

# Women's Perceptions of Sexual Exploitability Cues and Their Link to Sexual Attractiveness

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**Abstract** Two studies examined women's perception of the relationship between sexual exploitability and sexual attractiveness and women's use of cues to sexual exploitability to signal sexual accessibility. Study 1 ( $N = 77$ ) found that women accurately assessed other women displaying cues to sexual exploitability both as sexually exploitable and sexually attractive to men. Study 2 ( $N = 74$ ) tested the predictions that women who were dispositionally inclined toward short-term mating, who were not in a committed relationship, and who perceived themselves to be low in mate value would be more likely to display cues to sexual exploitability as a mate attraction tactic. Results supported the first prediction. These results suggest that a subset of women, those dispositionally inclined toward a short-term mating strategy, employ the risky strategy of signaling sexual accessibility using cues to exploitability to advance their mating goals.

**Keywords** Sexual exploitability · Sexual accessibility · Mate attraction · Individual differences · Signaling

## Introduction

It is now well documented that a woman's sexual attractiveness is predicated on fitness-based indicators of mate quality, such as cues to fertility, youth, and health (e.g., Fink & Penton-Voak, 2002; Gangestad & Scheyd, 2005; Sugiyama, 2005).

Cues to mate quality, however, may not fully explain perceptions of women's sexual attractiveness. A woman's sexual attractiveness also appears to be based, in part, upon cues to her apparent sexual accessibility. In a study of mate attraction tactics, those rated most effective were signals of sexual accessibility (Greer & Buss, 1994). Men may find cues to sexual accessibility attractive because of their functional effect on mating motivation—the pursuit of women who represent a greater likelihood of payoff compared to women who are less sexually accessible (Clark, 2008).

Commonly examined cues to sexual accessibility are those that indicate a woman is *interested* in a sexual relationship. However, one relatively unexplored domain of cues to sexual accessibility consists of cues indicating a woman could be sexually *exploited* (Buss & Duntley, 2008). Recent work has empirically documented a novel finding in the attractiveness literature—that men find cues to sexual exploitability to be sexually attractive (Goetz, Easton, Lewis, & Buss, 2012). Stated differently, men will perceive two different women with identical mate qualities cues as differentially sexually attractive depending on which one displays more sexual exploitability cues. Currently unknown are (1) whether women similarly identify women displaying cues to exploitability to be sexually attractive to males and (2) whether some women use the intentional display of sexual exploitability cues as a mate attraction strategy that functions to capitalize on men's mate preferences. These were the central goals of the current research.

## Cues to Sexual Exploitability and Their Link to Sexual Attraction

Goetz et al. (2012) had male participants rate the sexual exploitability, long-term mate attractiveness, and short-term mate attractiveness of photographed women pre-determined to be displaying varying levels of hypothesized exploitability

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cues. Men found women displaying cues to sexual exploitability to be attractive as short-term mates, but, importantly, not attractive as long-term mates. This evidence was consistent with the hypothesis that men have an evolved psychological mechanism designed to perceive cues to sexual exploitability as sexually attractive, presumably to motivate their pursuit of sexually accessible women.

Although these findings address men's perceptions of cues to exploitability, women's interpretation of these cues remains unknown. Because exploitability cues enhance a woman's sexual attractiveness to men, we hypothesized that women have co-evolved mate attraction mechanisms designed to capitalize on this feature of male sexual psychology. Women are not passive pawns in men's game of mating (Buss & Duntley, 1999). Rather than these cues being solely markers of vulnerability, we hypothesized that women would have benefited from displaying exploitability cues to advance their own mating and relationship goals.

### Exploitability as a Mate Attraction Strategy

Prior research on mate attraction tactics suggests that some women engage in mate attraction tactics that signal their sexual accessibility by advertising cues related to vulnerability to sexual exploitation. For example, some women report acting "ditzzy" or "air-headed" as mate attraction tactics (e.g., Buss, 1988; Schmitt & Buss, 1996). Men may interpret these behaviors, veridically or non-veridically, to indicate these women could be more easily deceived, pressured, or coerced into sex. Although women report employing these sorts of tactics, a key question is whether they recognize that these cues' relationship with exploitability cause men to find them attractive.

Historically, women would have benefited from knowledge about the exploitability-attractiveness link in two ways. First, understanding which cues activate men's mate attraction mechanisms would have allowed them to manipulate their behavior to appear sexually attractive to men. Second, women would have benefited from understanding other women's mating behavior and intentions since women's primary competitors in mating are other women. In a study examining indirect aggression in women, female participants were exposed to a confederate dressed in revealing, "sexy" clothing or in conservative clothing and their reactions were video recorded. Women exposed to the sexy confederates made negative statements and engaged in more indirect aggression toward the sexy confederate than women exposed to the conservatively-dressed confederates (Vaillancourt & Sharma, 2011). This suggests that women are sensitive to other women's attempts to sexually attract men and behave negatively towards those engaged in such pursuits. Understanding that women who displayed cues to sexual exploitability were perceived as sexually attractive to men could have allowed women to better assess potential rivals and competitors for mates.

