

# SEX-DIFFERENCES IN PREFERENCE FOR LOOKING AT THE FACE OR BODY IN SHORT-TERM AND LONG-TERM MATING CONTEXTS

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**Abstract.** Previous research has demonstrated that while women prefer to look at the face of men regardless of relationship context, men preferentially look at women's bodies for short-term (over long-term) relationship judgments. The current study examined how self-rated mate value and 'mating intelligence' correlate with the subjective importance of information from the face or body. In addition, given the apparent sex differences in these judgments, we investigated whether either sex is aware of how the opposite-sex prioritizes this. Participants were 266 undergraduate students/volunteers who completed an online survey, measuring preferences for information from the face or body in short-term or long-term contexts, and a range of self-rated mate value measures. Information from the body was more important in short-term contexts for men (but not women), and correlated positively with mating strategy measures. While both sexes overestimated the opposite-sex's preference for looking at the body, women accurately perceived men's differential investment in face or body across contexts, whereas men assumed that women make decisions similarly to themselves. Women might benefit more than men from awareness of opposite-sex preferences as this could afford the enhancement or reduction of cues to sexual availability.

**Keywords:** cross-sex, mating, attractiveness, Evolutionary Psychology

## INTRODUCTION

### Attention allocation between the sexes

In humans, both sexes make mate-choice decisions that rely on multiple physical cues of different components of mate quality. In some cases, the same physical region might provide signals relating to different components of mate quality. Masculinity and femininity in faces, for example, can provide cues relating to investment potential (Gangestad & Simpson, 2000) and immunocompetence (Boothroyd et al., 2013; although see also Scott et al. 2013 for an

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example of alternative viewpoints on this argument) and competitive advantage (Li et al., 2014) for males, and fertility (Rhodes et al., 2005) for females. Other cues, such as symmetry (thought to be an indicator of genetic resistance to developmental stressors, Gangestad et al., 1994), are simultaneously displayed by both the face and body (Pfluger et al., 2012). Importantly, some cues are likely to be more readily perceived, or more strongly signaled, from one region compared to another. Kramer et al. (2012) showed that people more accurately judge physical health from women's bodies, but more accurately estimate agreeableness (which relates to parental care investment, Bradley et al., 1997) from women's faces.

Women's faces signal developmental quality, pathogen resistance, and phenotype quality (e.g. Grammer & Thornhill, 1994) and are thus important in signaling both fertility (short-term reproductive potential) and fecundity (long-term). Indeed, moderate correlations are evident between men's attractiveness ratings of women's faces and bodies (for example, see Thornhill & Grammer, 1999). However, men show a consistent difference in their preference for looking at women's faces or bodies depending on whether they are making short-term or long-term judgments, with their preference for bodies increasing for short-term judgments (e.g. Confer et al., 2010; Jing Lu & Chang, 2012). Proximity to ovulation increases the subjective attractiveness of women's dance (Fink et al., 2012) and gait (Guéguen, 2012); the symmetry of soft tissues such as breasts (Scutt & Manning, 1996); and is associated with wearing more revealing clothing (Durante et al., 2008; Saad & Stenstrom, 2012). Additionally, the waist-to-hip ratio, a signal of fertility when low, increases during pregnancy (Rebuff-Scrive et al., 1987). While ovulation may also be perceived from changes in facial skin-tone (van den Berghe & Frost, 1986) and attractiveness (Roberts et al., 2004), these changes are subtle and may be more easily obscured (with cosmetics, for example). Changes in bodily movement, symmetry and dress, therefore, might offer a more readily perceptible cue to current fertility than the face.

Sex differences in minimal parental investment (see Trivers, 1972) mean that men, more than women, may benefit from copulation with a large number of partners and, as a result, are typically more willing than women to engage in casual sexual encounters. For men pursuing such a strategy (Buss & Schmitt, 1993), the readily perceptible cues of cyclical fertility in the female body may offer more reliable signals of current fertility and intention than those in the female face. For men pursuing a long-term mating strategy, however, the long-term fecundity cues present in a woman's face may be of more importance.

