

Effects of Sexual Permissiveness on Desirability of Partner as a Function of Low and High Commitment to Relationship*

MARY BETH OLIVER
Virginia Polytechnic Institute and State University

CONSTANTINE SEDIKIDES
University of Wisconsin—Madison

We conducted two experiments to examine the predictions of the double standard and the evolutionary perspectives concerning the role of sexual permissiveness in desirability of partner at different levels of perceived commitment to relationship. Subjects reported their desired level of sexual permissiveness for either a low- or a high-commitment partner (Experiment 1), and evaluated the dating and the marriage desirability of either a permissive or a nonpermissive target person (Experiment 2). Females preferred low levels of sexual permissiveness for both low- and high-commitment partners, and rated permissive targets lower than nonpermissive targets on both dating and marriage desirability. Males also preferred low levels of sexual permissiveness for committed partners, and rated permissive targets lower on marriage desirability. Males, however, preferred higher levels of sexual permissiveness for low-commitment partners, and rated permissive targets higher on dating desirability. The results were consistent with both the double standard and the evolutionary perspective.

Research suggests that males and females today, unlike those in the recent past, are approximately equally likely to engage in premarital intercourse (Cullari and Mikus 1990; Robinson et al. 1991; Simon 1989). At the same time, however, a considerable amount of additional research suggests that the attitudes associated with sexual behavior and the circumstances surrounding sexual activity continue to show substantial gender differences: females report lower levels of sexual permissiveness than males and also place a greater value on love and commitment (Carroll, Volk, and Hyde 1985; Gfellner 1988; Hendrick and Hendrick 1987; Hendrick et al. 1985; King, Balswick, and Robinson 1977; Philliber and Tatum 1982).

Social psychological explanations of sexual attitudes and behaviors tend to account for these persistent gender differences in terms of socialization into "appropriate" male and female sexual scripts or scenarios (DeLamater 1987; Sprecher, McKinney, and Orbuch 1987). In contrast, evolutionary perspectives explain gender differences in terms of differential parental investment and sexual selection (Buss 1989). Yet despite the divergent

explanations for sexual attitudes and behaviors, the two perspectives often lead to similar predictions. As Kenrick and Keefe (1989) remarked, "We think that the theories, methods, and empirical findings of social psychology can be integrated with evolutionary models, to the mutual enrichment of both" (p. 26). The purpose of the present research is to examine the *comparable* predictions of both theoretical perspectives concerning the role of sexual permissiveness in desirability of partner at low and high levels of commitment to relationship.

The Double Standard Perspective

The sexual double standard is discussed often by researchers who employ a social psychological approach. This standard refers to the cultural belief that premarital sex is unacceptable for women but excusable or even appropriate for men (Reiss 1960, 1971). According to the sexual double standard, males are encouraged to engage in premarital sexual intercourse and yet are taught that females who engage in this behavior are "bad." Thus one implication is that males should accept (or even desire) sexually permissive women in casual dating relationships, but should reject such women in committed or marital relationships.

Although the predictions of the double

* Correspondence concerning this manuscript should be addressed to Mary Beth Oliver, Department of Communication Studies, Virginia Polytechnic Institute and State University, 11 Agnew Hall, Blacksburg, VA 24061-0311.

standard concerning females' mate preferences are less clear than those for males' mate preferences, one might expect females to reject permissive males as casual dating partners for fear that these men might make advances and encourage behaviors on the women's part that the men later would condemn. As Reiss (1960) explained:

Many women very strongly resent this contradictory virginity-attitude on the part of men. These women feel it most unfair for a man to date a girl, try to seduce her, and then if he succeeds, condemn her and cross her off his marriage-possibility list (p. 106).

Concerning preferences in characteristics of committed partners, Reiss suggested that females actually may prefer sexually experienced males because females may view their partners' experience as an asset. Yet Reiss also pointed out many potential problems in such marital situations. One such problem is the possibility that the double-standard male, who is not condemned for body-centered coitus (i.e., sexuality focused on bodily aspects), may be more likely to engage in extramarital intercourse. An additional problem concerns sexual maladjustment: even if the female has sexual experience, the double-standard male is likely to be most experienced with body-centered coitus and somewhat ignorant about his spouse's desires for person-centered intercourse (i.e., sexuality focused on emotional aspects).

These "self-centered sexual attitudes" (Reiss 1960, p. 189) on the part of males are likely to lead to sexual dissatisfaction, especially among females. Reiss suggested, however, that when *both* partners follow the standard of permissiveness with affection, mutual sexual satisfaction is more likely. Thus one might expect that females would want a less permissive marriage partner who adheres to the standard of permissiveness with affection.

In sum, the social psychological concept of the double standard would predict that males would desire permissive females in low-commitment conditions (e.g., as casual dates), but would desire nonpermissive females in high-commitment conditions (e.g., as spouses). Females would be expected to desire nonpermissive partners at both low and high levels of commitment.

