

A sharp eye for her SOI: perception and misperception of female sociosexuality at zero acquaintance

Tyler F. Stillman*, Jon K. Maner

Florida State University, Tallahassee, FL, USA

Initial receipt 1 April 2008; final revision received 16 September 2008

Abstract

Two studies supported the hypothesis that female sociosexuality can be accurately detected by strangers based on thin slices of observable behavior. Twenty-four female participants, whose sexual strategies ranged from highly restricted to highly unrestricted, were video taped while interacting with a male confederate. In Study 1, raters' judgments of the women's sociosexuality were highly correlated with the women's self-reported sociosexuality. Study 2 replicated this finding and identified specific cues perceivers used to make their judgments. We identified (1) *Valid cues* (e.g., eyebrow flashes, glances at the confederate), which were associated with both targets' actual sociosexuality and raters' perceptions of sociosexuality; (2) *Poor cues* (e.g., hand gestures, posture), which were not correlated with actual or perceived sociosexuality; and (3) *Misleading cues* (e.g., provocativeness of dress, physical attractiveness), which were not associated with actual sociosexuality, but were correlated with perceptions of sociosexuality. Statistically controlling for valid cues (but not poor cues or misleading cues) reduced the relationship between perceived and actual sociosexuality, suggesting that perceiving these traits may partially account for perceiver accuracy. The accurate detection of traits in others may play an important role in helping people respond adaptively to important social threats and opportunities.

© 2009 Elsevier Inc. All rights reserved.

Keywords: Person perception; Sociosexuality; Thin slices; Human sexuality; Jealousy

Like members of other social species, humans frequently engage in interactions with other people who might pose threats (e.g., a possible romantic interloper or physical threat) or opportunities (e.g., a possible romantic partner or ally). In navigating such social interactions, the ability to readily and accurately perceive others' traits may facilitate adaptive interpersonal behavior, promoting useful responses to important social threats and opportunities (Haselton & Funder, 2006).

Accurate person perception may be particularly adaptive for traits directly related to mating. Although some of those traits (e.g., age) may be readily and directly inferred from visible characteristics, others may be far less obvious. For example, is it possible to tell simply by observing a person's behavior whether he or she willingly engages in sexual activity without commitment or emotional attachment? If the person in question is a man, researchers have demonstrated

that this trait (i.e., sociosexual orientation; Simpson & Gangestad, 1991) can be accurately judged by strangers on the basis of 1-min clips of silent video tape (Gangestad, Simpson, DiGeronimo, & Biek, 1992). However, the same judges that accurately perceived male sociosexual orientation were unable to judge female sociosexual orientation.

In the current paper, we report data suggesting that perceivers can accurately detect female sociosexual orientation based on thin slices of observable behavior (cf. Ambady & Rosenthal, 1992). Moreover, we provide evidence for specific cues used to judge a women's sociosexual orientation, as well as for specific traits in the perceiver that may promote accurate judgments of female sociosexuality.

1. The perception of female sociosexual orientation

Sociosexuality refers to individual differences in people's inclination to engage in short-term and/or long-term mating (Gangestad & Simpson, 1990; Simpson & Gangestad, 1991). Being *sexually restricted* means displaying a proclivity

* Corresponding author.

E-mail address: stillman@psy.fsu.edu (T.F. Stillman).

toward long-term monogamous mating relationships, whereas being *sexually unrestricted* means being open to short-term mating without need for commitment or intimacy. Sociosexual orientation has played a key role in studies about human mating (e.g., Maner, Gailliot, & DeWall, 2007; Schmitt, 2005; Simpson, Gangestad, Christensen, & Leck, 1999). Compared with restricted individuals, for example, unrestricted individuals tend to engage in sex earlier in their relationships, to report higher numbers of previous sex partners and to prioritize different characteristics in evaluating potential partners (e.g., Simpson & Gangestad, 1991; see also Ostovich & Sabini, 2004). There is considerable variation in sociosexual orientation within each sex. Although women are generally more restricted (and less unrestricted) than men (Schmitt, 2003, 2005; Schmitt, Shackelford, & Buss, 2001; see also Trivers, 1972), Oliver and Hyde (1996) reported that only about 25% of the variance in the propensity to adopt an unrestricted mating strategy is accounted for by a person's sex. This means that about three-quarters of the variability in unrestricted mating reflects variability within (rather than between) men and women. Among 1707 US women who completed a sociosexuality scale as part of a cross-cultural study, we calculated the coefficient of variation for sociosexuality to be 70% (Schmitt, 2005). Accurately perceiving differences in female sociosexual orientation could serve important mating-related functions. Unrestricted women can serve as accessible mating partners for men, and potent intrasexual rivals for other women (e.g., Schmitt, 2004). Hence, being able to discern women with high vs. low levels of unrestrictedness could facilitate mating opportunities (for men) and mate guarding (for women) (cf. Maner, Gailliot, Rouby, & Miller, 2007).

