-1.2	4.8	2.6	5.8	5.1	4.8
Importance of Partner's Physical Attractiveness	0.0	5.4	-1.4	5.8	2.9	4.9	3.1	5.7
Sociosexuality	0.0	3.0	0.0	2.8	3.1	5.8	1.2	3.3

Note. Scale scores have been rescaled so that the heterosexual female mean is 0.0. HTW = heterosexual women; HSW = homosexual women; HSM = homosexual men; HTM = heterosexual men.

eral factor ( $-.36$ ), reflecting the aforementioned pattern of negative correlations with the other scales.

### Discussion

#### Predictions From Sexual Selection Theory

Sex differences were all as predicted by sexual selection theory. Furthermore, most of the differences were substantial, at least for the heterosexual subjects. Using the guidelines suggested by Cohen (1988), the heterosexual sex difference was large ( $d > .80$ ) for four scales, moderate to large ( $.80 > d > .50$ ) for two, and small to moderate ( $.50 > d > .20$ ) for one. The

smallest heterosexual effect size was for the Sociosexuality scale, which we argue underestimates the true effect size. It is ironic that sex differences so large have been scientifically ignored until recently, when so much energy has been expended examining relatively small sex differences (Hyde & Linn, 1986).

For most of the traits examined in the present study, previous research had demonstrated a sex difference. One exception was Interest in Visual Sexual Stimuli, which to our knowledge had not yet been systematically studied; this variable yielded the largest heterosexual sex difference. The sex difference in this trait may partially underlie the much higher rate of pornography consumption by men.

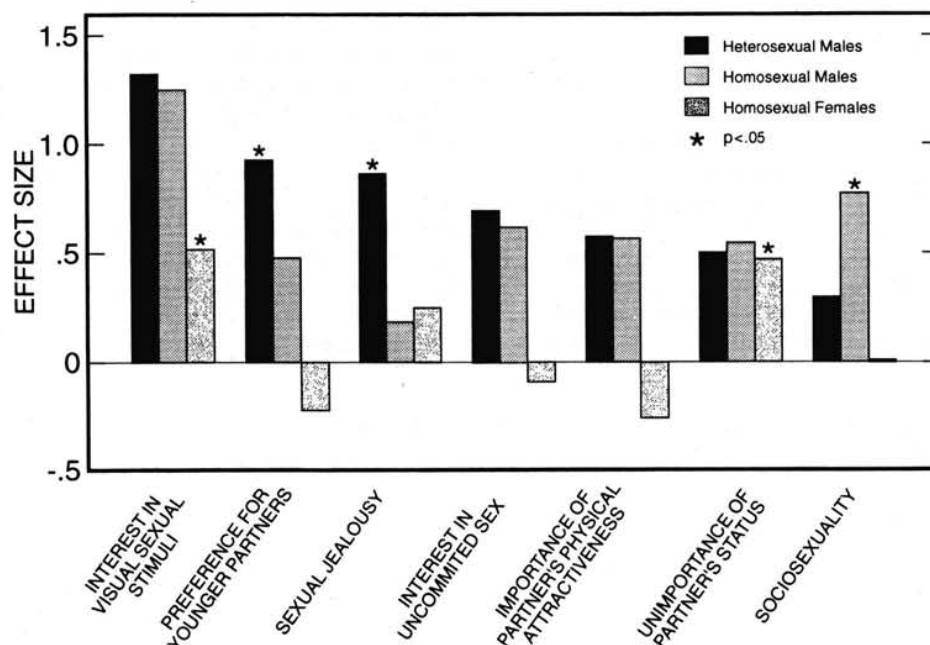


Figure 1. Effect sizes of heterosexual men and homosexual men and women, compared with heterosexual women. The effect size for each group was computed as the difference of that group's mean and the respective mean for heterosexual women divided by the within-group standard deviation. Scales that yielded a significant ( $p < .01$ ) heterosexual-homosexual difference within a sex are designated with an asterisk over the higher scoring orientation. All sex differences were significant.



