



Can Men and Women Differentiate Between Friendly and Sexually Interested Behavior?

Author(s): R. Lance Shotland and Jane M. Craig

Source: *Social Psychology Quarterly*, Vol. 51, No. 1 (Mar., 1988), pp. 66-73

Published by: American Sociological Association

Stable URL: <http://www.jstor.org/stable/2786985>

Accessed: 18/11/2009 13:14

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=asa>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



American Sociological Association is collaborating with JSTOR to digitize, preserve and extend access to *Social Psychology Quarterly*.

<http://www.jstor.org>

Can Men and Women Differentiate between Friendly and Sexually Interested Behavior?

R. LANCE SHOTLAND AND JANE M. CRAIG
The Pennsylvania State University

Research indicates that males perceive people to be more interested in sex than do women and are less able than women to differentiate among liking, love, and sexual involvement. Does this mean, as Abbey (1982) hypothesized, that males cannot differentiate between friendly and sexually interested behavior? Videotapes were prepared of five couples, each showing a male and a female behaving in either a friendly or a sexually interested fashion. The design was 2 (sex of subject) x 2 (male intent) x 2 (female intent) x 2 (sex of actor), with sex of actor as a within-subject factor. The data were analyzed by means of a MANOVA. Results of subjects' ratings of videotapes indicate that 1) males perceive both males and females as having more sexual interest than do females, and 2) both males and females differentiate between friendly and interested behavior. We concluded that 1) males and females have different thresholds for the perception of sexual intent, and 2) members of either sex can make errors, depending upon their perceptual threshold and the emotivity of the actors. The gender difference in the perception of sexual intent is thought to result from the male's greater sexual appetite, which the male uses as a model for the attribution of the appetites of others.

It is a common observation in contemporary America that men are more preoccupied with sex than women. Perhaps because of the pervasiveness of this observation, research testing the existence of this gender difference and its consequences is quite sparse. Surprisingly, no theory comes to mind, and little research has been performed to illuminate how such a difference may affect relationships between men and women.

One area in which the relationship between a man and a woman may be affected is a male's misinterpretation of a woman's friendly behavior as a sign of sexual interest. Men may see the world through sexual glasses and may assume that women share the same level of interest in sex, an assumption which results in the misinterpretation of the cues provided by women.

The paucity of research and theory on this topic should be of particular concern because the understanding of such a phenomenon may be important from both a theoretical and an applied perspective in the areas of attraction, the family, sex-role socialization, acquaintance rape, and sexual harassment, to name a few. We will review briefly the available literature.

Gross (1978) theorized that the socialization experience causes men to perceive sex more favorably than women. Research supports Gross's assessment, indicating that males view sex more favorably and perceive others to be more interested in sex than do women. Researchers have found that 1) males imagine a touch "of their sexual area" by a stranger of the opposite sex to be more pleasant than do females (Heslin, Nguyen, and Nguyen 1983); 2) adolescent males judge some female apparel to be a sign

that the wearer "wanted sex," while females did not (Zellman, Johnson, Giarrusso, and Goodchilds 1979); 3) males are more likely to indicate sexual attraction to a female after sustained eye contact than are females to males (Rytting 1976); 4) males are more likely to rate both male and female actors or models to be higher on sexual desire than are females (Abbey 1982; Abbey, Cozzarelli, McLaughlin, and Harnish 1987; Abbey and Melby 1986; Hendrick 1976; Major and Heslin 1982).

Do men and women see the relationships among friendship, sexual interest, and love differently? The available evidence supports this suggestion. Ruben (1970) reported that liking and loving of a dating partner were more strongly related for males than for females. Similar results were found in a study of nonverbal cues by Frevert and Kahn (1976).

These results lead to the question: can men tell the difference between friendly and sexually interested behavior? Abbey (1982) reported recently that men frequently misjudge a woman's friendly intent as an indication of sexual interest. She could not conclude, but did hypothesize, that men could not tell the difference between a woman's sexual interest and her friendly behaviors.

