Original Article

Social Exclusion and Female Mating Behavior: Rejected Women Show Strategic Enhancement of Short-Term Mating Interest

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Abstract: Because cost asymmetries in sexual reproduction have historically enabled women to exchange sexual access for other resources, including social resources, we tested the possibility that social exclusion would lead women to display an elevated preference for short-term mating strategies in the service of reaffiliation. In Study 1, women were given false feedback to manipulate social inclusion or exclusion prior to indicating their endorsement of short and long-term mating behaviors. Socially excluded women indicated greater interest in short-term mating and reduced interest in long-term mating. In Study 2, women wrote about a social inclusion, social exclusion, or control experience and then indicated their preference for different male body types. Women in the social exclusion condition preferred more muscular male partners – a pattern of preference typical of short-term mating – than women in the other conditions. Collectively, these results are consistent with a social exchange theory of women’s sexual behavior following social exclusion.

Keywords: social exclusion, mating, sex differences, social rejection, ostracism

Introduction

Although sexual behavior is primarily in the service of reproduction, extant research has found that numerous primate species also rely on intimate physical contact for reconciliation purposes following social conflict (e.g., kissing; de Waal and van Roosmalen, 1979; embracing; Castles, Aureli, and de Waal, 1996; direct sexual behavior;
Social exclusion and female mating

de Waal, 1987). In humans, research reveals that many of the reasons individuals list for engaging in sexual behavior have affiliative motives (e.g., “I wanted to feel connected to the person,” “I wanted to increase the emotional bond by having sex;” Meston and Buss, 2007). This is consistent with other taxonomies that include seeking intimacy as a reason for sexual behavior (e.g., Hill and Preston, 1996; Leigh, 1989). In the current research, we investigate how mating may be sought as a reaffiliation strategy following an acute experience of social exclusion, with an emphasis on how sex differences in mating tactics and behaviors may lead women specifically to endorse an interest in short-term mating following experiences of social exclusion.

Parental Investment and Sexual Gate Keeping

Due to inherent biological differences, there is a cost asymmetry in men and women’s sexual behavior. Specifically, for men the provision of sperm is the minimal investment in offspring during sexual reproduction. Conversely, women’s minimal investment in offspring is significantly greater and includes such costs as pregnancy and lactation. Because sexual behavior that results in reproduction entails more risks and a greater investment for women, there is elevated incentive for them to be more selective when choosing a mate; consequently, men must compete with other men to be selected for mateships (e.g., Symons, 1979; Trivers, 1972). Based on this sex difference, Baumeister and Vohs (2004) argue that these sex-specific cost asymmetries in reproduction facilitate a sexual marketplace in which women are the “sellers” of sex and men are the “buyers.” Indeed, a social exchange theory of female sexual behavior suggests that women, relative to men, may be better able to strategically utilize sexual behavior in exchange for other resources, such as financial resources or social support (Atchison, Fraser, and Lowman, 1998; Baumeister and Vohs, 2004). Because women serve as sexual gatekeepers (Baumeister and Vohs, 2004; Symons, 1979), they can choose to employ short-term mating as a strategy to facilitate social reaffiliation. Thus, when socially excluded, women may display greater interest in short-term partners to achieve social connectedness. Because men are more chronically interested in short-term mating, and therefore do not typically serve as sexual gatekeepers, they could not employ this strategy as effectively. Given this extensive theoretical and empirical body of work, the current experiments emphasize mating behaviors in an exclusively female sample.

Social Exclusion, Reaffiliation, and Short-term Mating Interest

Researchers have recently begun to investigate how social rejection and social inclusion differentially influence the priority placed on mating goals for both men and women (Brown, Young, Sacco, Bernstein, and Claypool, 2009), as well as how social inclusionary status influences male-specific mating strategies (Sacco, Brown, Young, Bernstein, & Hugenberg, 2011). However, to the authors’ knowledge, no research has yet investigated how social inclusionary status affects female-specific mating strategies. Importantly, we believe that an understanding of women’s mating strategies following social exclusion requires considering the cost asymmetries of sex in light of the costs of social exclusion.

