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A night on the town: when the importance of mate acquisition overrides intrasexual competition

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Abstract: It is argued that, while men may be intrasexually more competitive than women, to attract potential mates, men will, more than women, associate with same-sex friends who are attractive to the opposite sex. Therefore, more than women, men will choose more physically attractive and dominant companions in a mating context than in a neutral context.
In Study 1 among 262 participants a mating scenario (going to a party) and a neutral scenario (seeing a movie) were developed, and it was shown that the mating scenario did indeed induce more a mating context than the neutral scenario. In Study 2 among 167 participants the hypotheses were tested by examining the preferences for a companion in both scenarios.
The findings from Study 2 supported the predictions. In response to the mating as compared to the neutral scenario, men, but not women, found the attractiveness of a companion more important, preferred a more socially dominant companion, and found the social dominance of a companion more important. Men as well as women preferred in general companions who were less attractive than themselves, but preferred a more attractive companion in a mating than in a neutral context. The effects for social dominance were in general more pronounced among individuals high in sociosexual orientation (SOI).
To conclude especially mens' attitude towards same sex others in a mating context may be driven by the desire to associate, rather than to compete, with same-sex others who are attractive to the opposite sex.

Key words: mate choice, mating, sex differences

Introduction

Since Darwin (1871) introduced the notion of sexual selection, it has been known that a variety of male characteristics may have developed as a result of competition with other males over the access to females. Parental investment theory (for a review, see Geary 2005), states that in most species, males have to make a much lower minimal investment to sire off-spring than females, and can

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theoretically sire many more children than females can. Unlike what is generally the case for females, for males each mating opportunity offers the potential to reproduce. Therefore, males will compete with other males to gain access to females, fighting for dominance over other males. Like their primate ancestors, human males also have been found to engage in competition with each other to increase their status and dominance relative to other men. Indeed, a recent experiment (Ainsworth and Maner, 2012) showed that a mating prime is sufficient to induce men's aggressive behavior towards a male competitor, with the aim to assert dominance. This competitive tendency among males is already manifest in childhood. From an early age on, compared to females, males engage more in physical and non-physical forms of competition, find it more important to win, and try harder to win when they can (for reviews, see Cummins 2005; Campbell 2002; Geary 1999). To ensure their own superiority over others, males will often prefer friends with lower status and attractiveness. Indeed, even in childhood, males, more than females, prefer friends who perform worse on important tasks (Tesser et al. 1984; see also Tesser 1988). Not surprisingly, males do not like the idea that their friend is superior to them, especially in a setting related to mating. For example, Bleske and Shackelford (2001) found that males experienced more upset in response to imagined rivalry from a friend than to that from a stranger

Nevertheless, there is another side to males' competitive nature. That is, males tend to have a stronger inclination than females to participate in groups with a clear hierarchical structure, i.e. groups in which issues of competition and dominance have been settled and moderated. This tendency is already visible in young boys, who are much more likely to form stable peer groups with a clear dominance hierarchy than girls (e.g., Campbell 2002; Geary et al. 2003). Among males intrasexual competition is to some extent dampened by the importance of collaborating with other men in groups. In line with this, Benenson et al. (2009) found that women tend to accept stresses and strains in their peer relationships less easily than men do. Among our closest relatives – the chimpansees – the tendency of males to form peer groups seems to have evolved at least in part because attacking and dominating other groups may give access to females (e.g., Gilby et al. 2013). As noted by Low (2000: 222) when reviewing the chimpanzee literature "… males in traveling groups may profit from attacking smaller groups when they encounter them and capturing females when they can". Like chimpanzees, humans in ancestral times lived in male bounded communities and tended to associate with other males in order to facilitate the acquisition of females (see e.g., Geary 1999; Goodall 1986; Wrangham and Peterson 1996, cf. the 'male warrior hypothesis' proposed by Van Vugt, De Cremer and Janssen 2007). For example, among the Yanomamö of Venezuela, males fight with males from other villages most often over women, and when they have a chance, they will abduct a woman from an enemy village (Chagnon 1988; 1977). In contrast, female reproductive success is not enhanced by acquiring as many mates as possible, but by selecting a male with the highest status and the best genes (e.g., Schmitt 2005). Therefore, there would be little reason to predict a tendency in women to engage in same-sex group bonding to

fight other groups and to conquer mates, and indeed, research indicates that women tend to value one-on-one contact with especially female kin more than spending time in large same-sex peer groups (e.g. Vigil 2007).