Abbey designed an experiment in which male and female strangers were instructed to interact with each other by discussing their life at the university for five minutes while two other subjects observed. In this way she was able to make actor-observer comparisons. Abbey found that males, whether actors or observers, rated both female and male actors as being more "seductive" and "promiscuous" than did females. Male actors also stated that they found

their partners to be more sexually attractive and felt more eager to date their partners than did the female actors. Similar results were found for the observers' ratings of the male and female actors. It is important to note that all the differences between males and females were found only on the most sexually explicit items.

Yet, in order to determine whether people can tell the difference between friendly and sexually interested behavior, their responses must be compared across conditions of friendship and sexual interest. To our knowledge, at the time this study was conducted, neither Abbey (1982) nor any other researcher had determined whether males or females can distinguish between friendly and sexually interested behavior. One purpose of this study is to make this determination.

GENERAL HYPOTHESES

1. On the basis of Abbey's study, we hypothesize that males will attribute more sexual intent to both male and female role players than will females (gender hypothesis).
2. We expect that both male and female subjects can differentiate "sexually interested" from "friendly" behavior in both male and female role players (discrimination hypothesis).

PREPARATION AND CONSTRUCT VALIDITY OF THE STIMULUS MATERIAL

Rationale

To investigate these hypotheses we needed to create friendly and sexually interested stimuli and present them to subjects. In light of Abbey's investigation, in which both actors and observers were subjects, it appears that the same relationships are obtained with either actors or observers. Because colleagues and students thought that subjects would be uncomfortable if they were asked to act sexually interested, we decided to use them as observers only; students in an advanced social psychology methods course were to serve as actors.

Perceptual Targets

Ten males and females were paired randomly into five role-playing teams. Each team acted four scenes, each of which lasted three minutes. The scenes were 1) male interested-female friendly, 2) male friendly-female interested, 3) male interested-female interested, and 4) male friendly-female friendly. The actors were seated, and appeared to be eating at a university cafeteria; the camera (operated by the crew of a local educational television station) was posi-

tioned to record a three-quarter view of the actors' faces in color.

To try to preserve ecological validity, we gave the role players only the following instructions: 1) their encounter was to be a first meeting; 2) they were to play the role using their "normal" repertoire of behaviors for the situation; and 3) the male was always to begin the encounter.

It seems obvious that almost everyone should be able to interpret correctly a blatant show of sexual interest. Therefore, useful stimuli for a sensitive test of the differentiation hypothesis are those which are understated but which differ according to a valid and objective criterion. In the presence of such stimuli, a diminished capacity by males to discriminate between interested and friendly behavior should be detected most easily (for a further discussion of the benefits of weak manipulations see Shotland and Goodstein 1983).

After talking to the actors, the researchers agreed to eliminate three scenes. Two of these scenes were eliminated because the males appeared to be too interested for the first three minutes of a first encounter (one asked the woman for a date; the other asked the woman if a ring that she was wearing was an engagement ring). The third was removed because an actor stopped and mumbled, "I'm blowing it," and then continued with the conversation. The three eliminated conditions were male interested-female friendly, male interested-female interested, and male friendly-female friendly. To create an approximately balanced number of subjects by experimental condition,¹ we increased the numbers of subjects who viewed the remaining scenes.

In general, the conversation began with the male asking the female if they had been in the same class. Conversation continued around the relative merits of the class and the instructor and then shifted in other directions, such as other courses they might both have taken, their majors, job prospects for people in their major, plans for the summer, and recreational activities that they liked.

¹ Because three of the films were discarded, we could not run a complete MANOVA model with acting team as a factor, using all the acting teams. Therefore we conducted a number of different analyses in order to judge the effect of individual acting teams. These analyses did not cause us to change our conclusions: in the "worst" cases, the consideration of acting teams lowered the significance of the effect in question to a marginal level. In all cases, except the "global" measure, we noted similar effects for other dependent variables that were not affected in this way.