There is an extensive literature documenting a variety of negative consequences of social exclusion (see Williams, 2007, for a review) as well as numerous physical and psychological benefits of social inclusion (e.g., Neumann, 2009). Consequently, humans
appear to have a repository of behaviors useful for reestablishing social connections following social exclusion, such as an enhanced ability to identify individuals displaying true emotional displays of approach (Bernstein, Young, Brown, Sacco, and Claypool, 2008) and an increased interest in behaving prosocially toward others who offer reaffiliative opportunities (Maner, DeWall, Baumeister, and Schaller, 2007).

Because social exclusion is inherently costly and social affiliation is so essential for human well-being (e.g., Baumeister and Leary, 1995; MacDonald and Leary, 2005), the drive to reaffiliate should motivate individuals to utilize a wide variety of strategies following experiences of social exclusion. Furthermore, to the extent individuals perceive social exclusion as extremely costly (e.g., van Beest and Williams, 2006), they may be willing to engage in extreme or risky behaviors to connect with others (i.e., the risk posed by these behaviors is outweighed by the risk of social exclusion). Based on these requirements, we hypothesize that socially excluded women will be more interested in engaging in short-term mating strategies than women not experiencing acute exclusion (e.g., socially included women or women in a control condition), in spite of the increased risk posed by short-term mating. As outlined above, women (relative to men) can more effectively utilize sexual behavior to secure other valuable benefits, such as financial and social support (Baumeister and Vohs, 2004). Although displaying interest or engaging in short-term mating strategies has its own potential costs (e.g., pregnancy, disease contraction, promiscuous reputation), the consequences of social exclusion may be perceived as detrimental enough for women to chance the costs of short-term mating in order to secure social affiliation.

Sensibly, any such shift toward short-term mating strategies should also correspond with identifying and procuring a mate with cues of good genes (Gangestad and Simpson, 2000). Specifically, compared to selecting long-term mates, women show a greater preference for physically attractive men as short-term mates, including men with more muscular body types (Frederick and Haselton, 2007), more masculine faces (Little, Cohen, Jones, and Belsky, 2007; Penton-Voak & Perrett, 2000), and more symmetrical faces (Little, Jones, Burt, and Perrett, 2007; Little, Jones, DeBruine, and Feinberg, 2008). By seeking out such traits, women are endeavoring to find short-term mates with the greatest likelihood of producing healthy and robust offspring, thus minimizing some of the potential costs of short-term mating. We predict that while socially excluded women will pursue short-term mating as a means of obtaining affiliation opportunities and social resources, they will do so in a manner that minimizes the added risk of unhealthy offspring. In other words, although they would be engaging in a risky behavior (short-term mating) to avoid an even greater risk (social isolation), we expect that they would still prefer mates with characteristics typically desired in short-term mating partners.

We tested our hypotheses in two studies. In our first study, we provided women with one of three types of false feedback: feedback indicating that they would be alone in the future (future alone), feedback that they would maintain strong social relationships in the future (future belonging), or feedback that they would live an accident-prone life (negative control). All participants then completed attitudinal measures assessing their interest in “sexually unrestricted” (i.e., promiscuous) sexual behavior and “sexually restricted” (i.e., long-term, high investment) sexual behavior. We hypothesized that women who believed they would have reduced social support in the future would display greater interest in short-term mating than women who believed they would have abundant support.
social support in the future (or women in a negative affect control condition). In our second study, we indirectly tested short-term mating interest by examining whether socially excluded women show partner preferences typical of women engaging in short-term mating. We had women write about a time in which they had been socially excluded, socially included, or a neutral control experience. They then selected their preferred male body type from a series of body type options (body fat and musculature). We hypothesized that compared to socially included and control participants, socially excluded women would prefer male targets who were relatively more muscular – a pattern consistent with an increase in short-term mating preferences (Frederick and Haselton, 2007).