The Evolutionary Perspective

The predictions of the evolutionary perspective are identical to those of the double

standard perspective, albeit for different reasons. For instance, the relationship-qualified parental investment model of Kenrick et al. (1990) suggests parallel predictions in regard to partners' selectivity. Kenrick and Trost (1989) explained that in casual mating circumstances, females should be more selective in their choice of partners than males because of females' greater likelihood of parental investment. At high levels of commitment, however, involving parental investment on the part of both males and females, the genders should report equally high levels of selectivity in their preferences. In support of this position, Kenrick et al. (1990) reported that females were more selective regarding potential partners' desired characteristics (e.g., intelligence, kindness, understanding) than were males, and that gender differences in selectivity were largest for ratings of sexual partners and smallest for ratings of marriage partners.

Although the Kenrick et al. (1990) study did not measure preferences as to partners' sexual permissiveness, one might expect patterns similar to those predicted by the double standard. Males should prefer high levels of sexual permissiveness in potential partners at low levels of relationship commitment, but should prefer low levels of permissiveness at high levels of commitment. These differential preferences would reflect the idea that at low levels of commitment, males have a low likelihood of parental investment, but females will continue to devote resources to protect the investments that they make during gestation and lactation. In view of females' likelihood of parental investment, even at low levels of commitment, it is to the male's advantage to impregnate as many females as possible. At high levels of commitment, however, where the male is likely to expend a great many resources, it is to his advantage to ensure that his investments support his own offspring rather than another male's. Therefore chastity is predicted to be valued in high-commitment conditions (Buss 1989).

As for females' preferences, the evolutionary approach diverges from the predictions of the double standard in suggesting generally that females should be less concerned about their partners' fidelity than males (see Buss 1989; Kenrick 1987; Kenrick and Trost 1987). In a cross-cultural study of gender differences in desired mate characteristics,

however, Buss (1989) found large cultural variations in the importance placed on chastity, and strong but not unanimous support for the predicted gender difference in chastity preferences. Therefore Buss suggested that proximate cultural influences may play a large role in the importance of chastity in mate selection. In addition, as Buss (1988) pointed out earlier, "evolutionary accounts often predict that a woman will avoid indiscriminate mating of the sort implied by temporary sex partners, instead seeking a man who will invest maximally in her and her future offspring" (p. 625). Therefore, in keeping with evolutionary perspectives, one might expect that females (particularly from cultures stressing monogamy) would desire low levels of sexual permissiveness in partners because high levels of permissiveness might signal a low probability that the male would invest resources (Buss 1989).

Summary of Theoretical Perspectives

In sum, the double standard and the evolutionary approach predict similar preferences based on the effects of sexual permissiveness on desirability in low- and in high-commitment circumstances, at least among males. At low levels of commitment, males should prefer females with high levels of sexual permissiveness; at high levels of commitment, males should prefer females with low levels of sexual permissiveness. Although the predictions for females' preferences are less clear, there is ample reason to suspect that females should prefer partners with low levels of permissiveness in both high- and low-commitment conditions.

Empirical Findings

Despite the convergence of predictions from the two perspectives, research examining the influence of sexual permissiveness on dating and marriage desirability has revealed only limited support for these predictions. Perhaps the strongest empirical support comes from a person-perception study conducted by Specher et al. (1991). In their study, male and female subjects were presented with information about a stimulus person (target) that varied the target's gender (male, female), age (16, 21), level of emotional commitment in the target's current relationship (casual, steady), and level of sexual activity in the

current relationship (low, medium, high). Subjects subsequently were asked to estimate how other people (both male and female) would rate the target in terms of desirability, for friendship, and to estimate how people of the opposite gender would rate the target in terms of desirability for dating and marriage.

Overall the results showed that sexual activity was associated negatively with marriage desirability (particularly if the sexual activity occurred in a casual relationship), but positively with dating desirability (particularly if the sexual activity occurred in a steady relationship). In addition, however, ratings of dating desirability as a function of sexual activity were shown to be different for male and for female targets. Subjects stated that females would give highest ratings of dating desirability to the moderately active male targets, but that males would give the highest ratings of dating desirability to the most sexually active female targets. The results of this study appear to support the predictions of both the double standard and the evolutionary approach concerning the effects of sexual permissiveness on desirability.

Other research, however, has not demonstrated such apparent support. Garcia (1982) asked gender-typed and androgynous male and female subjects to rate the dating and marriage desirability of sexually experienced or inexperienced other-gender stimulus persons (targets). Contrary to predictions, the results revealed no significant differences between the dating and the marriage ratings obtained from male subjects. In addition, only one significant difference was found among the female subjects: gender-typed females rated the inexperienced target as a more desirable date than the experienced target.

Istvan and Griffitt (1980) asked females and males to rate the dating and marriage desirability of other-gender targets who varied in sexual experience. Although the results showed that the targets' sexual experience had effects on desirability, these results were explained most plausibly in relation to the subjects' own level of sexual experience. More specifically, inexperienced males rated inexperienced female targets as more desirable than experienced female targets. Similarly, female subjects tended to give the highest desirability ratings to targets whose sexual experience matched their own sexual experience.