### Individual Differences in the Use of Sexual Exploitability to Attract Mates

Advertising cues to exploitability is a mating strategy that comes with potential risks and costs. By signaling accessibility using these cues, a woman may attract men who are more prone to using coercion or force to exploit her, regardless of her desires. Appearing sexually accessible may also result in reputation damage in the eyes of other women (Campbell, 2002). Because men value sexual fidelity in long-term mates (Buss, 1989; Buss & Schmitt, 1993), gaining a reputation as being sexually exploitable may decrease a woman's attractiveness as a long-term mate. Finally, if a woman already has a mate, broadcasting sexual accessibility may incur additional costs, including coercive mate guarding, decreased investment, retaliation, or relationship termination (Buss, 2003; Buss & Duntley, 2011).

We hypothesized that women's mate attraction adaptations are designed to be sensitive to these potential risks and costs. Consequently, rather than a context-blind decision rule, we hypothesized that only certain women in delimited contexts would view tactics of displaying sexual exploitability to be an effective mate attraction strategy. Specifically, we hypothesized that three individual differences would predict which women would be more likely to report using mate attraction tactics that advertise cues to exploitability: propensity towards short-term mating, relationship status, and self-perceived mate value.

Individual differences in desire to engage in casual, uncommitted sex may influence which women will be more likely to use exploitability-related tactics to attract a mate. A variety of benefits to women for short-term mating have been hypothesized, including obtaining economic resource benefits, protection from other males, and genetic benefits for her offspring (Greiling & Buss, 2000; Thornhill & Gangestad, 2008). Women more inclined toward casual sex are more likely to implement mate attraction tactics that highlight their sexual accessibility (Bleske-Rechek & Buss, 2006). Women inclined toward short-term mating may be less concerned with the reputational costs that accompany advertising cues to sexual exploitability because such a reputation could enhance their ability to attract men who pursue short-term exploitative mating strategies. Research suggests that women with a greater inclination towards casual sex prefer more masculine men (Provost, Kormos, Kosakowski, & Quinsey, 2006; Provost, Troje, & Quinsey, 2008) and masculinity in men is associated with a greater number of reported short-term sex partners and a greater inclination toward short-term mating (Boothroyd, Jones, Burt, DeBruine, & Perrett, 2008; Rhodes, Simmons, & Peters, 2005). These findings suggest that women pursuing a short-term mating strategy target similarly inclined men. Displaying exploitability cues could be particularly useful to women inclined towards short-term mating because it may be especially effective in attracting men also interested in casual sex.

Single women may also value the benefit of being perceived as sexually accessible more than mated women, since mated women are generally less likely to be attempting to attract new mates. Mated women also face costs associated with their current partner perceiving they are sexually accessible, such as increased mate guarding from their partner and increased risk of partner violence (Cousins & Gangestad, 2007; Daly & Wilson, 1988; Kaighobadi, Starratt, Shackelford, & Popp, 2008). Because of these potential risks, mated women may perceive the costs associated with signaling accessibility as greater and, consequently, be less likely to display exploitability cues to attract mates.

Women low in mate value may be more inclined to employ riskier strategies than women high in mate value because they have more difficulty attracting and retaining mates. Mate value reflects an individual's current desirability on the mating market and is based on multiple components, including what members of the opposite sex perceive as sexually attractive in a partner, the specific preferences of each individual of the opposite sex currently seeking a partner, and other contextual features, such as operational sex ratio in the mating pool (Buss, 2003; Symons, 1987). There is mixed evidence about the influence of women's mate value on mating strategy. Some studies have found no significant relationship between women's self-perceived mate value and an inclination towards short-term mating (e.g., Clark, 2006; Landolt, Lalumiere, & Quinsey, 1995). One study found that women with a high number of lifetime sex partners had lower, and thus more attractive, waist-to-hip ratios than women with a low number of lifetime sex partners, suggesting a relationship between mate value and mating strategy in the opposite direction from what we hypothesized (Mikach & Bailey, 1999). Mikach and Bailey also reported no significant differences between women with a high or low number of sex partners on a variety of other mate value measures. However, these studies did not address the effect of self-perceived mate value on likelihood of implementing a risky, but possibly effective, mate attraction strategy. Because displaying exploitability cues could be a risky strategy, we hypothesized that women who perceived themselves as being lower in mate value would be more likely to endorse using this strategy than other women, who may be able to successfully rely on other, less risky, mate attraction strategies.

## Present Studies

The present set of studies had two objectives. Study 1 tested if women identified other women displaying cues that men perceived as diagnostic of sexual exploitability and sexual attractiveness to be sexually exploitable and sexually attractive. Replicating the procedure employed by Goetz et al. (2012) with male participants, female participants viewed

and rated images of women displaying hypothesized cues to exploitability. In Study 2, we examined individual differences in women's use of mate attraction tactics that involved the display of sexual exploitability cues.