Study 1

Materials and Method

Participants

Seventy-seven women (M_{\text{age}} = 18.38 \text{ years}, SD_{\text{age}} = .56 \text{ years}; 93\% \text{ Caucasian}) participated in exchange for partial course credit.

Materials

All participants were asked to complete two dependent measures. Participants completed the Sociosexuality Orientation Inventory (SOI; Simpson and Gangestad, 1991), which consists of seven questions assessing level of sexual restrictedness, both behaviorally (e.g., “How many different partners do you foresee yourself having sex with during the next five years?”) and attitudinally (e.g., “Sex without love is okay”). We utilized the scoring algorithm outlined by Simpson and Gangestad (1991), with lower SOI scores indicating a sexually restricted orientation (i.e., fewer sexual partners, high relationship commitment) and higher values indicating a sexually unrestricted orientation (i.e., many sexual partners, low relationship commitment).

Participants also completed the Mini-K Inventory (Figueroedo et al., 2006). This 20 item measure assesses general life-history strategy (e.g., “I would rather have one than several sexual relationships at a time”). Individuals are asked to indicate their agreement with a series of statements using a seven point Likert-type scale (-3 = Disagree Strongly to 3 = Agree Strongly). Higher values are consistent with a slower life history strategy (i.e., emphasis on long-term, pair-bonded relationships; fewer sexual partners) whereas lower numbers are consistent with a faster life history strategy (i.e., emphasis on short-term, unrestricted relationships; many sexual partners).

Although both of these measures are commonly used as measures of chronic or “trait” orientations, virtually all individual differences have both state and trait components. Therefore, in the current work we employ these measures as dependent measures, designed to capture changes in current interest in short- (SOI) and long-term (Mini-K) mating.

Procedure

Upon their arrival in the laboratory and following consent procedures, participants were randomly assigned to one of three conditions on a between-subjects basis. To manipulate inclusionary status, we relied on the well-validated Life Alone Paradigm in which participants are asked to complete a personality inventory that is supposedly the
basis for feedback they receive about their future likelihood of social belonging (e.g., Twenge, Baumeister, Tice, and Stucke, 2001). Specifically, participants first completed a 50-item measure of the Big Five personality traits (Goldberg, 1999; International Personality Item Pool, 2001) and were told that the computer would automatically score their responses and explain the meaning of their personality score. To facilitate this cover story, participants did receive accurate feedback regarding the extraversion subscale of the personality inventory.

We then provided participants with one of three types of false feedback to induce a sense of social exclusion, inclusion, or general negative affect. Participants believed that this feedback was based on their responses to the personality inventory (see Twenge et al., 2001, for a detailed description of this manipulation). Specifically, participants in the social exclusion condition read the statement, “You have a LOW relationship score. Your relationship score was 6. Read about your personality below to understand what this means.” This was followed by a detailed statement informing participants that they would be likely to lose current friendships and to end up relatively alone later in life. Participants in the social inclusion condition read the statement, “You have a HIGH friendship score. Your friendship score was 40.” They were then told that this score meant, “You’re the type who has rewarding friendships throughout life…” For the current study, we altered the original description by removing any references to romantic relationships (i.e., marriage) and added an additional statement about friendship so that the manipulation only increased a sense of non-sexual affiliation (see Sacco et al., 2011, for similar procedures). Lastly, control condition participants read, “You have a LOW coordination score,” and this score indicates, “You’re likely to be accident prone later in life—you might break an arm or a leg a few times, or may be injured in car accidents. Even if you haven’t been accident prone before, these things will show up later in life, and the odds are you will have a lot of accidents” (see Twenge et al., 2001).

Following this inclusionary status manipulation, participants completed the SOI and the Mini-K inventories, followed by a brief demographics questionnaire. Participants were thanked for their participation and were thoroughly debriefed. Specifically, participants were informed that the relationship score was false before leaving.

