



# Love and Lust in Opposite-sex Friendships: Prevalence and (Mis)perceptions



\*Bryan Koenig & Lee Kirkpatrick (2005)

The College of William and Mary, Department of Psychology

## BACKGROUND

Research has long shown that males overperceive the sexual interest of females (Abbey, 1982). Two explanations for this finding are the **default-model hypothesis**, which argues that people use their own desires to gauge the desires of others (Haselton & Buss, 2000; Shotland & Craig, 1988), and **error management theory (EMT)**, which argues that misperceptions are predictable when costs of different types of errors were asymmetrical over evolutionary history (Haselton & Buss, 2000). The default-model hypothesis predicts that misperception of another's interest will be predicted by one's own interest, when other variables are controlled. EMT predicts that 1) males will overperceive female sexual interest - missing opportunities for "cheap babies" was costly, 2) females will underperceive male romantic interest - abandonment after conception was costly, and 3) both sexes will overperceive the interests of targets with high mate value - as to not miss excellent mating opportunities. The predictive ability of these two explanations was tested in this study. Additionally, studies of misperception of sexual and romantic interest have primarily used fabricated stimuli with strangers as targets; the current project used real opposite-sex friends (OSFs).

## METHOD

Participants were Introduction to Psychology students and an OSF that each recruited (could not be a relative or boyfriend/girlfriend). Study 1 had 129 females and 129 males. Study 2 had 104 females and 104 males. Using an on-line questionnaire in which the names of participants and their OSF were embedded, participants indicated their sexual and romantic interest in their OSF and their perceptions of their OSF's romantic and sexual interest in them (see examples below). In Study 2 participants also reported their perceptions of their OSF's long-term and short-term mate value.

If you and Bryan were both single, how likely is it that Bryan would join a **long-term, committed romantic relationship** with you if you asked?

Very Unlikely           Very Likely NR

How much do you believe Bryan desires a **long-term, committed romantic relationship** with you?

None           Very Much NR

How frequently do you believe that Bryan thinks about a **long-term, committed romantic relationship** with you?

Never           Very Often NR

If you and Bryan were both single, how likely is it that you would have **casual sex** with Bryan if Bryan asked?

Very Unlikely           Very Likely NR

How much do you desire to have **casual sex** with Bryan?

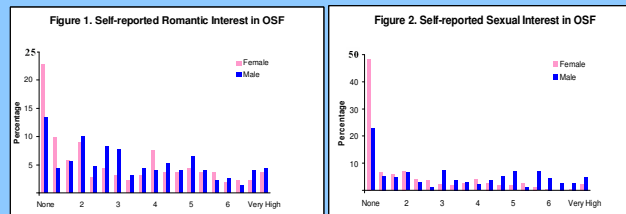
None           Very Much NR

How frequently do you think about having **casual sex** with Bryan?

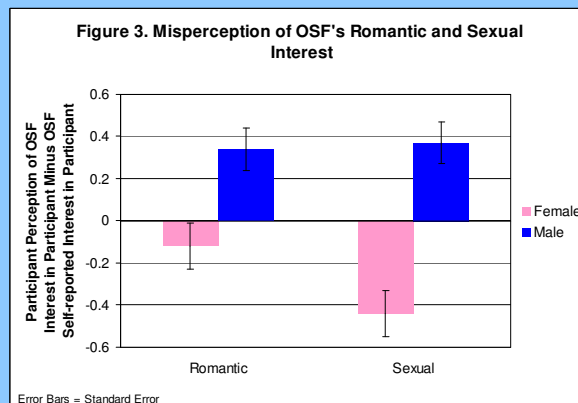
Never           Very Often NR

## RESULTS

**Self-reported and Perceived Interest.** Males ( $M = 3.36, SD = 1.81$ ) reported more romantic interest in OSFs than did females ( $M = 3.01, SD = 1.90$ ),  $t(451) = 2.01, p = .045$  (see Figure 1). Males ( $M = 3.28, SD = 1.65$ ) and females ( $M = 3.23, SD = 1.86$ ) perceived that their OSFs were equally romantically interested in them,  $t(449) = 0.33, p = .740$ . Males ( $M = 3.37, SD = 2.01$ ) reported more sexual interest in OSFs than did females ( $M = 2.12, SD = 1.57$ ),  $t(448) = 7.34, p = .000$  (see Figure 2). Females ( $M = 2.93, SD = 1.99$ ) reported perceiving that their OSFs were more sexually interested than did males ( $M = 2.47, SD = 1.72$ ),  $t(450) = -2.60, p = .010$ .