Table 3  
*Significance Tests (F) for Multiple Regression Analyses*

Scale	Men vs. women	HSW vs. HTW	HTM vs. HSM
Interest in Uncommitted Sex	34.2***	0.3	0.2
Interest in Visual Sexual Stimuli	72.4***	9.5**	0.2
Unimportance of Partner's Status	6.1*	7.6**	0.1
Sexual Versus Emotional Jealousy	11.9***	1.9	15.4***
Prefer Young Partner	46.5***	1.5	7.2**
Importance of Partner's Physical Attractiveness	31.3***	2.1	0.1
Sociosexuality	21.1***	0.0	8.2**

Note. *dfs* = 1 and 273 for all *F*s. HSW = homosexual women; HTW = heterosexual women; HTM = heterosexual men; HSM = homosexual men.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

As we have noted, the present study also extended previous findings by using more reliable measures and furthermore by focusing on more psychologically than behaviorally oriented items. A psychological focus potentially allows insight into the nature of behavioral sex differences as well as a deeper understanding of putative adaptations (Tooby & Cosmides, 1990). For instance, there are many possible explanations for Clark and Hatfield's (1989) finding that men are more likely than women to accept sexual propositions from strangers. These include sex differences in fear of sexual violence, desire for sex in the context of love, arousal to sexual novelty, strength of general sexual desire, offensiveness of sexual propositions, and concern about what others might think. In principle, one could investigate the importance of each of these. Though our scope was narrower in this regard, results do support the potential importance of the measured preferences for explaining sex differences in mating behavior.

#### *Sexual Orientation and Mating Psychology*

One general conclusion is that among our subjects, sex had a considerably greater impact on mating psychology than did sexual orientation. Whereas all seven scales showed significant sex differences, in 9 of 14 within-sex comparisons, homosexual individuals did not differ significantly from same-sex heterosexual individuals. One must of course be cautious in inferring that two groups are similar from the failure to reject the null hypothesis that they differ. However, examination of the means in Table

2 reveals that for six of the nine nonsignificant within-sex comparisons, the difference between homosexual and same-sex heterosexual persons was less than 15% of the heterosexual sex difference. In these cases it seems safe to characterize the scores of homosexual and heterosexual persons as quite similar. By this criterion, comparisons yielding similar means for homosexual and same-sex heterosexual persons included Interest in Uncommitted Sex (both sexes), Visual Sexual Stimuli (men), Unimportance of Partner's Status (men), Importance of Partner's Physical Attractiveness (men), and Sociosexuality (women).

*Scales unrelated to sexual orientation.* Only one scale, Interest in Uncommitted Sex, yielded very similar scores for homosexual and heterosexual men as well as for homosexual and heterosexual women. The finding that the closely related scale, Sociosexuality, showed a large sexual orientation effect for men (but not for women) might at first seem to provide contradictory evidence. However, the different pattern for Sociosexuality was demonstrated to depend only on behavioral items, and they reflect opportunity as well as motivation to engage in casual sex. The psychologically oriented items on Sociosexuality showed no association with male (or female) sexual orientation. Our study provides the first evidence in support of Symons's (1979) view that homosexual men have more sexual partners than do heterosexual men because of a difference in opportunity rather than a more fundamental psychological difference. The pattern of results for Interest in Uncommitted Sex, which omits behavioral items likely to be sensitive to differential opportunity, sug-

Table 4  
*Maximum Likelihood Estimates for Within-Group Scale Intercorrelations*

Scale	2	3	4	5	6	7
1. Interest in Uncommitted Sex	.42***	-.05	.03	.11*	.35***	.75***
2. Interest in Visual Sexual Stimuli		-.22**	.07	.14*	.34***	.33***
3. Unimportance of Partner's Status			-.11*	-.07	-.36***	-.06
4. Sexual Versus Emotional Jealousy				.15*	.20**	.01
5. Prefer Young Partner					.42***	.02
6. Importance of Partner's Physical Attractiveness						.26***
7. Sociosexuality						

