

Cognitive Bias in the Perception of Romantic and Sexual Interest In Opposite-sex Friendships

Bryan Koenig

Psychology Department
College of William and Mary

Cognitive Bias

- When a judgment must be made under uncertainty, cognitive errors can occur in inference
 - False-consensus bias
 - People tend to believe that their attitudes or behaviors are shared by the majority (Sherman, Presson, & Chassin, 1984)
 - Out-group Homogeneity
 - People tend to think that members of groups to which they do not belong are more similar to each other than members of groups to which they do belong (Linville, 1982)

Cognitive Bias in Romantic and Sexual Interest

- Abbey, 1982
 - Males rated female actors as more promiscuous and seductive than females did
 - Male observers, more than the female observers, thought female actors wanted to be friends with, were sexually attracted to, and wanted to date the male actor
 - Females underperceived sexual interest of male actors

Cognitive Bias in Romantic and Sexual Interest

- Shotland & Craig, 1988
 - Males perceived more sexuality in the relationship of the actors than did females
 - Males perceived more sexual interest in female actors than did females
 - Males perceived female actors as more promiscuous, seductive, and flirtatious than did females

Error Management Theory

- Hazelton and Buss (2000)
 - Error Management Theory “proposes that psychological mechanisms are designed to be predictably biased when the costs of false-positive and false-negative errors were asymmetrical over evolutionary history” (p. 81)
- Which decision mistake had worse consequences, or greater benefits, when repeated over evolutionary history?

Error Management Theory

- An example



Error Management Theory

- An example



Parental Investment Theory

- Trivers, 1972
- Parents (almost always female) who invest in offspring should be choosy about with whom they mate
- Females: High **obligatory** investment in offspring
 - More expensive gametes (i.e., ova)
 - In mammals, gestation and nursing

Parental Investment Theory + Error Management Theory

- Sex differences: Costs and benefits predict cognitive biases in human mating:
 - Long-term mating
 - Females who underperceive male commitment are less likely to be abandoned
 - Males who overperceive female infidelity are less likely to be cuckolded
 - Males who overperceive female romantic interest are less likely to miss opportunities to find a LT mate

Parental Investment Theory + Error Management Theory

- Sex differences: Costs and benefits predict cognitive biases in human mating:
 - Short-term mating
 - Males who overperceive female sexual interest are less likely to miss opportunities for sex

Cognitive Bias in Romantic and Sexual Interest

- Haselton & Buss, 2000
- Results
 - Males overperceived female sexual intent
 - Females underperceived male commitment intent
 - Males correctly inferred the sexual intent of their sisters

Cognitive Bias in Romantic and Sexual Interest

- Summary of literature
 - Females may underperceive males romantic interest
 - Males reliably overperceive female sexual interest
 - Females may underperceive male commitment interest
 - Females may underperceive male sexual interest

Cognitive Bias in Romantic and Sexual Interest

- Previous research evaluated interactions between strangers
- The current project extended previous research by evaluating cognitive biases in an ongoing relationship:

Opposite-sex Friendships (OSFs)

Sexuality and Romance in Opposite-sex Friendships (OSFs)

- Afifi & Faulkner, 2000
 - 51% of 215 participants indicated they had had sex with at least one OSF
 - 44% of these OSFs developed into a romantic relationship

Sexuality and Romance in Opposite-sex Friendships (OSFs)

- Bleske & Buss, 2000
 - When participants thought about a single OSF
 - 77% indicated being sexually attracted to that friend at some point in the relationship
 - 52% reported being romantically attracted to that friend at some point in the relationship

Sexuality and Romance in Opposite-sex Friendships (OSFs)

- Bleske & Buss, 2000
 - When evaluating 100 different aspects of OSFs, the list of top ten aspects included . . .
 - Beneficial aspects
 - Males only: LT mate potential
 - Females only: No LT mate potential
 - Costly aspects
 - Males and females: Own love not reciprocated

Sexuality and Romance in Opposite-sex Friendships (OSFs)

- Primary Research Question:
 - Since sexuality and romance are frequently a part of OSFs, do people have the same cognitive biases within OSFs that occur with strangers?

Cognitive Bias in Opposite-sex Friendships (OSFs)

Hypotheses

1. Romantic interest exists in OSFs – maybe males higher than females
2. Females underperceive male romantic interest
3. Males have greater sexual interest in OSFs than females
4. Males overperceive female sexual interest
5. Females underperceive male sexual interest