In line with the present analysis, men tend more than women to have agency expectations of same-sex friendships, i.e. consider what a friend can do for them (Hall 2010), or which socioeconomic needs a certain peer can satisfy (Benenson et al. 2008). Our reasoning implies that in a non-mating context among men competitive tendencies will prevail, and men are likely to prefer allies that are less attractive to the opposite sex than they are. However, in a mating context this preference could be reversed, and men may rather seek attractive and dominant others as allies to obtain access to women. Given the fact that in our ancestral past, women did not collaborate in groups to acquire mates, we predict that women will discriminate less than men between choosing a companion in a non-mating versus a mating context. Moreover, while women may in general resist the company of more attractive others, with respect to status and dominance they tend to be less competitive than men (Campbell, 2002; Geary 1999), and should therefore attach less importance to a companion's higher social dominance.

Social Sexual Orientation

The assumed male tendency to associate in mating contexts with attractive and dominant others to facilitate the acquisition of mates, will apply in particular to individuals with a strong tendency to engage in short-term mating, i.e., having casual sexual encounters. Individuals who are primarily interested in finding a long-term mate need just a single mate, and may even find typical mating contexts (such as a singles bar) somewhat aversive given the attached connotations of casual sex. Indeed, individuals differ in important ways in a preference for mates for short-term encounters. *Socio Sexual Orientation* (SOI) is a concept introduced by Simpson and Gangestad (1991) to refer to individual differences in permissive attitudes about casual sex. Individuals at one end of the continuum – those with a restricted orientation – need to feel emotionally close to a romantic partner before they are willing to have sex with them, have fewer partners, and rarely have casual sex with others. In contrast, individuals at the other end of the continuum – those with an unrestricted orientation – are relatively comfortable with engaging in sex without emotional closeness, have more partners during their life-time, and more often have casual sex with others.

SOI is reliably associated with two higher order personality dimensions (e.g., Gangestad and Simpson 1990). That is, both men and women high in SOI are higher in extraversion (tapped by measures of social potency, extraversion, and self-monitoring) and in lack of constraint (tapped by measures of disinhibition, lack of harm avoidance, and poor ego control). There is also evidence that those high in SOI are lower in agreeableness, higher in adventurousness and pleasure seeking, higher in avoidant attachment, and higher in masculinity (for a review, see Simpson Wilson and Winterheld 2004). Overall, those high in SOI show a stronger interest in mating, report more sexual motivations to engage in opposite sex friendships than individuals low in SOI (Bleske-Rechek and Buss 2001), attach more value to phys-

ical attractiveness and to sex appeal in a mate (Simpson and Gangestad 1992), and display more direct competition tactics to impress potential mates, such as bragging about one's accomplishments (Simpson et al. 1999).

We reason that as those high in SOI will be more interested in attracting partners, it would for them be much more important to have allies who could facilitate the attraction of partners. Thus, for the current study we predict that in mating contexts, but not in neutral contexts, particularly individuals high in SOI (i.e. unrestricted individuals) should want to associate themselves with a friend who is more attractive to the opposite sex value than they are themselves. To sum up, in the current study we examined whether the context – a mating situation versus a neutral situation – influences which characteristics participants prefer in a same-sex companion. In Study 1 we developed and tested a method to prime individuals on either a mating or a neutral context, and in Study 2, we tested the hypotheses. In both studies, we examined the role of SOI.

Study 1

Method

Participants and Procedure

This study was part of a larger internet survey which all first-year psychology students at the University of Groningen were required to complete for course credits. Due to the composition of the student body at the psychology department in Groningen, more women (n=206) than men (n=56) participated in this study, and data for men and women are reported separately. Upon logging in, men and women were randomly assigned to one of two conditions (mating vs. neutral).