The processes through which people accurately perceive others can be complex (Funder, 1995). Not only must the person being perceived exhibit some sort of observable cue, but the cue must be detected by the perceiver and it must be interpreted accurately. Given that imperfections at any one phase of this process will likely lead to error (Funder, 1999), the accurate judgment of a character trait at zero acquaintance can be a challenging task. Nevertheless, compelling evidence suggests that people are capable of making valid inferences of strangers based on very limited information. Brief observations (lasting less than 5 min) often are sufficient to make accurate judgments of a range of personality traits (e.g., Albright, Kenny, & Malloy, 1988; Ambady, Bernieri, & Richeson, 2000; Funder, 1987, 1999; Verplaeste, Vanneste, & Braeckman, 2007).

In the current research, we extend this literature not only by examining the extent to which observers can accurately perceive female sociosexual orientation, but also by identifying specific nonverbal cues perceivers may use to judge a women's sociosexual orientation. Given that women control courtship interactions partially through nonverbal behavior (Grammer, Kruck, Juetten, & Fink, 2000), we sought to identify the role nonverbal cues play in the perception of sociosexuality. The literature on courtship

cues provides a useful starting point for identifying the specific cues that might be used to judge female sociosexuality (e.g., Grammer, 1990; Moore, 1985). Because a woman's sociosexual orientation may reveal itself partially through the communication of sexual availability, cues that reveal sexual interest or openness may be used to perceive female sociosexual orientation. Simpson et al. (1993), for example, showed that canting the head (tilting one's head so as to expose the neck) and leaning forward toward a desirable male is more characteristic of unrestricted women than of restricted women. Likewise, an eyebrow flash (opening the eyes wide while raising the eyebrows) can be used to signal one's willingness for further affiliation (Eibl-Eibesfeldt, 1975) and thus may serve as a cue to sexual interest. We examined such behavioral cues in Study 2. In Study 2, we also examined two individual differences in the perceiver — trait jealousy and sexual unrestrictedness — that might be linked to higher accuracy in perceiving sociosexuality. Our expectation was that jealous perceivers would be especially motivated to be accurate and that sexually unrestricted perceivers would benefit from more extensive courtship experience.

2. Study 1

Study 1 provided an initial assessment of whether people might be able to detect a woman's sociosexual orientation based on thin slices of observable behavior. We administered the Sociosexual Orientation Inventory (SOI; Simpson & Gangestad, 1991) to a large number of female undergraduates. We then recruited a sample of these women to take part in a social interaction with a male research assistant. The interaction was unobtrusively videotaped. The videotaped interaction was viewed by a set of perceivers who rated the target women on a variety of traits, including sociosexuality.

3. Method

3.1. Stimulus development

In exchange for course credit, 203 female undergraduates completed the SOI. Items include "How many different partners do you foresee yourself having sex with during the next 5 years?" and "With how many different partners have you had sex on one and only one occasion?" Higher scores on the SOI reflect a proclivity toward sexually unrestricted attitudes and behavior. A sample of these women ($n=24$) was then recruited to participate in a laboratory study. To ensure adequate variability, we made sure to include women at the upper and lower ends of the SOI distribution (z -standardized SOI scores ranged from -1.28 to 2.81). We only recruited women who, in a prescreening questionnaire, described themselves as romantically unattached. We focused on single women so as to increase the likelihood of romantically tinged behavior during the interaction.