Method

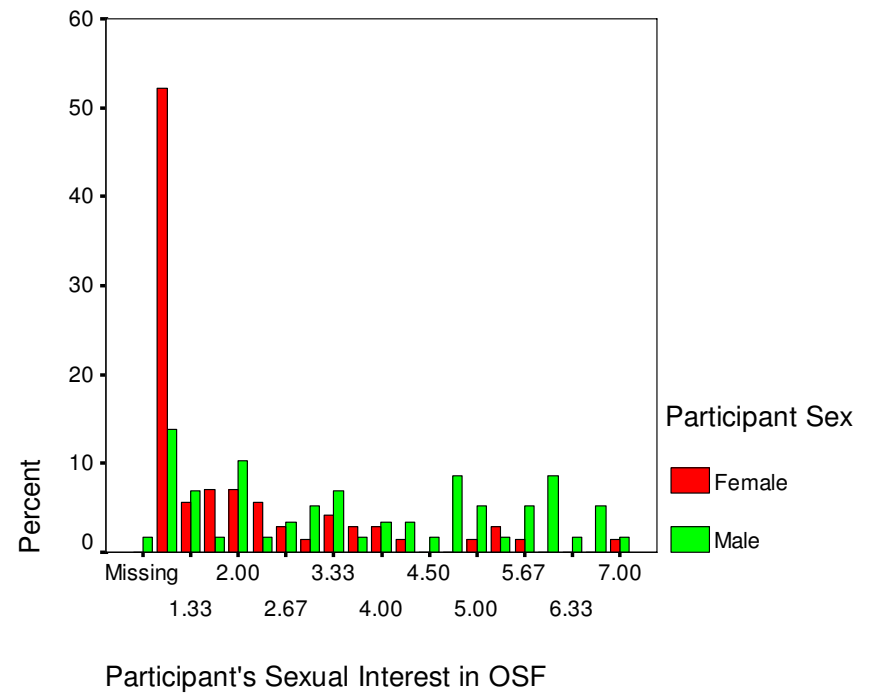
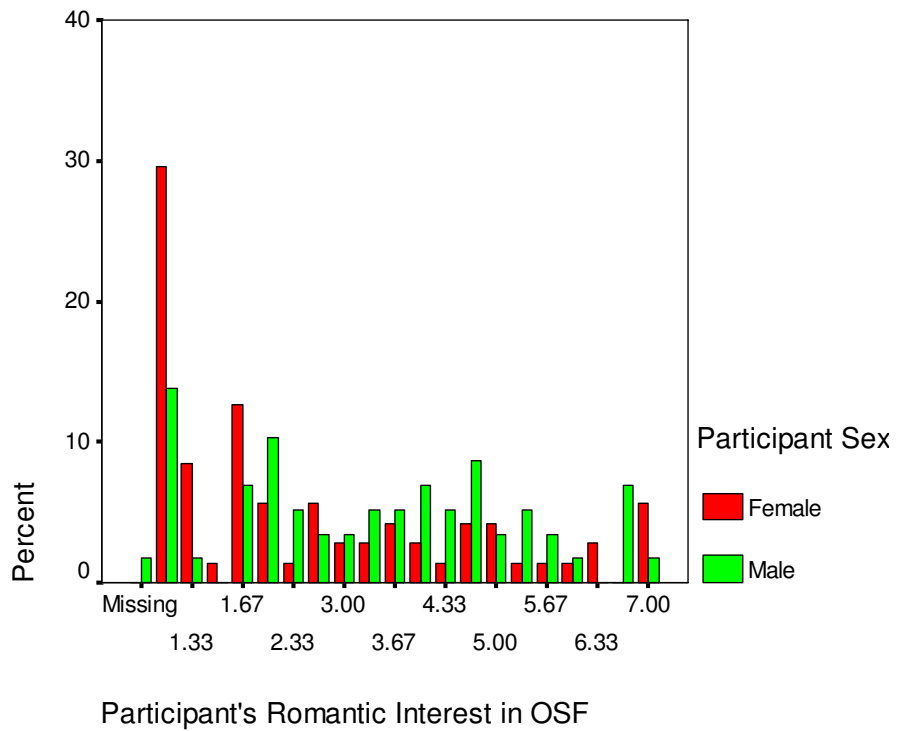
– Participants

- 71 female and 58 male intro to psychology students
- Each participant recruited his or her closest OSF
- Total Sample Size (N) = 248

Method

- On-line questionnaire, two versions
 1. Participant version
 - Asked participants about
 - » their romantic and sexual interest in their OSF
 - » their perceptions of their OSF's romantic and sexual interest in them
 2. OSF version
 - Complementary questions

Results



Results

Self-reported, Perceived, and Difference Scores for Romantic and Sexual Interest

	Self-reported		Perceived		Difference ¹	
	Mean	SD	Mean	SD	Mean	SD
Romantic						
Male	3.35	1.93	3.29	1.89	-0.05	1.78
Female	2.95	1.88	3.14	1.64	0.22	1.69
Sexual						
Male	3.56	2.01	3.18	2.04	-0.37	1.55
Female	2.23	1.58	2.56	1.71	0.36	1.67

1. Difference = Perceived - Self-reported. Thus, a positive value is "overperception."

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Hypotheses

1. Romantic interest exists in OSFs – maybe males higher than females
 - Supported, males were marginally more romantically interested
2. Females underperceive male romantic interest
 - Not supported