Table 1. Mean Numbers of Interested and Friendly Behaviors per Scene

Behaviors	$F(1,132)$	Means	
		Interested	Friendly
Long eye contact	14.13***	4.04	1.99
Short eye contact	8.52**	16.63	19.79
Short smiling	7.49**	6.41	4.91
Playing with inanimate objects	12.60***	2.99	5.10
Moving around	9.10**	5.16	1.79
Movement forward	14.67***	1.84	.65
Movement back	5.04*	.90	.49
Voice low in volume	4.02*	.10	.01
Eating, drinking, reading	19.74****	1.71	4.22
Asking questions	62.20****	8.91	5.09
Long answers	17.01****	1.63	2.90
Has noticed before	14.28***	1.28	.84
Helpful, makes offers	6.51*	.16	.01
First to speak after a pause	7.42**	1.46	.84
Does most of the talking	5.05*	1.03	.60

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

MANIPULATION CHECK OF THE STIMULUS MATERIAL

In order to determine the effectiveness of the "friendly—sexually interested" manipulation, it was necessary to conduct a manipulation check. Yet because our dependent variables consisted of the subjects' perceptions of the scenes, it was necessary to assess the manipulation independently of perceptual measures.

Because the literature provides information about how men and women behave when they are sexually interested, we decided to content analyze our scenes and to determine whether our actors used techniques that the literature described as signs of sexual interest. Such a procedure provided us with an independent assessment of the construct validity of the manipulation and allowed us to assess the manipulation's ecological validity, to the extent that the literature is ecologically valid.

On the basis of prior research and our own observations we chose and then separated 35 behaviors into verbal and nonverbal categories. Two of the behaviors, smiling (0–5 seconds, 5–10 seconds, and 10 seconds) and eye contact (less than 10 seconds, greater than 10 seconds), were divided into several variables according to their duration.

Coders

Two male and two female undergraduate assistants were trained in the use of the coding sheets, and practiced coding on the discarded tapes before they were asked to code the experimental stimuli. Using Winer's (1971, p.124) alternative method for interjudge reliability, we obtained a mean reliability of .79

(averaging across behaviors) and a median of .83, with a standard deviation of .14. Judges' scores were averaged for the analysis.

Manipulation check results

The data from the content analysis then were subjected to an intent of actor \times sex of actor multivariate analysis of variance. Results indicated significant effects of intent of actor, $F(34, 99) = 6.77$, $p < .0001$, and sex of actor, $F(34, 99) = 10.83$, $p < .0001$, but no significant interaction, $F(34, 99) = 1.16$, ns.

Several of the significant univariate main effects of the actors' intent, shown in Table 1, replicate or confirm hypotheses found in the literature. More long and less short eye contact, short smiling, moving forward and moving back (for every two movements forward there is a reciprocating move backward), moving around nervously, voice low in volume, indicating verbally that the other person was noticed previously, asking questions, and offering to be helpful are illustrative of sexual interest according to our content analysis, and replicate or confirm findings or suggestions found in the literature (Givens 1978; Muehlenhard, Andrews, and Koralewski 1984; Muehlenhard and Burdick 1984; Schefflen 1979). The remaining "intent of actor" main effects make intuitive sense: if a person is interested, for example, he or she will pay more attention to the focus of interest than to food, drinking, or reading².

² Long answers may be explained best in terms of a gender \times interest interaction. Men gave more long

In addition, although the multivariate interaction was not significant, other researchers (Muehlenhard et al. 1984) found that females tend to agree more often when they are interested than when they are not. Therefore we might expect an interaction between actors' sex and actors' intent on the amount of agreement they exhibited toward their partners. Inspecting this interaction, we found that women agree more often when they are acting interested ($M=9.25$) than when they are acting friendly ($M=6.63$), but found no such difference for men ($M=6.00$, "interested" $M=6.31$ "friendly"), $F(1,132)=4.03$, $p < .05$.

As sex of actor was included only so that we could examine the interaction between actors' intent and actors' gender, the main effect results of actors' gender will be presented in a footnote.³ We will point out only that 12 of the 35 behaviors discriminated between men and women and that generally they confirmed results or hypotheses found in the literature.

METHOD

Subjects

Eighty-one male and 85 female introductory psychology students aged 18–21 were assigned randomly to experimental conditions.