Measures

On the basis of informal interviews with students, we developed two scenarios of situations likely to be encountered by young adults going out: one for a neutral context, i.e. going to a movie in a cinema, and one for a mating context, i.e. going to a party in a bar. In the neutral context condition, participants were presented with the following scenario: *You are single and this evening, you are going to see a popular movie. You can take one (man/woman) with you. What kind of (man/woman) would you like to take with you?* In the mating-context condition, participants were presented with this scenario: *You are single and this evening, you are going to a party in a bar which a lot of (men/women) will attend. You can take one (man/woman) with you. What kind of (man/woman) would you like to take with you?* To check whether the two scenarios differed as they were intended, we asked participants to rate the likelihood that they would be able to find a mate in those surroundings. On a seven-point scale (1=completely disagree, 7=completely agree), participants answered seven questions that asked about the likelihood of meeting a new partner or flirting with people of the opposite sex, either at a party in a bar or at a movie in the cinema. Examples of questions are: "At a party in a bar [a movie in the cinema] it is easy to meet someone you could start a relationship with" and "At a party in a bar [a movie in the cinema] you feel the tension between boys and girls".

Sociosexual Orientation was measured with the Sociosexual Orientation Inventory (SOI; Simpson and Gangestad, 1991), a 7-item scale measuring participants' own sexual behavior and participants' opinions on several sexual behaviors. Higher scores indicate a more unrestricted sociosexual orientation. Cronbach's α for the SOI was 0.75. Scores were standardized due to scale differences of the questions

Results and Discussion

Men. Factor analysis on the questions about the likelihood of finding a date in the mating vs neutral situation showed only one factor, with factor loadings>0.61. Moreover, reliability of this scale was very good, α=0.85. It was decided to average the seven questions into a single measure, which we named 'mating opportunity' (M=3.31, SD=1.14). Next, a t-test was performed with condition (mating vs. neutral) as the independent variable, t(54)=–4.17, p <0.001, η^2=0.24. Men thought it much more likely that they would have an opportunity to find a mate in the mating context, i.e., at a party in a bar, than in the neutral context, i.e. a movie in the cinema, M=3.87 (SD=1.07) and M=2.76 (SD=0.94) respectively.

Women. A factor analysis on the mating likelihood questions for the female data also revealed only one factor, with loadings>0.60. Reliability of the scale was good: α=0.86, and it was decided again to average the scores on the seven questions into a single item, 'mating opportunity' (M=3.22, SD=1.20). A t-test was performed with condition (mating vs. neutral) as the independent variable: t(204)=–14.74, p<0.001, η^2=0.52. Women thought it much more likely that they would have an opportunity to find a mate in the mating context, i.e., at a party in a bar than in the neutral context, i.e. a movie in the cinema, M=4.08 (SD=.81) and M=2.36 (SD=.87) respectively.

Sociosexual Orientation

Next, because scores on the SOI were expected to influence the effect of the manipulation, we performed moderation analyses by including SOI in a regression analysis.

Men. Regression analysis with mating opportunity as dependent variable on Sociosexual Orientation (SOI) and condition as independent variables showed no main effect of SOI, b=–0.01, t(50)=0.32, ns. There was the expected main effect of condition, b=–0.39, t(50)=–2.39, p=0.02, but the interaction between SOI and condition was not significant, b=–0.48 t(50)=–1.36, ns. Thus, we conclude SOI has no effect on men's interpretation of the mating opportunities in each scenario.

Women. Regression analysis with mating opportunity as dependent variable on Sociosexual Orientation (SOI) and condition as independent variables showed the previously reported main effect for condition, b=–0.90, t(200)=– 15.60, p<0.001, as well as a significant main effect of SOI, b=–0.05, t(200)=3.60, p<0.01, and a significant interaction between SOI and condition, B=–0.039, t(200)=–2.85, p<0.01. In the mating context, women high in SOI saw more mating opportunities than women low in SOI (M=4.26 and M=4.08 respectively, b=0.09, p<0.001), whereas in the neutral context, women high and low in SOI did not differ from each other (M=2.37 and M=2.39 respectively, b=–0.010, ns).

Thus, especially women high in SOI regarded the party scenario and not the movie scenario as a mating opportunity.

To conclude, as intended, the party scenario was considered as a much better mating opportunity than the movie scenario. Among women, this difference was found particularly for those high in SOI. The fact that we did not find a similar effect of SOI among men, may reflect the fact that men in general are interested in mating, independent of their SOI level or the situation they are in. Alternatively, these results may have been caused by the fact that we did not have enough power in the subsample of men.