Note. Significance tests were performed by constraining each entry to be zero across groups. The resulting increase in chi-square is distributed as chi-square with one degree of freedom.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .



gests that the determinants of this sex difference consist of factors that are shared by homosexual and heterosexual persons of the same sex. This would exclude, for instance, fear of men's increased propensity for violence. Our homosexual female subjects avoid sex with men for the most part; nevertheless, they do not appear to be any more interested than heterosexual women in casual sex. Nor do homosexual men appear to be any less interested in casual sex than heterosexual men, though they are sexually involved with the more dangerous sex. The pattern of results for this scale could be explained through socialization, assuming that homosexual and same-sex heterosexual persons had similar socialization experiences. They could also be explained by more innate processes, if the sexual differentiation process shaping interest in uncommitted sex is independent of that affecting sexual orientation.

One other scale, Importance of Partner's Physical Attractiveness, was not significantly related to sexual orientation in either men or women. Although heterosexual and homosexual men were quite similar in their scores, homosexual and heterosexual women's scores differed enough (nearly half the magnitude of the heterosexual sex difference, with lesbians less concerned with partner's attractiveness) that it may not be prudent to treat their nonsignificant difference as trivial. Regardless, the fact that heterosexual and homosexual men were similar constrains possible explanations of the heterosexual sex difference; for instance, it is unlikely to be a byproduct of a social organization in which female beauty has been emphasized more than male beauty. If that were the case, gay men should have been as uninterested as heterosexual women in physical attractiveness of partners, and lesbians should have been as interested as heterosexual men.

*Scales related to sexual orientation.* Although no scale showed significant sexual orientation effects for both men and women, each of the remaining four scales was significantly associated with sexual orientation within one sex. It is noteworthy that, for each of these four scales, the mean for the differing homosexual sex was intermediate between those of heterosexual men and women. Thus, in these instances gay men evidenced a relatively feminine pattern or lesbians a relatively masculine pattern of mating psychology, compared with same-sex heterosexual persons. This pattern of findings suggests that the heterosexual sex difference cannot be completely explained by influences shared by homosexual and same-sex heterosexual persons. For example, early socialization patterns are unlikely to be the sole cause of baseline sex differences because these socialization patterns are relatively invariant for same-sex children regardless of their subsequent sexual orientations.

*Scales related to female sexual orientation.* Two scales yielded associations with female sexual orientation only. Interest in Visual Sexual Stimuli was significantly higher for homosexual than for heterosexual women but was similar for both groups of men. That homosexual men appeared as interested as heterosexual men in such stimuli argues against an explanation based on the role of women, such as their less powerful social position (Dworkin, 1981), in causing the heterosexual sex difference. In contrast, a neurohormonal interpretation of the association between female sexual orientation and interest in visual sexual stimuli is consistent with Money and Ehrhardt's (1972) finding that prenatally androgenized women were more responsive to visual sexual imagery than unexposed women. It

is noteworthy that pornography has been a source of contention among lesbians, with lesbian feminists decrying its negative effects and lesbian "sexual radicals" proclaiming its virtues (Faderman, 1991). Our finding may help to explain the existence of the latter subgroup. Furthermore, our informal observation is that there is a relatively higher frequency of visual erotica oriented toward lesbians than toward heterosexual women, though this has not been systematically investigated.

Unimportance of Partner's Status was also associated with sexual orientation for women but not for men. Heterosexual women were substantially more concerned with partner status than the other three groups, who were all similarly unconcerned. These results are consistent with the possibility that heterosexual women's preference is a reasoned consequence of the desire to raise a family conjoined with the general economic dependence of women in American society. At least two findings weaken this interpretation. In Sweden it is economically feasible (and increasingly common) for single women to raise a family. Buss (1989) reported a significantly higher emphasis by Swedish women compared with men on whether a potential mate was a "good financial prospect," though the difference was smaller than for the American sample. Wiederman and Allgeier (1992) showed that in the United States women who are less economically dependent are systematically more selective with respect to their partner's financial status. Exploring another possible causal avenue Money and Ehrhardt (1972) observed that prenatally androgenized women were less traditional and more concerned with their own careers than unexposed women. It is at least possible that a single biological process organizes both sexual orientation and interest in partner's status in women.