Results

Because we were interested in how the experience of social exclusion influenced women’s mating strategies, we computed two composite scores for each participant: an aggregated Sociosexuality Inventory score ($\alpha = .73$) in which higher values indicate greater interest in short-term mating, as well as an aggregated Mini-K score ($\alpha = .67$) in which higher values indicate less interest in short-term mating.\(^1\) Because of the sensitive nature of the SOI, six participants chose not to complete this measure, resulting in different degrees of freedom for the SOI and Mini-K analyses.

To assess the impact of social exclusion on short-term mating interest, we first conducted a one-way ANOVA with participants’ SOI scores as the dependent measure. This analysis yielded a significant effect of condition, $F(2,68) = 4.59, p = .01$ (see Figure 1,

\(^1\) Because the negative correlation between participants’ SOI and Mini-K scores was relatively weak, $r(69) = -.30, p = .01$, we treated these scores as separate constructs and analyzed them independently.

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top panel). Consistent with our hypothesis that social exclusion would lead women to show elevated interest in short-term mating behavior, post hoc analyses (LSD tests) revealed that participants in the social exclusion condition reported higher SOI scores ($M = 27.93, SD = 13.67$) than did participants in either the control ($M = 20.48, SD = 12.42$), $p = .04$, or social inclusion conditions ($M = 17.96, SD = 9.82$), $p = .01$. Social inclusion and control condition participants did not differ in their SOI scores ($p = .48$).

We also conducted a one-way ANOVA with participants’ Mini-K scores as the dependent measure. This analysis again yielded a significant effect of condition, $F(2,74) = 4.26$, $p = .02$ (see Figure 1, bottom panel). Consistent with our predictions, participants in the social exclusion condition indicated reduced interest in long-term mating, displaying significantly lower Mini-K scores ($M = 1.48, SD = .46$) than participants in the control ($M = 1.80, SD = .48$), $p = .02$, or social inclusion conditions ($M = 1.83, SD = .49$), $p = .01$. Social inclusion and control condition participants did not differ in their Mini-K scores ($p = .84$).

**Figure 1.** Participant mating interest by condition in Study 1. Sociosexuality Inventory (SOI) scores are displayed in the top panel and Mini-K scores are displayed in the bottom panel.

**Discussion**
Consistent with our predictions, the experience of social exclusion led women to display a shift toward interest in short-term mating behavior, as indexed by greater interest in unrestricted sexual behavior (i.e., higher SOI scores) and reduced interest in committed sexual behavior (i.e., lower Mini-K scores) compared to socially included or control condition women. Much past research has indicated that the majority of individuals find social exclusion to be an aversive experience and engage in numerous compensatory behaviors to re-establish social connections (e.g., Bernstein et al., 2008; 2010; Maner et al., 2007). Because sexual behavior is potentially more costly for women than men, women have evolved to be more selective in mate choice, whereas men must compete to be chosen. As such, women have a greater capacity to leverage sexual behavior for other resources (Baumeister and Vohs, 2004). In the current study, we found evidence that women who have been socially excluded showed heightened interest in providing sexual access as assessed by interest in short-term mating, possibly as a reaffiliation strategy.