Women on the other hand, gain maximally by increasing the quality, rather than quantity of sexual partners, whether they are pursuing a long-term or a short-term sexual relationship. This, coupled with the fact that male receptivity

does not change cyclically, may lead women to exhibit a less changeable preference for the male face or body, respectively, when making judgments about long- and short-term relationships. This is especially likely to be true given the apparent redundancy of mate quality cues seen in men's faces and bodies. There are high correlations in ratings of attractiveness between males' face, body, vocal pitch, and scent (see for example Feinberg et al., 2008; Fink et al., 2010) and high correlations between facial attractiveness and grip strength, and high shoulder to hip ratios (Shoup & Gallup, 2008). While women have been shown to prefer increased masculinity when judging men for a short-term versus a long-term relationship, they prefer this increase in masculinity similarly across both the face and body (see Little et al., 2011). Given that women desire qualities in both long-term partners, such as ability to acquire resources, and short-term partners, such as immediate acquisition of resources and physical protection (Buss, 2006), which are readily observed from both the face and body (Little et al., 2011), we should expect little difference in women's preference for the face or body when prompted for either long-term or short-term relationship contexts.

The differential distribution of cues of mate quality across faces and bodies is thought to be responsible for effects of sex (both observer and observed) and relationship-context on the relative importance of faces and bodies when making hypothetical mating judgments. For example, Confer et al. (2010) demonstrated that men making short-term relationship judgments (where immediate fertility is most important) exhibit a stronger preference to see the body of a female rather than her face (when given a mutually exclusive choice), than when making long-term relationship judgments, where long-term fecundity is more important. There was no such effect of relationship type on women's preferences for the male face or body. Similarly, Jing, Lu and Chang (2012) showed that men spend more time looking at the waist/hip area than the face, when prompted for a short-term relationship, with equal time allocation to these areas following a long-term relationship prompt. Again, women were unaffected by long- or short-term context. Currie and Little (2009) found that ratings of facial attractiveness, when faces are presented independently of the body, are better predictors of overall attractiveness of simultaneous face/body presentation than attractiveness ratings of the body presented independently. Critically, this effect was stronger in long-term rating conditions than short-term conditions for men's ratings of female bodies, but not for women's ratings of male bodies.

## Contextual factors influencing allocation of attention

A variety of environmental and life history factors influence mating strategies, and so might also predict the extent to which a man would rely on female facial or bodily cues of attractiveness. Confer et al. (2010) demonstrated a positive correlation between men's socio-sexual orientation (positive attitudes, desires and behaviour toward casual sex, SOI-R: Penke & Asendorpf 2008) and rated priority of information from women's bodies. Other measures that, similarly to the SOI-R, are influenced by the extent to which men are pre-disposed to pursue a short-term strategy, should also predict the extent to which men preferentially rely on female bodily cues. Two such measures are the MI (Mating Intelligence Scale, Geher & Kaufman, 2007) and the MVI-S (self-rated Mate Value Inventory, Kirsner et al., 2003).

"Mating Intelligence", the set of cognitive constructs related to navigating mating interactions (Geher & Kaufman, 2007), while initially proposed as a 'fun' scale for a popular psychology magazine, has since been shown to predict 'hook-up' behaviour in college students (O'Brien et al., 2010): women with high MI have more hook-ups with potentially higher quality men (men who would be good candidates for long-term relationships), and men with high MI have more hook-ups overall. These findings also suggest that MI should correlate positively with the SOI-R scale. According to the scale's authors, though, MI is less a measure of individual character, and more a measure of relationship 'effectiveness' (see Geher & Kaufman, 2012, pp. 217–231). Our reading of the scale's items (and its behavioural correlates) suggests it may be even better characterized as a measure of short-term mating confidence. Since a short-term mating strategy for men is characterized by pursuing more instances of intercourse, with emphasis on the body when judging short-term female mate value, we expect MI to positively predict male preference for information from the female body. Additionally, given the MI scale has only been used in a limited number of previous studies, we also sought to further investigate its construct validity, via its relationship to other scales more commonly used in mating research.