*Scales related to male sexual orientation.* In addition to Sociosexuality (discussed above) two scales yielded significant sexual orientation effects for men but not women. Sexual versus Emotional Jealousy was higher for heterosexual than for homosexual men, the latter obtaining scores more similar to heterosexual and homosexual women. The nonsignificant difference between heterosexual and homosexual women was approximately one third the size of the heterosexual sex difference, with homosexual women more sexually jealous. The present finding of lower sexual jealousy among homosexual men replicates that of Hawkins (1990), who preferred the social explanation that norms of gay male culture place less value on sexual exclusivity. It seems just as likely, however, that the difference in male homosexual and heterosexual norms is a consequence of their different psychological propensities. For example, assume a generalized psychological adaptation that inclines people to withhold their resources from all but their own children. If this were so, heterosexual men would see their resources put at risk by a partner's infidelity, whereas homosexual men would not. Thus, a sufficiently general psychological mechanism (cf. Tooby & Cosmides, 1990; Turke, 1990), coupled with the differential risks faced by homosexual and heterosexual men, could explain the dramatic decrease in sexual jealousy among the former. To scrutinize this generalist explanation more carefully, it would be useful to assess whether sexual jealousy among heterosexual men increases with their desire to have offspring or with the ineffectiveness of contraception methods used with their partners. The observed pattern of sexual versus emotional jealousy is inconsistent with an explanation emphasizing the role of

women in eliciting a jealous response (e.g., because sexual infidelity is not casually undertaken by women, their partners have reason to be especially concerned about it). If this were the case, homosexual women should have been as sexually jealous as heterosexual men.

Preference for younger partners was also significantly lower for homosexual than for heterosexual men. Homosexual women similarly obtained lower scores than heterosexual women, but that difference (about one fourth the heterosexual sex difference) was not significant. The lower interest of homosexual men in youthful partners may seem surprising because most writers have focused on the diminished sexual attractiveness of aging gay men (Ackerly, 1968; Hoffman, 1968; Symons, 1979). In fact, Harry and DeVall (1978) previously demonstrated that a substantial proportion of gay men preferred older partners, though there was no heterosexual control group in their study. They suggested, without offering systematic evidence, that some gay men prefer older partners for their higher economic and social status. Steinman (1991) reported qualitative data supporting this possibility. Our results suggest that this explanation is unlikely, however. Despite homosexual men's relative de-emphasis of partner youth, they were indistinguishable from heterosexual men regarding the unimportance of partner status. Furthermore, within the homosexual male group, the correlation of Unimportance of Partner's Status with Preference for Younger Partners was only  $-.14$ . One possible explanation, anticipated by Kenrick and Keefe (1992), is that heterosexual men's elevated concern about partner youth reflects rational concerns given their conscious intention to reproduce. As above, this kind of explanation could be evaluated by examining whether heterosexual men who plan to have children are particularly desirous of youthful partners and whether, for example, vasectomized men are less concerned about their partners' age.

### *Within-Group Variation*

Results of this study suggest that there is reliable variation on all seven dimensions studied within each of four groups: homosexual women, homosexual men, heterosexual women, and heterosexual men. Furthermore, the pattern of scale intercorrelations was similar across the four groups, suggesting that the scales measure similar differences across them. These results provide a justification for examining aspects of mating psychology as individual-difference variables as well as sexually differentiated traits. At least two broad kinds of research, one more empirically and the other more theoretically driven, would be useful to illuminate the measures as individual differences. A more empirically guided approach would explore the correlates and determinants of the traits using established methods in personality psychology to answer questions such as how heritable the traits are and how closely they relate to more familiar personality dimensions such as extraversion or impulsivity. Relevant data from the present study include the within-group intercorrelations among the scales. Because these correlations are low to moderate, within-group variation does not appear primarily to result from a single process affecting all scales simultaneously (e.g., socialization to be generally masculine or feminine). On the other hand, the pattern of observed correlations

conforms to the picture of a general factor, and thus is consistent with some common, but modest, influence on all the scales.

