


Why Do Men Prefer Nice Women? Gender Typicality Mediates the Effect of Responsiveness on Perceived Attractiveness in Initial Acquaintanceships

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Abstract

Responsiveness may signal to a potential partner that one is concerned with her or his welfare, and may therefore increase sexual interest in this person. Research shows, however, that this proposition holds true for men, but not for women. In three studies, one observational and two experimental, we explored a potential mechanism that explains why men and women diverge in their sexual reactions to a responsive opposite-sex stranger. Studies 1 and 2 showed that men, but not women, perceived a responsive stranger as more gender typical (masculine/feminine) and, in turn, as more attractive. Study 3 revealed that responsiveness increased men's perception of partner's femininity. This, in turn, was associated with higher sexual arousal, which was, in turn, linked to greater partner attractiveness and greater desire for a long-term relationship. These findings suggest that whether responsiveness affects perceptions of partner attractiveness varies in individuals, depending on the contextually based meaning of responsiveness.

Keywords

attraction, dating, gender, responsiveness, sex

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Sexual responses to a potential new partner may serve as a diagnostic test of her or his mate value and suitability (Birnbaum & Reis, 2006), determining whether future interactions with this person will occur (Berscheid & Reis, 1998). Increased sexual desire for a new acquaintance may signify mate suitability and is therefore likely to motivate pursuit of this desirable potential partner. In contrast, a lack of sexual desire may signal incompatibility, and therefore may motivate withdrawal from future interactions with this person (Birnbaum, 2014; Birnbaum & Reis, 2006). If so, partner traits that signal mate value, such as those that are theorized to promote reproductive success via parental investment or “good genes” (e.g., warmth–trustworthiness, status resources, and attractiveness–vitality; Eastwick & Finkel, 2008; Fletcher, Simpson, Thomas, & Giles, 1999), may encourage sexual attraction to potential partners and increase the desire to bond with them (Lemay, Clark, & Greenberg, 2010).

Responsiveness is an important behavioral manifestation of such a trait, as it may signal to potential partners that one understands, values, and supports important aspects of their self-concept and is willing to invest resources in the relationship (Birnbaum & Reis, 2012; Reis, 2007). This key intimacy-building behavior is therefore likely to be particularly

valued in a potential long-term relationship partner (Clark & Lemay, 2010; Reis & Clark, 2013) and to increase sexual interest in her or him (Baumeister & Bratslavsky, 1999; Rubin & Campbell, 2012). Interestingly, though, recent research has indicated that men and women do not react to a stranger's expressions of responsiveness in the same way. Specifically, men, but not women, perceive responsive opposite-sex strangers as more sexually desirable than unresponsive opposite-sex strangers (Birnbaum & Reis, 2012). This research points to the possibility that the provision of responsiveness conveys different meanings to men and women in the context of initial (and potentially romantic) acquaintanceships. However, questions still remain as to what a responsive opposite-sex stranger signals that leads men and women to react differently.

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In the present research, we explored one potential mechanism that might explain why men and women diverge in their sexual reactions to a responsive opposite-sex stranger. In particular, we considered the possibility that provision of responsiveness in the specific context of dating is likely to reflect the feminine stereotype of communal relating (Diekmann & Eagly, 2000; Eagly & Mladinic, 1989; Rudman & Glick, 2001). Consequently, it may signal congruence (or lack thereof) between the stranger's biological sex and gender-typical qualities. That is, responsive women may be perceived as more gender typical (feminine) than unresponsive women, whereas responsive men may be perceived as less gender typical (masculine) than unresponsive men. To the extent that such perceptions of gender typicality determine perceived attractiveness (e.g., Johnson & Tassinary, 2007), they should lead men and women to have different views about the desirability of a responsive opposite-sex stranger. To explore this possibility, we conducted one observational and two experimental studies that investigated whether perceived gender typicality (perceived masculinity/femininity) mediated the association between provision of responsiveness by an opposite-sex stranger and perceptions of her or his sexual attractiveness.

Expressions of Intimacy and Sexual Desire

Being responsive to a partner's needs and wishes may signal to the partner that one is genuinely concerned with her or his welfare in a way that is truly open and informed about what the partner cares about and wants. Perceiving a partner as responsive is therefore fundamental to the development of intimacy within a relationship (Laurenceau, Barrett, & Rovine, 2005; Reis, 2007; Reis, Clark, & Holmes, 2004). Because sex is a prominent context in which people seek to be understood and cared for (e.g., Birnbaum & Laser-Brandt, 2002; Birnbaum & Reis, 2006; Cooper, Shapiro, & Powers, 1998), it is reasonable to expect that perceptions of a partner's responsiveness may strengthen the desire for sex with this partner. In particular, people who perceive that their partner understands, validates, and supports them can view sexual interactions as one way to enhance intimate experiences with such a responsive partner and, therefore, are likely to experience greater sexual desire. However, people who perceive that their partner is unresponsive—that is, that their partner does not understand or appreciate their needs, or is disinterested in supporting them—are likely to avoid sexual activity, thereby missing out on the potential intimacy that sexual interaction can create.

In line with this reasoning, Baumeister and Bratslavsky (1999) proposed that cues of rising intimacy, such as displays of affection and understanding, stimulate passion. Supporting this hypothesis, several studies have found that in established relationships, intimacy relates positively to sexual desire (e.g., Birnbaum, Cohen, & Wertheimer, 2007; Patton & Waring, 1985). Similarly, a recent diary study has shown that

daily increases in intimacy reported by both male and female partners predicted higher relationship passion and a higher probability of having sex (Rubin & Campbell, 2012). Nevertheless, the nature of the association between intimacy and sexual desire may depend on the changing functional significance of sex across different stages of relationship development (e.g., evaluating the suitability of a partner in initial encounters, promoting intimacy in later stages of dating; Birnbaum & Reis, 2006). Hence, findings about intimacy and sexual desire based on existing relationships may not apply to the initial stage of potential romantic relationships.

Responsiveness during Dating in Gendered Shoes

The effect of intimacy on sexual desire is not necessarily uniform even in initial romantic encounters, because this context may elicit different goals (e.g., pursuit of either short-term or long-term mating opportunities; Birnbaum, 2014; Birnbaum & Gillath, 2006). To be sure, not all people perceive a new acquaintance who seems to want to be close in the same manner. Specifically, as mentioned above, a prospective partner's expressions of intimacy are apparently desirable to men, but not to women (Birnbaum & Reis, 2012). A clue for why responsiveness in initial acquaintanceships induces a different sexual response in men and women comes from studies on gender roles that are embedded in dating scripts (i.e., stereotypes about the sequence of events and actions appropriate for dating encounters).