Self-rated mate value (MVI-S) is correlated with an individual's preference for symmetry and dimorphism in a potential partner (Little et al., 2001), and increases in self-perceived mate value precede increases in men's preference for casual sexual encounters (Surbey & Brice, 2007). In addition, men who are aware of their own mate-value are typically more oriented toward a short-term mating strategy (Back et al., 2011), thus allowing men who are sexually competitive (in the mating market) to be more successful in employing a short-term (and long-term, for that matter) mating strategy. Women seeking extra-pair short-term partners typically seek high quality males for such encounters (Greil-

ing & Buss, 2000), suggesting that such men would be more successful than low quality males at pursuing a short-term mating strategy. We predict that MVI-S scores, therefore, should also positively correlate with men's preference for female bodies.

### **Cross-sex awareness of cue preferences**

Women often compete for access to men through changes in their appearance (e.g. Campbell, 2004; Goetz et al., 2013), while men compete through either feigning or drawing attention to their commitment and ability to secure resources (e.g. Tooke & Camire, 1991; Walters & Crawford, 1994). For example, manipulations of men's monetary status (with cars and apartments) will affect women's ratings of attractiveness, but manipulation of women's status has no effect on men's ratings of attractiveness (Dunn & Hill, 2014; Dunn & Searle, 2009). Indeed, men self-report tactical motives for giving gifts (such as displaying financial resources and creating a good impression) more frequently than women (Saad & Gill, 2003). When asked about opposite-sex use of tactical motives, women report men as using these gift-giving tactics more frequently than themselves, whereas men believed both sexes used these tactics with similar frequency.

Awareness of men's preferential reliance on face or body cues would allow women to differentially enhance (or reduce) cues to their own fertility status (and intentions) dependent on their own mating goals and the perceived intentions of the man. On the other hand, as men's mating tactics less often involve enhancement of attractiveness, and women seek qualities which are readily observed from both the face and body of men regardless of context, it is less likely that men have experienced selection pressure to be aware of where women will allocate attention when required to make a mating decision. We might therefore predict that women will more accurately predict the face or body preferences of men, than men will of women, and thus that women will accurately predict greater male preference for the body in short-term, compared to long-term, scenarios.

### **Current study**

Previously, Confer et al. (2010) presented participants with a figure occluded by two boxes, a face box and a body box, and asked participants to remove one of the boxes in order to make a decision about whether the occluded person would be suitable as a short-term or long-term partner. They also asked participants to what extent the face or the body was important in making these decisions, corre-

lating these measures with SOI-R. In the current study, we employed Confer et al.'s. (2010) basic design, asking participants whether they wished to remove a 'head box' or 'body box' covering a potential mate to assist in a long-term or short-term mate choice decision. In addition to this, however, we also investigated how other mate-value factors (MVI-S and MI) influenced this decision. Participants not only made the face/body judgment for themselves, but also indicated how they thought an opposite sex participant would respond in a similar scenario, allowing us to examine the extent to which individuals are aware of opposite-sex preferences for looking at the body or the face of potential mates. In line with Confer et al. (2010), we predicted that men, but not women, would exhibit a stronger preference to view the body when prompted with a short-term, rather than a long-term mating scenario. We also predicted that SOI-R, MI, and MVI-S would positively correlate with preferences for the body in men, but not women. Lastly, we predicted that women would be more accurate than men at predicting opposite-sex preference for the face or body.