A particularly intriguing within-groups pattern emerged for Unimportance of Partner's Status. Though all measures were scaled so that men were predicted (correctly) to score higher, this single measure correlated negatively with all the others within groups (Table 4). The causes of within-sex variation in Unimportance of Partner's Status must differ somewhat from the causes of the sex difference. One possibility is that within sexes, lack of concern with a partner's status reflects relatively low standards of partner choice. Supporting this hypothesis, that scale correlated most strongly ( $r = -.36$ ) with Partner's Physical Attractiveness. On the other hand, it is doubtful that this explanation can account for the significant negative within-groups correlation ( $r = -.22$ ) with Interest in Visual Sexual Stimuli.

A more theoretical approach to the elaboration of individual differences would entail generating predictions using sexual selection theory to account for within-sex (and, possibly, within-sexual orientation) variation in mating psychology. Such an approach would examine, for instance, the possibility that within-sex variation in mating psychology represents the pursuit of different reproductive strategies. For example, Gangestad and Simpson (1990) theorized that women who readily engage in casual sex may do so to obtain access to "high quality" men, who are particularly likely to be reproductively successful, thus increasing the genetic quality of the women's offspring. Their model generated novel and nonintuitive hypotheses that garnered some empirical support.

### *Limitations*

There are at least two methodological concerns in the present study. First, the scales constructed for use in the present study have not been thoroughly validated. Although we would encourage further validation of the scales, the fact that they show, for the most part, reasonably high reliabilities, show a similar pattern of intercorrelations across groups and yield sex differences in the predicted direction supports their use in the present study. Furthermore, their discriminant validity is supported by their differing patterns of sexual orientation effects. The second concern is that our subjects were recruited through newspaper advertisements and, as volunteers, are unlikely to be representative of the general population of heterosexual and homosexual individuals. One specific concern is that because subjects were recruited using advertisements in relatively liberal publications, they may tend to be relatively unconventional in their sexual attitudes and behavior. This would probably have biased results in a direction making it less likely to demonstrate sex differences, but all hypothesized sex differences were obtained. Unfortunately, it remains impossible to ascertain a representative sample of homosexual (or for that matter, heterosexual) subjects. It would be useful to replicate our findings using subjects recruited in other manners.

### *Conclusions*

Evolutionary theory is a rich source of hypotheses about many kinds of sex differences. However, its implications about the development of these sex differences are not so transparent.

Because homosexual and heterosexual individuals differ in one obvious way (i.e., their sexual experience with and attraction to both sexes), and may differ in others as well (e.g., innate influences), they can provide data that constrain developmental explanations for sex differences. The mating psychologies of our female and male subjects generally appeared to be as predicted by evolutionary theory. However, the effects of sexual orientation on mating psychology were complex, with most of the seven scales exhibiting unique profiles across the four groups of subjects. This suggests that no single developmental theory, whether it focuses on innate or psychosocial factors, can completely explain all sex differences in mating psychology.

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## Appendix

### Items for Newly Developed Scales

#### Preference for Younger Partners

1. Facial wrinkles in a potential romantic partner would be a real turn-off to me.
2. I find gray hair to be somewhat sexy in a potential romantic partner.<sup>a</sup>
3. I could imagine being romantically and sexually involved with someone 20 years older than I.<sup>a</sup>
4. If I had to choose someone other than my current romantic partner as a long-term romantic partner I would choose someone aged \_\_\_\_.<sup>b</sup>
5. If I had to choose someone other than my current romantic partner as a one-time sexual partner I would choose someone aged \_\_\_\_.<sup>b</sup>
6. I am turned off by bodies that show signs of aging (such as sagging skin or varicose veins).
7. I am most sexually attracted to younger adults (aged 18–25).
8. If someone showed definite physical signs of aging, it would be difficult for me to be very sexually attracted to them.
9. I find attractive adolescents (aged 16–18) particularly sexy.
10. I would be comfortable having a mate considerably older than I.<sup>a</sup>
11. It is hard for me to understand why anyone would have a strong preference for younger rather than older partners.<sup>a</sup>