Early dating constitutes an ambiguous interpersonal situation in which little is known about the other person. In such situations, relying on traditional norms of how men and women should behave may provide a familiar framework for interpreting behavior, which helps to reduce uncertainty and the ensuing anxiety (Eagly, Eastwick, & Johannesen-Schmidt, 2009; Eaton & Rose, 2011). Indeed, although dating patterns have changed over the years, gender-stereotypic behavior persists in the dating realm. In particular, women are expected to show a communal orientation and to be more caring and concerned about others than are men. Men, in contrast, are expected to show an agentic orientation and to take control of the dating environment (e.g., initiate a date and pay for it; see review by Eaton & Rose, 2011). Given that initial romantic encounters reinforce stereotypical views of men and women, perceptions of a responsive opposite-sex stranger should become "attuned" to these gender stereotypes and guide people's emotional reactions and desires (e.g., Eagly et al., 2009). These perceptions and preferences may also be driven by evolutionary forces that have shaped women to prefer agentic, potentially good providers and men to prefer nurturing partners (e.g., Buss, 1989).

The Present Research

Perceived responsiveness, by definition, includes recognition that an individual understands and supportively reacts to

one's needs and goals (Reis, 2007). As outlined above, it is currently unknown why an opposite-sex stranger whose behavior emphasizes concern for others affects men's and women's sexual reactions differently. The present research set out to answer this question by suggesting that in the specific context of dating, communal behavior is likely to be viewed in gendered terms and to be regarded as feminine (Diekmann & Eagly, 2000; Eagly & Mladinic, 1989; Rudman & Glick, 2001). As such, responsiveness is likely to have a differential effect on men's and women's perceptions of the stranger's gender typicality and, consequently, as has been shown in previous studies, of her or his sexual attractiveness (e.g., Johnson & Tassinari, 2007). Thus, we hypothesized that men would perceive a responsive woman as more conforming to gender norms and feminine than an unresponsive woman and, thus, as more sexually attractive. These perceptions may be enhanced by men's tendency to overestimate women's sexual interest so as not to miss potential reproductive opportunities (e.g., Haselton & Buss, 2000). Specifically, men may interpret women's responsiveness as a sign of sexual interest and react accordingly by perceiving them as more attractive. Women, by comparison, would perceive responsive men as less masculine than less responsive men and, therefore, as less sexually attractive.

We conducted three studies to examine these hypotheses. In all studies, participants discussed a recent negative event with an unfamiliar, opposite-sex partner, and then rated how responsive this partner had been during the interaction. Participants also rated this person's masculinity/femininity and sexual attractiveness. Study 1 examined whether subjective judgments of gender typicality (perceived masculinity/femininity) mediated the association between perceived partner responsiveness and perceived partner attractiveness during face-to-face conversations among randomly paired strangers, while allowing interactions to unfold in a natural, spontaneous way. Studies 2 and 3 were experiments in which participants exchanged Instant Messages with a confederate who sent them either responsive or unresponsive standardized messages. In Study 2, we examined whether gender typicality mediated the effect of partner responsiveness on perceived partner attractiveness. In Study 3, we further investigated the processes by which partner responsiveness leads men to perceive their partners as more feminine and, in turn, as more sexually attractive. Specifically, we examined whether the association between a partner's perceived femininity and attractiveness was mediated by sexual arousal. We also considered whether partner responsiveness only affected men's perceptions of their partner's sexual attractiveness or whether it also affected their desire for a long-term relationship.

Study 1

Study 1 used a live interaction paradigm in which participants discussed a recent negative event with an opposite-sex stranger, and then rated this stranger's responsiveness,

gender typicality (perceived masculinity/femininity), and sexual attractiveness. We used moderated-mediation procedures to test our hypothesis that perceived masculinity/femininity would mediate the association between perceived partner responsiveness and perceived partner attractiveness (Preacher, Rucker, & Hayes, 2007). We also hypothesized that this mediation would be moderated by gender, such that men's perceptions of partner responsiveness would be positively associated with perceptions of partner's femininity, which in turn would be positively associated with perceptions of partner attractiveness. In contrast, we expected that women's perceptions of partner responsiveness would be negatively associated with perceived masculinity and therefore, with lower perceptions of partner attractiveness.

Method

Participants. One hundred twelve undergraduate students (56 women, 56 men) from a university in central Israel volunteered for the study without compensation. All participants were heterosexual and were not currently involved in a romantic relationship. Participants were randomly paired with an opposite-sex participant whom they did not know. One member of each pair was randomly designated as "discloser," and the other partner was designated as "responder." The participant of interest was the person in the role of discloser (28 women and 28 men). Disclosers ranged in age from 20 to 33 years ($M = 24.39$, $SD = 2.08$). Responders ranged in age from 19 to 28 years ($M = 24.13$, $SD = 2.01$).

Measures and procedure. Participants who agreed to participate in a study on personality, sexuality, and dating activities were randomly paired with an unfamiliar opposite-sex participant. They were scheduled for a single half-hour laboratory session that followed the procedure of Birnbaum and Reis (2012, Study 1). When each dyad arrived at the lab, they were greeted by a research assistant who asked them to get acquainted with each other for 5 min. The research assistant explained that the study involved discussing a recent personal negative event and randomly assigned participants to the role of discloser or responder by flipping a coin. The research assistant then asked disclosers to discuss a recent personal negative event (e.g., failing an exam) of their choosing and instructed responders to respond to, add to, or talk about as much or as little as they would under normal circumstances. All discussions lasted between 5 and 7 min.

After the discussion, participants were led into separate rooms to ensure confidentiality. Disclosing participants completed the Hebrew version of a measure of responsiveness, adapted from Reis's (Reis, Maniaci, Caprariello, Eastwick, & Finkel, 2011) General Responsiveness Scale to reflect new acquaintance. The responsiveness scale was translated into Hebrew by Birnbaum and Reis (2012), who also validated its structure on an Israeli sample. The current version assessed perceptions of how understood, validated, and cared for the