## MATERIALS AND METHODS

### Participants

Participants who indicated they were not heterosexual ( $N = 24$ ), or who indicated they were pregnant ( $N = 2$ ), were excluded from analysis. The remaining participants consisted of a convenience sample of students undertaking an introductory Psychology course from an Australian University, and volunteers who were registered as part of an online experimental management system; comprising 65 males, age 18–34 years (mean = 21.8,  $SD = 3.6$ ) and 191 females, aged 18–36 years (mean = 21.2,  $SD = 3.1$ ). All gave informed consent under the University's Human Research Ethics Committee Approval number: H-2009-0312.

### Materials and procedure

Participants first provided information about age, sex, and sexual orientation (Kinsey Sexual Orientation Scale; Kinsey et al., 1948), and then were provided with a stick figure diagram divided into two sections, a face box and a body box, beneath which was a figure of the opposite-sex (see *Figure 1*). The occluded figures consisted of stock photos of two clothed individuals, one man and one woman, that were obtained through an Internet search, and the boxes were created using a stick figure on an ivory background. Participants were asked to imagine they were single and then judge the occluded figure as suitable

for either a short-term (one-night stand/affair), or long-term (eventually move in with or marry) relationship, manipulated between-subjects.

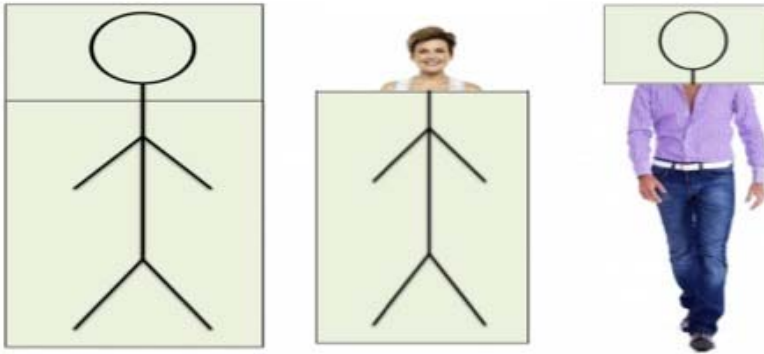


Figure 1. Demonstration of box choice, from left to right: complete box, female face revealed, male body revealed

To help guide their decision they could choose to look at either the person's face or body. For continuity, once participants made their choice they were shown either the face or the body of the occluded figure (as shown in *Figure 1*). Participants then made a similar judgment based on what an imagined person of the opposite-sex would do in a scenario in which they were also judging a potential mate (with the same allocation to either a short-term or long-term context). After both trials, participants were asked to rate how they prioritized information about which box to remove, on a scale from 1 (face much more important) to 7 (body much more important). Lastly participants completed the SOI-R (Penke & Asendorpf, 2008), MVI-S (Kirsner et al., 2003), and MI (Geher & Kaufman, 2007).

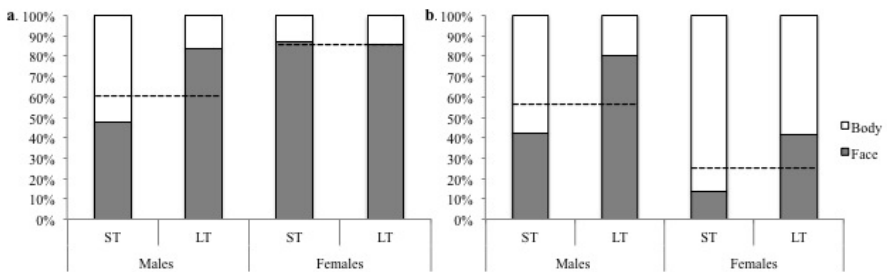
The MVI-S consists of 17 traits, such as "healthy", "intelligent" and "attractive body" that participants are asked to rate themselves on, with a scale from 1 (extremely low on this trait) to 7 (extremely high on this trait). Scores are summed, with higher scores reflecting higher self-rated mate value. The MI consists of 24 items, with separate scales for men and women. Participants respond true or false to items such as "I look younger than most women my age", and "At parties, I tend to tell stories that catch the attention of women". Answers to questions that are negatively worded are reverse scored (see Geher & Kaufman, 2007 for scoring instructions), and the scores are summed. Higher scores reflect higher 'mating intelligence'.