**Sex Differences in Misperception.** Separately for each sex, misperception of romantic and sexual interest was evaluated using within-subjects *t*-tests with the variables 1) participant perception of OSF interest in participant, and 2) OSF self-reported interest in participant. A positive difference score is an overperception. Males overperceived female romantic interest,  $t(217) = 3.09, p = .002$ , ( $M_{\text{difference}} = 0.34, SD = 1.63$ ), and sexual interest,  $t(217) = 3.65, p = .000$ , ( $M_{\text{difference}} = .37, SD = 1.51$ ). Females did not misperceive male romantic interest,  $t(219) = -1.07, p = .284$ , ( $M_{\text{difference}} = -.12, SD = 1.71$ ), but did underperceive male sexual interest,  $t(217) = -4.10, p = .000$ , ( $M_{\text{difference}} = -.44, SD = 1.59$ ). See Figure 3.



**Predictors of Misperception.** Multiple regression was used to evaluate independent predictive abilities of theoretically relevant variables. Two analyses were done for each study. In the first, the DV was participant perception of OSF romantic interest, in the second, participant perception of OSF sexual interest. In both, OSF self-reported interest was controlled as a covariate. Thus, the other variables predicted *misperception* of interest, i.e., perception beyond OSF self-reported interest. As shown in Table 1, sex was a significant predictor of misperception of sexual interest, with females showing higher perceptions. Self-reported interest was a strong, significant predictor for both romantic and sexual misperception in both studies. Mate value was not a significant predictor of misperception.

Table 1  
Multiple regressions predicting participants' (mis)perception of opposite-sex friends' (OSFs) romantic and sexual interest in participant, controlling for OSFs' self-reported romantic and sexual interest in participant, for Studies 1 & 2.

Variables	Dependent Variable			
	Participant Perception of OSF Romantic Interest		Participant Perception of OSF Sexual Interest	
	Study 1 (n = 236)	Study 2 (n = 196)	Study 1 (n = 237)	Study 2 (n = 193)
	$\beta$	$\beta$	$\beta$	$\beta$
Covariate				
OSF Self-report Interest in Participant	0.36****	0.42****	0.51****	0.37****
Predictors				
Participant Sex <sup>1</sup>	-0.05	0.08*	-0.12**	-0.14****
Participant Self-report Interest in OSF	0.44****	0.50****	0.36****	0.59****
Participant Ratings of OSF Mate Value	-	-0.07	-	0.03

<sup>1</sup>Note: Female = 1, Male = 2.  
\*p < .10, \*\*p < .05, \*\*\*p < .01, \*\*\*\*p < .001

## DISCUSSION & CONCLUSIONS

Romantic and sexual interest were common between OSFs, but many OSFs had little or none. Females had less romantic and sexual interest in OSFs than did males. Predictions based on EMT were supported by only one result, males overperceived female sexual interest. Once one's own interests were taken into account, sex predicted opposite than expected based on EMT. The default model hypothesis was strongly supported. However, actual misperceptions were all in the general direction consistent with EMT. Perhaps this apparent inconsistency can be accommodated if EMT, an ultimate (evolutionary) theory, works through the proximal mechanism of the "default model." That is, males evolved to have greater romantic and sexual interest than females, thus they project their greater interest onto females. Females evolved to be less easily aroused sexually and romantically, to be more discriminating, and therefore have lower interest levels on average, and project these lower levels onto males. Also, it is important to notice that participants' perceptions of their OSF's interest was strongly influenced by that persons actual, self-reported interest. We are not completely deluded. In conclusion, these results suggest that accounting for participant interests and motivations is critical in misperception research and that misperception of romantic and sexual interest occurs between people who know each other, such as opposite-sex friends.