Procedure

Subjects simply were asked to watch a short videotape and then to open the questionnaire and

answers in the friendly condition, while the length of women's answers showed no difference between the friendly and the interested conditions. It seems reasonable that when men are interested they may curtail their answers in order to give the woman a chance to talk. Males also may give shorter answers because they are more anxious in the interested than in the friendly conditions.

³ The statistically significant, $d.f.(1,132)$, $p < .05$, gender of actor effects were as follows: women asked more questions (female $M=7.76$, male $M=6.24$, $F=7.59$), while men gave longer answers (male $M=2.60$, female $M=1.93$, $F=4.11$) (see Footnote 1). Males were more likely to comment that they had noticed the woman previously (male $M=1.26$, female $M=.85$, $F=12.63$), to raise their eyebrows (male $M=3.74$, female $M=1.50$, $F=16.40$), to self-clasp (e.g., fold one's arms across one's chest) (male $M=3.63$, female $M=.41$, $F=42.64$), and to accept offers (e.g., of food) that were made to them (male $M=.10$, female $M=.00$, $F=7.48$). Women were more likely to make helpful offers (female $M=.15$, male $M=.03$, $F=3.94$), to agree (female $M=8.01$, male $M=6.16$, $F=5.99$), to laugh (female $M=5.41$, male $M=1.72$, $F=57.78$), to smile both a long time (female $M=.49$, male $M=.10$, $F=6.64$) and a medium length of time (female $M=1.47$, male $M=.60$, $F=7.83$), and to protrude their tongue slightly between their lips (female $M=.76$, male $M=.43$, $F=4.22$).

answer it. We used this procedure to avoid the transmission of any expectations on the part of the experimenters. Subjects were shown one of the 17 episodes in mixed-gender groups of eight to 12 people. After watching the episode, they responded to five-point Likert-type items.

First we used the three sexually related adjectives with which both Abbey (1982) and Hendrick (1976) found their effects. The stem for each item followed the form: "The man in the film is _____," or "The woman in the film is _____." The blanks were filled in with the adjectives "promiscuous," "seductive," or "flirtatious." These items were scored so that a more interested subject obtained a higher score.

Second, we constructed a 12-item sexual interest scale (SIS), which was designed to measure the extent to which the role players appeared to be attracted to each other. Because the scenes included both a male and a female actor, we changed the genders in order to specify which of the two actors was the target of the question. Otherwise the male and female versions of the SIS were identical. The male and the female version of the scale had identical reliabilities of .90, as measured by Guttman's Lambda-3. Examples of items are "The man was sexually attracted to the woman" and "The woman was trying to 'pick up' the man." We constructed these scales 1) to obtain greater reliability than should be obtained from single items, as used by Abbey and by Hendrick, and 2) because we feared that Abbey's and Hendrick's adjectives (promiscuous, flirtatious, seductive) might be more descriptive of women than of men.

The third set of items consisted of the global sexual interest scale, and was designed to characterize the subject's perception of the couple's "relationship" without differentiating between the two people. The global scale contained 10 items; its reliability was measured at .81. Examples of these items are "The interaction was strictly innocent" (reversal item) and "A sexual relationship could easily develop between these two people." We recorded responses to the sexual interest scales and the global sexual interest scale using five-point Likert-type items and scored them so that a higher scale score denoted greater sexual interest.

RESULTS

Each of the items and scales was duplicated for the man and the woman; therefore sex of actor was used as a within-subject factor. Then we conducted a 2 (sex of subject) x 2 (male intent) x 2 (female intent) x 2 (sex of actor) multivariate analysis of

Table 2. Two Simple Interactions: Effects of Male and Female Intent by Sex of Actor

Sex of Actor	Sexual Interest Scale		Dependent Variable			
			Flirtatious		Promiscuous	
	Interested	Friendly	Intent of Female Actor			
Male	29.63	32.09	Interested	Friendly	Interested	Friendly
Female	33.47	28.83	3.87	3.65	3.08	3.65
			Intent of Male Actor			
Male	33.69	27.94	3.51	3.95	3.87	3.64
Female	30.53	31.93	3.47	3.24	3.71	3.92

variance on the sexual interest scale and on the promiscuous, seductive, and flirtatious items.

