

I want her to want me: Sexual misperception as a function of heterosexual men's romantic attachment style



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ABSTRACT

Heterosexual men consistently overperceive women's sexual interest. Past studies have related overperception to individual and situational factors such as alcohol intoxication, but nobody has yet investigated personality factors that may contribute to sexual misperception. The present research takes a first step in that direction by examining the relation between attachment style and sexual misperception. Two studies revealed that men's romantic attachment anxiety and avoidance predicted the extent to which men estimated the sexual interest of a hypothetical woman in a nightclub scenario. Mediation analyses suggest that this is due to both motivated social perception and cognitive bias. Specifically, men's attachment anxiety predicts increased desire for intimacy, which predicts their hope that a woman will be sexually interested; consequently, men imagine themselves as more flirtatious in the scenario, which biases them toward imagining the woman as more flirtatious, too. A similar process occurred for attachment avoidance, but in the opposite direction.

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1. Introduction

Imagine a common scene: A man sees an attractive woman from across the bar. As she turns to chat with her friends, she notices his gaze, and for a brief moment she smiles. But there is a problem: He has no idea what she's thinking. As it is impossible to read a potential romantic partner's mind, sexual interest must be inferred from behavioral cues, which may be ambiguous. For instance, smiling may denote sexual interest, but it also might reflect sociability or politeness, instead. As a result, individuals—particularly men—are prone to misperceiving women's sexual intent (e.g. Farris, Treat, Viken, & McFall, 2008; Perilloux, Easton, & Buss, 2012).

Error management theory (EMT; Haselton & Buss, 2000) offers an evolutionary explanation for men's consistent overperception of women's sexual interest. Namely, the various errors that result when people make decisions under uncertainty are not equal; some bear greater costs than others, and when the costs of false positive and false negative errors are recurrently asymmetrical, natural selection may favor systematic biases toward committing the less costly error. Because of the high cost to men of missing a potential mating opportunity and the minimal cost of wasted courtship effort (Alcock, 1993), EMT predicts that men should consistently overperceive non-related women's sexual intent. (By contrast, women should not systematically overperceive men's sexual intent, as ancestrally they did not experience

the same asymmetrical costs associated with missing a potential mating opportunity (Trivers, 1972); hence, following the sexual perception literature, here we limit our analysis to men.)

Indeed, men's general tendency to overperceive women's sexual intent is well-documented (e.g., Haselton & Buss, 2000; Perilloux, 2014; Perilloux et al., 2012). However, despite the central tendency, men do not uniformly misperceive women's sexual intent, and little is known about the proximate psychological processes—particularly those involving personality traits—that might lead to variance in men's tendencies to misperceive. In the present research, we use adult attachment theory (e.g., Mikulincer & Shaver, 2007) to explore how personality orientations can explain individual differences in heterosexual men's likelihood of interpreting a woman's ambiguous cues as sexual interest. Furthermore, we identify mediators which might elucidate the psychological process linking romantic attachment style to sexual misperception.

2. Attachment and sexual misperception

Although men are more likely than women to overperceive sexual intent in general, researchers have identified situational factors such as alcohol consumption (Abbey, Zawacki, & McAuslan, 2000; Farris, Treat, & Viken, 2010), and individual differences, such as interest in casual sex (Howell, Etchells, & Penton-Voak, 2012; Lenton, Bryan, Hastie, & Fischer, 2007), self-perceived attractiveness (Perilloux et al., 2012), mate value (Kohl & Robertson, 2014) and adversarial views toward women (Jacques-Tiura, Abbey, Parkhill, & Zawacki, 2007), that increase a man's likelihood of misperceiving a woman's friendly cues as

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sexual interest. However, despite this extensive body of work, thus far, no investigation has attempted to identify personality antecedents of sexual misperception.

We propose that attachment style is a personality antecedent of sexual misperception. Attachment styles reflect individuals' cognitive-affective working models of close relationships that, in turn, influence romantic relationship goals (e.g., Collins, Guichard, Ford, & Feeney, 2004). These working models are thought to be akin to operating instructions of the *attachment system*, a behavioral control system that mediates individuals' behavior in close relationships (Bowlby, 1982).