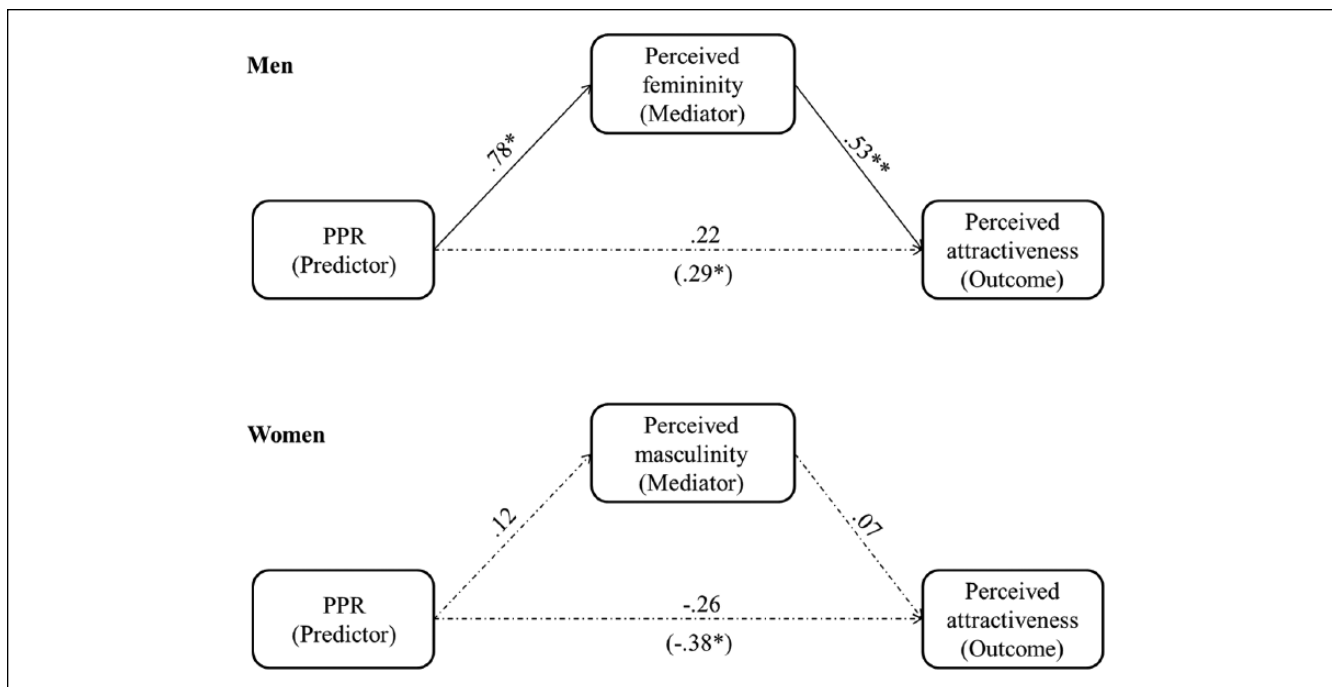


Figure 1. Moderated-mediation model showing that perceived femininity fully mediated the association between men's perceptions of partner responsiveness (PPR) and partner attractiveness in Study 1.

Note. The value in parentheses is from the analysis of the effect without perceived femininity/masculinity in the equation.

* $p < .05$. ** $p < .01$.

discloser felt when interacting with the responder. Participants rated nine statements, such as "The responding participant was aware of what I am thinking and feeling" or "The responding participant really listened to me." Items were rated on a 5-point scale from 1 (*not at all*) to 5 (*very much*). This scale was factorially unidimensional and internally consistent (Cronbach's $\alpha = .87$) in our sample. Higher scores indicated greater perceived responsiveness.

Disclosing participants were then asked to think about how they felt right then and to evaluate the responder's sexual attractiveness on five adjectives used by Birnbaum, Weisberg, and Simpson (2011): sexually desirable, sensual, "hot," attractive, and sexually exciting (e.g., "To what extent do you think that the responding participant is sexually desirable?"). These items were intermixed with five fillers (e.g., "To what extent do you think that the responding participant helps others in need?") to mask the nature of this questionnaire. Ratings were made on a 5-point scale ranging from 1 (*not at all*) to 5 (*very much so*). In the current sample, the five items were internally consistent ($\alpha = .95$) and were thus averaged to form a global sexual attractiveness index. Participants also rated the responder's masculinity/femininity, using the same 5-point scale (two items were averaged: "To what extent do you think that the responding participant is masculine/feminine?"; "To what extent do you think that the responding participant is a typical man/woman?"; $r = .29$, $p = .03$). Men answered the questions about femininity and the

typical woman, whereas women answered the questions about masculinity and the typical man. Finally, participants were asked to provide demographic information and were then fully debriefed. Participants were not allowed to leave until the research assistant was convinced that they felt good about their experience in the study.

Results and Brief Discussion

We examined whether the association between perceived partner responsiveness and perceived partner attractiveness was mediated by perceived partner's masculinity/femininity. In addition, we examined whether this mediation differed among men and women. Specifically, we tested a moderated-mediation model by using PROCESS (Hayes, 2013, Model 59) in which perceived partner responsiveness was the predictor, perceived partner attractiveness was the outcome measure, perceived partner's masculinity/femininity was the mediator, and gender ($-1 = \text{women}$, $1 = \text{men}$) was the moderator. Figure 1 shows the final model. In all of the reported analyses, confidence intervals (CI) for mean differences (Cohen's d) were calculated using the MBESS package in R (Kelley, 2007), CIs for correlations were calculated using Biesanz's (2014) R code, and CIs for standardized regression coefficients (β s) were calculated with the bias-corrected and accelerated bootstrap resampling method (Biesanz, 2014; Jones & Waller, 2013).

This analysis revealed a significant main effect of perceived partner responsiveness on perceived partner's masculinity/femininity, $b = .35$, standard error (SE) = 0.09, $t = 3.90$, $p = .01$, $\beta = .45$, the 95% CI for $\beta = [0.22, 0.69]$, such that participants who perceived their partners as more responsive also perceived them as more gender typical. This effect, however, comparable with the "a" path in mediation analysis, was qualified by gender, $b = .26$, $SE = 0.09$, $t = 2.88$, $p < .01$, $\beta = .32$, the 95% CI for $\beta = [0.09, 0.56]$. Men who perceived their female partners as more responsive also perceived them as more feminine, $b = .62$, $SE = 0.16$, $t = 3.78$, $p < .001$, $\beta = .78$, the 95% CI for $\beta = [0.37, 1.00]$. Conversely, the association between partner responsiveness and partner's masculinity was not significant among women, $b = .09$, $SE = 0.08$, $t = 1.16$, $p = .41$, $\beta = .12$, the 95% CI for $\beta = [-0.04, 0.23]$.