Hypotheses

3. Males have greater sexual interest in opposite-sex friends than will females
 - Supported

4. Males overperceive female sexual interest
 - Supported

Hypotheses

5. Females underperceive male sexual interest

– Supported

Conclusions

- Within OSFs, females do not underperceive male romantic intention, as was found for “commitment intent” with strangers (Haselton & Buss, 2000)
- Perception of romantic interest in OSFs is accurate

Conclusions

- Males have greater sexual interest than females in OSFs
- Males overperceive female sexual interest in OSFs as well as between strangers
- Females underperceive male sexual interest in OSFs as well as between strangers

The Bottom Line

Cognitive biases about sexual interest between strangers are also found in OSFs.

However, within OSFs, no cognitive biases were found for romantic interest.

Thanks

- Dr. Lee Kirkpatrick

Is there a self-selection difference between the male and female participants?

Males:

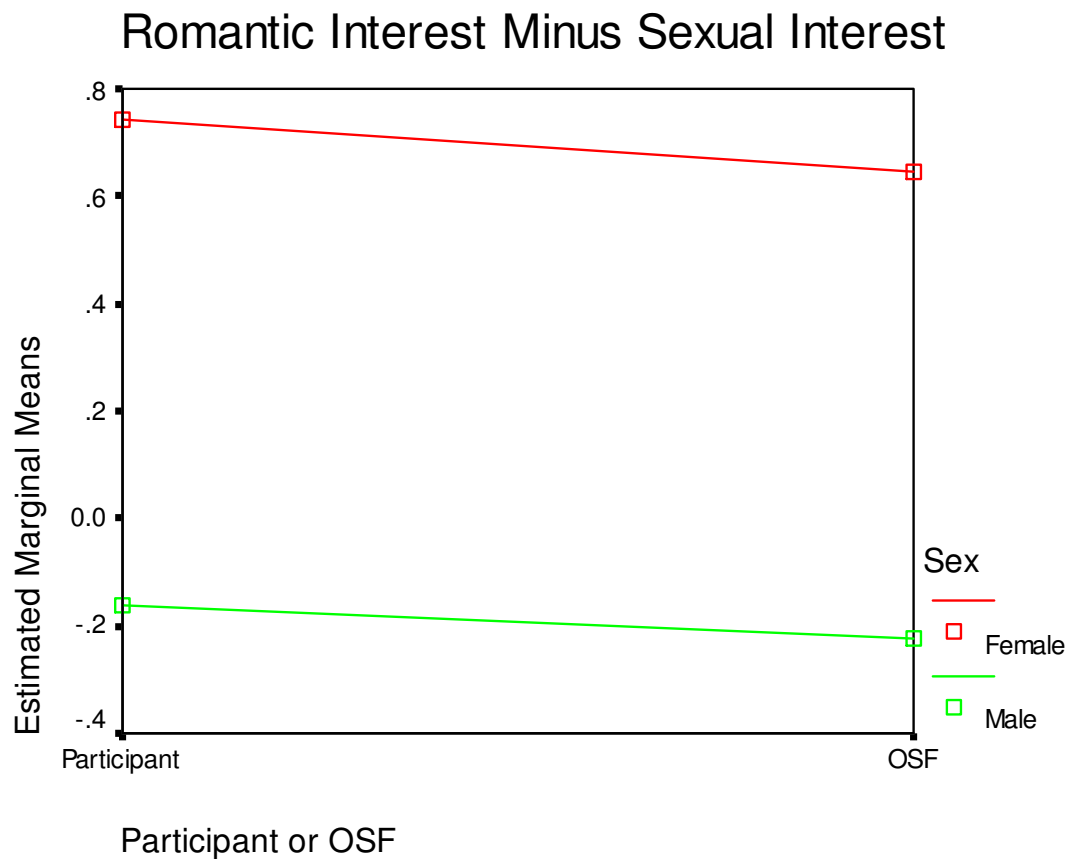
1. Believed more opposite-sex friends were romantically attracted to them
2. Perceived female to use friendship to begin romantic relationships more
3. More opposite-sex friends
4. Greater likelihood a romantic relationship would start with an opposite-sex friend in the next six months
5. More were on an athletic team
6. More likely to be romantically pursuing an opposite-sex friend

Is there a self-selection difference between the male and female participants?

Females:

1. Believed more opposite-sex friends were romantically attracted to them
2. More likely to tell an opposite-sex friend they were romantically interested in them
3. Believed a greater percentage of opposite-sex friends to be romantically interested in them
4. More likely to have experienced sexual jealousy in a romantic relationship

Differences in romantic and sexual interest for both sexes



Females

$$t(121) = 4.66$$

$$p = .000$$

Males

$$t(125) = -1.09$$

$$p = .277$$

Romantic Interest Difference Scores