In our second study, we sought to understand this relationship in greater detail and rule out some alternative hypotheses. First, we employed a different manipulation of social exclusion (memory prime) to assure that our effects are due to social exclusion more generally and not a particular method of manipulating social exclusion. We also measured mood and several basic needs that have been shown to vary with the experience of rejection (Williams, 2007) to examine whether they affect the relationship between social exclusion and short-term mating preferences (i.e., are increases in negative mood following social exclusion responsible for increased short-term mating interest?). Finally, we employed a different dependent measure to index short-term mating interest. Specifically, we explored the extent to which women’s preferences for physical characteristics of male partners are consistent with previously documented short-term mate preferences. If socially excluded women are interested in short-term mating behavior, then socially excluded women, compared to control and socially included women, should also prefer traits in potential partners that women generally prefer in their short-term mates. For example, past research has shown that women place heightened interest on physical characteristics indicative of good genes when evaluating partners as short-term mates (e.g., facial symmetry, facial masculinity, body musculature; Frederick and Haselton, 2007; Little et al., 2007a, 2007b). As such, to the extent that social exclusion leads women to shift their interests toward short-term mating, we hypothesized that they would show a greater preference for men with physical characteristics consistent with good genes, specifically men with more muscular body types, which is a preference consistent with women’s short-term mating goals. Indeed, immunocompetence (e.g., immunocompetence signaling hypothesis; Folstad and Karter, 1992) and general cost models (e.g., Kaplan and Gangestad, 2005) indicate that male traits produced by high levels of testosterone, such as body musculature, are cues of heritable fitness because they indicate that the male can afford these costly traits and is more likely to produce higher quality offspring.

Study 2

Materials and Method

Participants
Seventy-nine women (87% Caucasian) participated in exchange for partial course credit. Although age was not recorded in the current study, all participants were undergraduate students (the median age of female students at our university is 21.5 years). Two participants failed to complete the dependent measures resulting in a final sample of 77 participants.

Materials
As a manipulation check to evaluate the effectiveness of our social inclusion/exclusion manipulation, we had all participants complete a measure of basic needs that has been associated with the experience of social inclusion and exclusion in past work (Williams, Cheung, and Choi, 2000). Participants were asked to utilize a 5-point Likert-type scale (1 = Not at all; 5 = Very much) to respond to questions assessing their levels of positive mood, negative mood, and four basic needs: belonging, control, self-esteem, and meaningful existence.

To measure mate preferences, we used a muscle silhouette scale (MSS) and a fat silhouette scale (FSS) adapted from previous research (Frederick et al., 2007). The MSS consists of eight drawings of male bodies that vary on their musculosity whereas the FSS consists of eight drawings of male bodies that vary on their fat content. We used these scales to assess participants’ body type preferences in potential short-term mates.

Procedure
Upon arriving in the laboratory and after providing consent, participants were randomly assigned to inclusionary status condition on a between-subjects basis. To manipulate inclusionary status, we employed a memory prime that has been used in previous research (e.g., Maner et al., 2007; Sacco et al., 2011). Specifically, exclusion condition participants were asked to, “Write about a time in which you felt rejected or excluded by others.” Inclusion participants were asked to, “Write about a time in which you felt socially included or accepted by others.” Participants in the control condition were asked to, “Write about your day yesterday (e.g., what you did).” Participants in all of the conditions were instructed to engage in the writing task for approximately five minutes and were encouraged to visualize the experience and to write about it in as much detail as possible.

Following this writing task, participants completed the basic needs questionnaire. They were then asked to respond to the MSS and the FSS (order counterbalanced between-subjects) by indicating which target they would most prefer as a short-term mate (“Which man below would make the best short-term sexual partner/brief sexual affair for you?”). Eight targets of various body types comprise each scale where higher target number chosen was indicative of a greater preference for a muscular body type on the MSS and a greater preference for a heavier body type on the FSS. Following this task, participants completed a brief demographics questionnaire, were thanked for their participation, and were debriefed.

Results

2 The FSS and MSS were included as part of a larger battery of questionnaires and measures collected for an unrelated research project.

Evolutionary Psychology – ISSN 1474-7049 – Volume 10(3), 2012. -580-
Mood and Basic Needs Manipulation Check

To determine the effectiveness of our writing manipulation, we computed participants’ average level for each basic need. Because the individual needs were highly interrelated (α = .96), we averaged these into a composite basic needs score for each participant where higher values indicated less satisfied basic needs (see McConnell, Brown, Shoda, Stayton, and Martin, 2011 for a similar consolidation of basic needs data). We conducted a one-way ANOVA across conditions for participants’ composite basic needs score. This analysis yielded the predicted effect of condition, \( F(2,74) = 89.24, p < .01 \). Post hoc analyses (LSD tests) indicated that socially included participants displayed less basic needs dissatisfaction (\( M = 1.71, SD = .61 \)) than did control (\( M = 2.95, SD = 1.24 \)) and socially excluded participants (\( M = 4.24, SD = .51 \)), and control participants also experienced less basic needs dissatisfaction than did socially excluded participants (all \( ps < .01 \)).