Jacoby and Williams (1985) asked male and female subjects to rate the marriage and dating desirability of five other-gender targets who were described in terms of their sexual ideology (i.e., sexual behaviors believed to be acceptable) and their lifetime sexual behaviors (i.e., number of sexual partners, number of partners for whom they felt affection, and number of partners for whom they felt love). The results showed that *both* males and females preferred dating and marriage partners with less sexual experience to partners with more sexual experience. Williams and Jacoby (1989) reported similar results in a follow-up study in which male and female college students from two universities rated the marriage and dating desirability of five other-gender targets who were described in terms of both their heterosexual behavior and their homosexual behavior. In regard to the targets' heterosexual experience, Williams and Jacoby (1989) reported that both males and females rated targets with lower levels of sexual experience as more desirable dating and marriage partners, although this preference was more pronounced for females than for males.

With the exception of the Sprecher et al. (1991) study, research on the effects of sexual behavior on dating and marriage desirability offers very little support for the predictions of the double standard and the evolutionary perspectives. Several alternative explanations, however, may account for the reported findings.

First, in the experiments by Garcia (1982) and by Istvan and Griffitt (1980), sexuality was manipulated in terms of sexual experience rather than in terms of sexual attitudes or sexual permissiveness. As mentioned previously, research has shown that males and females are approximately equally likely to engage in premarital sexual intercourse; yet they continue to hold very different attitudes concerning sexual permissiveness. Therefore subjects may have assumed that male and female targets held permissive and nonpermissive attitudes respectively, despite the targets' level of sexual experience.

Jacoby and Williams (1985) attempted to include sexual standards as one manipulation of the targets' sexual profiles, but this was only one of the four variables manipulated. (The others were number of sexual partners, number of partners for whom affection was felt, and number of partners for whom love was felt.) As Sprecher et al. (1987) pointed

out, this manipulation required subjects to perform numerous and complex calculations (e.g., subtracting the total number of partners associated with "affection" and with "love" from the total number of partners for each sexual behavior) in order to determine the emotional context of the targets' sexual behaviors; thus interpretations were difficult. Further, although Jacoby and Williams (1985) suggested that a target's attitudes and behaviors are important in dating and marriage desirability, they did not report any data regarding the effects of such attitudes. Perhaps stronger and less complex manipulations indicating directly the targets' level of sexual permissiveness would have resulted in more pronounced differences between groups.

A second explanation for the lack of strong effects involves the perceived relationship commitment implied by ratings of "dating" and "marriage." Although "dating" clearly implies less commitment than "marriage," subjects may perceive "dating" as at least a semicommitted activity involving anticipation of repeated interaction. In fact, subjects in Jacoby and Williams's (1985) and Williams and Jacoby's (1989) experiments were instructed to imagine that they had "gotten to know and like" the target before rating dating desirability. Therefore a more powerful manipulation of relationship commitment (especially low commitment) might have led to stronger differentiation between responses.

A third explanation for the failure to obtain unambiguous support for the double standard and/or the evolutionary approach entails the data-analysis strategies employed. In all experiments, ratings of dating and marriage desirability were analyzed separately rather than being treated as within-subjects factors in a repeated-measures design. Consequently no statistical comparisons between these two ratings were possible. Comparisons between dating and marriage desirability are essential, however, because both the double standard and the evolutionary perspective predict differential effects of sexual permissiveness on these variables, at least among males.

Finally these experiments did not measure the subjects' *preferences* concerning their partners' sexuality. It is possible that subjects *prefer* different levels of sexual experience in low- and in high-commitment partners, but nevertheless are willing to forgo their preferences if necessary.

The Present Research

The extant research offers only equivocal support for the hypothesized effect of a potential partner's sexual experience on desirability in low- and high-commitment conditions. As argued above, however, the lack of clear support may have been the result of the manipulations, measures, and statistical analyses used in these experiments. Therefore the present research attempts to replicate and extend previous research by examining the relations between a potential partner's attitudes toward sexuality (i.e., sexual permissiveness) and the desirability of that partner at low and high levels of relationship commitment. We hypothesized that males would hold different standards or preferences for sexuality in potential partners, preferring sexually permissive partners at low levels of perceived commitment and nonpermissive partners at high levels of perceived commitment. In contrast, we predicted that females would prefer less permissiveness in their partners at both low and high levels of perceived commitment. Furthermore, in keeping with Kenrick et al.'s (1990) relationship-qualified parental investment model, we predicted that males' and females' preferences would differ significantly in low-commitment conditions, in which the female had a larger likelihood of parental investment, but not in high-commitment conditions, in which both males and females had a high likelihood of parental investment.

The first experiment was designed to examine preferences in potential partners' sexual attitudes. In this experiment, males and females were asked to complete a sexual permissiveness scale as they would want a blind date to complete the scale or as they would want their spouse to complete the scale.¹ We expected that females would

¹ We used the term *blind date* in this and the following experiment to suggest low relationship commitment because, as mentioned previously, we were concerned that the terms *date* or *dating partner*, used in previous research, might connote higher levels of commitment than we intended. Although alternative terms such as *sexual partner* or *sexual relationship* also would have implied low levels of relationship commitment, we did not use these terms because the desired level of sexual permissiveness was the dependent variable of interest in the first experiment. The term *sexual partner* or *sexual relationship* potentially would have precluded the possibility of reported desires for low levels of sexual permissiveness.

prefer nonpermissiveness in both a blind date and a spouse, but that males would prefer more permissiveness in a blind date than in a spouse.