Adult attachment style is conceptualized and measured with two conceptually orthogonal dimensions (Brennan, Clark, & Shaver, 1998). *Attachment anxiety* reflects chronic hyperactivation of the attachment system resulting in increased intimacy-seeking behavior, whereas *attachment avoidance* reflects chronic deactivation of the attachment system resulting in reduced intimacy-seeking behavior. According to attachment theory (see Mikulincer & Shaver, 2007, for a comprehensive review), these “insecure” attachment styles develop in the face of interpersonal rejection, abandonment, and inconsistent treatment by close others, and remain influential across interpersonal contexts. Attachment anxiety is associated with more negative self-concept and ardent attempts to earn affection in relationships, creating the appearance of emotional dependency or clinginess. By contrast, attachment avoidance is associated with the defensive suppression of relational needs, leading to distancing behaviors that are apparently designed to minimize the risk of emotional pain by preventing deep intimacy. Because the two dimensions are independent, it is possible for people to be high or low in both. Individuals higher in both anxiety and avoidance may display inconsistent behavior such as alternating intimacy seeking and emotional withholding, whereas individuals who are low on both dimensions are typified as having a *secure* attachment style: stable, positive conceptions of the self and comfort with both intimacy and independence.

We suggest that anxious attachment should predict sexual overperception¹ because individuals who are more anxiously attached tend to be eager to form new attachment relationships, and are likely to view sex as a conduit to the emotional intimacy they desire (Birnbau, Mikulincer, & Gillath, 2011; Davis, Shaver, & Vernon, 2004; Schachner & Shaver, 2004; Tracy, Shaver, Albino, & Cooper, 2003). Previous research suggests that anxiously attached individuals report increased sexual attraction when they perceive that new acquaintances are behaving in a warm fashion (Birnbau & Reis, 2012). Such increased attraction may, in turn, lead these individuals to hopefully perceive their attraction being reciprocated (i.e., “wishful thinking”). By contrast, higher avoidant attachment should predict sexual underperception, because avoidant individuals tend to be guarded about forming new relationships and therefore might feel threatened by perceived romantic overtures from others; indeed, they report reduced sexual interest toward new acquaintances who behave warmly toward them (Birnbau & Reis, 2012). Underperceiving genuine intent by potential sexual or relationship partners may be a way for more avoidant individuals to regulate fears about intimacy, just as overperceiving sexual interest may be a reflection of anxious individuals' hopes for intimacy. In other words, we suggest that sexual (mis)perception is partly a consequence of a *motivated social perception* (e.g., Spencer, Fein, Zanna, & Olson, 2003) or *functional projection* (e.g., Maner et al., 2005) process, whereby individuals perceive in others the attributes that they wish to perceive (i.e., that are consonant with their own active goals).

¹ We are less interested in an objective standard of over- or underperception, but rather in *relative tendencies to perceive* sexual intent (as a function of attachment style). Hence, for brevity—and in line with the sexual intent perception literature—we will refer to relatively high perception of sexual interest as “overperception,” even though it is possible that high perception of sexual interest is actually accurate perception (or even underperception) as compared to an objective standard (see Perilloux & Kurzban, 2015 for a thorough discussion of this issue).

According to this logic, we hypothesized that attachment style would systematically predict men's sexual perception due to differences in desire for intimacy harbored by individuals higher in anxiety and avoidance. We further hypothesized that the relation between men's attachment style and sexual misperception would be mediated by intimacy goals. Specifically, compared to lower attachment anxiety, higher attachment anxiety would predict greater desire for intimacy and, in turn, a bias to overperceive potential romantic partners' sexual interest, whereas compared to lower attachment avoidance, higher attachment avoidance would predict less desire for intimacy, and in turn, a bias toward perceiving potential romantic partners as less sexually interested.

We explored these hypotheses in two samples of heterosexual adult men. In Study 1, we tested the basic hypotheses concerning the mediated association between attachment style and sexual perception. In Study 2, we examined alternative mediational explanations for the association between attachment style and sexual perception.