We also computed composite positive and negative mood scores for each participant and conducted separate one-way ANOVAs for each of these scores. For positive mood, there was a significant effect of condition, \( F(2,74) = 76.89, p < .01 \). Post hoc analyses revealed that socially included women (\( M = 4.50, SD = .60 \)) indicated higher levels of positive mood than control (\( M = 3.24, SD = 1.15 \)) and socially excluded participants (\( M = 1.67, SD = .56 \)), and control participants indicated higher levels of positive mood than socially excluded participants (all \( ps < .01 \)). For negative mood, there was also a significant effect of condition, \( F(2,74) = 63.07, p < .01 \). Post hoc analyses revealed that socially excluded women (\( M = 3.65, SD = .69 \)) indicated higher levels of negative mood than control (\( M = 2.29, SD = 1.03 \)) and socially included participants (\( M = 1.23, SD = .48 \)), and control participants indicated higher levels of negative mood than socially included participants (all \( ps < .01 \)). Thus, our inclusionary status manipulation had the intended effect, leading socially excluded women to indicate lower basic needs satisfaction, lower positive mood, and higher negative mood than women in either the control or social inclusion conditions.

Body Type Preferences

To test our primary hypothesis regarding the impact of social inclusion and exclusion on the relative preference for a muscular body type, we subtracted participants’ body fat preference from their muscular body preference to create a muscularity advantage score, where higher values indicate a higher relative preference for more muscular bodies (rather than merely a preference for larger targets). Furthermore, because we wanted to determine whether or not any changes in muscularity preferences were specific to the experience of social exclusion, rather than simply reflective of changes in mood or basic needs level, we conducted a univariate ANCOVA across condition and included positive mood, negative mood, and average basic needs level as covariates in the model. Importantly, positive mood, negative mood, and average basic needs level were not significant covariates in the model (all \( ps > .26 \)), and the predicted effect of condition on the muscularity advantage score was significant even when controlling for these other variables, \( F(2,71) = 3.14, p = .05 \) (see Figure 2).³

³ The results presented above are identical to a 2 Body Type (muscle, fat) × 3 Condition (exclusion, control, inclusion) mixed model ANOVA with repeated measures over the first factor and positive mood, negative Evolutionary Psychology – ISSN 1474-7049 – Volume 10(3). 2012. -581-
To better understand the impact of inclusionary status condition, we ran independent samples t-tests to compare muscularity preferences across each condition. In support of our hypothesis that socially excluded women would prefer men displaying characteristics that women typically prefer in their short-term sexual partners, socially excluded women displayed a significantly greater preference for muscular male body types (\(M = 2.30, SD = 1.41\)) than did women in the control (\(M = 1.12, SD = 1.24\)), \(t(51) = 3.23, p < .01\), and socially included conditions (\(M = 1.17, SD = 1.27\)), \(t(49) = 2.99, p < .01\). Socially included and control women did not differ in their relative preference for muscular male bodies, \(t(48) = .14, p = .89\).

Finally, to further clarify these results, we ran separate one-sample t-tests for each condition comparing the muscularity advantage score against a zero value to determine the magnitude of the muscularity preference across groups. Not surprisingly, and consistent with previous work indicating that women’s short-term mating goals lead to the prioritization of cues associated with good genes in male partners (Gangestad and Simpson, 2000), women across conditions showed a significant muscularity preference (all \(ps < .01\)). However, this preference was twice as large in the social exclusion condition (\(d = 1.58\)) compared to the control (\(d = .87\)) and social inclusion conditions (\(d = .89\)). Thus, although participants across conditions did in fact show a preference for male muscularity in a short-term mating partner, the magnitude of this preference was much larger for women in the social exclusion condition.

