

SIBLINGS, FRIENDS, AND MATES:

DEVELOPMENT OF A WORD-PAIR ASSOCIATION TASK TO MEASURE IMPLICIT SEXUAL RESPONSE TO DIFFERENT RELATIONSHIP PARTNERS



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BACKGROUND

In heterosexual samples, men report more sexual attraction to their female friends than women do to their male friends.^{1, 2} A constructionist explanation for men's higher levels of attraction is that men are socialized to sexualize women.³ An alternative explanation, however, is that men have stronger evolved desires for sexual novelty and variety than women do, and that those desires are activated in the context of reproductively viable members of the opposite sex.⁴ If this latter hypothesis is correct, then thinking about either a romantic partner or opposite-sex friend should prime sexual cognition for men; however, thinking about an opposite-sex sibling (sister) should not prime sexual cognition for men, because although sisters are women, they are kin rather than potential reproductive partners. Further, because women have a relatively weak orientation toward sexual novelty and variety, they should experience an increase in sexual cognition only after thinking about a romantic partner, as opposed to either an opposite-sex friend or brother. Analogous to a procedure used by previous researchers to study aggressive cognition,⁵ we defined sexual cognition as the extent to which individuals perceived sexually ambiguous words (e.g., heat) as related to other sexual words and sexually ambiguous words.

HYPOTHESES

1. Men will report more sexual attraction toward their opposite-sex friend than women will. However, men and women will report similarly low levels of attraction to their opposite-sex sibling and similarly high levels of attraction to their romantic partner.
2. For sexually ambiguous-sexually ambiguous and sexual-sexually ambiguous word pairs, participant gender and imagery condition will interact. Specifically, after opposite-sex friend imagery, men will perceive sexually-ambiguous words as more related than women will; in the other imagery conditions men and women will not differ.
3. For neutral (non-sexual) word pairs, neither participant gender or imagery condition will influence participants' perception of how related the words are.

PARTICIPANTS

A total of 56 men and 209 women completed a survey online. Participants first reported their romantic relationship status and their sibling status which filtered into the subsequent priming condition options. All participants had the option of being randomly assigned the opposite sex sibling condition. Based on their demographic responses, they also had the option to be in the opposite sex sibling or romantic partner condition.

PROCEDURE

Step 1: Imagery Priming

Imagery Priming (IV).

Participants were asked to think about either an opposite sex sibling (6M, 34F), opposite sex friend (39M, 131F), or current romantic partner (11M, 44F) as determined by the filter questions described above. Participants typed responses to several questions about their target person.

The Questions:

- Tell us about your first memory with this person.
- How long have you known this person?
- Describe what activities you and this person enjoy doing together.
- What aspects of their personality do you like most?
- What aspects of their appearance do you like most?
- How do you feel about this person?
- What do you like best about the relationship you have with this person?

Step 2: Perceived Word-Relatedness

Sexual Cognition Measure (DV).

After the imagery priming task, participants judged the relatedness of 35 word pairs. The 35 word pairs were divided into three sets. One set included neutral word pairs meant to serve as a control, a second set included sexually ambiguous words paired with other sexually ambiguous words, and a final set included sexually ambiguous words paired with sexual words. Participants rated the word pairs on a seven-point scale (*not related at all to completely related*).

Sample Word Pairs:

neutral-neutral

coffee – school
build – hockey
picnic – family
candy – clorox
piano – obsession
soprano – boring

ambiguous-ambiguous

movie – position
dinner – touch
heat – long
attract – blow
tender – bite
shower – interest

ambiguous-sexual

chocolate – sexy
excitement – lingerie
intense – nipple
neck – love
suck – infatuation
stroke – intimate

Step 3: Explicit Attraction

Explicit Attraction (DV).

Before exiting the survey, participants reported the extent to which they felt sexually attracted to the target person they had responded about in the priming task.

The Question:

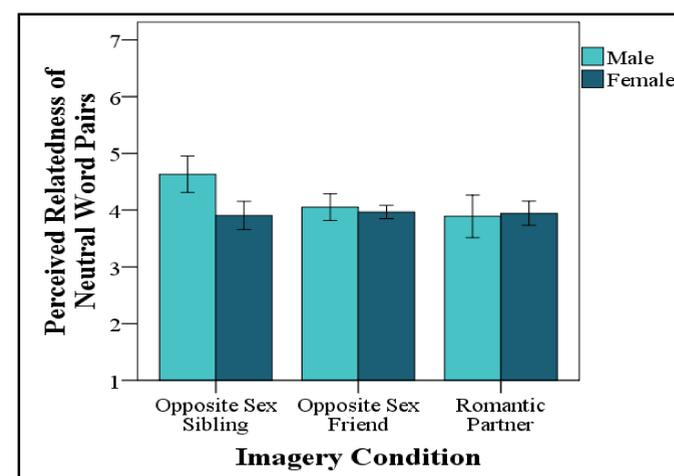
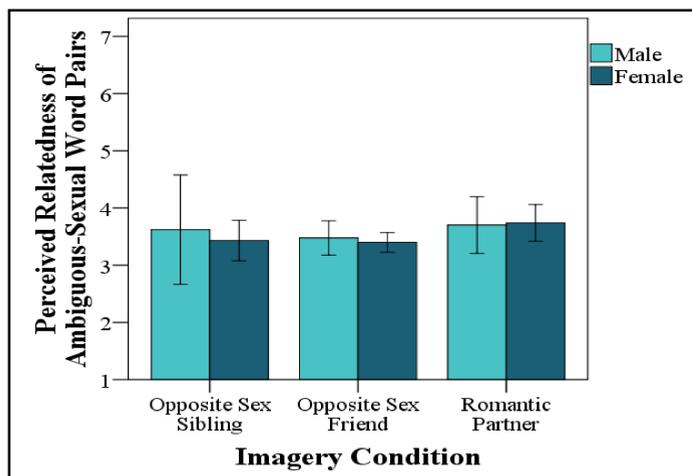
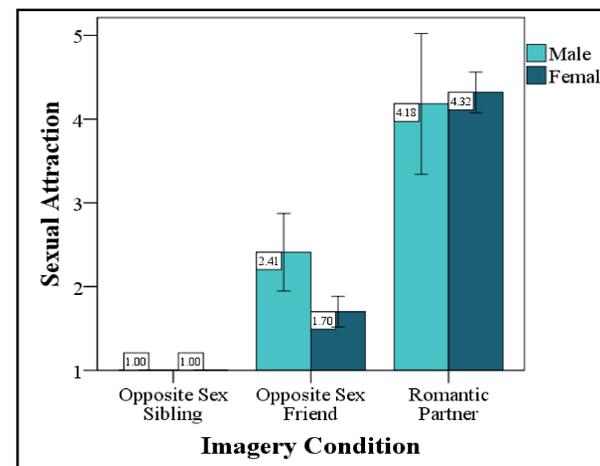
- How would you describe your degree of sexual attraction toward your opposite-sex friend (sibling/romantic partner)?
- Not at all - A little - Moderately - Quite - Extremely*

RESULTS

As shown at right, Hypothesis 1 was supported. As documented in many previous studies, men reported more attraction to their opposite-sex friends than women did, $t(50.85) = 2.88, p = .006$. Men and women reported similarly low levels of sexual attraction toward their opposite-sex siblings and similarly strong levels of attraction toward their romantic partners.

As shown below, however, Hypothesis 2 was not supported. Men who were primed to think of an opposite-sex friend did not perceive sexually ambiguous words as more related to each other than did women primed to think of an opposite-sex friend. Another comparison reveals that our word-pair task was not a valid measure of sexual cognition: Men and women who had been primed with thoughts of their romantic partner did not respond any more sexually than participants who had been primed with thoughts of a sibling.

Hypothesis 3 predicted no effect of imagery condition or gender on response to neutral word pairs. The findings, as shown at bottom right, generally followed that prediction, but they do not provide discriminant evidence because the sexual word-pairs (see Hypothesis 2) failed to discriminate between those who had and had not been primed to think sexually.



DISCUSSION

We designed this study to test the validity of a word-pair association task as a measure of sexual cognition. We had expected that participants primed to be in a "mating mindset" would perceive sexually ambiguous words as related to one another; the fact that the effect did not even show up for those who had been primed to think of their romantic partner suggests that we must use a different measure of sexual cognition if we want to determine whether thinking about an opposite-sex friend differentially affects men's and women's cognition. The word-pair task we used was modeled from previous research studying aggression⁵ because few researchers have ever attempted to prime and then measure "sexual cognition." We are in the process of conducting a follow-up study in which we utilize a recently developed word completion task⁶ to assess sexual cognition. In that task, participants fill in blanks to make words; each letter string can be completed with either a sexual word or a non-sexual word (e.g., "p_n_s" and "l_st"). In one previous study, men who were exposed to the scent of ovulating women's t-shirts (primed to be in a mating mindset) completed more letter strings with a sexual option (Miller & Maner, 2011). We expect that, when primed with thoughts of an opposite-sex friend, men will generate more sexual words than women will.

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ACKNOWLEDGMENTS

We thank the Office of Research and Sponsored Programs at UWEC for supporting this research.