## RESULTS

Data were analysed using SPSS v21 for Mac.

### Sex differences in box choice

We predicted that a higher proportion of men, but not women, would prefer to look at the body in the short-term condition than the long-term condition. To test this, we conducted a  $\chi^2$  cross-tabulation within each sex to examine the effect of mating context on box choice. As predicted, men exhibited a significant association between mating context and cue preference,  $\chi^2_1 (N = 65) = 8.66$ ,  $p = .004$ , with below chance removal of the body box in the long-term condition (16%) but not in the short-term condition (52.5%). Also as predicted, context had no effect on women's choice of face or body box  $\chi^2_1 (N = 191) = .128$ ,  $p = .832$  (see *Figure 2*). Women did exhibit an overall binomial preference for removal of the face box (86.4%,  $N = 191$ ,  $p < .0005$ ).



*Figure 2.* Frequency distribution of body or face box choice for self (a) or cross-sex (b) mating decisions in short-term or long-term context for male and female participants. Average frequency of box choice collapsed across ST or LT condition indicated by dashed lines

### Sex differences in importance of information from body versus face

We also predicted that, similarly to box choice, men, but not women, would indicate an increased preference for information from the body in the short-term than long-term relationship context. A 2×2 factorial ANOVA, with participant sex and relationship context (short-term or long-term) as factors, and priority of information from the body as the outcome, revealed significant main effects of sex ( $F_{1,251} = 17.49$ ,  $p < .0005$ ,  $\eta_p^2 = .065$ ), and relationship context ( $F_{1,251} = 8.10$ ,  $p = .005$ ,  $\eta_p^2 = .031$ ) and a significant sex-by-relationship context interaction



( $F_{1,251} = 5.95, p = .015, \eta_p^2 = .023$ ). Simple effects contrasts confirmed that the difference between short-term and long-term ratings was significant for men, ( $F_{1,251} = 9.30, p = .01, \eta_p^2 = .036$ ), but not for women ( $F_{1,251} = 0.166, p = .684, \eta_p^2 = .001$ ). Additionally, men rated information from the body as significantly more important ( $F_{1,251} = 27.76, p < .0005, \eta_p^2 = .100$ ) than did women in the short-term condition only, with no difference ( $F_{1,251} = 1.25, p = .264, \eta_p^2 = .005$ ) between men's and women's mean scores in the long-term condition (see *Figure 3*), men's priority as rated by men, and women's priority as rated by women. (A previous  $2 \times 2 \times 2$  ANOVA with current relationship status as the third factor revealed no effect of being partnered or single, and so relationship status was dropped from the analysis.)

### Correlations between body priority ratings and SOI-R, MI, and MVI-S

The MVI-S and SOI-R scales had good internal reliability (MVI-S Chronbach's  $\alpha = .83$ , SOI-R Chronbach's  $\alpha = .85$ ). Not all participants completed all scales. *Table 1* indicates the sample size and outcomes for all correlations, including confidence intervals. As predicted, men's priority ratings for the body box positively correlated with their total SOI-R, MVI-S and MI scores. For women, only total SOI-R was positively correlated with body box priority ratings. Additionally, the MVI-S was positively correlated with both the MI and SOI-R in males and females; and, for males only the MI was positively correlated with the SOI-R (correlations shown in *Table 1*).