The analysis further revealed a significant main effect of perceived partner's gender typicality (i.e., masculinity/femininity) on perceived partner attractiveness, $b = .37$, $SE = 0.11$, $t = 3.33$, $p = .001$, $\beta = .31$, the 95% CI for $\beta = [0.12, 0.50]$, such that participants who perceived their partners as more gender typical also perceived them as more attractive. This effect, however, which relates to the "b" path in mediation analysis, was qualified by gender, $b = .28$, $SE = 0.11$, $t = 2.48$, $p = .015$, $\beta = .23$, the 95% CI for $\beta = [0.05, 0.42]$: Men who perceived their female partners as more feminine also perceived them as more attractive, $b = .53$, $SE = 0.12$, $t = 4.18$, $p < .001$, $\beta = .54$, the 95% CI for $\beta = [0.29, 0.80]$. The association between partner's masculinity and partner attractiveness was not significant among women, $b = .07$, $SE = 0.13$, $t = 0.54$, $p = .59$, $\beta = .07$, the 95% CI for $\beta = [-0.20, 0.35]$. Thus, in men, but not in women, perceived partner responsiveness predicted perceived partner's masculinity/femininity, which in turn predicted perceived partner attractiveness, 95% CIs = $[0.06, 0.84]$ for men and $[-0.07, 0.07]$ for women.

Finally, the analysis revealed that perceived partner responsiveness did not significantly predict partner attractiveness after controlling for partner's gender typicality, $b = .02$, $SE = 0.12$, $t = 0.00$, $p = .90$, $\beta = .02$, the 95% CI for $\beta = [-0.22, 0.26]$. This effect, however, was qualified by gender, $b = -.23$, $SE = 0.12$, $t = -2.01$, $p = .046$, $\beta = -.25$, the 95% CI for $\beta = [-0.50, -0.01]$: Among men, $b = .25$, $SE = 0.09$, $t = 2.59$, $p = .01$, $\beta = .28$, the 95% CI for $\beta = [0.07, 0.48]$, but not women, $b = -.23$, $SE = 0.21$, $t = -1.05$, $p = .29$, $\beta = -.23$, the 95% CI for $\beta = [-0.67, 0.21]$, perceived partner responsiveness predicted perceived partner attractiveness. Without controlling for perceived partner's gender typicality, perceived partner responsiveness did significantly predict partner attractiveness, $r = .27$, $p = .047$, 95% CI for $r = [0.09, 0.43]$. In addition, the total effect of perceived partner responsiveness on perceived partner attractiveness was qualified by gender, $b = -.38$, $SE = 0.14$, $t = -2.75$, $p = .007$, $\beta = -.39$, 95% CI for $\beta = [-0.66, -0.12]$. Consistent with previous research (Birnb Baum & Reis, 2012), men's perceptions of

partner responsiveness were positively associated with perceptions of partner attractiveness, $b = .25$, $SE = 0.09$, $t = 2.87$, $p = .005$, $\beta = .26$, 95% CI for $\beta = [0.08, 0.44]$. Conversely, women's perceptions of partner responsiveness were marginally and negatively associated with perceptions of partner attractiveness, $b = -.50$, $SE = 0.27$, $t = -1.92$, $p = .058$, $\beta = -.51$, 95% CI for $\beta = [-1.00, 0.02]$.

To examine gender differences in perceived partner responsiveness, gender typicality, and partner attractiveness, we conducted independent-sample t tests. These t tests revealed that men perceived their partners as marginally more attractive ($M = 2.81$, $SD = 1.02$) than women did ($M = 2.32$, $SD = 0.88$), $t(110) = 2.74$, $p = .007$, Cohen's $d = .52$, 95% CI for Cohen's $d = [0.14, 0.90]$. There were no significant gender differences in perceived partner responsiveness, $t(110) = 0.48$, $p = .63$, or in perceived partner's gender typicality, $t(110) = 0.01$, $p = .99$.

Overall, the results indicate that, as expected, perceived gender typicality mediated the association between perceived partner responsiveness and perceived partner attractiveness, and that this mediation was moderated by gender. Consistent with our hypothesis, men who perceived a new acquaintance as more responsive also perceived her as more feminine and, in turn, as more sexually attractive. This finding adds to research showing that traditional gender prescriptions still prevail in dating practices (Eaton & Rose, 2011) by illustrating how gendered thinking may affect perceptions and desires in early dating. In particular, it implies that women who are communal and supportive follow gender norms and are thus perceived as more feminine and as more attractive as potential mates.

Contrary to our hypothesis, perceived gender typicality did not mediate the association between perceived partner responsiveness and perceived partner attractiveness among women. One potential reason for this lack of mediation could be that women, unlike men, do not necessarily associate provision of responsiveness with lack of masculinity, at least in the context of initial acquaintanceships. Indeed, the findings showed that women's perceptions of partner responsiveness were not associated with their perceptions of partner's masculinity. This need not imply that women are less prone to gendered thinking than men are, however. Instead, it may reflect women's tendency to be skeptical of partners' commitment intentions, especially during the earliest phase of acquaintanceship (e.g., Haselton & Nettle, 2006). In this context, women may be suspicious of a responsive stranger's intentions, attributing his responsiveness to possible ulterior motives (e.g., manipulation to obtain sexual favors, a self-presentation strategy) rather than communal tendencies.

Study 2

Study 1's correlational design precludes conclusions about causal connections between perceptions of a new acquaintance's responsiveness and her or his gender typicality. Study

2 addressed this limitation by using an experimental design in which the responses to the participant's disclosure were manipulated. Our design thereby controlled both verbal content of the responsive message and other cues that are visible when people interact face-to-face (e.g., smiling, physical attractiveness). Participants discussed with an opposite-sex confederate over Instant Messenger a recent personal negative event. The confederate responded to this disclosure by sending either responsive or unresponsive standardized messages. Following this discussion, participants rated the confederate's responsiveness, gender typicality, and sexual attractiveness. Our hypotheses were the same as in Study 1.

Method

Participants. One hundred sixty-one undergraduate students (79 women, 82 men) from a university in central Israel volunteered for the study without compensation. Participants ranged from 20 to 38 years of age ($M = 24.49$, $SD = 2.28$). All participants were heterosexual and not currently involved in a romantic relationship. No significant differences were found between the experimental conditions for any of the socio-demographic variables.

Measures and procedure. Participants who agreed to participate in a study of personality and online intimate interactions were individually scheduled to attend a single half-hour laboratory session, which followed the procedure of Birnbaum and Reis (2012, Study 2). Prior to each session, participants were randomly assigned to interact with either a responsive or an unresponsive confederate. On arrival at the laboratory, participants were led to believe that they would be participating in an online chat with another participant who was located in a different room. All participants were assigned an opposite-sex confederate. Then, participants had their picture taken, which they were told would be shown to the other participant (the confederate). Next, participants were asked to view the other participant's photo. In reality, all participants were shown the same photos of an opposite-sex individual, previously used by Birnbaum and Reis (2012), which had been pilot tested to ensure that the male and female versions were similar in physical attractiveness (both were moderately attractive). Participants were then instructed to communicate with the confederate partner over Instant Messenger for 5 min and thereby to get to know each other.