Study 2

In Study 2, the scenarios we developed in Study 1 were used to prime participants with a specific situation – seeing a movie or going to a party – after which they were asked to indicate the desired characteristics of a companion they would take with them. To examine whether they desired to be accompanied by a same-sex other either higher or lower in 'mate value' than they are, we also asked participants to rate their own attractiveness and social dominance.

Method

Participants and design

167 Participants (89 heterosexual men, Mean age=22.46, SD=2.27 and 78 heterosexual women, Mean age=22.03, SD=2.53) were recruited in the cafeterias of several faculties of both the University of Groningen and the Hanze University of Applied Sciences in Groningen. The participants took part on a voluntary basis.

The study used a 2 (gender: male vs. female) X 2 (context: neutral vs. mating) X 2 (attractiveness: own vs. other) repeated measures design, where attractiveness was the repeated measures variable. Both men and women were randomly assigned to either the mating context or the neutral context. Ethical approval was provided by the Ethics Committee of Psychology of the University of Groningen.

Materials and procedure

Questionnaires were handed out to undergraduate students who were present at one of the cafeterias. Participants were told that they would anonymously participate in a study on the nightlife of students. All participants first provided informed consent. Then, after providing some general demographics (gender and age), they rated themselves on the physical attractiveness and social dominance characteristics.

We assessed two important, partially sex-specific dimensions – physical attractiveness and social dominance- that play a central role in mate selection (see e.g. Buss 1989), by asking participants to rate on a 9-point scale how much 8 features applied to them (1=*doesn't apply to me at all,* 9=*completely applies to me*). The physical attractiveness dimension consisted of the words *attractive, sexy, good-looking and great body*, and the social dominance dimension of the features: *talkative, extrovert, outgoing* and *self-confident*. Cronbach's α was calculated for both the physical attractive features (α=0.84) and the social dominance features (α=0.69).

Next, participants were instructed to imagine that they would go out to

a movie in a cinema (neutral context) or to a party in a bar (mating context), and they were asked what kind of person of the same sex they would like to take with them. That is, they were asked to rate this person in terms of his or her preferred physical attractiveness (α=0.92) and preferred social dominance (α=0.76). In addition, they were asked how important they found both characteristics of the person they would like to take with them, i.e., the importance of physical attractiveness (α=0.95) and the *importance* of social dominance (α=0.78) of this companion.

Next, participants completed like in Study 1 the Sociosexual Orientation Inventory. Sociosexual Orientation was measured with the Sociosexual Orientation Inventory (SOI; Simpson and Gangestad, 1991), a 7-item scale measuring participants' own sexual behavior and participants' opinions on several sexual behaviors. Cronbach's α for the SOI was .74. Scores were standardized due to scale differences of the questions.

In a final set of questions, participants reported whether they were currently in a romantic relationship or not (51.8% reported they were), the duration of their current relationship (M=12.5 months, SD=18.03)1, and their sexual preference. Due to the nature of the study, homosexual and bisexual participants (n=8) were left out of the data analyses. After completing all questions, participants were thanked for their participation and debriefed about the study's purposes.

Results

We analyzed the data for attractiveness and social dominance separately, using a repeated measures ANOVA's when participants' own ratings were included, ANOVA's for the importance of attractiveness or social dominance, and regression analyses when investigating the influence of SOI.

Attractiveness

Preferred level of attractiveness. To investigate the preferred level of physical attractiveness of participants' same-sex companion, we conducted a repeated measures ANOVA with two between-subjects factors, i.e. gender (male vs. female), and context (neutral vs. mating), and one within-subjects factor (own vs. companion's attractiveness). There was a main effect of the within-subjects factor, $F(1, 157)=19.08$, $p<0.001$, $\eta^2=0.11$, indicating that individuals on average preferred overall companions who were less attractive than themselves (self, M=6.25, SD=1.10, other M=5.68, SD=1.62). However, this effect was qualified by an interaction between this factor and context, $F(1,157)=7.19$, $p<0.01$, $\eta^2=0.04$. While, of course, the ratings of one's own attractiveness did not differ between situations (neutral, M=6.27, SD=1.17; mating, M=6.22, SD=1.04), individuals preferred in general a more attractive companion in a mating context (M=5.98, SD=1.42) than in a neutral context (M=5.35, SD=1.75). None of the other effects was significant, although context had a marginally significant main effect (gender: $F(1, 157)=0.52$, ns; context: $F(1, 157)=3.76$, $p=0.08$, $\eta^2=0.02$; interaction gender and context $F(1, 157)=0.78$, ns.).