Support for the gender hypothesis would be obtained if a main effect was found for sex of subjects such that males judged the actors to be more sexually interested than did females. Support for the discrimination hypothesis would be obtained if actors were seen as interested rather than friendly when they intended to be interested rather than friendly. This finding would translate into the following two-way interactions: male intent by sex of actor and female intent by sex of actor. If these effects were found and if there were no significant three-way interactions involving the variables in the two-way interactions and the sex-of-subject variable, it could be concluded that both men and women could make this discrimination.

Multivariate Results

Main effects were found for sex of subject, $F(4,155)=5.58$, $p < .0001$, and for sex of actor, $F(4,155)=7.31$, $p < .0001$. In addition, there were two simple interactions, female intent x sex of actor, $F(4,155)=9.11$, $p < .0001$, and male intent x sex of actor, $F(4,155)=8.18$, $p < .0001$. No higher-order interaction was statistically significant.

Univariate Results from the MANOVA

Univariate tests indicated that sex of subject was significant for all the dependent variables including the sexual interest scale, $F(1,158)=17.03$, $p < .0001$, and the promiscuous, $F(1,158)=6.41$, $p < .02$, the seductive, $F(1,158)=14.11$, $p < .0001$, and the flirtatious, $F(1,158)=6.18$, $p < .02$, items. As we hypothesized (gender hypothesis) and as others found, male subjects perceived more sexual interest in both actors ($M=32.83$) than did female subjects ($M=29.30$), and saw them as more promiscuous ($M=2.36$), more seductive ($M=2.24$), and more flirtatious ($M=2.61$) than did women ($M=2.08$, 1.86, 2.31, respectively).

Sex of actor was significant for seductive,

$F(1,158)=8.55$, $p < .005$, and flirtatious, $F(1,158)=17.70$, $p < .0001$. These effects indicated that women were perceived as more seductive ($M=2.16$) and flirtatious ($M=2.64$) than were men ($M=1.93$, 2.27, respectively), thereby providing some evidence that these adjectives may be applied more readily to females than to males.

The two multivariate interactions (female intent x sex of actor and male intent x sex of actor) supported the hypotheses that both male and female subjects could differentiate between "sexually interested" and "friendly" behavior in both men and women.

The female intent x sex of actor interaction was significant for the SIS, $F(1,158)=28.59$, $p < .0001$, and the flirtatious item, $F(1,158)=24.25$, $p < .0001$, and is illustrated in Table 2. Pairwise comparisons indicated (Winer 1971, p. 209) that the female actor was perceived as more *sexually interested* when she was acting interested ($M=33.47$) than when she was acting friendly ($M=28.83$). The female's behavior also affected the perceptions of the male's intent. The male actor was perceived as more sexually interested when the woman was acting friendly ($M=32.09$) than when she was acting interested ($M=29.63$).⁴ The differentiation hypothesis also was confirmed with the *flirtatious* item: the woman was seen as more flirtatious when she was acting interested ($M=2.92$) than when she was acting friendly ($M=2.35$).

The other interaction, male intent x sex of actor, was significant for the sexual interest scale, $F(1,158)=29.89$, $p < .0001$, and the promiscuous, $F(1,158)=8.03$, $p < .006$, and flirtatious, $F(1,158)=14.94$, $p < .0001$, items.

⁴ Whether a male and a female are being friendly or are sexually interested is ambiguous to a stranger observing the first three minutes of the couple's first conversation. Therefore a stranger will look for cues from either party to make a judgment. The observer, knowing that cross-gender college friendships are rare, will perceive one party as "working at it" for a reason if the other party appears to be less interested. Sexual interest is a logical reason for college students.

Pairwise comparisons revealed that the male actor was perceived as more *sexually interested* when he was acting interested ($M = 33.69$) than when he was acting friendly ($M = 27.94$).

Male intent had only a marginal effect on peoples' perceptions of the male actor on the promiscuous item thereby supporting the discrimination hypothesis. Men who were acting interested ($M = 2.29$) were seen as more promiscuous than those who were acting friendly ($M = 2.08$). In addition, the female actor was perceived as more *promiscuous* when the man was acting friendly ($M = 2.36$) than when he was acting interested ($M = 2.13$) (see Footnote 4).