3. Study 1: Method

3.1. Participants

Participants were 191 heterosexual men (77% identified as White, 7% as Black, 8% as Hispanic/Latino, and the rest chose another ethnicity) aged 18 to 73 (*Mdn* = 31) who were located in the U.S. and who completed a survey about their “views on different types of interpersonal relationships and interactions” posted on Mechanical Turk (MTurk, see Buhrmester, Kwang, & Gosling, 2011). They were each compensated \$.50.

3.2. Materials and procedure

Participants first completed the measure of sexual perception. Participants were asked to imagine that:

“In a nightclub, you notice a group of girls across the room. One of them particularly catches your eye. There is something about her that you feel drawn to. As you are looking, she turns round and catches your eye. Rather than look away, she holds your gaze and smiles at you ...” (Kohl & Robertson, 2014).

Then, participants gauged the level of interest they felt that the woman in the scenario was showing (1 = *Not at all interested*; 9 = *Extremely interested*), and rated the relative truth (1 = *Not at all true*; 9 = *Very true*) of four sexual perception statements that we developed to tap into the categories of flirtatiousness, seductiveness, and promiscuousness that La France, Henningsen, Oates, and Shaw (2009) identify as areas where men and women make differential judgments in cross-sex interactions: “She is acting flirtatiously”; “She is sexually attracted to me”; “She is acting seductive”; and “She would like to have sexual intercourse with me.” All five items were averaged to form a sexual perception score. Participants also rated four parallel statements about their own likely behavior in the scenario (e.g., “I am acting flirtatiously,” etc.), which we averaged to form a self-perception score.

Next, participants completed the Experiences in Close Relationships scale (Brennan et al., 1998), which measures attachment anxiety with 18 statements (e.g., “I worry a lot about my relationships”; “I worry a fair amount about losing my partner”) and attachment avoidance with 18 statements (e.g., “I get uncomfortable when a romantic partner wants to be very close”) rated on a 7-point scale (1 = *Disagree strongly*; 7 = *Agree strongly*).

Participants then completed a dark triad personality test (Paulhus, 2013), the Short Sadistic Impulse Scale (SSIS; O'Meara, Davies, & Hammond, 2011), and the Rosenberg Self-Esteem scale (RSE; Rosenberg, 1965), which were included to pilot analyses for a different line of inquiry from the present one. These were followed

Table 1
Correlation matrix for both studies' main variables.

| | Anxiety | Avoidance | Desire for Intimacy | Hope | Self-perception | Sexual perception |
|-------------------|------------|------------|---------------------|------------|-----------------|-------------------|
| Anxiety | (.95, .93) | .27*** | .12 | N/A | .08 | .07 |
| Avoidance | .23*** | (.95, .94) | −.65*** | N/A | −.17* | −.16* |
| Desire intimacy | .14* | −.62*** | (.92, .89) | N/A | .27*** | .27*** |
| Hope | .27*** | −.12 | .35*** | (N/A, .79) | N/A | N/A |
| Self-perception | .09 | −.09 | .15* | .54*** | (.78, .85) | .72*** |
| Sexual perception | .05 | −.10 | .18** | .49*** | .80*** | (.87, .87) |

Note. Study 1's correlation coefficients are above the diagonal; Study 2's are below the diagonal. Coefficient alphas are reported in parentheses along the diagonal (Study 1, Study 2).

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

by a measure of the desire for (psychological) intimacy in relationships (Hart, Shaver, & Goldenberg, 2005), consisting of five statements about participants' "ideal romantic relationship": "How close would you like your relationship with your romantic partner to be?" (1 = *Extremely distant*; 9 = *As close as possible*); "How psychologically intimate would you like to be with your romantic partner?" (1 = *No psychological intimacy*; 9 = *Completely psychologically merged*); "How much time would you like to spend with your romantic partner?" (1 = *Hardly any time*; 9 = *Every single minute of every single day*); "What portion of your thoughts and feelings would you like to share with your partner?" (1 = *None of my thoughts and feelings*; 9 = *Every single thought or feeling I've ever had*); and "How much would you like to rely on your romantic partner for sympathy and support?" (1 = *No reliance for sympathy and support*; 9 = *Completely reliant for sympathy and support*). The high anchors for this measure were intentionally designed to be extreme to avoid ceiling effects, to which Hart et al. found the measure was prone. See Table 1 for the correlation coefficients and alpha reliability coefficients for each measure.²

After providing demographic information, including gender and sexual orientation, participants were debriefed and the questionnaire concluded.