After five min, participants were told that they would discuss over Instant Messenger a recent personal negative event that had happened to one of them. To decide who took the role of discloser and responder, the research assistant ostensibly randomly assigned the real participants to be disclosers by asking them to draw a slip of paper from a basket; all slips read "discloser." Thus, all responders were confederates. Subsequent checks on the credibility of this procedure revealed no instance of suspicion. After role assignment, participants were given the following instructions, in Hebrew:

We would like you to choose some current problem, concern, or stressor you are facing in your life. This may be something that happened before but continues to bother you, something going on now, or something you anticipate will happen in the future. Some examples could be a recent argument with a friend or a family member, a grade in class, work or financial problems, or personal illness. Please pick something that has been on your mind recently, no matter how big or small you may think it is. While you are interacting, please feel free to talk about anything related to the personal concern by dividing it into three messages. Some suggestions would be to discuss the circumstances surrounding the concern in your first message, how you feel and what you think about the concern in your second message, and any other details or issues that you think are important, such as the implications of this event for your life, in your third message. The responding participant can reply to each of your messages with a single line.

Participants and confederates then discussed the participant's negative event for up to 10 min. We experimentally manipulated responsiveness by having the confederate copy standardized responsive (e.g., "You must have gone through a very difficult time"; "I completely understand what you have been through") or unresponsive (e.g., "Doesn't sound so bad to me"; "Are you sure that's the worst thing you can think of?") messages. This set of standardized responses had been pilot tested by Birnbaum and Reis (2012) to fit the experimental condition.

After the discussion, participants completed the measure of perceived partner responsiveness described in Study 1. This measure served as a manipulation check ($\alpha = .95$). Participants also completed items assessing their perceptions of the responders' sexual attractiveness ($\alpha = .93$) and gender typicality ($r = .42$, $p < .001$), described in Study 1. In addition, participants completed four items assessing perceptions of partner selectivity (e.g., "To what extent do you think that the responding participant is selective in choosing potential partners?"; $\alpha = .87$). These items were included to examine whether perceptions of partner selectivity underlie the effect of responsiveness on partner's attractiveness, as less responsive new acquaintances may be perceived as more selective in their favors, which might increase their desirability (Eastwick, Finkel, Mochon, & Ariely, 2007). Finally, participants provided demographic information and were then carefully debriefed. No participant left until the research assistant was convinced that he or she felt good about her or his experience in the study.

Results and Discussion

Manipulation check. A t test on perceived partner responsiveness yielded the expected effect, $t(159) = 9.98$, $p < .001$, Cohen's $d = 1.58$, 95% CI for Cohen's $d = [1.22, 1.93]$: Perceived partner responsiveness was higher in the responsive confederate condition ($M = 3.27$, $SD = 0.85$) than in the unresponsive confederate condition ($M = 2.06$, $SD = 0.68$).

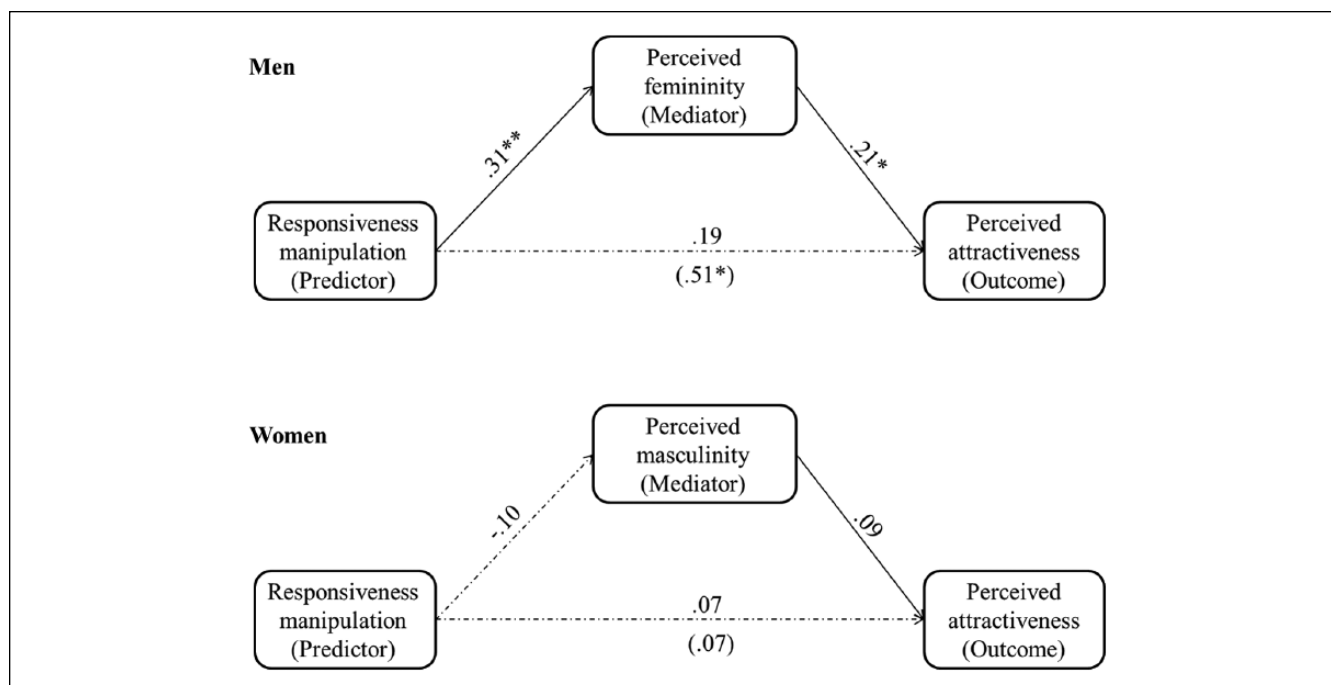


Figure 2. Moderated-mediation model showing that perceived femininity fully mediated the effect of partner responsiveness manipulation on men's perception of partner attractiveness in Study 2.

Note. The value in parentheses is from the analysis of the effect without perceived femininity/masculinity in the equation.

* $p < .05$. ** $p < .01$.

Responsiveness, perceived gender typicality, and sexual attractiveness. We again tested our hypotheses with a moderated-mediation model by using PROCESS (Hayes, 2013, Model 59) in which partner responsiveness manipulation ($-1 = unresponsive$, $1 = responsive$) served as the predictor, perceived partner attractiveness served as the outcome measure, perceived partner's masculinity/femininity served as the mediator, and gender served as the moderator. Figure 2 shows the final model.