Importance of attractiveness. An ANOVA with gender (male vs. female), and context (neutral vs. mating) as factors and the importance of attractiveness of the companion as dependent variable revealed no significant effect of gender,

F(1, 151)=0.22, ns, and a marginally significant main effect of context, F(1, 151)=3.40, p=0.07, η^2 =0.02. This last effect was qualified by a significant interaction between gender and context, F(1, 151)=4.46, $p<0.05$, $\eta^2=0.03$, indicating that for the importance of attractiveness, only men made a distinction between both contexts. That is, men found an attractive partner more important (or less unimportant) in a mating context (M=4.91, SD=1.84) than in a neutral context (M=3.68, SD =2.04): F(1, 82)=8.40, $p<0.01$, $\eta^2=0.09$. In contrast, women found the attractiveness of a companion in the mating and neutral contexts equally important, respectively M=4.40, SD=1.90, and M=4.48, SD=1.90, F(1, 69)=0.03, ns.

The role of sociosexuality (SOI). We analyzed the role of SOI by performing multiple regressions with the desired attractiveness and the importance of attractiveness of the companion as dependent variables, and gender, context and SOI as predictors. Both analyses showed no effects involving SOI on desired attractiveness, or on the importance of attractiveness, p's >0.15.

Social dominance

Preferred level of social dominance. We conducted a repeated measures ANOVA with two between-subjects factors, i.e. gender (male vs. female), and context (neutral vs. mating), and one within-subjects factor (own vs. companion's social dominance). The analysis revealed a main effect of the within-subjects factor, F(1, 157)=8.89, $p<0.01$, $\eta^2=0.05$, indicating that participants preferred overall companions more socially dominant than themselves (self, M=6.44, SD=1.00, other M=6.72, SD=1.08). However, this effect was qualified by an interaction between social dominance and gender, F(1, 157)=6.11, $p<0.05$, $\eta^2=0.04$, and by a three-way interaction between gender, context and own vs. companion's social dominance F(1, 157)=6.33, $p<0.05$, $\eta^2=0.04$. To further probe this last interaction, we analyzed the effects of own vs. companion's dominance and context separately for men and women. For women, there was only a main effect of own vs. companion's dominance, F(1, 74)=16.17, $p<0.01$, $\eta^2=0.18$, indicating that women preferred on average companions more socially dominant than themselves (self M=6.34, SD=1.06; other M=6.83, SD=0.88). There was no significant interaction between target and context, F(1, 74)=0.86, ns.

Among men, there was no significant main effect of own vs. companion's dominance, F(1, 83)=0.12, ns, but, as predicted, a significant interaction between this factor and context, F(1, 83)=6.75, p=0.01, $\eta^2=0.08$. While, of course, the ratings of one's own social dominance did not differ between situations (neutral, M=6.52, SD=0.94, mating, M=6.55, SD=0.96), in the mating context (M=6.94, SD=0.95) men preferred a more socially dominant companion than in the neutral context (M=6.25, SD=1.41), F(1, 84)=7.20, $p<0.01$, $\eta^2=0.08$.

Importance of social dominance. An ANOVA with gender (male vs. female), and context (neutral vs. mating) as independent variables, and importance of social dominance as dependent variable revealed a marginally significant effect of context, F(1, 151)=2.74, p=0.10, $\eta^2=0.02$, no effect of gender, F(1, 151)=0.57, ns, nor an interaction between gender and context, F(1, 151)=1.53, ns. Nevertheless, for exploratory reasons we examined the

effects of context for men and women separately. These analyses showed that men and not women, made a distinction between both contexts. That is, men found a socially dominant partner more important in a mating context (M=6.77, SD=1.33) than in a neutral context (M=6.15, SD=1.39), $F(1, 82)=4.34$, $p<0.05$, $\eta^2=0.05$. In contrast, women found the dominance of a companion in the mating and the neutral contexts equally important, respectively M=6.35, SD=1.21, and M=6.26, SD=1.35; $F(1, 69)=0.09$, ns.