4. Results and discussion

To test our hypotheses we used an SPSS macro and guidelines provided by Hayes (2013). Specifically, we conducted two mediation analyses with estimated bias-corrected 95% confidence intervals and 5000 bootstrap samples predicting sexual perception as a function of (1) attachment anxiety, controlling for avoidance, with desire for intimacy entered as the mediator; and (2) attachment avoidance, controlling for anxiety, with desire for intimacy entered as the mediator.

Consistent with hypotheses, attachment anxiety predicted higher desire for intimacy at .38 ($p < .001$) and the total effect of attachment anxiety on perception of women's sexual interest was marginally significant at .13 ($p = .09$). The direct effect of desire for intimacy on sexual perception was .25 ($p = .007$). Finally, whereas the direct effect of attachment anxiety on sexual perception was not significant at .04 ($p = .66$), the indirect effect was significant at .09 (CI = .01 to .19), indicating that desire for intimacy mediated the effect of attachment anxiety on sexual perception.

Also consistent with hypotheses, attachment avoidance predicted lower desire for intimacy at .94 ($p < .001$) and the total effect of attachment avoidance on perception of women's sexual interest was −.22 ($p = .01$). The direct effect of desire for intimacy on sexual perception was .25 ($p = .007$). Finally, whereas the direct effect

of attachment avoidance on sexual perception was not significant at .02 ($p = .87$), the indirect effect was significant at −.24 (CI = −.46 to −.03), indicating that (lower) desire for intimacy mediated the (negative) effect of attachment avoidance on sexual perception.

In sum, Study 1 supported our hypotheses. Men's attachment anxiety predicted a tendency to perceive more sexual interest on the part of a friendly-seeming woman in a hypothetical nightclub scenario, and this was due to anxiously attached men's higher desires for intimacy compared to men who were low in attachment anxiety. By contrast, men's attachment avoidance predicted a tendency to perceive less sexual interest on the part of the woman in the scenario, and this was due to avoidantly attached men's lower desires for intimacy compared to men who were low in attachment avoidance.

These findings are consistent with a motivated social perception/functional projection process (Maner et al., 2005; Spencer et al., 2003): when imagining the degree to which a woman is likely to be interested in a sexual relationship, men imagine a reality that is consistent with what they wish it would be. Specifically, their perception is colored by their own hopes for a sexual or romantic relationship, which is based on their desires for intimacy, and, in turn, their attachment style.

However, another possible interpretation of the results is one of a simple cognitive bias, as proposed by the "default model" hypothesis of sexual misperception (Shotland & Craig, 1988). For example, in the course of imagining themselves in the nightclub scenario, it is possible that men's imagination of their own intentions might exert a heuristic influence on their evaluation of the hypothetical woman's intentions. Hence, for a man who has a stronger interest in forming an intimate relationship, there may be a tendency to infer that the woman across the room is reciprocating his nonverbal signals, simply because sexual interest themes are salient in the man's own mind. Such a process might be closer to what is called *social projection* (e.g., Krueger, 2000), and might operate on a simulation heuristic (Kahneman & Tversky, 1998).

The data from Study 1 allowed a preliminary examination of this possibility, because included in the measure of sexual perception were questions about participants' imagination about their own intentions and actions in the nightclub scenario. A post-hoc serial mediation analyses (attachment → desire for intimacy → self-perception → sexual perception) was consistent with the possibility that the effects of attachment style on sexual perception, which were distally mediated by desire for intimacy, were proximally mediated by self-perceptions. CIs for the indirect serial mediation effect were .01 to .11 and −.27 to −.01 respectively for the anxiety and avoidance paths.