The analysis did not reveal a significant main effect of perceived partner responsiveness on perceived partner's masculinity/femininity, $b = .10$, $SE = 0.08$, $t = 1.32$, $p = .18$, Cohen's $d = .22$, 95% CI for Cohen's $d = [-0.09, 0.53]$, but indicated that this link was qualified by gender, $b = .21$, $SE = 0.08$, $t = 2.67$, $p = .009$, $\eta^2 = .044$ (i.e., gender qualified the "a" path of the moderated-mediation model). Men who interacted with a responsive female confederate perceived her as more feminine than did men in the unresponsive confederate condition, $b = .31$, $SE = 0.11$, $t = 2.86$, $p = .005$, Cohen's $d = .65$, 95% CI = $[0.33, 0.97]$. Conversely, the effect of partner responsiveness manipulation on women's perception of partner's masculinity was not significant, $b = -.10$, $SE = 0.11$, $t = -0.94$, $p = .35$, Cohen's $d = -.21$, 95% CI = $[-0.52, -0.10]$.

The analysis further revealed a significant main effect of perceived partner's gender typicality on perceived partner attractiveness, $b = .19$, $SE = 0.08$, $t = 2.44$, $p = .02$, $\beta = .18$, 95% CI for $\beta = [0.03, 0.33]$, such that participants who

perceived their partners as more gender typical also perceived them as more sexually attractive. This effect, which corresponds to the "b" path in mediation analysis, was not significantly qualified by gender, $b = .10$, $SE = 0.08$, $t = 1.35$, $p = .18$, $\beta = .10$, 95% CI for $\beta = [-0.05, 0.25]$. In short, the analysis indicated that in men but not women, partner responsiveness led to perceiving the partner as more feminine, which in turn predicted perceived partner attractiveness, Bootstrap 95% CI = $[0.01, 0.18]$ for men and $[-0.05, 0.01]$ for women. Finally, the analysis revealed that partner responsiveness affected perceived partner attractiveness only marginally after controlling for perceived partner's gender typicality, $b = .14$, $SE = 0.08$, $t = 1.82$, $p = .07$, $\beta = .14$, 95% CI for $\beta = [-0.01, 0.28]$. Without controlling for perceived gender typicality, the effect was significant, $t(159) = 2.41$, $p = .017$, implying that the path between partner responsiveness and perceived partner attractiveness was significantly, yet only partially, mediated by perceived gender typicality (i.e., masculinity/femininity). Nevertheless, the total effect of perceived responsiveness on perceived attractiveness was qualified by gender, $b = .21$, $SE = 0.07$, $t = 2.89$, $p = .004$, $\eta^2 = .05$. Specifically, responsiveness was associated with increased perceptions of partner attractiveness among men, $b = .51$, $SE = 0.11$, $t = 4.78$, $p < .001$, Cohen's $d = 1.10$, 95% CI = $[0.77, 1.43]$, but not among women, $b = .08$, $SE = 0.10$, $t = 0.84$, $p = .40$, Cohen's $d = .19$, 95% CI = $[-0.12, 0.50]$. Introduction of perceptions of partner selectivity as an alternative mediator revealed that this variable did not mediate the effects of responsiveness.

We conducted independent-sample *t* tests to examine gender differences in perceived partner responsiveness, gender typicality, and perceived partner attractiveness. These tests revealed that men perceived their partners as more attractive ($M = 2.49$, $SD = 1.09$) than women did ($M = 1.88$, $SD = 0.84$), $t(159) = 4.00$, $p < .001$, Cohen's $d = .64$, 95% CI = [0.32, 0.96]. There were no significant gender differences in perceived partner responsiveness, $t(159) = 1.04$, $p = .30$, Cohen's $d = .16$, or perceived partner's gender typicality $t(159) = 0.55$, $p = .58$, Cohen's $d = .09$.

These findings indicate that, as predicted, and similar to the results of Study 1, perceived gender typicality mediated the association between perceived partner responsiveness and perceived partner attractiveness in men, but not in women. In particular, men associated provision of responsiveness with sexual attractiveness because it indicated high femininity. This pattern suggests that responsiveness is a cue for a woman's mate value and thus activates mechanisms for sexual attraction that motivate either short-term or long-term mating opportunities with this woman (Birnbau, 2014).

Women are apparently more cautious than men are when interpreting a stranger's expressions of responsiveness, as their perceptions of the stranger were unaffected by his responsiveness. Because women are more discriminating than men in their choice of sexual partners (e.g., Baumeister, Catanese, & Vohs, 2001; Sadalla, Kenrick, & Vershure, 1987), they may base their perceptions of potential partners on multiple behavioral cues, which may increase the reliability of mate choice decisions, rather than solely on provision of responsiveness. Alternatively, the meaning attached to provision of responsiveness may vary in women. For example, responsiveness can communicate that one truly cares about a partner and is willing to commit to the relationship. Hence, some women may perceive a responsive stranger as a valuable and desirable long-term partner. However, other women may interpret men's provision of responsiveness as a tactic for sexual exploitation rather than genuine long-term interest. Because sexually exploitative tactics are more typical of men than women (e.g., Haselton, Buss, Oubaid, & Angleitner, 2005), these women may view a potential partner's responsiveness in traditionally masculine terms. It is also possible that some women see responsiveness as an indication of eagerness to please, which is more typical of women than men (e.g., Diekmann & Eagly, 2000; Rudman & Glick, 2001). Hence, the nonsignificant effect of responsiveness on perceived partner masculinity may reflect conflicting trends among different women. As expected, when women did perceive a man as more masculine, they also perceived him as more sexually attractive.

Study 3

Studies 1 and 2 indicate that among men, perceiving female partners as responsive and thus feminine may lead to perceiving them as sexually attractive. These findings suggest

that a potential partner's responsiveness may activate motivational mechanisms, such as sexual attraction, that fuel pursuit of either short-term or long-term mating opportunities with this responsive partner (Birnbau, 2014; Birnbau & Reis, 2012). Study 3 further explored this mechanism, testing the specific possibility that sexual arousal functions as one such mechanism. This possibility was suggested by previous studies showing that arousal affects attraction to opposite-sex people (see meta-analytic review by Foster, Witcher, Campbell, & Green, 1998). Thus, in Study 3, we replicated and extended Study 2 by adding a measure of sexual arousal. This additional measure enabled us to examine whether a female partner's responsiveness would signal high femininity and therefore enhance men's sexual arousal, in turn promoting their perceptions of her sexual attractiveness.