The role of sociosexuality (SOI). In the same way as for attractiveness, we analyzed the role of SOI for men and women by doing multiple regressions with the desired social dominance and the importance of the social dominance of the companion as dependent variables, and gender, context and SOI as predictors.

For preferred social dominance of the companion, the regression analysis showed a main effect of gender, b=–0.21, $p<0.05$, but no interactions with gender were significant (b's<0.02). There was a marginally significant main effect of SOI, b=0.04, p=0.06, which was qualified by a significant interaction between SOI and context, b =0.05, $p<0.05$. Simple slopes analyses indicated that whereas participants low in SOI did not differ significantly in the preferred dominance of their companion in the mating or the neutral situation (M=6.83 and M=6.51 respectively, b=0.16, p=0.06), participants high in SOI preferred a more socially dominant companion in the mating than in the neutral situation: M=6.97 and M=6.41 respectively, b=0.25, $p<0.01$.

In addition, SOI affected in a similar way the importance of the social dominance of the companion. That is, there was no main effect of SOI, b=–0.01 ns, but a significant interaction between SOI and context for this variable, b=–0.08, $p<0.01$. Simple slope analyses indicated that participants low in SOI found the social dominance of their companion equally important in the mating and the neutral context, M=6.25 and M=6.44 respectively, b=–0.09, ns. However, participants high in SOI found the social dominance of their companion more important in the mating than in the neutral condition, M=6.65 and M=6.12 respectively, b=0.27, $p<0.05$. Thus, as predicted, regardless of their gender, individuals high in SOI preferred more dominant companions in the mating as opposed to the neutral context.

Discussion

Although generally human males and females tend to compete with one another over access to the most desirable mates, sometimes for strategic reasons, i.e., the acquisition of mates, they may overcome their competitive tendencies and prefer to associate with others who are better than they judge they are themselves. In the current study, we examined if men would, more than women, show these strategic tendencies, and would choose companions that were more physically attractive and socially dominant than they felt they were themselves, but only in situations involving mating opportunities. Moreover, since research has overwhelmingly indicated that individuals differ in sociosexual attitudes and behaviors (see Simpson et al. 2004), we investigated the role of sociosexual orientation as well, expecting that for unrestricted individuals, the 'right companion' would be in general more important than for restricted individuals, especially in a mating situation.

In our first study, we developed two scenarios that were shown to differ clearly in the extent to which they were perceived as offering opportunities for mating. Using these scenarios, most findings in our second study supported our predictions. That is, in the mating as compared to the neutral context, men, but not women, found the attractiveness of a companion more important, preferred a more socially dominant companion, and found the social dominance of a companion important. Interestingly, both men and women preferred to take along a more attractive companion in a mating than in a neutral context. This is surprising given the fact that intrasexual competition among women tends to focus on the domain of physical attractiveness. Women competing with other women use strategies such as derogating other women with respect to physical attractiveness (e.g. Vaillancourt and Sharma 2011), and indirect forms of aggression, such as gossip, to damage other women's (sexual) reputation (Massar et al. 2012; Geary 1999). Thus, one might have expected that women would prefer a less attractive companion in a mating context than in a neutral context. One explanation of this result could be that women (and men also) would assume that being associated with an unattractive female might lower one's own perceived attractiveness. Indeed, research has demonstrated that the perceived similarity and closeness with a target are likely to lead to assimilation effects in the comparison of physical traits (e.g., Häfner 2004; Young et al. 2014). That is, women might feel less attractive after comparing themselves with an unattractive friend. Since the current study asked participants to think of a same-sex friend to take with them, it could be that our participants assumed that since they perceived themselves to be similar to their friend(s), others would too. Thus, in order to avoid assimilation effects in possible mates, it is likely that our female participants would not prefer to take an unattractive companion with them in a mating situation, whereas this is less important in a neutral context. It must be noted, however, that even in the mating context, both men and women preferred companions less attractive than themselves. Thus, it seems that men and women, independent of context, generally prefer to associate with others that make them, in a process of "downward comparison", look relatively attractive (cf. Buunk and Ybema 2003).