In light of these findings, Study 2 was designed not only to replicate Study 1 but also to more directly test whether both motivated-perception and more cognitive (projection) processes are at play. Specifically, we added a measure of the extent to which men *hoped* that the woman in the nightclub scenario was sexually interested in them. If, as Study 1 suggests, both the motivated-perception and social-projection accounts are true, then the effects of anxiety

² Because anxiety and avoidance are positively correlated with each other but oppositely correlated with other study variables, a few of the zero-order correlations appear to be counterintuitive (e.g., the correlation between anxiety and desire for intimacy is not significant, presumably because any avoidance offsets the otherwise significant association; in other words, when the opposite effects of anxiety and avoidance are equivalent in magnitude, they tend to cancel each other out).

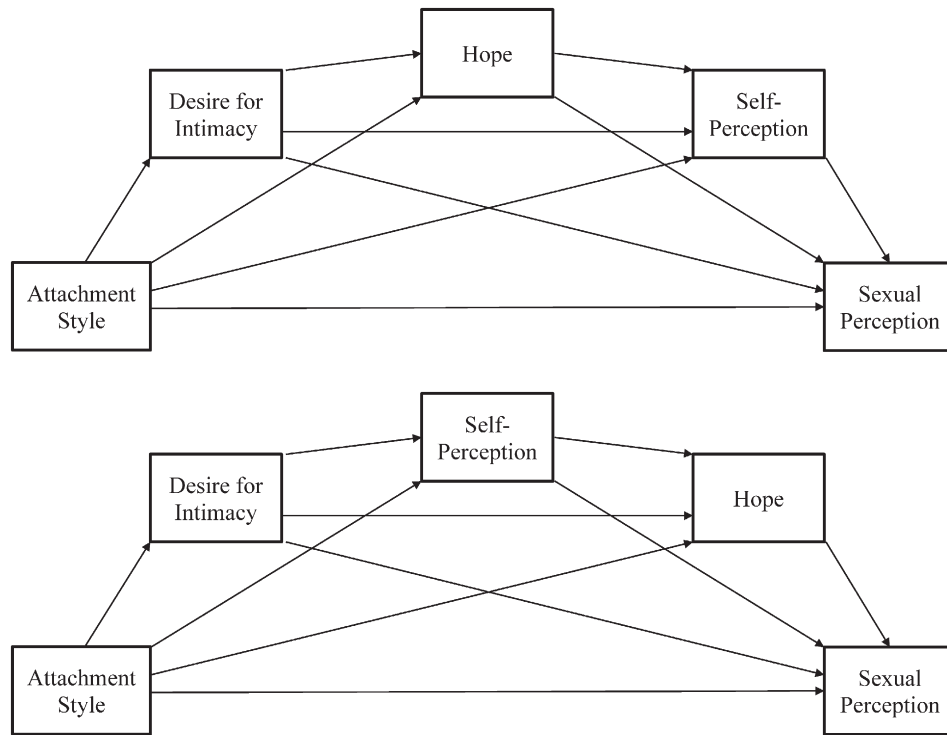


Fig. 1. Conceptual schematics of potential mediational pathways.

and avoidance should be either (1) proximally mediated by self-perception and distally mediated by generalized desire for intimacy, with hope for a sexual encounter intervening between desire for intimacy and self-perception, or (2) proximally mediated by hope for a sexual encounter and distally mediated by generalized desire for intimacy, with self-perception intervening. (See Fig. 1 for conceptual diagrams.)

5. Study 2: Method

5.1. Participants

Because of the more complex mediational models we planned to test in Study 2 compared to Study 1, we decided to increase the sample size. We collected data on 300 MTurk participants. Six participants returned incomplete surveys. Of the remaining 294 participants, 26 had participated in Study 1 (on the basis of their MTurk identification numbers), and 25 participants did not identify as heterosexual. This left 243 participants (75% identified as White; 7% identified as Black, 7% as Asian-American, and 7% as Hispanic/Latino; the rest chose another ethnicity) who were heterosexual men aged 18 to 75 ($Mdn = 29$) located in the US who had not participated in Study 1. They were paid \$.35 each.