Finally, in support of the discrimination hypothesis, men were rated as more *flirtatious* when they were acting interested ($M = 2.49$) than when they were acting friendly ($M = 2.05$). In conclusion, these two simple interactions offered strong support for the "differentiation" hypothesis.

Global Scale

We performed a separate analysis on the global scale, using a 2(sex of subject) x 2(male intent) x 2(female intent) analysis of variance. There were two main effects: sex of subject, $F(1,158) = 11.89$, $p < .002$, and male intent, $F(1,158) = 5.45$, $p < .03$. The first effect indicates that male subjects ($M = 27.07$) perceive the situation to be more sexually charged than do female subjects ($M = 24.04$), again supporting the gender hypothesis.

The second effect reveals that the situation is more likely to be perceived as the beginning of a sexual relationship if the man is acting interested ($M = 26.59$) than if he is acting friendly ($M = 24.45$). Women's intentions are not important to either men or women as a main effect or an interaction in judging whether the encounter is the beginning of a sexual relationship. The result signifies that the role of the male as initiator of sex is still generally accepted.

DISCUSSION

Our results replicated the major findings of Hendrick and of Abbey. Male subjects perceive role players of both sexes to be more sexually interested in their role-playing partners than do female subjects. This finding was not an artifact of the measuring techniques; the result was obtained both for the adjectives used by Abbey and for our SIS.

In addition, both male and female subjects can differentiate sexually interested behavior from friendly behavior. We confirmed this hypothesis with several different dependent measures. Muehlenhard, Miller, and Burdick (1983), using a

similar method, also confirmed that males could distinguish between sexually interested and friendly behavior. Therefore it is not logical to infer that the gender difference results from males' inability to decode female cues adequately.

What, then, is a likely cause for this perceptual gender difference? What is the best way to characterize this difference? Let us begin with the latter question.

Gender Differences in the Ratings of Sexual Intent

Men perceive more situations as sexually oriented than do women. Stated another way, women perceive fewer situations as sexually oriented than do men. Members of both genders, however, demonstrated that they can discriminate between "friendly" and "interested" behavior even when the stimuli are ambiguous. The fact that men perceive a greater degree of sexual interest than women can be characterized best simply as a difference in perceptual thresholds of sexual intent.

As long as a gender-based perceptual difference persists, interested behavior probably will be misjudged as friendly behavior by a group with a high threshold for labeling interested behavior, namely, women. Likewise, friendly behavior is likely to be misjudged as interested behavior by a group with a low threshold for labeling interested behavior, namely, men. Obviously a mild expression of interested behavior and an exuberant expression of friendly behavior are most likely to be misjudged. A person may feel that he or she is indicating only friendly intent, when many or most people might interpret this behavior as a sign of sexual interest. In such a situation the communication is poor. Yet neither the sender nor the receiver is objective, and there is no objective criterion by which to judge bias. The effectiveness of any communication depends both on what is sent and on what is received.

Because there are no objective criteria for interested and for friendly behavior, all that can and should be said is that men and women have different thresholds for labeling interested behavior. It is difficult to say whether men or women are more correct because there is no objectively correct criterion on which a *direct* test of this question can be based⁵. This is not to say, however, that a search for the underlying causes of this perceptual gender difference is unimportant; the potential causes of this difference are important and worth discussing.

⁵ An *indirect* answer may come from an understanding of the causes of this gender difference.

Potential Causes of the Perceptual Gender Difference of Sexual Intent

Men may be more sexually interested than women, and have, on average, a higher base level of sexual arousal. In support of this proposition, research shows that men have more "total sexual outlets" than do women, as measured by the frequency of coitus, masturbation, and so forth (Kinsey, Pomeroy, Martin, and Gebhard 1952; Masters, Johnson, and Kolodny 1982). This differential base rate in sexual arousal may produce the differences in sexual intent thresholds; research has shown that experimentally induced sexual arousal can cause sexually related social perceptions in both sexes (Istvan, Griffitt, and Weidner 1983; Stephan, Berscheid, and Walster 1971). Men simply may assume an equality of sexual interest by women; they may assume that men and women are alike and have the same sexual appetites, and then may use their own appetite as the model. This explanation seems to be more likely than a "wish fulfillment" explanation because our research and other previously cited research found that men judged other men, as well as women, to be more sexually interested than did women.