## Method

### Participants

A total of 77 female students enrolled in an introductory psychology course participated and received partial course credit. The recruitment ad and consent form informed participants that the study's goal was to examine the relationship among women's perceived attractiveness and mating strategies and different physical and behavioral characteristics. Participants ranged in age from 18 to 26 years ( $M = 18.7$ ,  $SD = 1.34$ ). Two participants reported a sexual orientation other than heterosexual and two did not respond to the question assessing sexual orientation. Excluding these participants did not alter the study's findings in anyway and they were included in the analyses presented here. Participants were randomly assigned to one of three groups and only viewed about one-third of the total images to avoid fatigue effects. Group 1 ( $n = 23$ ) viewed a randomized set of 36 photographed women while Group 2 ( $n = 28$ ) and Group 3 ( $n = 26$ ) each viewed a randomized set of 37 photographed women.

### Measures

We used the identical set of 105 pictures (containing 110 women to be rated) and 63 hypothesized cues to exploitability evaluated by male participants in Goetz et al. (2012). These images were originally selected from publically available sources on the Internet because they contained women displaying hypothesized cues to exploitability. Two of the researchers coded cues that could be determined as present or absent in the pictures (e.g., touching hair, finger on lips). To quantify the degree to which women in the photographs displayed cues that could not simply be coded as present or absent (e.g., immature, intelligent), the researchers employed four independent raters to rate the presence of these cues in the images. Cues that did not receive a high enough level of agreement among the raters were eliminated. This allowed for the calculation of an average rating of each cue in each image to quantify how much a cue was displayed. This process resulted in 63 cues that were reliably present in the images (see Goetz et al. for reliability analyses associated with the cues and a detailed explanation of the picture selection process).

Participants answered the same four questions about the women's perceived exploitability and the same five questions about attractiveness as did male participants in Goetz et al.

(2012). The first exploitability question asked women to evaluate, “How easy would it be for a man to seduce this woman into engaging in sexual intercourse?” The next two questions were phrased the same way but replaced the word seduce with “pressure” and “deceive.” The fourth question asked, “How easy would it be for a man to sexually assault this woman?” The attractiveness questions assessed the target woman’s perceived long-term mate attractiveness (“How attractive would this woman be to a man as a long-term mate [e.g., committed romantic relationship, wife, etc.]?”), short-term mate attractiveness (“How attractive would this woman be to a man as a short-term mate [e.g., one-night stand, casual sex, etc.]?”), and physical attractiveness (“How attractive is this woman’s face?”, “How attractive is this woman’s body?”, and “How attractive is this woman overall?”). Participants responded to all questions using a rating scale ranging from 1 (not at all) to 5 (extremely). Participants also completed a demographics questionnaire to record their age, ethnicity, sexual orientation, and relationship status.

### Procedure

A research assistant explained to the participant how to advance through a prepared PowerPoint slide show of the set of images the participant was assigned to view. The research assistant then left the participant alone in the room to record her responses privately. After viewing each image, the participant rated the woman in the image on the exploitability and attractiveness measures. If a picture contained more than one woman, the image was clearly labeled with which woman should be evaluated. To avoid fatigue effects (the entire procedure took approximately 45 min), the research assistant interrupted participants after 25 min and provided them with the demographics questionnaire and instructed them to complete that before returning to the picture rating task.

### Results

Because participants only viewed a subset of pictures, we conducted a one-way analysis of variance between each group on the four exploitability and three attractiveness measures to ensure that there were no systematic differences based on set of pictures viewed. There were no significant differences between groups except for the measures of assault (Group 1:  $M = 2.87$ ,  $SD = .54$ ; Group 2:  $M = 3.18$ ,  $SD = .45$ ; Group 3:  $M = 2.59$ ,  $SD = .50$ ,  $F(2, 109) = 12.83$ ,  $p < .05$ ) and long-term mate attractiveness (Group 1:  $M = 3.05$ ,  $SD = .64$ ; Group 2:  $M = 3.06$ ,  $SD = .68$ ; Group 3:  $M = 3.45$ ,  $SD = .80$ ;  $F(2, 109) = 3.88$ ,  $p < .05$ ). Because the majority of the measures (seven out of nine) did not show between groups differences, and because there was no reason to suggest that the existing differences would affect interpretation of the study’s results, we proceeded with analyses as planned.

Data were organized and analyzed to correspond with analysis of male participants in Goetz et al. (2012). Participant ratings were averaged to generate a score for each measure of exploitability for each image. Because these four exploitability measures were highly correlated with one another ( $M = .89$ , range:  $r = .79-.97$ ), the scores were averaged to generate an overall exploitability score for each image. We calculated Pearson correlation coefficients between the rating means for each cue and the overall exploitability scores to determine which cues women viewed as diagnostic of exploitability. To isolate the relationship between each cue and each woman’s perceived mate attractiveness and exploitability, we statistically partialled out participant’s ratings of overall physical attractiveness when calculating the correlations. Overall physical attractiveness was highly correlated with facial attractiveness,  $r(108) = .96$ ,  $p < .001$ , and body attractiveness,  $r(108) = .94$ ,  $p < .001$ , prompting its use as our measure of physical attractiveness. Physical attractiveness was significantly correlated with both long-term and short-term mate attractiveness, but not exploitability: long-term:  $r(108) = .72$ ,  $p < .001$ ; short-term:  $r(108) = .70$ ,  $p < .001$ ; exploitability:  $r(108) = .12$ . Because each correlation between a cue and the participant ratings represented a test of an independent prediction, because the number of significant correlations far exceeded what would be expected by chance, and because they were all predicted a priori, we report the data without applying a statistical correction (see the footnote in Table 1). Furthermore, we wanted to keep analyses equivalent to those employed by Goetz et al. to allow for comparison between men and women.