*Table 1.* Correlations between importance of information assigned to body, and mate value and sociosexual orientation measures for male and female participants

	Female			Male		
	MVI-S	MI	SOI-R Total	MVI-S	MI	SOI-R Total
r						
Body Importance	-0.116	0.026	0.164*	0.244*	0.332*	0.367**
MVI-S	---	0.247**	0.208**	---	0.537***	0.424***
MI	---	---	-0.133	---	---	0.285*
N						
Body Importance	188	188	185	65	50	64
MVI-S	---	188	184	---	50	64
MI	---	---	184	---	---	49
CI (95%)						
Body Importance	-0.25, 0.03	-0.12, 0.17	0.02, 0.30	0.00, 0.46	0.06, 0.56	0.13, 0.56
MVI-S	---	0.11, 0.38	0.07, 0.34	---	0.30, 0.71	0.20, 0.61
MI	---	---	-0.27, 0.01	---	---	0.00, 0.52

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

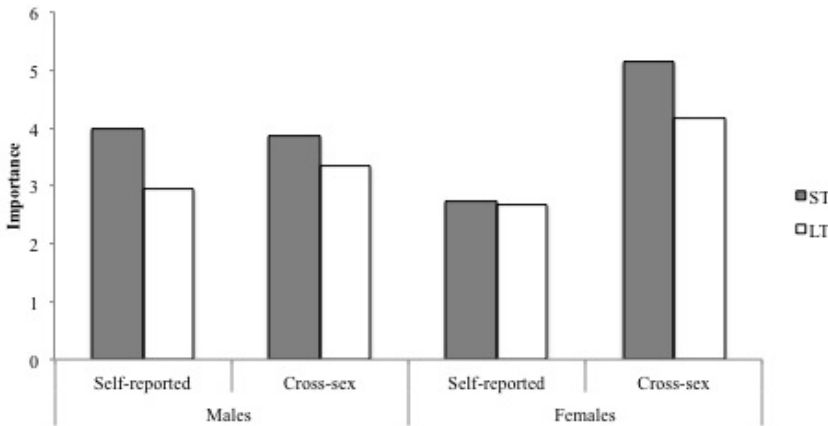
We also performed a linear regression analysis, with body importance ratings as the outcome, and SOI-R, MVI-S and MI entered in one step as predictors. We found that a significant model emerged only for men ( $R^2_{\text{adj}} = .16$ ,  $F_{3,48} = 4.00$ ,  $p = .013$ ), with only SOI-R as a significant unique predictor,  $\beta = .312$ ,  $t_{48} = 2.12$ ,  $p = .040$ ; the same model was not significant for female participants ( $R^2_{\text{adj}} = .02$ ,  $F_{3,181} = 2.39$ ,  $p = .070$ ).

### Opposite-sex awareness of face/body preferences

We performed a  $\chi^2$  cross-tabulation within each sex in order to determine the effect of context on perceptions of opposite-sex box choice (see *Table 3*). In line with the hypothesis, men believed women would choose the body significantly less frequently than chance in the long-term condition (20.0%) and significantly more frequently in the short-term condition (57.5%),  $\chi^2_1$ , ( $N = 65$ ) = 8.823,  $p = .004$ , with overall preference for the face or body at chance levels. Women displayed an overall binomial preference for body box removal (74.3%,  $N = 191$ ,  $p < .0001$ ), and believed men would choose the body box significantly less frequently than average in the long-term condition (58.5%), and significantly more frequently in the short-term condition (86.2%),  $\chi^2_1(N = 191) = 18.828$ ,  $p < .0005$ , as demonstrated in *Figure 2*.