If the analysis is correct, we probably studied the age group that should produce the maximum difference between men and women. Research indicates that men reach their sexual peak sometime in their late teens to early twenties (Kaplan and Sager 1971; Kinsey et al. 1952; Masters et al. 1982), whereas women reach their peak in the early to middle thirties. Thus if we test a sample of men and women who are in their middle thirties and forties, this perceptual gender difference should be smaller.

A recent study (Montgomery 1987) seems to provide some support for this age-related contention, but in regard to sexually flirtatious behavior rather than perceptions of sexual intent. Men and women of varying ages were asked how likely they were to engage in sexually flirtatious behavior (for example, "rub knees with the person" and "adopt a sensual stance"). The author found that men between the ages of 20 and 29 and between 30 and 39 reported similar high levels of sexual flirtation, while women between 20 and 29 reported the lowest level of these behaviors. Women between the ages of 30 to 39, however, reported relatively high levels of sexually flirtatious behavior, which (as indicated by the author's graph) approached the level of 30- to 39-year-old males. For the groups of 40 years of age and above, sexually flirtatious behavior decreased among members of both genders.

One also could speculate about a specific biological mechanism for the causes of the

gender difference in the perception of sexual intent. It seems more than reasonable that the male steroid testosterone may be involved in these processes. First, it appears that the quantity of "free testosterone," the active testosterone component, follows the same age curve for males as does the number of total sexual outlets, reaching an asymptote at about 20 years of age and declining steadily thereafter (Harman 1978). Second, research demonstrates that free testosterone increases over baseline when a man interacts socially with either a man or a woman, although the increase is greater when the subject converses with a woman (Dabbs, Ruback, and Besch 1987). Of course this change in testosterone is a consequence of the social interaction, and could be either a cause or a consequence of male perception of sexual intent. We hope that future research will test the validity of this hypothesis and, more generally, will determine the causes of the perceptual gender difference.

REFERENCES

- Abbey, A. 1982. "Sex Differences in Attributions for Friendly Behavior: Do Males Misperceive Females' Friendliness?" *Journal of Personality and Social Psychology* 42:830-38.
- Abbey, A., C. Cozzarelli, K. McLaughlin, and R. Harnish. 1987. "The effects of clothing and dyad sex composition on perceptions of sexual intent: Do women and men evaluate these cues differently?" *Journal of Applied Social Psychology*, 17:108-26.
- Abbey, A., and C. Melby. 1986. "The effects of nonverbal cues on gender differences in perceptions of sexual intent." *Sex Roles*, 15:283-98.
- Abbey, A., C. Melby, C. Cozzarelli, K. McLaughlin, and R. Harnish. 1984. "The Effects of Nonverbal Cues on Gender Differences in Perceptions of Sexual Intent." Unpublished manuscript: Pennsylvania State University.
- Dabbs, J.M., R.B. Ruback, and N.F. Besch. 1987. "Male Saliva Testosterone Following Conversations with Male and Female Partners." Convention poster, American Psychological Association, New York.
- Frevort, R.L., and A. Kahn. 1976. "Observers' Perceptions of Affection in Heterosexual Pairs: Does Like = Love = Sex?" Unpublished manuscript: Iowa State University.
- Givens, D.B. 1978. "The Nonverbal Bias of Attraction: Flirtation, Courtship, and Seduction." *Psychiatry* 41:346-59.
- Gross, A.E. 1978. "The Male Role and Heterosexual Behavior." *Journal of Social Issues* 34:87-107.
- Harman, S.M. 1978. "Clinical Aspects of Aging of the Male Reproductive System. Pp. 29-58 in *The Aging Reproductive System*, Vol. 4, edited by E.L. Schneider. New York: Raven.
- Hendrick, C.A. 1976. *Person Perception and Rape: An Experimental Approach*. Unpublished grant proposal: Kent State University.
- Heslin, R., T.D. Nguyen, and M.L. Nguyen. 1983. "Meaning of Touch: the Case of Touch from a