We also added a measure of desire for a long-term relationship that allowed us to examine whether the processes described above underlie the effect of a potential partner's responsiveness on the desire to bond with her. Studies 1 and 2 suggest that provision of responsiveness indicates high femininity and therefore renders a woman sexually attractive. Nevertheless, perceiving a woman as sexually attractive does not necessarily make her attractive as a long-term mate (e.g., Goetz, Easton, Lewis, & Buss, 2012). Because provision of responsiveness signals communal tendencies and a willingness to invest in a relationship, it is likely to be desired not only in short-term partners but also in long-term partners (Clark & Lemay, 2010; Lemay et al., 2010). Therefore, being responsive and being perceived as feminine should render women attractive as long-term mates. This reasoning led us to hypothesize that a female partner's responsiveness would cause men to perceive her as more feminine and consequently to feel more sexually aroused. Sexual arousal, in turn, would heighten their desire for a long-term relationship with her.

Method

Participants. Eighty undergraduate male students from a university in central Israel volunteered for the study without compensation. Participants ranged from 20 to 31 years of age ($M = 25.60$, $SD = 2.06$). All participants were heterosexual and not currently involved in a romantic relationship. No significant differences were found between the experimental conditions for any of the socio-demographic variables.

Measures and procedure. Participants followed the same procedure as in Study 2, except that they completed additional measures of sexual arousal and desire for a long-term relationship. Participants discussed a recent personal negative event with a female confederate over Instant Messenger. Following this online discussion, participants completed measures of perceived partner responsiveness ($\alpha = .97$), perceived partner sexual attractiveness ($\alpha = .96$), and perceived partner's femininity ($r = .77$, $p < .001$), described in Study 1. In

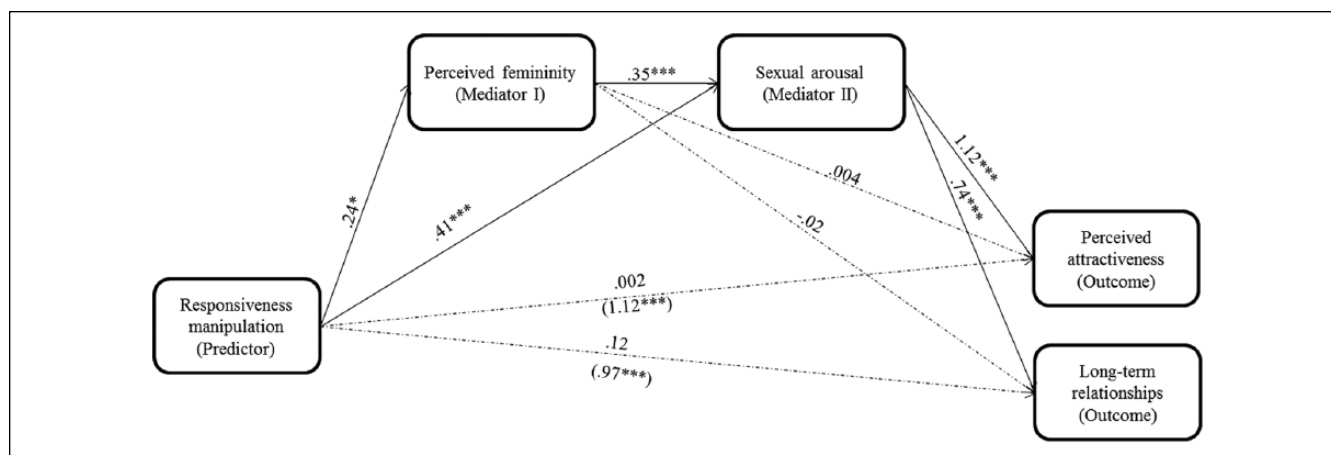


Figure 3. Two-step mediation model showing that the effect of partner responsiveness manipulation on men's perceptions of partner attractiveness and men's desire for a long-term relationship were mediated by perceived femininity and sexual arousal in Study 3.

Note. The value in parentheses is from the analysis of the effect without perceived femininity/masculinity and sexual arousal in the equation.

* $p < .05$. *** $p < .001$.

Table 1. Means, Standard Deviations, Statistics, and Effect Sizes of the Study Measures for the Different Conditions in Study 3.

	Responsive partner		Unresponsive partner		$t(78)$	Cohen's d	95% CI for Cohen's d
	M	SD	M	SD			
Perceived femininity	3.31	1.32	2.66	1.13	2.36*	0.53	[0.08, 0.97]
Sexual arousal	3.51	1.19	2.17	1.16	5.11***	1.16	[0.68, 1.63]
Perceived attractiveness	3.52	1.08	2.40	1.12	4.56***	1.03	[0.56, 1.49]
Desire for long-term relationships	3.41	1.25	1.93	1.10	5.63***	1.27	[0.79, 1.75]

Note. CI = confidence interval.

* $p < .05$. *** $p < .001$.

addition, participants completed three items assessing their sexual arousal (e.g., "To what extent do you feel sexually aroused?"; $\alpha = .95$) and reported their desire for a long-term relationship with the responder on the same 5-point scale.

Results and Discussion

Manipulation check. A t test on perceived partner responsiveness yielded the expected effect, $t(78) = 8.30$, $p < .001$, Cohen's $d = 1.90$, 95% CI = [1.37, 2.42]: Perceived partner responsiveness was higher in the responsive confederate condition ($M = 4.03$, $SD = 0.83$) than in the unresponsive confederate condition ($M = 2.30$, $SD = 1.01$).

Two-step mediation of the effect of responsiveness on partner attractiveness and the desire for a long-term relationship. In this study, we examined whether the association between perceived partner's femininity and perceived partner attractiveness was mediated by sexual arousal. We also examined whether partner responsiveness also affected men's desire for a long-term relationship with this partner. To do so, we tested two-step mediation models by using PROCESS

(Hayes, 2013, Model 6) in which partner responsiveness manipulation ($-1 = \text{unresponsive}$, $1 = \text{responsive}$) served as the predictor, perceived partner attractiveness and the desire for a long-term relationship served as the outcome measures, perceived partner's femininity served as the first-step mediator, and sexual arousal as the second-step mediator. The final model is presented in Figure 3. Means and standard deviations are presented in Table 1.

This analysis revealed two significant mediational paths. First, the partner responsiveness manipulation significantly increased men's perception of their partner's femininity. Greater perceived partner's femininity, in turn, was associated with higher levels of sexual arousal, which were, in turn, linked to greater perceived partner attractiveness and greater desire for a long-term relationship (percentile bootstrap 95% CI = [0.01, 0.18] for sexual attractiveness and [0.01, 0.14] for desire for long-term relationships. Second, partner responsiveness manipulation significantly increased men's sexual arousal, which, in turn, was linked to greater perceived partner attractiveness and greater desire for a long-term relationship (percentile bootstrap 95% CI = [0.23, 0.63] and [0.16, 0.44], respectively).