In the second experiment we examined the effects of a potential partner's sexual attitudes on desirability as a low-commitment and as a high-commitment partner. Females and males rated permissive or nonpermissive other-gender targets on many evaluative dimensions, and on desirability as a blind date and as a spouse (see Garcia 1982; Istvan and Griffitt 1980; Jacoby and Williams 1985; Janda, O'Grady, and Barnhart 1981; Sprecher et al. 1987, 1991; Williams and Jacoby 1989). We expected that females would rate the nonpermissive target higher on desirability than the permissive target, both as a blind date and as a spouse, but that males would rate the nonpermissive target higher on desirability as a spouse and the permissive target higher as a blind date.

EXPERIMENT 1

Method

Subjects. This and the following experiment were conducted in the spring 1990 semester. Subjects were 44 heterosexual male and 44 heterosexual female University of Wisconsin undergraduates enrolled in introductory psychology courses.² The subjects' mean age was 19.8.

Procedure. The research was conducted in small groups (two to eight subjects per group); each subject was seated at a desk separated by partitions. After reading and signing a consent form, subjects were given a booklet that contained instructions and the dependent measures.

The manipulation in this experiment consisted of different instructions on the first page of the questionnaire booklet. Subjects

² In both studies, subjects were asked to indicate their sexual orientation after completing all questionnaires. Because the first experiment assumed that males were rating females as potential dates or spouses and that females were rating males, only subjects who stated that they were heterosexual were included in the analyses. Similarly, only heterosexuals were included in the analyses of the second experiment because subjects were asked to rate the dating and marriage desirability of an other-gender target. One person (male) was excluded in the first study, and three people (two males and one female) were excluded from the second study.

were assigned randomly to one of two instruction conditions that manipulated the level of relationship commitment which might be anticipated. For the subjects in the low-commitment condition the instructions read:

Imagine that you have a blind date for Friday night. Please respond to the following statements as you would like for your blind date to respond to the statements.

For the subjects in the high-commitment condition the instructions read:

Imagine a person that you would like to be your spouse. Please respond to the following statements as you would like for your spouse to respond to the statements.

After reading these instructions, subjects completed Hendrick and Hendrick's (1987) Sexual Permissiveness Scale. This scale, which consists of 21 items measuring attitudes toward sexuality, has been shown to have high reliabilities and to correlate positively with the Sexual Opinion Survey (Fisher et al. 1988) and with the Male and Female Premarital Sexual Permissiveness Scales (Reiss 1967; see Hendrick and Hendrick 1987). Because some subjects in this experiment rated this scale in terms of a potential spouse, the item on this scale that reads "Extramarital affairs are all right as long as one's partner doesn't know about them" was judged inappropriate and was omitted from both experiments. Therefore the final scale used in this experiment consisted of 20 items concerning sexual attitudes; subjects indicated their agreement or disagreement by circling a number on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores on this scale reflect more permissive sexual attitudes. Cronbach's alpha for this scale was .91.

Results and Discussion

We analyzed ratings of desired sexual permissiveness using a 2 (gender) x 2 (level of relationship commitment) analysis of variance (ANOVA). Although both males and females showed preferences for low levels of permissiveness overall, females reported preferences for significantly lower levels of sexual permissiveness ($M = 2.1$) than did males ($M = 3.1$, $F(1, 84) = 31.88$, $p < .001$). Further, subjects in the high-commit-

ment (spouse) condition reported preferences for significantly lower levels of sexual permissiveness ($M = 2.4$) than did subjects in the low-commitment (blind date) condition ($M = 2.8$, $F(1, 84) = 6.76$, $p < .05$).

Most important, the ANOVA revealed a significant interaction between gender and level of relationship commitment ($F(1, 84) = 18.28$, $p < .001$). As Table 1 shows, males preferred significantly lower levels of sexual permissiveness in a spouse than in a blind date, whereas females' preferences in this regard did not differ significantly. In addition, males preferred significantly higher levels of sexual permissiveness in a blind date than did females, but males' and females' preferences as to a spouse's permissiveness did not differ significantly.

To summarize, although both males and females preferred low levels of permissiveness at both high and low levels of commitment, the results supported the hypothesis that males would prefer higher levels of sexual permissiveness in partners in low-commitment conditions. The results also revealed that females' preferred levels of sexual permissiveness were the same in low-commitment as in high-commitment conditions, and that males and females preferred equally low levels of sexual permissiveness in high-commitment conditions.