- Stranger or Same Sex Person." *Journal of Nonverbal Behavior* 7:147-57.
- Istvan, J., W. Griffitt, and G. Weidner. 1983. "Sexual Arousal and the Polarization of Perceived Sexual Attractiveness." *Basic and Applied Social Psychology* 4:307-18.
- Kanin, E., and S.R. Parcell. 1977. "Sexual Aggression: a Second Look at the Offended Female." *Archives of Sexual Behavior* 6:67-76.
- Kaplan, H.S., and C.J. Sager. 1971. "Sexual Patterns at Different Ages." *Medical Aspects of Human Sexuality* 5:10-23.
- Kinsey, A.C., W.B. Pomeroy, C.E. Martin, and P.H. Gebhard. 1952. *Sexual Behavior in the Human Female*. Philadelphia: Saunders.
- Koss, M.P., and C.J. Oros. 1980. "The 'Unacknowledged' Rape Victim." Paper presented at the meeting of the American Psychological Association, Montreal.
- Major, B., and R. Heslin. 1982. "Perceptions of Cross-Sex and Same-Sex Nonreciprocal Touch: It Is Better to Give than to Receive." *Journal of Nonverbal Behavior* 6:148-62.
- Masters, W.H., V.E. Johnson, and R.C. Kolodny. 1982. *Human Sexuality*. Boston: Little Brown.
- Montgomery, B.M. 1987. "Sociable vs. Sensual Flirting: the Influence of Gender." Unpublished manuscript: University of Connecticut.
- Muehlenhard, C.L., S.L. Andrews, and M.A. Koralewski. 1984. Nonverbal Cues that Signal Interest in Dating: Identifying the Skills. Unpublished manuscript.
- Muehlenhard, C.L., and C.A. Burdick. 1984. "Verbal Cues That Convey Interest in Dating." Unpublished manuscript.
- Muehlenhard, C.L., C.L. Miller, and C.A. Burdick. 1983. "Are High-Frequency Daters Better Cue Readers? Men's Interpretations of Women's Cues as a Function of Dating Frequency and SHI Scores." *Behavior Therapy* 14:626-36.
- Rubin, Z. 1970. "Measurement of Romantic Love." *Journal of Personality and Social Psychology* 16(2):265-73.
- Rytting, M.B. 1976. "Sex or Intimacy: Male and Female Versions of Heterosexual Relationships." Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago.
- Schefflen, A.E. 1979. "Quasi-Courtship Behavior in Psychotherapy." Pp. 135-48 in *Nonverbal Communication*, edited by S. Weitz. New York: Oxford University Press.
- Shotland, R.L., and L.I. Goodstein. 1983. "Just Because She Doesn't Want To Doesn't Mean It's Rape: an Experimentally Based Causal Model of the Perception of Rape in a Dating Situation." *Social Psychology Quarterly* 46(3):220-32.
- Stephan, W., E. Berscheid, and E. Walster. 1971. "Sexual Arousal and Heterosexual Attraction." *Journal of Personality and Social Psychology* 20:93-101.
- Winer, B.J. 1971. *Statistical Principles in Experimental Design*. 2nd ed. New York: McGraw-Hill.
- Zellman, G.L., P.B. Johnson, R. Giarrusso, and J. Goodchilds. 1979. "Adolescent Expectations for Dating Relationships: Consensus and Conflict between the Sexes." Paper presented at meeting of the American Psychological Association, New York.

R. Lance Shotland is a Professor of Psychology at The Pennsylvania State University. His research interests include bystander behavior, crime control, methodological issues, the use of social science in the creation of public policy, misperceptions of sexual intent between men and women, and date rape.

Jane M. Craig is currently a Test and Measurement Specialist for the City of New York. She is also a psychology graduate school student at The Pennsylvania State University and is completing her dissertation on the cues used by men and women to communicate sexual intent.