To ensure there was overall agreement between men’s and women’s assessments, we calculated the single measures intraclass correlation between the women’s average ratings for each image and the men’s average ratings computed by Goetz et al. (2012). There was a high level of agreement between men and women on all measures (short-term mate attractiveness: .82, long-term mate attractiveness: .83, exploitability: .83).

Sixteen cues positively correlated with exploitability. Fourteen of these cues were the same cues determined to be diagnostic of exploitability by Goetz et al.’s (2012) male participants: Attention seeking, Come hither look, “Easy,” Flirty, Immature, Intoxicated, Open body posture, Partying, Promiscuous, Promiscuous friends, Reckless, Revealing clothing, Sleepy, and Young. Two additional cues, Tight clothing and Materialistic, were also positively correlated with perceptions of exploitability. Fifteen of these cues conformed to the hypothesized pattern and were significantly positively correlated with short-term mate attractiveness and were either negatively or not significantly correlated with long-term mate attractiveness. The cue Young was not significantly correlated with short-term mate attractiveness, but was negatively correlated with long-term mate attractiveness.

Eight cues negatively correlated with perceptions of exploitability: Age, Anxious, Being touched, Flushed face, Intelligent, Old, Passed out, and Shy. These paralleled the eight cues

**Table 1** Correlations between cues, sexual exploitability, and mate attractiveness

	Exploitability	STM attractiveness	LTM attractiveness
<b>Positively correlated cues</b>			
“Easy”	.85***	.80***	-.71***
Promiscuous	.74***	.78***	-.73***
Immature	.69***	.69***	-.70***
Intoxicated	.69***	.56***	-.43***
Reckless	.69***	.73***	-.77***
Partying	.61***	.61***	-.48***
Flirty	.57***	.61***	-.46***
Promiscuous friends	.55***	.69***	-.58***
Attention-seeking	.53***	.60***	-.64***
Revealing clothing	.49***	.55***	-.49***
Open posture	.38***	.46***	-.32**
Tight clothing	.36***	.46***	-.38***
Sleepy	.34***	.23*	-.14
Come hither look	.29**	.31**	-.31**
Materialistic	.28**	.39***	-.40***
Young	.25**	.18	-.28**
Alone	.15	.11	-.07
Punk	.14	.30**	-.50***
Touching face/hair	.14	.28**	-.02
Ring (wedding/engagement)	.13	.06	-.07
Confident	.12	.29**	-.14
Finger on lips	.12	.14	-.01
Touching breast	.10	.28**	-.02
Mostly with men	.09	.12	-.15
Tattoos	.09	.01	-.03
Tucking hair	.09	.12	-.10
Smiling	.08	.07	-.26*
At a wedding	.06	.10	-.20
Over-shoulder look	.06	-.01	-.04
Skinny	.05	-.03	-.17
Fat	.05	.07	.18
Friendly	.04	-.04	.25**
Laughing	.03	.08	-.09
Tall	.00	-.01	-.05
<b>Negatively correlated cues</b>			
Intelligent	-.70***	-.76***	.71***
Shy	-.49***	-.60***	.58***
Age	-.27**	-.23*	.29**
Flushed face	-.27**	-.17	.11
Passed out	-.27**	-.21*	.21*
Anxious	-.26**	-.26**	.03
Old	-.25**	-.17	.24*
Being touched	-.20*	-.21*	.07
Dancing	-.17	-.11	.02
Prostitute	-.16	-.20*	.18

**Table 1** continued

	Exploitability	STM attractiveness	LTM attractiveness
Sucking on a straw	-.15	-.19	.11
Sad	-.14	-.25**	-.09
Flushed neck	-.13	-.08	.10
Open legs	-.12	-.14	.09
Standing near men	-.12	-.05	-.05
Canted neck	-.11	-.09	.19
Piercings	-.11	-.20*	.28**
Lying back	-.11	-.06	-.06
Touching others	-.11	-.10	.00
Asleep	-.08	-.06	-.07
Crying	-.07	.09	.01
Touching thigh	-.07	-.12	-.00
Raised arms	-.06	-.08	-.02
Touching knee	-.06	.07	.11
Ear piercing	-.05	-.08	.04
Distressed	-.04	-.14	-.20*
Short	-.03	-.02	.12
Touching body	-.02	-.06	.11
Lip lick/bite	-.01	-.05	-.09

Of the 189 correlations presented, 46 correlations were significant beyond the .001 level, where <1 would be expected by chance alone; 66 were significant beyond the .01 level, where 2 would be expected by chance alone; and 77 were significant beyond the .05 level, where 10 would be expected by chance alone

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

reported by Goetz et al. (2012) as being negatively correlated with perceptions of exploitability. Six of these cues conformed to the hypothesized pattern and were significantly negatively correlated with perceptions of short-term mate attractiveness and either positively, or not correlated with, perceptions of long-term mate attractiveness. Flushed face and Old were negatively correlated with exploitability, but neither were significantly correlated with short-term mate attractiveness (Table 1).