**Discussion**

mood, and basic needs as covariates. We used the difference score between body fat and body musculature preferences in the main text for ease of interpretation. Furthermore, we ran a similar model to test our predictions without including covariates, which revealed the predicted main effect of condition, \(F(2,74) = 6.81, p < .01\); post hoc comparisons (LSD tests) stemming from this model indicated that socially excluded women displayed higher preferences for male muscularity than control or socially included women (both \(ps < .05\)) and socially included and control women did not differ in their muscularity preferences (\(p = .99\)).
Consistent with our prediction that women would display preference shifts toward short-term mating following social exclusion, women in our current sample indicated greater preferences for muscular male body types than did control and socially included women. Because male muscularity has been linked to mate quality (e.g., Frederick and Haselton, 2007) and because women prioritize such cues highly when evaluating men as short-term mates, we expected women who have been excluded to show greater interest in this short-term mating cue. This effect remained significant even when controlling for other factors that might result in systematic shifts in mating preferences, specifically, changes in positive mood, negative mood, and levels of basic needs satisfaction. That the experience of social exclusion influenced women’s short-term mating preferences is consistent with previous research that has documented a unique role of social inclusion and exclusion in shaping mating preferences and behaviors more generally (e.g., Sacco et al., 2011).

General Discussion

Humans, like numerous other species, engage in sexual behavior for strategic purposes beyond reproduction (e.g., Meston and Buss, 2007). Furthermore, the biological sex differences that produce differential costs of reproduction for men and women also create disparities in the ability to utilize sexual behavior as a social exchange tool. Specifically, the costs of reproduction lead women to be more selective in choosing mates, which forces men to compete with one another for access to females (e.g., Symons, 1979; Trivers, 1972). Consequently, women can use this greater control over sexual behavior in a larger system of social exchange, in essence receiving non-sexual benefits in exchange for sexual access (Baumeister and Vohs, 2004). In the current research, we suggested that women might be able to utilize sexual availability as a potential resource for securing social support following the experience of social exclusion.

In two studies, we tested this hypothesis by measuring changes in women’s short-term mating interests and preferences following the experience of social exclusion. Specifically, we anticipated that women’s interest in short-term mating behaviors, such as interest in non-committed sexual activity and more frequent sexual liaisons, would be up-regulated following social exclusion as displaying increased sexual availability might be useful for securing social affiliation. In Study 1, we provided women with false feedback regarding their future opportunities for social belonging and then measured their attitudes toward short-term and long-term mating behavior. Consistent with our hypothesis, socially excluded women displayed greater interest in short-term mating (e.g., more sexual partners, less commitment) and reduced interest in long-term mating (e.g., fewer sexual partners, greater commitment) than did women who were socially included or control condition women.

In our second study, we tested the breadth of this shift toward short-term mating interest following social exclusion by measuring women’s body type preferences following social inclusion and exclusion. Much past research indicates that when evaluating men as potential short-term mates, women focus on physical characteristics that are associated with good genes, such as a more muscular physique (Frederick and Haselton, 2007). Thus, to the extent that social exclusion leads women to emphasize short-term mating more broadly, socially excluded women should prefer male partners with characteristics indicative of
good genes (a short-term mating preference) more so than socially included or control condition women. Consistent with this hypothesis, socially excluded women in our second study indicated a greater preference for muscular male body types compared to control and socially included women. Such a shift in mate preferences suggests that socially excluded women may focus their enhanced short-term mating behavior toward specific targets that emit cues indicative of good genes. Indeed, such a strategy may have multiple benefits. Specifically, although affiliation may be the primary goal of sexual behavior for socially excluded women, a preference to mate with high quality partners ensures that any offspring potentially produced from such a short-term sexual liaison are of superior quality.