One way of looking at participant ratings of how the opposite-sex would allocate attention is to determine how ‘accurate’ these perceptions are, that is, how they compare to how the opposite-sex have rated importance of the face or body in the context of making a judgment for themselves? In order to explore this, we performed a 2×2 between-subjects ANOVA, with sex of participant and condition (short-term or long-term) as independent variables and ratings of importance of bodily information (for female stimuli vs. male stimuli) as dependent variables. That is to say, we were able to compare ratings of one type of stimulus (for example, female stimuli), between men (when they were making a decision for themselves) and women (when they were making a judgment about what men would do). We predicted that women would be more ‘accurate’ than men at predicting differences in priority of information from the body between the two conditions. For choices made about male stimuli (female self-choice vs. male opposite-sex choice), a main effect of sex was revealed, with men significantly overestimating women’s importance assigned to the body,  $F_{1,251} = 19.08$ ,  $p < .0005$ ,  $\eta_p^2 = .071$ . There was no main effect of condition and no interaction, indicating that men did not under- or over-estimate women’s preference for bodily information in either condition. Similarly, for female stimuli (male self-choice vs. female opposite-sex choice), women also significantly overestimated men’s body importance,  $F_{1,252} = 23.76$ ,  $p < .0005$ ,  $\eta_p^2 = .086$ , with contrasts re-

vealing overestimation in both the short-term and long-term condition. In addition, there was also a main effect of condition, with both sexes voting male priority as significantly higher in the short-term than long-term condition,  $F_{1,252} = 17.77, p < .0005, \eta_p^2 = .066$  (see *Figure 3*), indicating that women accurately estimated men's higher preference for bodily information in the short-term than long-term condition.



*Figure 3.* Ratings of importance of information obtained from the face or body (higher scores indicate preference for body), for male and female ratings, self-reported versus beliefs about cross-sex importance, in either short-term or long-term mating conditions

In order to determine the extent to which women and men judged opposite-sex allocation based on their own preferences, we performed a paired-samples *t*-test on the preference for body for self- versus predicted opposite-sex ratings, for each sex. Women's ratings for men's priority was significantly higher than their own priority ratings,  $t_{189} = -14.41, p < .0005$ , whilst men's ratings for women's priority were no different from their own priority ratings,  $t_{64} = -.29, p = .770$ .

## DISCUSSION

As previous research has shown, men show an increase in their preference for looking at the body of women, rather than the face, when prompted for a short-term relationship judgment over a long-term relationship, whereas women do not show this difference and generally prefer to look at the face. In this study, we aimed to replicate this trend, and to also determine to what extent self-rated

mate value factors are correlated with this decision, given that mate-value and mating-intelligence are factors which predict men's willingness to pursue a short-term relationship strategy (and might therefore be more willing to prefer the body over the face of female stimuli). In addition, given that men and women might have different selection pressures to be aware of opposite-sex preferences for looking at the face or body of potential partners, we investigated how accurate individuals of both sexes were in this judgment.

In accordance with our hypothesis, and previous research, a higher proportion of men chose to look at the body box in the short-term than long-term condition, whereas women did not show this trend, preferring to look at the face, regardless of condition. Similar findings were observed regarding men's and women's ratings of the importance of the body to making their decisions. We hypothesized that these ratings would positively correlate with increased self-rated mate value in men but less so in women. We found this to be the case, with positive correlations between men's ratings of the importance of the body in making a mating relevant decision, and their scores on the MVI-S, MI, and SOI-R total score (although only the SOI-R predicted unique variance in body importance scores). Women, too, showed a weak positive correlation between their total SOI-R score and their ratings of the importance of information from the body of male stimuli, but body importance scores did not correlate with MI or MVI-S in women. Overall, however, the mean rating for importance of bodily information for men was still substantially higher than for women. As discussed previously, this correlation between mate-value and mating intelligence factors, with men's importance of using bodily information to make a mating decision is likely due to men's increased pursuit of a short-term mating strategy when confident of their own ability to secure a variety of mates. Given the differential signaling of short-term and long-term suitability from women's bodies and faces, this results in men with higher confidence to pursue a short-term partnership being more likely to devote attention to women's bodies.