In sum, we predicted that women’s assessments of these cues would concur with men’s assessments. Only two cues were significantly correlated with exploitability in the women that were not significantly diagnostic of exploitability by men (Tight clothing and Materialistic). All 14 of the cues men perceived as positively correlated with exploitability were also perceived as positively correlated with exploitability by women. All 8 cues men perceived as negatively correlated with exploitability were perceived that way by women as well.

## Discussion

We examined hypothesized cues to sexual exploitability to determine whether women’s perception of these cues showed concordance with men’s perception of these cues. All 22 of the

cues originally determined to be correlated with perceptions of exploitability by Goetz et al.'s (2012) male participants were also judged as indicative of exploitability by the female participants in the present study. Women also rated the majority of these cues as being correlated with sexual attractiveness, but not long-term mate attractiveness. This suggests that women were aware of how certain body postures, actions, and characteristics enhance or detract from a woman's perceived sexual exploitability to men. Furthermore, women recognized these cues also influenced a woman's perceived sexual attractiveness.

One limitation was that our participants were limited to university undergraduates who may have limited mating experience. However, the results suggest that extensive mating experience may not be required to recognize these associations. Nonetheless, future research would benefit from examining the effects of age and sexual experience on her perception of these cues.

## Study 2

Because of the link between exploitability and sexual attractiveness, some women may use sexual exploitability as a tactic to attract men. We hypothesized three individual differences that would predict a greater usage of using exploitability cues to signal sexual accessibility as a mate attraction strategy. We predicted that women more inclined towards short-term mating, unmated women, and women with lower self-perceived mate value would report that they would be more likely to use mate attraction tactics that advertise sexual exploitability. In Study 2, we used the cues determined to be diagnostic of sexual exploitability in Study 1 to generate potential mate attraction tactics. We also assessed mate attraction tactics not associated with exploitability to compare women's reported use of these tactics to their reported use of tactics related to exploitability. We hypothesized that these individual differences would affect women's evaluations of their prospective usage of exploitability-related tactics, but not their evaluations of their prospective usage of non-exploitability related tactics.

## Method

### Participants

A total of 74 women ranging in age from 19 to 60 years ( $M = 30.05$ ,  $SD = 8.86$ ) completed the survey. Twenty other potential participants were excluded from analyses because they did not complete the entire instrument ( $n = 6$ ) or they reported a sexual orientation other than heterosexual ( $n = 14$ ). Women self-reported their relationship status as single ( $n = 22$ ), dating ( $n = 3$ ), exclusive relationship ( $n = 19$ ), married ( $n = 30$ ), or other ( $n = 0$ ). We classified single or dating participants as "Unmated" and participants in an exclusive relationship or married as "Mated."

To assess a sample of women from a greater age range than the participants in Study 1, we recruited participants through Amazon's Mechanical Turk (MTurk). MTurk is a small-task crowdsourcing marketplace operated through Amazon.com. Requesters can distribute small tasks to a large number of workers online for a small price. For the current study, participants were required to be female, English speaking, and have an approval rating of 95 % from previous requesters of their work. Participants received \$.40 for completion of the task, a rate similar to other tasks on MTurk that take the same amount of time to complete. Research into the efficacy of MTurk suggests that participants recruited via MTurk at this approval rating level generate data as reliable as data collected via traditional offline methods (Burhmester, Kwang, & Gosling, 2011).

### Measures

Using the cues found to be correlated with perceptions of sexual exploitability in Study 1 and by Goetz et al. (2012), we generated potential tactics a woman could use to sexually attract a mate. Each cue was used to generate a possible behavior or action. For example, the cue "Reckless" was used to generate the tactic "Act recklessly." Some cues generated more than one tactic (e.g., the cue "Intoxicated" generated the tactics "Act intoxicated" and "Get intoxicated"). We omitted three cues, Flushed face, Passed out, and Promiscuous friends, because of difficulty in translating them into implementable tactics. In total, this generated 20 tactics (Table 2). Participant responses to these 20 tactics were averaged (the tactics "Act anxious," "Act shy," and "Allow others to touch you" were reverse-scored because of their associated cues' negative correlations with exploitability) to generate an exploitability-tactics score for each participant ( $\alpha = .85$ ). Six additional tactics were included. The tactic "Act like you could be sexually exploited" assessed women's explicit endorsement of using exploitability to sexually attract a mate. The other five tactics have not previously been associated with sexual exploitability: Act friendly, Act kind, Make yourself look more attractive, Smile, and Talk about interests you share with the person you are interested in. Including these allowed us to compare women's endorsement of tactics associated with exploitability to tactics not associated with exploitability. We averaged participant responses to these five tactics to generate a score for tactics not related to exploitability for each participant ( $\alpha = .83$ ). In all, participants rated 26 tactics.

