

Misperception of Sexual Interest in Opposite-sex Friendships: Evidence for Functional Projection



^ABryan Koenig, ^BLee Kirkpatrick, & ^ATimothy Ketelaar

^ANew Mexico State University, Department of Psychology

^BCollege of William and Mary, Department of Psychology

Address correspondence to Bryan Koenig at blkoen@nmsu.edu.

INTRODUCTION

Research has consistently shown that males overperceive the sexual interest of females (e.g., Abbey, 1982). The mechanism by which this misperception occurs, however, is unknown. Abbey (1982, 1991) argued that this misperception is due to **socialization**: Males learn that females flirt and play hard to get. **Error management theory** (EMT; Haselton and Buss, 2000) suggests that beneficial overperceptions or underperceptions were selected in evolution. The fitness of males is limited primarily by the number of fertile females with whom males can mate, therefore males are expected to overperceive female sexual interest so as not to miss sexual opportunities. Both socialization and EMT suggest that misperception is the result of cognitively, *not motivationally*, mediated biases.

Maner et al. (2005) proposed an extension of EMT, **functional projection**, which suggests that people's motivational states lead them to overperceive others to be in emotional states that it is functional to overperceive. For example, a mate-search motivation manipulation increased male ratings of the sexual interest of attractive females. Functional projection thus suggests that misperception is due, not to cognitive bias *per se*, but to specific cognitive biases resulting from activation of specific motivations. This project evaluates if functional projection can explain the replicated finding that males overperceive female sexual interest.

METHOD

Participants were introductory psychology students and an opposite-sex friend (OSF) that each recruited. Participants in Study 1 were 129 females and 129 males; participants in Study 2 were 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 interest in their OSF and their perceptions of their OSF's sexual interest in them. In Study 2 participants also reported their perceptions of their OSF's short-term mate value using a single-item measure adapted from Haselton (2003).

RESULTS

Sex Differences in Misperception. Males reported more sexual interest in their OSF than did females, $ps < .000$ (see Figures 1 and 2). Females reported perceiving that their OSF was more sexually interested than did males in Study 1, $p = .010$, but not Study 2, $p = .321$.

Separately for each sex, misperception of sexual interest was evaluated using paired-samples *t*-tests with the variables (a) perception of OSF sexual interest and (b) OSF self-reported sexual interest. For both studies, males overperceived female sexual interest and females underperceived male sexual interest (see Figures 1 and 2). These results replicate previous findings of male overperception and provide evidence for female underperception.

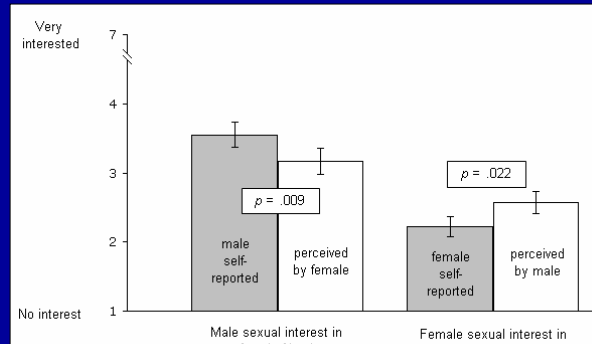


Figure 1. Self-reported and perceived sexual interest in Study 1. Males overperceived; females underperceived.

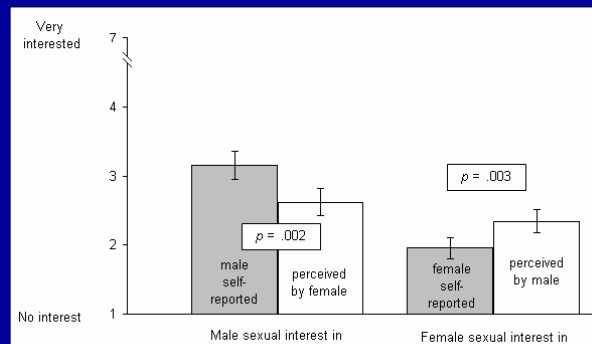


Figure 2. Self-reported and perceived sexual interest in Study 2. Males overperceived; females underperceived.

Effect of Motivation on Misperception of Sexual Interest.

Hierarchical multiple regression was used to evaluate the effect of perceiver level of sexual interest on the misperception of sexual interest. Perceived sexual interest was the dependent variable. OSF self-reported interest was controlled as a covariate. Other variables thus predicted misperception of interest, i.e., perception beyond OSF self-reported interest.

Consistent with functional projection, perceiver level of sexual interest was a strong, positive predictor of misperception in both studies, indicating that participants projected their own level of sexual interest onto their OSF. As shown in Table 1, perceiver sex was a *positive* predictor of misperception of sexual interest in Step 3 (i.e., males overperceiving, females underperceiving, significant only in Study 2). When controlling for perceiver level of sexual interest in Step 4, perceiver sex became *negative*, indicating female overperception and male underperception.

Table 1. Hierarchical regression analyses predicting the misperception of friend's sexual interest, i.e., the perception of friend's sexual interest controlling for friend's actual sexual interest. Males overperceived and females underperceived in Step 3, but males underperceived and females overperceived in Step 4.

Variable	Study 1		Study 2	
	β	R^2 Change	β	R^2 Change
Step 1				
Friend's actual sexual interest	.63***	.40***	.65***	.42***
Step 2				
Friend's actual sexual interest			.62***	
Friend's short-term mate value			.15**	.02**
Step 3				
Friend's actual sexual interest	.65***		.66***	
Friend's short-term mate value			.15**	
Perceiver sex ¹	.06	.00	.14*	.02*
Step 4				
Friend's actual sexual interest	.51***		.37***	
Friend's short-term mate value			.03	
Perceiver sex ¹	-.11*		-.14**	
Perceiver sexual interest in friend	.36***	.10***	.59***	.21***

¹ $p < .05$, ** $p < .01$, *** $p < .001$

¹Note: Female = 1, male = 2.

DISCUSSION

The current project provides evidence that the commonly reported finding that males overperceive female sexual interest, replicated here (see Figures 1 and 2), occurs because **males project their higher levels of sexual interest onto females and females project their lower levels of sexual interest onto males**. Compared to males, female sexual interest is less easily aroused (Baumeister et al., 2001), reflecting females' greater discrimination of sexual partners (Trivers, 1972). Once sexual interest is aroused females benefit from overperceiving the sexual interest of their target just like males. This can be understood by thinking of arousal of sexual interest as a **sexual-opportunity meter** which indicates that a target is a valuable potential mate whose interest would be costly to miss.

Perceiver projection of sexual interest suppressed an additional, smaller effect of sex demonstrated by the negative value of sex in Step 4 of the hierarchical regressions (see Table 1) in which females overperceived and males underperceived sexual interest. This effect is not predicted by any socialization or evolutionary theories known to the authors. A plausible explanation is that people use common knowledge that males have more sexual interest than do females to discount their estimates of female sexual interest and increase their estimates of male sexual interest. Thus, **socially acquired knowledge results in male underperception of female sexual interest**, not male overperception of female sexual interest as suggested by Abbey (1982), **as well as female overperception of male sexual interest**.