5.2. Materials and procedure

The materials and procedure were identical to those in Study 1 except (1) we added the measure of hope mentioned above, and (2) we removed the short dark triad scale, the SSIS, and the RSE, as they were irrelevant to the present inquiry. The measure of hope asked participants to indicate how likely they "... would be to have each of these thoughts if the [nightclub] scenario above actually occurred" (1 = *Very unlikely*; 9 = *Very likely*). The thoughts were: "I would think: I hope she finds me attractive"; "I would think: I hope she wants to have sex with me"; "I would think: I hope she thinks I would make a good romantic partner"; "I would think:

I hope she wants to have a committed relationship with me." Although we designed the questions to tap into sexual hope and relationship hope, responses to the four items appeared to reflect a single factor ($\alpha = .81$) so we treated them as a unitary measure of relational hopes in the nightclub scenario.

6. Results and discussion

We conducted mediation analyses to test the combined motivated-perception and social-projection interpretations of Study 1's results. Specifically, we tested two serial multiple mediation models each for attachment anxiety and avoidance. In Model 1, we tested a path in which men's attachment anxiety (or avoidance) predicted perception of a woman's sexual interest through the influence of attachment style on desire for intimacy, increased hope for women's sexual interest, and self-perception, respectively (attachment \rightarrow desire for intimacy \rightarrow hope \rightarrow self-perception \rightarrow sexual perception). In Model 2, we tested a path in which men's attachment style predicted perception of a woman's sexual interest through the influence of attachment style on desire for intimacy, self-perception, and increased hope for women's sexual interest, respectively (attachment \rightarrow desire for intimacy \rightarrow self-perception \rightarrow hope \rightarrow sexual perception). (For brevity, the coefficients for the Model 2 analyses are displayed in Figs. 2 and 3).

The results supported Model 1, but not Model 2. The effect of attachment style on sexual perception was proximally associated with men's own self-perception—how they saw themselves behaving in the nightclub scenario—which, in turn, was proximally associated with their hope that the woman in the scenario would be sexually interested in them and distally associated with their general desire for intimacy in romantic relationships. Specifically, this suggests that men's attachment anxiety predicts greater desire for intimacy in relationships, which predicts greater hope for women's sexual interest, which predicts greater (imagined) sexually suggestive behavior on the part of men themselves, which, finally, predicts their assumptions about the sexual nature of women's friendly behavior. The same process

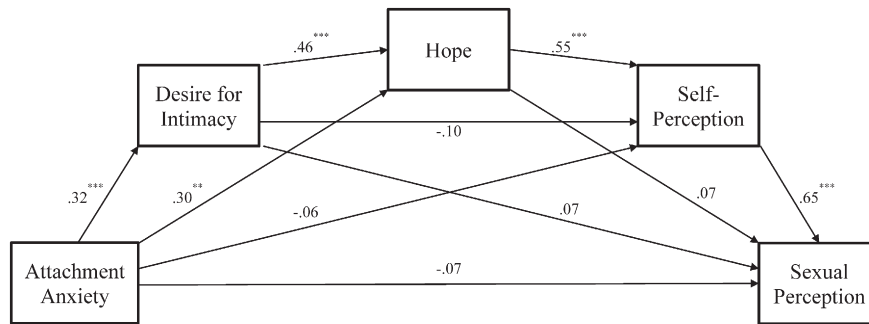


Fig. 2. Mediation model of the effect of attachment anxiety on sexual perception. Note. * $p < .05$; ** $p < .01$; *** $p < .001$. Coefficients reported below are noted to be significant when confidence intervals exclude zero. Indirect effect of attachment anxiety on sexual perception through: Desire for intimacy only = $.02$ Desire for intimacy and hope in serial = $.01$ Desire for intimacy and self-perception in serial = $-.02$ Desire for intimacy, hope, and self-perception in serial = $.05$ (significant; CI = $.02$ to $.09$) Hope only = $.02$ Hope and self-perception in serial = $.11$ (significant; CI = $.03$ to $.21$) Self-perception only = $-.04$ Total effect of attachment anxiety on sexual perception = $.15$ (significant; CI = $.02$ to $.29$).