After arriving at the lab, each woman completed a demographic survey and a brief Big Five personality inventory (Ten-Item Personality Inventory; Gosling, Rentfrow, & Swann, 2003) to assess their levels of extroversion, openness to experience, conscientiousness, agreeableness and neuroticism. Next, women were informed that they would be working on a joint task with a partner, actually a male research assistant. The pair received instructions for the task, which was to solve a handheld Rubik's Cube together using one hand each and without speaking to each other. By having them work on the puzzle in this way, our intention was to create a close physical interaction in which women might be inclined to communicate romantic interest or availability to their partner. Each dyad was provided 5 min to work on the puzzle. The experimenter then interrupted the pair and gave the participant a final questionnaire in which she reported how attractive she thought her partner was. On average, participants rated the research assistant as being fairly attractive: On a scale from 1 (*very unattractive*) to 21 (*very attractive*), average ratings were significantly above the scale midpoint [$\text{mean}=14.29$, $S. D.=3.18$; $t(23)=5.07$, $p < .001$].

3.2. Video rating

Ten undergraduates (four men, six women) independently watched the soundless videos of each interaction. All were unaware of the purposes and hypotheses of the study. The raters were asked to judge female participants on each of the Big Five personality factors, using 10-point scales (e.g., 1=*very introverted*, 10=*very extroverted*). They also rated women's sociosexual orientation (1=*restricted sexuality* to 10=*unrestricted sexuality*), level of attractiveness (1=*very unattractive* to 10=*very attractive*) and provocativeness of dress (1=*conservative*, 10=*provocative*). All raters were provided short written definitions of each trait being judged. Participants were provided the following definition of sociosexual orientation: "sociosexuality refers to individual differences in the preference for unrestricted sex (without the necessity of love) or restricted sex (in the context of a long-term relationship)."

4. Results and discussion

Perceptions of participant sociosexuality were averaged across raters ($\alpha=.86$). Across raters, perceptions of female sociosexuality were strongly correlated with participants' actual sociosexual orientation [$r(24)=.55$, $p=.006$] (see Table 1). Thus, raters generally displayed a high degree of accuracy in perceiving women's sociosexual orientation. There was substantial variability, however, with some raters displaying greater accuracy than others (individual-level correlations ranged from .18 to .61).

We examined whether accurate perceptions of SOI may have been driven by perceptions of how provocatively participants were dressed or how attractive participants were perceived to be. Controlling for perceptions of provocative-

Table 1

Rater-participant agreement by trait with reliability

Trait	Accuracy ($n=24$)
Sociosexuality	.55**
Big five	
Conscientiousness	.50*
Extraversion	.42*
Neuroticism	.33
Agreeableness	.14
Openness	.02

Accuracy measured by bivariate correlation.

* $p < .05$.

** $p < .005$.

ness did not alter the relationship between perceived SOI and actual SOI (partial $r=.51$, $p=.01$). Nor was the correlation reduced when controlling for attractiveness (partial $r=.61$, $p=.002$). These findings suggest that rater accuracy was not attributable to cues associated with provocative dress or level of physical attractiveness.

It is possible that the ability to detect female sociosexuality was associated with unrestricted women being more attracted than restricted women were to the male partner. However, there was no relationship between how attractive participants rated the confederate and perceived SOI ($r=.07$, $p=.76$) or actual SOI ($r=-.14$, $p=.50$). Moreover, controlling for participants' ratings of confederate attractiveness did not affect the relationship between perceived and actual SOI (partial $r=.56$, $p=.005$).

With respect to the Big Five dimensions of personality, there was quite a bit of variability in raters' ability to accurately perceive these traits. Raters accurately judged conscientiousness ($r=.50$, $p=.01$) and extraversion ($r=.42$, $p=.04$), whereas ratings of neuroticism ($r=.33$, $p=.11$), agreeableness ($r=.14$, $p=.53$) and openness to experience ($r=.002$, $p=.99$) did not correlate significantly with participants' self-reported standing on these variables (see Table 1). Notably, raters' perceptions of sociosexuality were at least as accurate as their perceptions of the Big Five traits.