Given the potential difference in selection pressures for being aware of opposite-sex preferences, and the evidence demonstrating women are aware of men's frequency of use of tactical gift giving (Saad & Gill, 2003), we hypothesized that women would be more accurate in their prediction of men's preferences than men would be in their prediction of women's preferences. We demonstrated that while both sexes overestimated the importance the opposite-sex will place on information from the body, women still accurately judged that men would find the body relatively more important in short-term than long-term relationship contexts, which differed significantly to women's own pattern of short-term/long-term decisions. On the other hand, men's judgment of opposite-sex choice more closely resembled their own decisions, as they believed women would also find the body to be more important for a short-term mating decision.

According to Error Management Theory (Haselton & Buss, 2000) women tend to underestimate men's commitment, thereby minimizing the cost of being deceived as to male intentions, while men tend to overestimate female sexual intention, as the cost to them of missing a mating opportunity is greater than that of misjudged interest. This may be especially true in scenarios in which women's mating intentions are not readily apparent. Thus both men and women overestimate opposite-sex short-term relationship orientation (see also Perilloux et al., 2012). In the current study, men also overestimated women's willingness to choose to look at the body of male stimuli. This may be explained if we consider that men assume that women make mating decisions based on the same cues as they do. Combined with a tendency to overestimate female interest in short-term mating, this would lead to an overestimate of how often women would choose to examine the male body.

Women, too, overestimated men's willingness to look at the body of the female stimuli. However, they were more accurate in their perception of men's increased willingness to look at the body in a short-term relationship context, and overall estimated men's preferences differently to their own, whereas men showed no difference between the decisions made for themselves and those made for the opposite-sex. Overall, women exhibit greater empathy and are more flexible in both their perspective taking (Baron-Cohen & Wheelwright, 2004) and their sexual orientation (Baumeister, 2000; Kinnish et al., 2005) than are men. These sex differences may help explain why women in the current study were better able to indicate opposite-sex preferences that were different to their own, while men assumed that women made similar decisions to themselves.

In addition to replicating the increased preference for the body in a short-term relationship context for men but not women, first demonstrated by Confer et al., (2010), we have also demonstrated a sex difference in perspective taking, suggesting that while men and women both overestimate the opposite-sex's interest in looking at the body of potential mates, women appear to be more accurate at judging men's shifting interests as a result of relationship context. Other variables may also contribute to changes in the relative importance of the face and body, and opposite-sex judgments of such preferences, such as the age of the participant, and the age of the imagined individual they are making this judgment for. A limitation of the current study is that we did not ask people to make a judgment about someone of a specific age, but just someone of the opposite-sex. Whether or not people's perceptions of what the opposite-sex would choose is based on perceived age remains to be seen.

Sensitivity to men's preferences potentially allows women to enhance (or reduce) cues to sexual availability or reproductive capacity as they see fit, dependent on their own mating strategies. An interesting question that arises from

this research is whether those women who were better able to predict men's preferences utilize this knowledge in some meaningful way. For example, previous research indicates that women's self-reported use of more 'sexy' clothing, and independent observer's judgments of 'effort put into appearance', increase during the fertile phase of the menstrual cycle (e.g. Haselton et al., 2007; Saad & Stenstrom, 2012). The exact reason for this is unclear, although it could be a means of attracting a short-term partner when more fertile and therefore more likely to conceive. If, as we are speculating, awareness of opposite-sex preferences allows greater control over how to use these cues to one's advantage in the mating game, it may be the case that women who are more aware take greater advantage of this information. They may (consciously or unconsciously) alter their own appearance and dress more markedly across the menstrual cycle.

In conclusion, sex differences in men's and women's willingness to allocate attention to the face or body of a potential sexual mate in a binary choice task are dependent on their own rated mate-value and their sociosexual orientation, as well as the relationship context of the judgment. Such preferences likely reflect adaptive motivations for seeking the most informative cues for the individual generally, as well as for the specific context of the judgment at hand. Similarly, sex differences in judgments of opposite-sex preferences in the same binary choice task may reflect evolutionarily-driven motivations to weigh the costs and benefits of over- or under-estimating the sexual motivations of members of the opposite sex.

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