EXPERIMENT 2

Experiment 1 demonstrated that gender and perceived relationship commitment influence the preference as to a partner's sexual attitudes. Experiment 1, however, did not explore variations in evaluations of a partner given the partner's sexual attitudes. Experiment 2 complemented Experiment 1 by examining how a target's sexual permissive-

Table 1. Desired Sexual Permissiveness: Gender x Relationship Commitment Interaction

Gender	Relationship Commitment	
	Spouse	Blind Date
Male	2.5 _b (0.8)	3.7 _c (1.0)
Female	2.2 _{ab} (0.8)	2.0 _a (0.4)

Note: Scores could range from 1 to 7, with higher scores reflecting higher levels of sexual permissiveness. Each cell contains 22 subjects. Means having no subscript in common differ at $p < .05$ by the Scheffé test. Standard deviations appear in parentheses.

ness affects judgments, evaluations, and desirability in low- and high-commitment relationships.

Method

Subjects. The subjects in this experiment were 80 heterosexual male and 80 heterosexual female University of Wisconsin undergraduates enrolled in introductory psychology courses. The subjects' mean age was 19.1.

Procedure. The research was conducted in small groups (two to eight subjects per group), with partitions separating each subject. After reading and signing a consent form, each subject was given a booklet that contained instructions, the manipulation, and the dependent measures.

The written instructions explained that the subjects would read a photocopy of a questionnaire completed by an other-gender student in the previous semester. This bogus questionnaire contained the same 20 items from Hendrick and Hendrick's (1987) Sexual Permissiveness Scale as used in the first experiment; subjects were assigned randomly to a condition in which the questionnaire reflected either sexually permissive attitudes or sexually nonpermissive attitudes. We determined permissive and nonpermissive responses on the bogus questionnaire by examining the percentiles of responses for each item given in the first experiment. For the permissive questionnaire, each response reflected scores at the 75th percentile; for the nonpermissive questionnaire, each response reflected scores at the 25th percentile. To make the bogus questionnaire look authentic, we used a different type of paper and color of ink in the rest of the questionnaire booklet.

Measures. After examining the bogus questionnaire, subjects were asked to rate their impressions of the target person on 12 characteristics taken from Byrne's (1971) Interpersonal Judgment Scale and Computer-Dating Interpersonal Scale. The characteristics were intelligence, knowledgeability of current events, morality, adjustment, likability in general, likability as a co-worker, friendliness, rationality, responsibility, warmth, physical attractiveness, and sexual attractiveness. Subjects also indicated how much they would like the target person as a blind date and how much they would like the target person as a spouse. Finally, as a manipulation check, subjects rated the target person on sexual permissiveness. For each character-

istic, subjects selected from one of seven statements that varied the degree to which the characteristic was perceived as describing the target person accurately (e.g., extremely maladjusted to extremely well-adjusted). All items were scored on seven-point scales; higher scores reflected more positive evaluations of the target, greater desirability as a blind date and as a spouse, and more permissive sexual attitudes.

Results and Discussion

Manipulation check. To check the effectiveness of the manipulation of sexual permissiveness contained in the bogus questionnaires, we entered the subjects' ratings of perceived sexual permissiveness into a 2 (gender) x 2 (sexual permissiveness) ANOVA. The results showed a strong main effect for permissiveness; permissiveness ratings were significantly higher in the permissive condition ($M = 5.8$) than in the nonpermissive condition ($M = 2.2$, $F(1, 155) = 309.21$, $p < .0001$). The main effect of gender and the interaction between the permissiveness conditions and gender were not significant.

Perceptions of target. In addition to rating the target's sexual permissiveness, subjects also rated the target on 12 personality characteristics. To present the results of these ratings in the most parsimonious fashion possible, we entered subjects' ratings on the 12 characteristics into a factor analysis using principal components extraction and varimax rotation. On the basis of a scree plot of the eigenvalues and of eigenvalues greater than 1, the clearest solution in this analysis yielded two factors. These two factors accounted for 65.8 percent of the variance; all items had factor loadings greater than .60. The first factor, which we labeled *evaluation*, included items measuring responsibility, adjustment, intelligence, morality, warmth, rationality, knowledgeability of current events, likability as a co-worker, and likability in general. The second factor, which we labeled *attraction*, included items measuring sexual attractiveness, physical attractiveness, and friendliness. We calculated reliabilities of these two scales using Cronbach's alpha; the evaluation scale had a reliability of .92, and the attraction scale had a reliability of .76.

To examine perceptions of the targets as a function of the targets' sexual permissiveness, we entered each scale into a 2 (sexual permissiveness) x 2 (gender) ANOVA. The

results for the evaluation scale showed a main effect for sexual permissiveness; permissive targets received lower ratings ($M = 3.6$) than nonpermissive targets ($M = 5.5$, $F(1, 155) = 259.49$, $p < .001$). Most important, the interaction between gender and sexual permissiveness was significant ($F(1, 155) = 39.51$, $p < .001$). Although both males and females rated the permissive target significantly lower on the evaluation scale than the nonpermissive target, Scheffé post hoc comparisons showed that sexual permissiveness had a larger effect on the ratings of female subjects than on those of male subjects. That is, females rated the permissive target significantly more negatively ($M = 3.2$) than did males ($M = 4.0$), and females rated the nonpermissive target significantly more favorably ($M = 5.9$) than did males ($M = 5.1$).