5. Study 2

Study 2 extended and improved on Study 1 in three ways. First, we sought to replicate the accurate perception of female sociosexuality using a larger number of raters and a better measure of perceived sociosexuality. Second, given that variability in perceptions of participant attractiveness, dress and attraction to the confederate was not associated with rater accuracy, we sought to identify other cues that may have been used by raters in forming accurate judgments of sociosexuality. We examined a number of potential cues that have been highlighted in the human mating literature (e.g., behavioral displays of flirtation, such as eyebrow flashes and smiles). Third, because there was considerable variation in accuracy across judges' assessments of sociosexuality, we sought to identify specific perceiver traits that might

differentiate accurate from inaccurate judges. We examined the role of two mating-related individual differences: perceiver SOI and level of dispositional jealousy.

6. Method

6.1. Stimuli

We used the same videotaped interactions that were used in Study 1, with the exception that instead of 5-min clips, the videos were trimmed to 3 min. We used the same 3 min of every interaction, beginning when the participant and the research assistant first touched the Rubik's Cube.

6.2. Raters

Fifty undergraduate raters (21 male, 27 female, two declined to indicate gender) watched and rated the silent videotapes as part of an optional course activity.

6.3. Procedure

6.3.1. Perception of sociosexuality

After viewing the taped interactions, raters judged women's sociosexual orientation using four items. Raters indicated (1) how likely they thought the participants would be to have a one-night stand; (2) the likelihood that the participant would have (or had had) a lot of sexual partners; (3) the likelihood that the participant would require a "strong relationship commitment before she would engage in sexual contact" (reverse-scored); (4) the number of encounters needed before the participant and the male research assistant would have sexual intercourse, if they began dating (reverse-scored). All items included nine-point response scales. Responses were standardized and summed to create a measure of perceived sociosexuality for each participant (average $\alpha=.89$).

6.3.2. Cues to female sociosexuality

Raters assessed several specific target behaviors and characteristics while watching the interactions. Items were based on measures used previously to assess cues associated with sexual interest and flirtation (especially Simpson et al., 1993; also Gangestad et al., 1992; Givens, 1978; Grammer, 1990; Moore, 1985). In addition to providing estimates of sociosexuality, raters provided subjective ratings of potential cues such as participant attractiveness (1=*not at all*, 9=*extremely*), how closely the participant sat to the confederate (1=*not at all*, 9=*extremely*), how provocatively the participant was dressed (1=*conservatively*, 9=*provocatively*) and the degree of attention the participant paid to solving the Rubik's Cube (1=*none*, 9=*considerable*). This last item was included because it seemed plausible that attention directed toward the partner might detract from attention directed toward the Rubik's Cube task. Raters also coded the number of hand gestures, flirtatious glances (attempts at making eye contact), laughs, hair touches, eyebrow flashes and the number of times the participant touched the confederate as they occurred. A separate group

of raters measured the amount of time participants spent smiling, as well as the amount of time in an open posture, leaning towards the male and canting the head. These latter measures were provided by separate raters who did not rate sociosexuality (because the timing task required repeated viewing of the stimulus material). There was agreement across raters in the attributes and behaviors they perceived; for timed behaviors, $\alpha>.88$; for coded behavior and subjective ratings, $\alpha>.95$.

6.3.3. Rater characteristics

Raters completed the SOI (see Study 1) and the Multidimensional Jealousy Scale (MJS; Pfeiffer & Wong, 1989). The MJS assesses individual differences in the tendency to exhibit cognitive, emotional and behavioral facets of jealousy. Participants considered a current or past romantic relationship, and then reported the frequency of worry-related thoughts (e.g., I suspect that X may be attracted to someone else; 1=*never*, 7=*all the time*), acts of mate guarding (e.g., I join in whenever I see X talking to a member of the opposite sex; 1=*never*, 7=*all the time*) and emotional reactivity in jealousy-evoking situations (e.g., X is flirting with someone of the opposite sex; 1=*very pleased*, 7=*very upset*). A summary measure was calculated by averaging responses to all scale items ($\alpha=.76$).

7. Results and discussion

An initial analysis confirmed that the current study replicated the accuracy findings of Study 1. Across raters, perceptions of participant sociosexuality correlated strongly with self-reported SOI [$r(24)=.49$, $p=.02$].