Given the fact that in three out of four cases, men seemed to choose more strategically in the mating than in the neutral context, our findings are in line with the theoretical perspective that assumes that with respect to mating, there is a general evolved tendency in human males to associate with same-sex conspecifics when this may enhance their mating opportunities. Thus, when there is a possibility to acquire mates, men tend to seek allies who have, due to their attractiveness and social dominance, the ability to attract members of the opposite sex. Our findings are particularly telling as they show that, unlike women who prefer the company of more dominant others in both contexts, in a neutral context men tend to choose allies that they can dominate, which may safeguard their own status and dominance in a group. However, when the importance of attracting mates becomes important, men tend to seek someone who is more dominant than they are, and they thus seem willing to make themselves subordinate to others. Although much more

is to be learned about this type of association, our findings are in line with the interpretation that men will – more than women – engage in the group wise pursuing of members of the opposite sex. As Campbell (2002) and Geary (1999) have noted, men may form alliances to defend and enlarge their territories, and by doing this, bring new women into the group.

The gender effects we found were independent of those of SOI, indicating that these effects cannot be explained by a higher interest of men in short-term mating. Individuals high in SOI are more strongly interested in particular short-term mating, and tend to engage more in intrasexual competition, as manifest from tactics such as bragging about one's accomplishments and showing off (Simpson et al. 1999). Research has shown that these tendencies are found among both genders, and that there generally is more within-sex than between-sex variation in sociosexuality (e.g. Simpson et al. 2004). Nevertheless, underlining the interpretation that the motivation to choose a more dominant companion in a mating context is indeed motivated by mating interests, for both men and women the effects for social dominance were in general more pronounced among individuals high in sociosexuality. That is, particularly individuals high in SOI tended to find the social dominance of a companion important, and to prefer a more dominant companion, in the mating context. The finding that especially those interested in short-term mating, and in engaging in casual affairs, tend to choose allies who could assist in attracting mates, strongly suggests that the companion choices were influenced by mating interests.

Like any experimental study, the current one also has some limitations that future research might address. For example, the underlying reasons for the choices made by our participants were not investigated. It might be worthwhile to investigate what exactly, if anything, especially men are hoping to 'get' out of taking a more socially dominant and attractive friend with them to a party. Moreover, research has shown that individuals inherently differ in the extent to which they engage in intrasexual competition tactics (Buunk and Fisher 2009), and these differences could influence companion choice in different contexts as well. To conclude, in the current paper we provided preliminary evidence that one's attitude – and especially men' attitude – towards same sex conspecifics in a mating context may not only be driven by intrasexual competition, but also by strategic considerations that may override competitive tendencies.

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Authors' contributions

The original idea came from AB. The development of the questionnaire was done jointly by both authors, with the help of a group of students. The data collection was primarily done by a group of students supervised by KM. Both authors contributed equally to the data analysis and the writing.

Conflict of interest

The Authors declare that there is no Conflict of interest.

Foot note

Relationship status and relationship duration did not influence the results, and were therefore not considered in further analyses.

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References

Ainsworth SE, Maner JK. 2012. Sex begets violence: mating motives, social dominance, and physical aggression in men. J Pers Soc Psychol 103:819–29.

Benenson JF, Saelen C, Markovits H, McCabe S. 2008. Sex Differences in the value of parents versus same-sex peers. Evol Psychol 6:13–28.

Benenson, JF, Markovits H, Fitzgerald C, Geoffroy D, Flemming J, Kahlenberg SM, Wrangham RW. 2009. Males' greater tolerance of same-sex peers. Psychol Sci 20:184–90.

Bleske, A.L., & Shackelford, T.K. (2001). Poaching, promiscuity, and deceit: Combating mating rivalry in same-sex friendships. Pers Relationship 8:407–24.

Bleske-Rechek AL, Buss DM. 2001. Opposite-sex friendship: sex differences and similarities in initiation, selection, and dissolution. PSPB 27:1310–23.

Buunk AP, Fisher M. 2009. Individual differences in intrasexual competition. Journal of Evolutionary Psychology 7:37–48.

Buunk AP, Ybema JF. 2003. Feeling bad, but satisfied: The effects of upward and downward comparison with other couples upon mood and marital satisfaction. Br J Soc Psychol 42:613–28.