Instructions to participants read: "Listed below are possible tactics you could use to make yourself appear more sexually attractive to a potential mate. Imagine you may have the opportunity to interact with potential mates that you are interested in. Please rate the likelihood that you would engage in each of the following tactics to make yourself sexually attractive to a potential mate or mates." Participants rated each item on 7-point scale that ranged from "Very unlikely" to "Very likely." Participants

**Table 2** Tactics for signaling exploitability

Cue	Associated tactic
Attention-seeking	Seek attention from others
Anxious	Act anxious
Being touched	Allow others to touch you
Come hither look	Give men a “come hither” look
“Easy”	Act “easy”
Flirtatious	Act flirtatiously
Immature	Act immature
(not) Intelligent	Act less intelligent than you are Act less intelligent than other women around you Act less intelligent than the person you are interested in
Intoxicated	Act intoxicated Get intoxicated
Open body posture	Have open body posture
Partier	Act like a partier
Promiscuous	Act promiscuous
Reckless	Act recklessly
Revealing clothing	Wear revealing clothing
Shy	Act shy
Sleepy	Act sleepy
Young	Act young

completed the tactics survey first to ensure their contemplation of their sexual history and mate value did not influence their evaluation of their mate attraction tactics.

Participants completed a demographics questionnaire assessing their age, ethnicity, sexual orientation, and relationship status, as well as the revised Sociosexual Orientation Inventory (SOI-R), which measures inclination towards short-term, casual sex by assessing sexual attitudes, behaviors, and desires (Penke & Asendorpf, 2008). The SOI-R consists of nine items. Three items assess frequency of sexual behaviors and number of sexual partners on a 5-point numerical scale anchored at “0” and “Eight or more.” The three items assessing attitudes ask participants how much they agree with statements about casual sex such as “I can imagine myself being comfortable and enjoying casual sex with different partners” and are scored on a 5-point Likert scale. The three items assessing desires asked about the frequency of sexual fantasies and arousal and were scored on a 5-point scale ranging from “Never” to “Nearly every day.” Responses to each item were coded as 1–5 and summed to generate an overall score. Three subscores can also be computed that reflect behaviors related to casual sex, attitudes towards casual sex, and desire for casual sex by summing the values three items that relate to each construct. Low scores on the SOI-R indicate an individual is less inclined towards short-term mating while high scores indicate an individual is more inclined towards short-term mating.

Participants completed three measures to assess their self-perceived mate value. Because of the previous mixed findings

with respect to women’s mate value and sexual strategies in the literature, we assessed mate value in a number of ways to test our mate value prediction. Participants completed the Mate Value Inventory (MVI) (Kirsner, Figueredo, & Jacobs, 2003), which asks participants to rate themselves on 17 traits theoretically linked to assessments of mate quality, such as intelligence, attractiveness, and health. Participants responded to the question “How well do you feel that these attributes apply to you currently?” on a scale of  $-3$  (extremely low on this trait) to  $+3$  (extremely high on this trait). Ratings were summed to generate an overall mate value score. They also completed the Components of Self-Perceived Mate Value Survey (CMVS) (Fisher, Cox, Bennett, & Gavric, 2008), which consists of 22 items that measure seven factors associated with mate value, including perceived attractiveness, relationship history, and how the opposite sex views the person taking the survey. Participants rated how much they agreed each statement applied to them using a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree) Items were summed to generate an overall self-perceived mate value score. Finally, participants completed the Body Esteem Scale (BES) (Franzoi & Shields, 1984), which asked participants to rate their feelings about 35 of their body parts. Participants rated each body part on a 5-point scale ranging from 1 (have strong negative feelings) to 5 (have strong positive feelings). Thirteen of these items sum to create a Sexual Attractiveness subscale for females. We used this subscale as the third measure of self-perceived mate value, as it reflected women’s self-perceived sexual attractiveness.

### Procedure

Participants viewed the study description on MTurk, which explained that they would provide their perceptions of different mate attraction tactics and answer questions about their personality and behaviors. The description provided a link to the survey hosted at Qualtrics.com. Participants read the consent page and, after agreeing to participate, continued to the tactics survey. After completing the tactics survey, participants completed the demographics questionnaire, the MVI, the CMVS, the SOI-R, and the BES. Participants viewed a debriefing page that explained the goal of the study was to assess individual differences in women’s endorsement of different mate attraction tactics and thanked them for their participation.

### Results

First, we compared participants’ overall evaluations of the likelihood of using exploitability-related tactics to using non-exploitability related tactics by performing a paired samples *t* test on the participants’ averaged scores on these two set of tactics. Women reported a higher likelihood of using non-exploitability related tactics ( $M = 5.98$ ,  $SD = .75$ ) than exploitability related tactics ( $M = 3.40$ ,  $SD = .84$ ),  $t(73) = -17.24$ ,  $p < .001$ .