7.1. Cues to female sociosexuality

One can think of cues as falling into three (loosely defined) categories: valid, poor and misleading. Good cues were those that were the source of accurate judgments, in that they corresponded to both perceived and actual SOI. Poor cues were those not correlated with perceived or actual SOI. Misleading cues were those that were a potential source of inaccurate judgments, as they correlated with the perception of SOI but not actual SOI. No cues we measured corresponded with actual SOI, but not perceived SOI (see Table 2).

The valid cues ($r's>.39$, $p\leq.06$ for both perceived and actual SOI) were eyebrow flashes, glancing at the confederate and paying little attention toward solving the puzzle. Poor cues ($r's<.24$, ns, for both perceived and actual SOI) were canting the head, sitting in an open posture, number of hair touches, number of hand gestures and touching the confederate (which was rare). The misleading cues ($r's>.51$, $p's<.05$ for perceived SOI, and $r's<.27$, ns for actual SOI) were smiling, laughing, closeness to the confederate, attractiveness and provocativeness of dress (see Table 2).

We conducted an additional analysis to assess more directly whether the perception of valid cues may have been

Table 2

Correlations between participant behaviors/attributes with actual and perceived sociosexuality

Behavior/attribute	Actual SOI	Perceived SOI
Valid cues		
Attention to puzzle (r)	-.48*	-.45*
Eyebrow flashes (c)	.43*	.43*
Glances at confederate (c)	.39 [†]	.59**
Poor cues		
Head cant (t)	.19	.23
Open posture (t)	.24	.16
Hair touches (c)	.12	.13
Hand gestures (c)	-.07	.11
Confederate touches (c)	-.04	.23
Misleading cues		
Smiling (t)	.27	.58**
Laughs (c)	.10	.51*
Closeness to confederate (r)	.11	.53*
Attractiveness (r)	.03	.56**
Provocativeness of dress (r)	.22	.64**

(r)=subjectively rated, (c)=coded behavior, (t)=timed behavior.

[†] $p=.06$.* $p<.05$.** $p<.005$.

responsible for the accurate detection of female SOI. Controlling for the three valid cues (eyebrow flashes, glances and attention) considerably reduced the relationship between perceived and self-reported SOI (from $\beta=.49$, $p=.02$ to $\beta=.21$; $p=.42$), suggesting that they were at least partially responsible for rater accuracy. In contrast, there was no reduction in the relationship between perceived and actual SOI when controlling for the five poor cues ($\beta=.49$, $p=.03$) or the four misleading cues ($\beta=.76$, $p=.02$).

7.2. Characteristics of accurate perceivers

We anticipated that, on average, both males and females would be able to detect female sociosexuality. Results indicated significant accuracy among female raters ($r=.51$, $p=.01$); accuracy was only marginally significant among male raters ($r=.35$, $p<.10$). To identify more clearly individual differences that may have contributed to accurate perceptions, we calculated an accuracy score for each rater by computing the correlation between actual SOI scores and perceived SOI for each rater, across targets (see Luo & Klohnen, 2005). As in Study 1, there was substantial variability in accuracy across raters: correlations ranged from $r=-.09$ to $r=.65$. With the use of individual raters' accuracy scores as the dependent variable, ANOVA revealed that accuracy scores were higher among female raters (mean $r=.37$; S.D.=.12) than among male raters (mean $r=.28$; S.D.=.13) [$F(1,46)=4.95$, $p=.02$]. Notably, men generally perceived targets as being more unrestricted than women did [$t(23)=4.58$, $p<.001$].

Rater sociosexuality did not predict the accurate detection of participant sociosexuality [$r(45)=-.14$, $p=.37$], in either men ($r=.04$) or women ($r=-.12$). With respect to individual differences in dispositional jealousy (as measured

by the MJS), a marginally significant relationship indicated that individuals high in jealousy were more accurate than those low in jealousy [$r(46)=.27$, $p=.07$]. The relationship between dispositional jealousy and accuracy in detecting female SOI was apparent in male ($r=.34$) and female perceivers ($r=.37$).

8. General discussion

This research provides support for the hypothesis that individuals can accurately detect female sociosexual orientation based on thin slices of observable behavior. Study 1 revealed a strong correlation between actual and perceived female sociosexuality, and this finding was replicated in Study 2. Notably, the magnitude of this relationship was at least as strong as that for the Big Five personality traits — traits commonly conceptualized as reflecting the fundamental underlying aspects of personality (e.g., Costa & McCrae, 1992). Indeed, the magnitude of this relationship compares favorably with previous research on accuracy in personality judgments (see Funder, 1995).