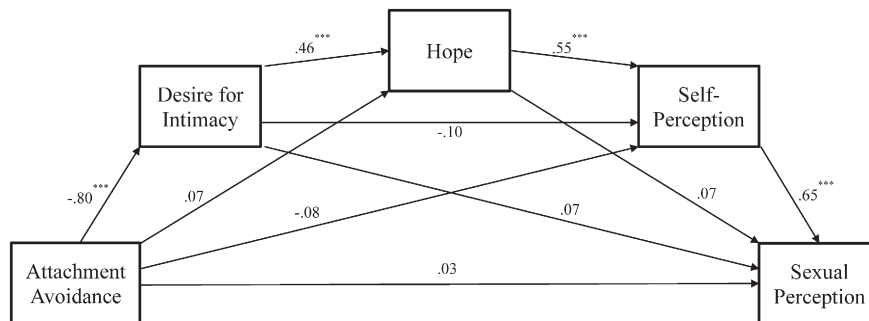


Fig. 3. Mediation model of the effect of attachment avoidance on sexual perception. Note. * $p < .05$; ** $p < .01$; *** $p < .001$. Coefficients reported below are noted to be significant when confidence intervals exclude zero. Indirect effect of attachment avoidance on sexual perception through: Desire for intimacy only = $-.06$ Desire for intimacy and hope in serial = $-.02$ Desire for intimacy and self-perception in serial = $.05$ Desire for intimacy, hope, and self-perception in serial = $-.13$ (significant; CI = $-.21$ to $-.06$) Hope only = $.00$ Hope and self-perception in serial = $.02$ Self-perception only = $-.05$ Total effect of attachment avoidance on sexual perception = $-.19$ (significant; CI = $-.39$ to $-.01$).

applied to attachment avoidance, but oppositely (in that avoidant attachment predicts less desire for intimacy, hope for sexual interest, and so on).³ Model 2, in which the self-perception and hope variables were switched, was not supported because none of the indirect effects were significant for either anxiety or avoidance (i.e., all of the confidence intervals included zero). This supports the proposed causal direction of the hypothesized processes, and reinforces Study 1's findings that suggest that both motivated-perception and social projection processes contribute to men's tendency to misperceive women's sexual intent.

7. General discussion

The present research points to a novel personality-process account of heterosexual men's (mis)perception of women's sexual interest. Although men's tendency to overestimate women's sexual intent may have conferred a reproductive advantage in humans' ancestral past, the EMT framework (Haselton & Buss, 2000) does not make predictions about which individual differences contribute to the likelihood of men misperceiving. Together, our two studies suggest that men's romantic attachment style predisposes them to different levels of intimacy needs, which, via a motivated projection process, biases their interpretation of women's friendly but ambiguous behavior toward them. According to this account, sexual misperception among men is caused in a proximate sense by personality differences thought to be forged in the context of life experiences in close relationships.

³ Exploratory parallel mediation analyses simultaneously including self-perception and hope were not significant for either anxiety or avoidance, indicating that the process is indeed serial, not parallel.

Specifically, anxiously attached men's general desire for intimacy appears to increase their hopes of being the target of a specific woman's sexual interest, thus motivating them to imagine themselves acting in a sexually suggestive way, which in turn biases them to perceive the woman's behavior as being congruent with their hopes and desires. A similar process applies to avoidant men, except they tend to imagine less sexual interest directed their way, presumably as a distal consequence of their own relatively low desire for intimacy.⁴

If it is true that the proximal mechanism of sexual misperception is social projection—individuals projecting their own level of interest onto others when gauging others' interest toward them—then this supports a modified version of the default model of sexual misperception (Shotland & Craig, 1988). However, our data also support a motivated-social-cognition account—such that men's social projection is influenced by their romantic and sexual motives and goals, both general and specific. This is consistent with evidence that inducing romantic mood through experimental priming increases men's likelihood of perceiving arousal in photographs of women's neutral facial expressions (Maner et al., 2005), as well as the finding that both men and women who desire casual sex are more likely to impute sexual intent from an ambiguous target's behavior (Lenton et al., 2007). These phenomena represent an interesting layering of motivational