The results of the ANOVA for the attraction scale also revealed a significant main effect for sexual permissiveness; permissive targets received higher ratings on attraction ($M = 5.1$) than did nonpermissive targets ($M = 4.3$, $F(1, 156) = 32.75$, $p < .001$). Most important, the interaction between gender and sexual permissiveness was significant ($F(1, 155) = 15.26$, $p < .001$), suggesting that the main effect for permissiveness was due to large differential ratings among male subjects only. Scheffé tests showed that male subjects gave significantly higher ratings of attraction to permissive targets ($M = 5.3$) than to nonpermissive targets ($M = 4.1$), whereas females' ratings of attraction for permissive ($M = 4.8$) and for nonpermissive targets ($M = 4.6$) did not differ significantly.

Desirability ratings under low and high commitment levels. To test for differential ratings between a target's desirability as a blind date and as a spouse, we conducted a repeated-measures ANOVA treating the two ratings of desirability at different levels of relationship commitment (blind date, spouse) as a within-subjects factor. Thus desirability was analyzed in a 2 (level of relationship commitment) \times 2 (gender) \times 2 (sexual permissiveness) repeated-measures ANOVA. Tests of the within-subjects effects revealed a significant main effect for level of relationship commitment; subjects reported greater desirability of the target as blind date ($M = 4.2$) than as a spouse ($M = 3.9$, $F(1, 156) = 6.98$, $p < .01$).

The interaction between level of relationship commitment and sexual permissiveness was significant ($F(1, 156) = 56.15$, $p < .001$). As Table 2 shows, this interaction reflects greater differences between the permissive and the nonpermissive target on ratings of desirability as a spouse than on ratings of desirability as a blind date.

Further, the three-way interaction between sexual permissiveness, level of relationship commitment, and gender was significant ($F(1, 156) = 19.07$, $p < .001$). Examination of the means and mean differences shows that this interaction reflects lower ratings of desirability for the permissive target than for the nonpermissive target, except for males' ratings in the low-commitment condition. That is, females rated the permissive target as less desirable than the nonpermissive target, both as a spouse and as a blind date. Like females, males rated the permissive target as less desirable than the nonpermissive target as a spouse. Unlike females, however, males rated the permissive target as more desirable than the nonpermissive target as a blind date. (See Table 3.)

Although the manipulation of sexual permissiveness contained in the bogus questionnaires was shown to be effective, we found variation in perceptions of sexual permissiveness. Therefore, as a more stringent test of the hypotheses, we conducted two regression analyses using gender and ratings of the target's sexual permissiveness (perceived sexual permissiveness) as independent variables. The dummy codes for gender were males = 0 and females = 1. In both analyses, we analyzed desirability of the target using hierarchical regression; gender and perceived sexual permissiveness were

Table 2. Ratings of Desirability of Target: Sexual Permissiveness \times Relationship Commitment Interaction

Sexual Permissiveness	Relationship Commitment	
	Spouse	Blind Date
Permissive	2.4 _a (1.6)	3.6 _b (1.6)
Nonpermissive	5.3 _d (1.7)	4.8 _c (1.6)
Mean Difference	2.9	1.2

Note: Scores could range from 1 to 7, with higher scores reflecting higher ratings of desirability. Each cell contains 80 observations. Means having no subscript in common differ at $p < .05$ by the Scheffé test. Standard deviations appear in parentheses.

Table 3. Ratings of Desirability of Target: Relationship Commitment x Gender x Sexual Permissiveness Interaction

Gender	Sexual Permissiveness	Relationship Commitment	
		Spouse	Blind Date
Male	Permissive	2.9 _b (1.7)	4.6 _d (1.4)
	Nonpermissive	5.1 _{de} (2.0)	4.1 _c (1.7)
	Mean Difference	2.2	-0.5
Female	Permissive	1.9 _a (1.3)	2.5 _b (1.1)
	Nonpermissive	5.6 _f (1.4)	5.5 _{ef} (1.3)
	Mean Difference	3.7	3.0

Note: Scores could range from 1 to 7, with higher scores reflecting higher ratings of desirability. Each cell contains 40 observations. Means having no subscript in common differ at $p < .05$ by the Scheffé test. Standard deviations appear in parentheses.

entered on the first step, and the product of gender and permissiveness was entered on the second step as a test for the interaction (Cohen 1978; Cohen and Cohen 1983).

In the first analysis, desirability as a spouse was the dependent variable. As Table 4 shows, the first step in the equation accounted for a significant amount of the variance in desirability; a significant main effect was revealed for perceived permissiveness. The increase in R^2 associated with the interaction also was significant; it showed that the slopes between males and females differed significantly. The separate regression equations for males and for females in Table 4 illustrate the interaction. They show that although perceived permissiveness explained a significant amount of the variation in marriage desirabil-

ity for both males and females, the association was stronger for females than for males.