The present investigation can be compared with research by Gangestad et al. (1992), which found that, in general, perceivers were able to detect sociosexuality in strangers based on videotaped interactions (with an effect size of $r=.39$). This effect was driven by the impressive correlation between perceived and actual sociosexuality in male targets ($r=.50$), while perceivers were unable to detect female sociosexuality ($r=.16$). The difference between our findings and those of Gangestad et al. may be attributable to two features of the method we used. First, we used a particularly evocative situation: women in the current research interacted in close physical proximity to a relatively attractive male confederate, whereas Gangestad et al. (1992) had participants interact with an opposite-sex confederate via video monitor. Second, we specifically recruited women to ensure adequate variability in sociosexuality. Under these conditions, cues to women's sociosexual orientation were displayed and readily perceived.

Compared with restricted women, unrestricted women did not report finding the confederate more attractive. This suggests that perceivers were not necessarily picking up on unrestricted women being more attracted to the confederate than restricted women were. One possible interpretation is that unrestricted women and restricted women have a different threshold above which they are willing to express their interest in a potential mate. That is, perhaps unrestricted and restricted women were equally attracted to their partner, but unrestricted women were more willing to openly communicate that interest. Another possible interpretation is that restricted vs. unrestricted women were displaying different types of interest — interest in casual sex on the part of unrestricted women, compared to interest in a deeper relationship on the part of restricted women — and that these differences are observable to perceivers.

The findings of the current study fit with other recent evidence suggesting that perceivers may be able to discern women's and men's sociosexual orientation based simply on facial photographs (Boothroyd, Jones, Burt, DeBruine, & Perrett, 2008). The current research builds on this previous research, in part by identifying the role specific behavioral and contextual cues may play in this process. Indeed, the current work provides evidence for the specific cues perceivers used (and misused) in judging a woman's sociosexuality. Frequent eyebrow flashes, frequent glances and paying less attention to the assigned task (and presumably more to the partner) provided valid indicators of sociosexual orientation, and these cues were apparently detected and used by observers. These findings fit with the courtship literature in that these behaviors have been observed in mating-related social interactions and often reflect romantic attraction.

In contrast, some cues were used by perceivers to judge women's sociosexual orientation, but these cues were not, in fact, related to female sociosexuality. Women who laughed frequently, sat close to her partner, dressed more provocatively and were physically attractive were perceived as being more sexually unrestricted, when in fact they were not. It is possible that some of these "misleading" cues could serve as reliable indicators of sociosexuality under other circumstances (e.g., when verbal exchanges are permitted). For instance, although no relationship between laughter and actual SOI was observed in the current research, previous research has demonstrated that women sometimes use laughter to signal sexual interest (Grammer, 1990; see also Bressler, Martin, & Balshine, 2006).

The null findings for physical attractiveness fit with previous evidence that men sometimes incorrectly "see" sexual interest displayed by women who are highly attractive (Maner et al., 2005). This is consistent with error management theory (EMT; Haselton & Buss, 2000): attractive women are highly desirable to men because attractiveness can signal health and level of fertility (e.g., Buss & Schmitt, 1993; Kenrick & Keefe, 1992), and therefore men may be inclined to overestimate the level of sexual interest displayed by those women because this might increase perceptions of availability, thereby leading men to initiate courtship. Indeed, also consistent with EMT, male perceivers tended to see women as more unrestricted than female perceivers did, which, again, could facilitate the initiation of sexual courtship.

In addition to valid cues and misleading cues, some cues were unrelated to both actual and perceived sociosexuality. Frequency of physical touching, making hand gestures and touching one's hair did not signal female sociosexual orientation, and perceivers were not inclined to use these cues in their judgments. Canting one's head and sitting in an open posture correlated modestly with actual sociosexuality in the current study (which is consistent with Simpson et al., 1993), but these cues failed to reach statistical significance. One limitation of the current study is that we have not

exhausted the range of possible cues that might signal a woman's sociosexual orientation (see Grammer, Kruck, Juette, & Fink, 2000), nor have we exhausted the range of social situations in which the perception of other people takes place. Future research would benefit from examining a broader range of behavioral and physical cues, as well as a wider range of specific social contexts.