**Table 3** Regression of likelihood of using exploitability-related tactics on relationship status, self-perceived mate value, and inclination towards short-term mating

Model	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
Constant	1.56	.44		3.58	.001
Relationship status	-.05	.18	-.03	<1	ns
Mate value (CMVS)	.01	.01	.21	1.95	.06
SOI	.05	.01	.45	4.02	<.001

Next, we performed multiple regression analyses to examine the effect of a woman's score on the SOI-R, relationship status, and self-perceived mate value on endorsement of mating tactics indicative of sexual exploitability. The relationship status variable,  $\beta = -.08$ ,  $t(72) < 1$ , scores on the MVI,  $\beta = -.01$ ,  $t(72) < 1$ , and scores on the Sexual Attractiveness subscale of the BES,  $\beta = .17$ ,  $t(72) = 1.68$ ,  $p = .10$ , did not yield significant results. The CMVS was used as the measure for mate value for the subsequent analyses. Tests for multicollinearity indicated that a low level of multicollinearity was present (tolerance = .92, .82, .76 for relationship status, CMVS, and SOI, respectively).

The CMVS resulted in a trend just short of conventional significance such that women with a higher self-reported mate value reported they would be more likely to use exploitability related tactics (Table 3). SOI-R scores alone significantly predicted prospective usage of exploitability tactics. Women more inclined towards short-term mating indicated that they would be more likely to use exploitability related tactics when trying to sexually attract a man,  $\beta = .54$ ,  $t(72) = 5.50$ ,  $p < .001$ ,  $R^2 = .30$ ,  $F(1, 72) = 30.27$ ,  $p < .001$ . Because the SOI-R is comprised of three subscales measuring behavior, attitudes, and desires, we examined each subscale by replacing the total SOI score with each subscale in the model to determine which were driving this relationship. All three subscales showed the same significant relationship as the total SOI-R score, behavior:  $\beta = .38$ ,  $t(72) = 3.44$ ,  $p < .01$ ,  $R^2 = .14$ ,  $F(1, 72) = 11.84$ ,  $p < .01$ ; attitudes:  $\beta = .41$ ,  $t(72) = 3.77$ ,  $p < .001$ ,  $R^2 = .17$ ,  $F(1, 72) = 14.19$ ,  $p < .001$ ; desires:  $\beta = .56$ ,  $t(72) = 5.71$ ,  $p < .001$ ,  $R^2 = .31$ ,  $F(1, 72) = 32.57$ ,  $p < .001$ .

To determine whether a woman's score on the SOI-R predicted likelihood of using the mate attraction tactics not related to exploitability, we performed a linear regression on the sum of the non-exploitability related tactics with SOI-R scores as the predictor. No significant relationship existed between SOI-R scores and prospective usage of these tactics,  $\beta = -.14$ ,  $t(72) = -1.21$ ,  $R^2 = .02$ ,  $F(1, 72) = 1.45$ .

Finally, we examined women's responses to the single item explicitly assessing their usage of signaling sexual exploitability to attract a mate. We found the same significant relationship in this explicit item as in the sum of the exploitability related tactics—women inclined toward short-term mating indicated they would be more likely to act like they could be sexually exploited to attract a mate than women less inclined to short-term mating,

$\beta = .48$ ,  $t(72) = 4.69$ ,  $p < .001$ ,  $R^2 = .23$ ,  $F(1, 72) = 21.95$ ,  $p < .001$ .

## Discussion

We explored women's assessments of mate attraction tactics related to sexual exploitability and tactics not related to exploitability. Individual differences emerged when examining the likelihood that a woman would use exploitability-related tactics. The key finding was that women more inclined towards short-term casual sex exhibited a higher probability of using exploitability-related mate attraction tactics than their long-term mating counterparts. This suggests that women who employed different mating strategies deployed exploitability-related tactics to different degrees. Women less inclined toward short-term mating may be less willing to appear sexually exploitable because of the potentially negative effects on their long-term mate attractiveness. Women more interested in short-term mating, on the other hand, may benefit from using tactics associated with sexual exploitability to sexually attract men. Furthermore, these women were also more likely to explicitly acknowledge that they would act sexually exploitable to attract a mate. These findings support the general hypothesis that women differ predictably in their tactics of attraction and the more specific hypothesis that women who were more inclined to use a short-term mating strategy were more likely to take advantage of men's attraction to sexual exploitability to advance their own mating goals.

Alternatively, women's experience with implementing these tactics may have influenced their prospective use of them. Women who have successfully attracted mates by behaving in an exploitable manner in the past may view this as a more effective strategy than women who have attempted to implement this strategy with little success. However, the current findings suggest that it is not only a woman's behavioral history that drives her assessment of signaling accessibility using exploitability-related tactics, because the attitudes and desires subscales of the SOI-R showed the same trends as the behaviors subscale. Future research could profitably examine women's reported experience with each of these tactics and women of varying sexual experience levels to further determine the effect of experience with these tactics on the likelihood of their use.

Overall, participants indicated that they would be more likely to use non-exploitability related tactics than exploitability-related tactics. Moreover, women's prospective usage of tactics not related to exploitability did not differ based on their dispositional inclination towards short-term mating. This suggests that it was specifically within tactics associated with being perceived as exploitable where individual differences based on mating strategy existed.