#### Interest in Uncommitted Sex

1. I would consider having sex with a stranger, if I could be assured that it was safe and s/he was attractive to me.
2. I like the idea of participating in a sex orgy.
3. I would *not* enjoy sex without any emotional commitment at all.<sup>a</sup>
4. I do not need to respect or love someone in order to enjoy having sex with him/her.
5. I can't imagine spending the rest of my life with one sex partner.
6. Sometimes I'd rather have sex with someone I didn't care about.
7. Monogamy is not for me.

8. I believe in taking sexual opportunities when I find them, as long as no one gets hurt.
9. I could easily imagine myself enjoying one night of sex with someone I would never see again.
10. If an attractive person (of my preferred sex) approached me sexually, it would be hard to resist, no matter how well I knew him/her.

#### Interest in Visual Sexual Stimuli

1. Seeing attractive people nude doesn't sexually arouse me.<sup>a</sup>
2. It would be exciting to watch two people have sex.
3. Seeing attractive people (of my preferred sex) in skimpy clothing such as lingerie or tight briefs is very sexually exciting to me.
4. I find photographs of attractive naked bodies (of my preferred sex) sexually exciting.
5. Being around a group of attractive naked people (of my preferred sex) does not sound very sexually arousing to me.<sup>a</sup>
6. When I meet someone I find attractive, I fantasize about what they would look like without clothes on.
7. Seeing the genitals of an attractive person (of my preferred sex) would be extremely sexually arousing.
8. Seeing my sexual partner undress is a real turn-on.
9. Whether or not I approve of them, I find films of attractive people having sex to be very sexually exciting.
10. When I see someone especially physically attractive, I may follow them briefly to get another look.
11. When I fantasize about having sex with someone, I try to picture very vividly in my mind what their body would look like.
12. If I had to choose, I'd rather have a long conversation with someone I'm attracted to than see them naked.<sup>a</sup>

<sup>a</sup> The scoring of these items is reversed. <sup>b</sup> Responses to these items are transformed by subtracting the respondent's age.

## Importance of Partner Status

1. Ideally, I want a romantic partner who is at least as highly educated as I.
2. It would be important to me if my partner were highly respected in the community.
3. If I found that a potential romantic partner made substantially more money than I, it would make her/him more attractive to me.
4. I would not mind being seriously involved with someone whose career ambitions were noticeably lower than mine.<sup>a</sup>
5. Although I don't necessarily expect it, having the other person pay for the date makes me feel good.
6. It can be very romantic to get a very expensive gift.
7. I would not want to get romantically involved with someone who did not have a job.
8. I sometimes fantasize about being in a relationship with someone who is socially powerful and wealthy.
9. I would like my partner to be from a higher social class background than I.
10. I wouldn't like it if my partner made more money than I.<sup>a</sup>
11. The prospect of a romantic partner who was well enough established so that I didn't have to work if I didn't want to would be very attractive.
12. I don't really care whether a potential romantic partner spends money on me.<sup>a</sup>

## Importance of Partner's Physical Attractiveness

1. It is easy to imagine becoming romantically involved with someone I initially felt was physically unattractive, as I grew to know their personality.<sup>a</sup>
2. Looks aren't that important to me.<sup>a</sup>
3. In the past, I've usually initially become romantically interested in someone largely due to their physical characteristics.
4. It is more important to me how nice a potential romantic partner is than how good looking they are.<sup>a</sup>
5. I wouldn't consider being romantically involved with someone who was significantly overweight.
6. It would be hard for me to get involved with someone with a noticeable skin problem.
7. I like my romantic partner to dress attractively, even if it requires some effort on her/his part.
8. I would be upset if my partner did not try to maintain her/his physical appearance.
9. If my partner became much less physically attractive, it would be difficult for me to stay with her/him.
10. I would be happy if my partner were more sexually attractive than I.

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