Study 2 began to discern the characteristics that might lead perceivers to be especially adept at accurately detecting female sociosexual orientation. Contrary to our expectation, perceiver sociosexuality was unrelated to accuracy, suggesting that courtship experience does not necessarily translate to accurate judgments. However, consistent with our prediction, there was a marginally significant trend such that men and women displaying high chronic levels of jealousy were better able to detect female sociosexuality. This fits with evidence that jealousy promotes vigilance to individuals (both potential mates and rivals) who might threaten one's own reproductive success with acts of infidelity (e.g., Maner et al., 2007).

An important limitation to the current research pertains to the potentially multidimensional nature of sociosexuality. There is emerging evidence that instead of being bipolar, sociosexual orientation may be bidimensional, with individuals varying independently on their proclivity toward short-term and long-term mating (e.g., Jackson & Kirkpatrick, 2007). Given that the sociosexuality scale used in this research focuses primarily on one's willingness to engage in short-term mating, the results of the studies are perhaps best thought of as revealing accurate perceptions of unrestricted sociosexuality. Additional research is needed to evaluate whether people can accurately judge people's tendency toward engaging in committed, long-term romantic relationships.

Haselton and Funder (2006) have argued that the ability to form accurate impressions of others would have helped ancestral humans deal effectively with navigating social challenges such as establishing cooperative alliances for hunting and protection, managing social exchanges, and (perhaps especially) mate selection and mate guarding. They proposed that selection pressures would lead to "finely honed adaptations for forming social judgments and making social decisions that are, at the very least, good enough to promote survival and reproduction" (p. 3). The current work suggests that the ability to identify female sociosexuality is, indeed, finely honed.

References

- Albright, L., Kenny, D. A., & Malloy, T. E. (1988). Consensus in personality judgments at zero acquaintance. *Journal of Personality and Social Psychology*, 55, 387–395.
- Ambady, N., Bernieri, F. J., & Richeson, J. A. (2000). Toward a histology of social behavior: Judgmental accuracy from thin slices of the behavioral stream. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol 32. (pp. 201–271). San Diego, CA: Academic Press.
- Ambady, N., & Rosenthal, R. (1992). Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis. *Psychological Bulletin*, 111, 256–274.