We used the same procedures as in the first analysis of marriage desirability to analyze the ratings of desirability as a blind date. As Table 5 shows, the first step in this analysis explained a significant amount of the variance in dating desirability; a main effect was revealed for perceived permissiveness. The increase in R^2 associated with the interaction, however, showed that the slopes for male and for female subjects differed significantly. The separate regression equations for males and for females show that for females, high levels of perceived permissiveness were associated significantly with lower ratings of desirability as a blind date. For males, however, increases in perceived sexual permissiveness were associated significantly with higher ratings of desirability.

Summary of findings. The results of Experiment 2 clearly support the hypothesis that a potential partner's sexual permissiveness has strong influences on perceptions of the partner and on the partner's desirability. This experiment showed that a target's sexual permissiveness affects ratings of both attractiveness (e.g., physical attractiveness) and evaluative characteristics (e.g., intelligence, morality, and rationality). Males rated the sexually permissive target as significantly more attractive than the nonpermissive target, whereas females' ratings of the two targets' attractiveness did not differ. For ratings of evaluative characteristics, both males and females rated the permissive target lower than the nonpermissive target. Females, however, gave more favorable ratings to the nonpermissive target and more unfavorable ratings to the permissive target than did males.

Table 4. Ratings of Desirability as Spouse: Gender x Perceived Sexual Permissiveness Interaction

	β	SE _B	t
Step 1: $R^2 = .27$; $F(2, 156) = 29.86$, $p < .0001$			
Gender	-.03	.30	-0.51
Perceived Permissiveness	-.52	.07	-7.70****
Step 2: R^2 change = .04; $F(1, 155) = 8.00$, $p < .01$			
Gender x Perceived Permissiveness Interaction	-.43	.13	-2.82**
Separate Regression Equations for Males and for Females			
Males: $R^2 = .12$; $F(1, 77) = 10.70$, $p < .01$			
Rating as Spouse = 5.28 - 0.34 (Permissiveness)			
Females: $R^2 = .47$; $F(1, 78) = 70.52$, $p < .0001$			
Rating as Spouse = 6.60 - 0.71 (Permissiveness)			

Note: The difference in the denominator degrees of freedom between males and females reflects the fact that one male subject failed to respond to the rating of sexual permissiveness.

* $p < .05$; ** $p < .01$; *** $p < .001$; **** $p < .0001$.

Table 5. Ratings of Desirability as Blind Date: Gender x Perceived Sexual Permissiveness Interaction

Step 1: $R^2 = .04$; $F(2, 156) = 3.49$, $p < .05$			
	β	SE_{β}	t
Gender	-.10	.27	-1.24
Perceived Permissiveness	-.18	.07	-2.30*
Step 2: R^2 change = .27; $F(1, 155) = 60.50$, $p < .0001$			
	β	SE_{β}	t
Gender x Perceived Permissiveness Interaction	-1.19	.10	-7.78****
Separate Regression Equations for Males and for Females			
Males: $R^2 = .14$; $F(1, 77) = 12.92$, $p < .001$			
Rating as Blind Date = 3.33 + 0.26 (Permissiveness)			
Females: $R^2 = .41$; $F(1, 78) = 54.59$, $p < .0001$			
Rating as Blind Date = 6.20 - 0.55 (Permissiveness)			

Note: The difference in the denominator degrees of freedom between males and females reflects the fact that one male subject failed to respond to the rating of sexual permissiveness.

* $p < .05$; ** $p < .01$; *** $p < .001$; **** $p < .0001$.

In ratings of dating and marriage desirability, females rated the permissive target lower on both measures. Males, however, differentiated between conditions, rating the nonpermissive target higher on desirability as a spouse but rating the permissive target higher on desirability as a date. These results were illustrated further in two regression analyses that used perceptions of the target's sexual permissiveness to predict desirability. Female subjects showed a negative association between perceived permissiveness and ratings of both dating and marriage desirability, but male subjects showed a negative association between permissiveness and marriage desirability and a positive association between permissiveness and dating desirability.

GENERAL DISCUSSION

Both the double standard and the evolutionary perspective predict that males will desire sexually permissive partners in low-commitment conditions and will desire nonpermissive partners in high-commitment conditions. Though the predictions for females' preferences are less clear, these perspectives seem to predict that females will desire nonpermissive partners at both low and high levels of relationship commitment. The purpose of the present research is to replicate and extend past research that examined the effects of a target's sexuality on desirability as a date and as a spouse. Our research differs from past research in that we describe the targets in terms of their sexual attitudes rather than behaviors, we employ stronger manipulations of perceived relationship commitment, and

we assess preferences for desired levels of permissiveness.

The first experiment showed that both males and females preferred low levels of sexual permissiveness overall; males, however, preferred higher levels of sexual permissiveness in a blind date than in a spouse, whereas females preferred equally low levels of permissiveness in both conditions. The second experiment demonstrated that males rated permissive targets higher than nonpermissive targets on blind-date desirability, but rated nonpermissive targets higher than permissive targets on spouse desirability. Females rated nonpermissive targets more desirable as both spouses and blind dates.