⁴ Compared to those higher in attachment anxiety and those lower in attachment avoidance, individuals higher in avoidance report more positive attitudes toward casual sex (Gentzler & Kerns, 2004) and favor short-term mating strategies (Gillath & Schachner, 2006). This may seem at odds with our finding that avoidant men were less likely to overperceive a woman's interest. However, avoidant men also report reduced sexual interest toward new acquaintances who behave warmly toward them (Birnbau & Reis, 2012), in line with our findings. Perhaps, then, avoidant men's relative interest in casual sex is tempered by their guardedness about psychological intimacy—particularly when confronted with a friendly, "smiling" woman, as the vignettes in the present studies encouraged our participants to imagine.

and information-processing biases that we have not seen many empirical examples of. In this light, the present research bears implications not only for understanding sexual-intent perception processes, but person-perception processes more generally. Future research should examine whether a combined motivational and cognitive bias process applies to other social-perceptual phenomena, such as behavior in trust and partner-choice games (e.g., prisoner's dilemma and the ultimatum game).

Like much of the sexual misperception literature, in the present research, we have focused solely on heterosexual male perceptions of (presumably) heterosexual females. However, growing evidence suggests that whereas men tend to overperceive women's sexual intent, women tend to underperceive men's sexual intent (La France et al., 2009; Perilloux et al., 2012). Perhaps the most classic example is that women in opposite-sex friendships reliably underperceive their male friends' sexual interest (Koenig, Kirkpatrick, & Ketelaar, 2007). EMT predicts that women will be more likely to underperceive men's interest in forming committed relationships, but it does not make explicit predictions about women's perceptions of men's sexual intent. The approach taken in the present research may provide a framework to study this related phenomenon. Perhaps women are motivated to underperceive the sexual intent of men whom they are not attracted to ease future social interaction, or to underperceive the sexual intent of men whom they do not want to become attracted to (i.e., male friends). Future research should examine the degree to which attachment style and motivated cognition may help to explain the variance in women's likelihood of underperceiving men's sexual intent both in a general sense (i.e., an unknown man in a vignette) and a more concrete one (i.e., a specific, real-world friendship).

Future research should also address another limitation of the present research stemming from the use of a single imagined scenario to tap sexual perception. Vignettes are often used in sexual misperception research (e.g. Fisher & Walters, 2003, Kohl & Robertson, 2014); however, they do not allow for claims about whether participants are actually under- or overperceiving a woman's sexual interest. It is easy to see how, once men begin imagining the nightclub scenario, thoughts of a romantic, sexual relationship naturally become salient, to a degree influenced by men's attachment style and resulting desire for intimacy, which influences both their own imagined behavior and the imagined behavior of the woman. By contrast, in a real life situation, other contextual variables would presumably come into play to influence sexual perception, perhaps weakening the biasing influence of one's own motives and goals. Future research should attempt a conceptual replication of the present study using a more naturalistic design such as asking men to report instances when they incorrectly identified a woman as sexually interested (Haselton, 2003), or having men and women engage in a speed-dating paradigm (Perilloux et al., 2012). Finally, because our cross-sectional correlational design limits our ability to draw causal conclusions, additional research is needed to test the plausibility of the causal paths we have specified compared to alternative ones.

8. Conclusion

There is mounting evidence that adult attachment styles predict motivational and cognitive tendencies that, in turn, influence intra-personal and interpersonal outcomes across a variety of domains. To give a few recent examples, attachment style influences sexism (Hart, Glick, & Dinero, 2013; Hart, Hung, Glick, & Dinero, 2012), Facebook use (Hart, Nailling, Bizer, & Collins, 2015; Oldmeadow, Quinn, & Kowert, 2013), and burnout at work (Leiter, Day, & Price, 2015). In many cases, the relation between attachment style and outcomes was found to be mediated by theoretically predictable, motivated cognitive processes. The present research is another example of the ways in which adult attachment theory can help elucidate personality-process antecedents of outcomes that have been studied extensively in other areas of psychology—in this case, sexual

perception. Furthermore, it provides a novel example of a combination or layering of what are presumably universal cognitive biases on top of personality-based motivational biases, which may eventually be found to underlie—and thus to help explain—other important phenomena.

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