- Boothroyd, L. G., Jones, B. C., Burt, D. M., DeBruine, L. M., & Perrett, D. I. (2008). Facial correlates of sociosexuality. *Evolution and Human Behavior*, 29, 211–218.
- Bressler, E. R., Martin, R. A., & Balshine, S. (2006). Production and appreciation of humor as sexually selected traits. *Evolution and Human Behavior*, 27, 121–130.
- Buss, D. M., & Schmitt, D. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204–232.
- Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13, 653–665.
- Eibl-Eibesfeldt, I. (1975). *Ethology: The biology of behavior*. New York: Holt, Rinehardt & Winston.
- Funder, D. C. (1987). Errors and mistakes: Evaluating the accuracy of social judgment. *Psychological Bulletin*, 101(1), 75–90.
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review*, 102, 652–670.
- Funder, D. C. (1999). *Personality judgment: A realistic approach to person perception*. San Diego, CA, US: Academic Press, Inc.
- Gangestad, S. W., & Simpson, J. A. (1990). Toward an evolutionary history of female sociosexual variation. *Journal of Personality*, 58, 69–96.
- Gangestad, S. W., Simpson, J. A., DiGeronimo, K., & Biek, M. (1992). Differential accuracy in person perception across traits: Examination of a functional hypothesis. *Journal of Personality & Social Psychology*, 62, 688–698.
- Givens, G. (1978). The non-verbal basis of attraction: Flirtation, courtship and seduction. *Psychiatry*, 41, 346–351.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528.
- Grammer, K. (1990). Strangers meet: Laughter and non-verbal signs of interest in opposite sex encounters. *Journal of Non-verbal Behavior*, 14, 209–236.
- Grammer, K., Kruck, K. B., Juette, A., & Fink, B. (2000). Non-verbal behavior as courtship signals: The role of control and choice in selecting partners. *Evolution and Human Behavior*, 21, 371–390.
- Haselton, M. G., & Buss, D. M. (2000). Error management theory: A new perspective on biases in cross-sex mind reading. *Journal of Personality and Social Psychology*, 78, 81–91.
- Haselton, M. G., & Funder, D. (2006). The evolution of accuracy and bias in social judgment. In M. Schaller, D. T. Kenrick, & J. A. Simpson (Eds.), *Evolution and social psychology* (pp. 15–37). New York: Psychology Press.
- Jackson, J. J., & Kirkpatrick, L. A. (2007). The structure and measurement of human mating strategies: Toward a multidimensional model of sociosexuality. *Evolution and Human Behavior*, 28, 382–391.
- Kenrick, D. T., & Keefe, R. C. (1992). Age preferences in mates reflect sex differences in reproductive strategies. *Behavioral and Brain Sciences*, 15, 75–133.
- Luo, S., & Klohnen, E. C. (2005). Assortative mating and marital quality in newlyweds: A couple-centered approach. *Journal of Personality and Social Psychology*, 88, 304–326.
- Maner, J. K., Kenrick, D. T., Neuberg, S. L., Becker, D. V., Robertson, T., Hofer, B., Delton, A., Butner, J., & Schaller, M. (2005). Functional projection: How fundamental social motives can bias interpersonal perception. *Journal of Personality and Social Psychology*, 88, 63–78.
- Maner, J. K., Gailliot, M. T., & DeWall, C. N. (2007). Adaptive attentional attunement: Evidence for mating-related perceptual bias. *Evolution and Human Behavior*, 28, 28–36.
- Maner, J. K., Gailliot, M. T., Rouby, D. A., & Miller, S. L. (2007). Can't take my eyes off you: Attentional adhesion to mates and rivals. *Journal of Personality and Social Psychology*, 93, 389–401.
- Moore, M. M. (1985). Non-verbal courtship patterns in women: Context and consequences. *Ethology and Sociobiology*, 6, 237–247.
- Oliver, M. B., & Hyde, J. S. (1996). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114, 29–51.
- Ostovich, J. M., & Sabini, J. (2004). How are sociosexuality, sex drive, and lifetime number of sexual partners related? *Personality and Social Psychology Bulletin*, 30, 1255–1266.
- Pfeiffer, S. M., & Wong, P. T. P. (1989). Multidimensional jealousy. *Journal of Social and Personal Relationships*, 6, 181–196.
- Schmitt, D. P. (2003). Universal sex differences in the desire for sexual variety: Tests from 52 nations, 6 continents, and 13 islands. *Journal of Personality and Social Psychology*, 85, 85–104.
- Schmitt, D. P. (2004). Patterns and universals of mate poaching across 53 nations: The effects of sex, culture and personality on romantically attracting another person's partner. *Journal of Personality and Social Psychology*, 86, 560–584.
- Schmitt, D. P. (2005). Sociosexuality from Argentina to Zimbabwe: A 48-nation study of sex, culture, and strategies of human mating. *Behavioral and Brain Sciences*, 28, 247–311.
- Schmitt, D. P., Shackelford, T. K., & Buss, D. M. (2001). Are men really more "oriented" toward short-term mating than women? A critical review of research and theory. *Psychology, Evolution and Gender*, 3, 211–239.
- Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, 60, 870–883.
- Simpson, J. A., Gangestad, S. W., & Biek, M. (1993). Personality and nonverbal social behavior: An ethological perspective of relationship initiation. *Journal of Experimental Social Psychology*, 29, 434–461.
- Simpson, J. A., Gangestad, S. W., Christensen, P. N., & Leck, K. (1999). Fluctuating asymmetry, sociosexuality, and intrasexual competitive tactics. *Journal of Personality & Social Psychology*, 76, 159–172.
- Trivers, R. L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual Selection and the Descent of Man* (pp. 136–179). Chicago: Aldine-Atherton.
- Verplaeste, J., Vanneste, S., & Braeckman, J. (2007). You can judge a book by its cover: The sequel. A kernel of truth in predictive cheating detection. *Evolution and Human Behavior*, 28, 260–271.