Together the results of these two experiments support the similar (and formerly only partially supported) predictions of the double standard and the evolutionary approaches concerning the role of sexual permissiveness in desirability of low-commitment and high-commitment partners. In regard to the double standard, these results support the notion that sexually permissive females are judged acceptable (or even appropriate) for casual dates or as sexual partners, but unacceptable for long-term relationship commitments or as spouses. Alternatively, in keeping with Kenrick et al.'s (1990) relationship-qualified parental investment model, these results also support the notion that at low levels of commitment females show more selectivity in mate selection than do males, whereas in high-commitment conditions males and females manifest equally high levels of selectivity; both prefer nonpermissive targets whom they perceive as higher on evaluative dimensions.

Although the results of these studies demonstrate clearly that a potential partner's sexual permissiveness plays a role in desirability in low- and high-commitment conditions, several additional considerations should not be overlooked. First, the present research does not account (nor does it intend to account) for other important variables that people are likely to consider when making judgments about a potential partner. In other words, these studies do not examine the *importance* of sexual permissiveness as compared to other considerations such as physical attractiveness, attitudes, and socioeconomic status. Therefore caution is needed in generalizing the results of these studies to evaluations made *outside* the laboratory, where numerous characteristics are judged.

A study conducted by Garcia et al. (1985), however, suggests that a person's sexual attitudes may be considered heavily in impression formation. In their study, subjects were instructed to form an impression of a target person, and were given the opportunity to select and view four of 20 attitude items that the target had answered previously. The results showed that subjects chose to view an item pertaining to sexual attitudes significantly more frequently than items pertaining to religion, hobbies, sex roles, social issues, politics, or recreational activities. The researchers found no significant differences in frequency of selection between the sexual attitude item and items pertaining to career goals, education, or admired traits. Although this study did not examine the importance of attitudes in dating or marriage desirability, the results suggest strongly that sexual attitudes may be important in evaluations of potential partners.

The idea that sexual permissiveness may affect desirability as a potential partner seems particularly relevant in light of public concern about AIDS and other sexually transmitted diseases. Some studies suggest that college students are not particularly concerned about contracting the AIDS virus and are not likely to have made significant changes in their sexual behavior as result of their knowledge about the virus (Baldwin and Baldwin 1988; Burnette, Redmon, and Poling 1990; Clark 1990). Even so, one might expect that fear of AIDS would decrease the attractiveness of sexually permissive partners. Roscoe and Kruger (1990), for example, reported that 18.1 percent of the females and 19.1 percent

of the males in their college sample stated that they had become more selective in choosing sexual partners as a result of the threat of AIDS. In addition, 3.0 percent of the females and 3.4 percent of the males reported that they had begun to quiz their new sexual partners in response to the AIDS threat.

Given that concern about the AIDS virus may diminish the attractiveness of the sexually permissive partners, one might argue that the gender differences in preferred sexual permissiveness obtained in this study actually are smaller than might be expected if AIDS were not an issue. Alternatively, one might argue that the gender differences obtained here are more pronounced than might otherwise be expected because females may have a greater fear or concern about AIDS than males.³ Yet this interpretation seems unlikely because, as Williams and Jacoby (1989) pointed out, females showed preferences for virgin mates before the population knew about the AIDS virus. Nevertheless, future research into the role of sexual permissiveness in desirability may benefit from including knowledge and concern about the AIDS virus as potentially important moderator variables.

Another possible issue for future research concerns the ways in which people *learn* about potential partners' sexual attitudes. As Sprecher et al. (1987) pointed out, "Certainly, in everyday contexts, men and women are not presented with survey data on the sexual behavior of others" (p. 30). These authors suggested that one way to gain knowledge of other people's sexual behavior is through communication with peers. Buss (1988) pointed out that some overt behaviors such as "acting promiscuous" or "acting coy" also may signal fidelity or discrimination (although he did not specify the behaviors that constitute acting promiscuous and acting coy). Yet other researchers (Zillmann and Bhatia 1989) believe that a person's preferences in literature, art, and music (among other things) may convey information about seemingly unrelated attitudes and behavioral dispositions (including sexual dispositions). Clearly, the ways in which people learn of (or infer) others' sexual attitudes and behavior are numerous, complex, and cultur-

³ We thank an anonymous reviewer for pointing out this interpretation to us.

ally diverse, so that research in this area is particularly valuable.

A final issue concerns the generalizability of these findings to nonstudent populations. Although the population employed in these experiments is particularly likely to hold permissive and egalitarian attitudes toward sexuality (therefore presenting a particularly conservative test of the hypotheses), populations may differ in their preferences and evaluations of potential partners. Therefore the results of these studies could be strengthened by additional research employing participants from different cultures (see Buss 1989), age levels, and educational backgrounds. Perhaps by broadening the populations of study, researchers will be more able to evaluate and integrate the social psychological mechanisms associated with the proximal influences of sexual attitudes and behaviors, and the evolutionary mechanisms associated with the distal influences.

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MARY BETH OLIVER is Assistant Professor of Communication Studies at Virginia Polytechnic Institute and State University. Her research interests include the social psychology of gender, and the role that the mass media play in influencing audience attitudes about gender and sexuality.

CONSTANTINE SEDIKIDES is Assistant Professor of Psychology at the University of Wisconsin-Madison. His research interests concern self-evaluation and intergroup perception.