Because the current studies focus on women’s short-term mating interests following social exclusion, rather than general interest in mating, they are not incompatible with previous work indicating that social inclusion leads to greater generalized but not specifically short-term mating effort in men and women (Brown et al., 2009; Sacco et al., 2011). Although men and women may use social inclusion as a signal to up-regulate mating effort in service of reproduction, women may also use social exclusion as a cue to utilize sexual behavior in exchange for social affiliation. Indeed, Sacco and colleagues (2011, Study 2) provide some preliminary evidence in support of this claim. Specifically, they had men and women indicate their endorsement of various mate poaching behaviors following manipulations of social rejection and inclusion. In this study, only women (not men) in the exclusion condition indicated greater endorsement of low-risk mate poaching activities than women in the other conditions. Importantly, inspection of these low-risk mate poaching behaviors revealed that the majority of them were pro-social behaviors consistent with an underlying motive of obtaining social affiliation. Furthermore, the mating-motives activated by social inclusion in women are more generalized and presumably longer-term than the specific, short-term sexual liaisons (hypothesized to be a form of social exchange) documented presently in excluded women, suggesting that qualitatively unique goals (e.g., reproduction vs. reaffiliation) are being pursued by females after social acceptance compared to social rejection.

It is also the case that the current findings do not directly test the motivation for increased interest in short-term sexual behavior following social exclusion. Although it seems consistent with the reaffiliation hypothesis, there are other potential reasons for increased interest in short-term mating behavior under similar circumstances. For example, past research has found that environmental cues associated with harshness and unpredictability lead organisms to adopt faster life history strategies (Ellis, Figueredo, Brumbach, and Schlomer, 2009). In essence, individuals living in these environments face more risks to their mortality, and therefore an expedited strategy of reproduction that focuses on quantity rather than quality (i.e., faster life history strategy) is more adaptive. To the extent that social exclusion is a cue indicative of environmental harshness and uncertainty, it may be the case that socially excluded women in the current research displayed a faster life history strategy to directly facilitate reproduction, rather than for reaffiliative purposes. These reasons are not incompatible, as engaging in short-term mate-seeking may serve multiple motives, including facilitating reproduction and securing social resources, both of which would be beneficial outcomes in harsh or unstable environments. In fact, when considered together, the results of Experiments 1 and 2 are largely consistent with this multi-motive reasoning.
Finally, it is also worth noting that the current research did not evaluate the efficacy with which sexual unrestrictedness can translate into social inclusion. Is it actually an effective strategy to use short-term mating to achieve social inclusion? In all likelihood, this probably depends on the local norms surrounding female sexual promiscuity (Baumeister and Vohs, 2004). In situations where female sexual promiscuity carries social stigma, such behavior may be a Faustian bargain for women, trading short-term feelings of connection for longer term experiences of social opprobrium. An additional limiting factor may be age and reproductive viability. The current sample consisted of college women; the extent to which short-term sexual access is a viable affiliative strategy is likely contingent on a female’s current age. However, we would predict that our results would be similar even sampling from a broader age range of participants. Although reproductive motives for sexual behavior diminish with age, the affiliative benefits of sexual behavior are less age-dependent; that is, individuals may continue to achieve the affiliative benefits of sexual behavior throughout the adult lifespan. As such, we would hypothesize that even women older than those included in our current sample could utilize increased short-term mating interest to secure social affiliation following an acute rejection experience. However, future research would be well-suited to address this provocative question.

Conclusion

Because biological constraints have resulted in greater female selectivity regarding human mating, women have historically been able to utilize sexual behavior as a strategy to obtain other valued resources (Baumeister and Vohs, 2004). One valued resource which women may be willing to exchange sexual access for is affiliation following social exclusion. Consistent with this hypotheses, the current research found that socially excluded women displayed greater interest in short-term mating behavior and greater preferences for physical cues in men associated with short-term mating interest than did socially included or control women.

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