Two a priori predictions received no empirical support—there were no significant differences in prospective use of exploitability-related tactics based on relationship status or self-perceived mate value. There may be other contextual ele-

ments of a woman's relationship status that influence her likelihood of using exploitability cues to attract mates. For example, women less satisfied with their current relationships may be more likely to use risky strategies to attract a new mate. Conversely, women high in relationship satisfaction may be less likely to use these strategies because of the potential relationship-jeopardizing risks associated with them. Similarly, unmated women who are dissatisfied with their relationship status may, over time, expand the range of their tactics of attraction to include those that signal sexual exploitability. Future research using a longitudinal design to examine changes in women's behaviors correlated with changes in relationship status or satisfaction could more fruitfully address these questions.

Our measures of self-reported mate value did not predict the prospective use of exploitability-related tactics, which was consistent with existing work showing no significant relationship between women's self-perceived mate value and preferred mating strategy (Clark, 2006; Landolt et al., 1995). This lack of significant findings suggests that a woman's self-perceived mate value does not predict her usage of signaling exploitability. However, these null findings may have stemmed from inaccuracies in women's judgments of their own mate-value (Back, Penke, Schmuckle, & Asendorpf, 2011). If there are real differences in women's use and endorsement of exploitability-related tactics based on mate value, a non-self-report methodology may be needed to reveal them. Women may engage in self-deception about their mate attraction tactics. Self-deception in this context would be beneficial because it would allow women to believe that their mate attraction tactics do not involve portraying themselves as exploitable (for a review of the adaptive benefits of self-deception, see von Hippel & Trivers, 2011).

The current methodology relied on women's conscious perception of their prospective behavior. This may have limited our findings to reveal differences only in women who were aware of their use of behaving sexually exploitable as a mate attraction strategy or who believed they would behave that way. Long-term mating inclined women may employ this strategy but be unaware of their behavior or unwilling to admit it. If so, our findings underestimated the number and types of women that did use exploitability-related tactics to attract mates. Perhaps women inclined toward short-term mating were more self-aware of their mate attraction tactics than other women. It is also possible that women's beliefs about what mate attraction tactics they would employ in a given situation were inaccurate. Our findings instead would have captured differences in women's beliefs about their likelihood of advertising exploitability, rather than their actual likelihood of behaving in ways that would do so. Future research would benefit from objective observation of women actively engaged in mate attraction to assess their use of signaling accessibility by using cues to exploitability although these sorts of *in vivo* studies carry their own formidable limitations, since participants might alter their behavior when under direct observational scrutiny.

## General Discussion

The present set of studies offered several novel insights into a previously unexamined mate attraction strategy in women. Findings from Study 1 suggested that women recognized the same cues to sexual exploitability and sexual attractiveness as do men. Findings from Study 2 suggested that a predictable subset of women used this knowledge to their advantage. Women with a greater interest in casual sex reported a greater prospective likelihood of using mate attraction tactics related to sexual exploitability more than other women. Because these women may achieve their mating goals through appearing sexually attractive, appearing sexually exploitable may benefit them, even if it detracts from their attractiveness as a long-term mate.

These studies highlight a unique class of mate attraction tactics that some women employ. Previous work has found that men's and women's mate attraction tactics are dependent, at least in part, on the desires and preferences of the opposite sex (Buss, 1988). Findings from the current studies suggest that mate attraction tactics may be further tailored based on the type of relationship a person is seeking. This key conclusion was supported by other work on mate attraction tactics that suggests that women vary their mating tactics based on the level of investment they expect from potential mates—women expecting high levels of investment act chaste and emphasize their fidelity whereas women who do not expect investment flaunt their sexuality to extract pre-reproductive investment from as many males as possible (Cashdan, 1993). The current studies added another nuance to women's context-dependent adjustment of their use of a unique mate attraction strategy. This mate attraction strategy is particularly important to understand because of the likely costs women incur when employing it. These studies provide initial insight into which women are more likely to use tactics that put them at a greater risk for exploitation. They also lay the groundwork for research extending these findings by examining specific contexts in which women implement an exploitability-displaying strategy, the efficacy of such a strategy, and the downstream effect that advertising exploitability has on a woman's reputation.

These findings also expand our knowledge of the domain of sexual exploitability. Much of the research in this area has focused on individual differences in men and situational contexts that affect the likelihood of men committing sexual aggression (e.g., Abbey, Jaques-Tuira, & LeBreton, 2011; Malamuth, 2005). Some studies have also focused on the victim-related cues related to risk of being sexually exploited (Goetz et al., 2012; Greene & Navarro, 1998; Testa & Dermen, 1999). The current studies examined previously unexplored component of exploitability—the way in which women perceive cues that are diagnostic of exploitability, and capitalize upon being perceived as exploitable to advance their own mating goals.

These studies provided a first step in understanding women's perception of cues to sexual exploitability. Our findings suggest

that not only are women aware of the cues that men use to evaluate sexual exploitability and sexual attractiveness, but also that a predictable subset of women uses the relationship between the two to their advantage.

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