Campbell A. 2002. A mind of her own: the evolutionary psychology of women. Oxford: Oxford University Press.

Chagnon NA. 1988. Life histories, blood revenge, and warfare in a tribal population. Science 239:985–92.

Chagnon N. 1977. Yanomamo: the Fierce People. New York: Holt Rinehart and Winston.

Cummins D. 2005. Dominance, status, and social hierarchies. In: DM Buss, editor. The handbook of evolutionary psychology Hoboken, NJ: John Wiley and Sons. 676–97.

Darwin C. 1871. The descent of man, and selection in relation to sex. London: John Murray.

Gangestad SE, Simpson JA. 1990. Toward an evolutionary history of female sociosexual variation. J Pers 58:69–96.

Geary DC. 2005. Evolution of paternal investment. In: DM Buss, editor. The handbook of evolutionary psychology. Hoboken, NJ: John Wiley and Sons. 483–505.

Geary DC. 1999. Male, female: The evolution of human sex differences. Washington DC: American Psychological Association.

Geary DC, Byrd-Craven J, Hoard MK, Vigil J, Numtee C. 2003. Evolution and development of boys' social behavior. Dev Rev 23:444–70.

Gilby IC, Brent LJN, Wroblewski EE, Rudicell RS, Hahn BH, Goodall J, Pusey AE 2013. Fitness benefits of coalitionary aggression in male chimpanzees. Behav Ecol Sociobiol 67:373–81.

Goodall J. 1986. Social rejection, exclusion, and shunning among the Gombe chimpanzees. Ethology and Sociobiology 7:227–36.

Häfner M. 2004. How dissimilar others may still resemble the self: assimilation and contrast after social comparison. J Consum Psychol 14:187–96.

Hall JA. 2010. Sex differences in friendship expectations: a meta-analysis. J Soc Pers Relat 28:723–74.

Low BS. 2000. Why sex matters: a Darwinian look at human behavior. Princeton, NJ: Princeton University Press.

Massar K, Buunk AP, Rempt S. 2012. Age differences in women's tendency to gossip are mediated by their mate value. Pers Individ Differ 52:106-09.

Schmitt DP. 2005. Fundamentals of human mating strategies. In: DM Buss, editor. The handbook of evolutionary psychology Hoboken, NJ: John Wiley and Sons. 258–91.

Simpson JA, Gangestad SW. 1991. Individual differences in sociosexuality: evidence for convergent and discriminant validity. J Pers Soc Psychol 60:870–83.

Simpson JA, Gangestad SW. 1992. Sociosexuality and romantic partner choice. J Pers 60:31–51.

Simpson J, Wilson C, Winterheld H. 2004. Sociosexuality and romantic relationships. In: J Harvey, A Wenzel, and S Sprecher, editors. The handbook of sexuality in close relationships .Lawrence Erlbaum Associates Publishers. 87–112.

Simpson JA, Gangestad SW, Christensen PN Leck K. 1999. Fluctuating asymmetry, sociosexuality, and intrasexual competitive tactics. J Pers Soc Psychol 76:159–72.

Tesser A. 1988. Towards a self evaluation maintenance model of social behavior. In: L Berkowitz, editor. Advances is experimental social psychology. San Diego: Academic Press. 181–227.

Tesser A, Campbell J, Smith M. 1984. Friendship choice and performance: self-evaluation maintenance in children. J Pers Soc Psychol 46:561–74.

Vaillancourt T, Sharma A. 2011. Intolerance of sexy peers: intrasexual competition among women. Aggressive Behav 37:569–77.

Van Vugt M, De Cremer D. Janssen DP. 2007. Gender differences in cooperation and competition: the male warrior hypothesis. Psychol Sci 18:19–23.

Vigil JM. 2007. Asymmetries in the friendship preferences and social styles of men and women. Human Nature 18:143–61.

Wrangham R, Peterson D. 1996. Demonic males: apes and the origins of human violence. Boston, MA: Houghton Mifflin Co.

Young AF, Gabriel S, Schlager OM. 2014. Does this friend make me look fat? Appearance-related comparisons within women's close friendships. Basic Appl Soc Psych 36:145–54.