The analyses also revealed that partner responsiveness did not significantly affect perceived partner attractiveness or men's desire for long-term relationships when controlling for perceived partner's femininity and men's sexual arousal. Thus, the analyses indicated that the effects of partner responsiveness manipulation on men's perception of their partner attractiveness and their desire for long-term relationships were almost fully mediated by perceived partner's femininity and men's sexual arousal.

In sum, the findings of Study 3 replicated and extended those of Study 2 by showing that a female partner's actual responsiveness led men to perceive her as more feminine and consequently to feel more sexually aroused. Provision of responsiveness also had a direct effect on men's sexual arousal. Heightened sexual arousal, in turn, was related to both men's perceptions of partner attractiveness and desire for a long-term relationship with this partner. These findings provide empirical support for the view that a potential partner's responsiveness may signal mate quality and therefore activate motivational mechanism for the pursuit of long-term mating opportunities with this potential partner. Obviously, responsiveness may also indicate mate availability rather than quality and accordingly activate motivational mechanism for the pursuit of short-term mating opportunities (Birnbau, 2014; Birnbau & Reis, 2012).

The findings also imply that assessment of a woman's femininity is central to activation of such mechanisms. Past research has already suggested that physical cues of femininity (e.g., facial features, vocal characteristics) are one source of information to which mechanisms for sexual attraction are sensitive (e.g., Fraccaro et al., 2010), as they denote higher estrogen levels, good reproductive health, and overall mate quality (e.g., Feinberg, 2008; Law Smith et al., 2006; Thornhill & Gangestad, 2006). Our findings further imply that behavioral displays, such as provision of responsiveness, may serve as cues of femininity, thereby enhancing mate quality and making a female partner seem both more sexually desirable and attractive as a long-term mate. Of course, long-term mate choice decisions are likely to be guided by multiple behavioral cues, such as trustworthiness and being selective in choosing partners, than solely by provision of responsiveness.

General Discussion

Responsiveness is a key intimacy-building behavior geared toward promoting a partner's welfare (Reis & Clark, 2013) and is therefore, likely to be particularly desirable in a long-term partner (Clark & Lemay, 2010). Yet, it is not at all clear that provision of responsiveness arouses sexual interest in early dating and renders a prospective partner attractive. In such situations of uncertainty, some people may feel uncomfortable about a new acquaintance who seems eager to be close, and these feelings may impair sexual attraction to this person. Of course, other people may find a responsive

acquaintance sexually appealing. Indeed, a recent series of studies has shown that perceiving a new acquaintance as responsive increased the desire for sex with this acquaintance among men but not among women (Birnbau & Reis, 2012). These earlier findings suggest that men and women interpret a stranger's expressions of intimacy differently. In the present research, we sought to explain why an opposite-sex stranger whose behavior apparently denotes a priority concern for others does not affect men's and women's sexual reactions in the same way. By doing so, we were able to demonstrate how categorical gendered thinking spills over to the dating realm and operates together with intimacy-related processes to affect sexual attraction.

The findings of our three studies indicate that in the context of early dating, a prospective partner's responsiveness is likely to be viewed in gendered terms and regarded as feminine, at least by men, and therefore, have a differential effect on men's and women's perceptions of this partner's attractiveness. Study 1 revealed that under relatively naturalistic conditions, men, but not women, perceived a responsive stranger as more gender typical and, in turn, as more sexually attractive. Studies 2 and 3 experimentally manipulated partner responsiveness while using computer-mediated interactions. Study 2 indicated that, as predicted, and similar to the results of Study 1, men associated provision of responsiveness with sexual attractiveness because it signified high femininity. Study 3 replicated and extended the findings of Study 2 by showing that a female partner's actual responsiveness led men to perceive her as more feminine and consequently to feel more sexually aroused. Heightened sexual arousal, in turn, was linked to both increased perception of partner attractiveness and greater desire for a long-term relationship with this prospective partner.

Viewed together, these findings imply that whether a responsive partner will be seen as sexually desirable depends on the contextually based meaning assigned to provision of responsiveness. In early dating, this meaning is likely to be shaped by gendered expectations that are common to this relationship stage. Early dating provides a context in which little is known about the other person, and as such, it may revolve around reducing uncertainty about this person (Afifi & Lucas, 2008). To reduce uncertainty, potential partners often tend to rely heavily on conventional cultural scripts of how women and men should behave toward each other. Gender norms may therefore be especially influential in gauging behavior and guiding preferences for partners in these ambiguous interpersonal situations (e.g., Eagly et al., 2009; Eaton & Rose, 2011). If so, and given that female communion and male agency represent culturally shared expectations that are manifested in dating scripts (Diekmann & Eagly, 2000; Eaton & Rose, 2011; Rudman & Glick, 2001), it is not surprising that the meaning of the communal trait of responsiveness is gendered feminine in initial acquaintanceships.

What may seem surprising is that although men perceived responsiveness in gendered terms and viewed a responsive

opposite-sex stranger as more feminine than an unresponsive stranger, women did not perceive a responsive man as less masculine. Although these findings are ostensibly at odds with research showing that both men and women hold highly gendered beliefs about practices in the courtship context (e.g., Eaton & Rose, 2011), they do not necessarily imply that women's thinking is less gendered than that of men. Rather, the findings may reflect women's conflicting gendered interpretations of a prospective partner's responsiveness; some of whom possibly stem from a cautious approach to dating, which may reflect evolutionary forces.

According to evolutionary models of human sexuality (e.g., Buss & Schmitt, 1993; Trivers, 1972), women typically invest more in each offspring than men do, and thus, they have more to lose from a poor mating choice. Consequently, women are more selective than men are in their mating choices, particularly in short-term relationships (Baumeister et al., 2001; Sadalla et al., 1987). Because women are predisposed to caution in forming impressions of prospective mates (e.g., Haselton & Nettle, 2006), they may be skeptical of a responsive stranger's communal intentions and ironically attribute his behavior to exploitative strategies. Such strategies are more typical of men than of women (e.g., Haselton et al., 2005) and may thus lead women to perceive the stranger as more masculine. However, some women may perceive a responsive man as overly eager to please and therefore as less dominant and more feminine (e.g., Diekmann & Eagly, 2000; Rudman & Glick, 2001). Other women may simply view a responsive man as genuinely responsive. These mixed trends may obscure potential links between observed behavioral differences in responsiveness and the gender of the person doing the behaving. Future studies should investigate these possibilities by assessing the various meanings responsiveness may have and their associations with perceptions of gender typicality.

The differences we found between men's and women's perceptions of partner responsiveness support the notion that partners' traits gain meaning within the diverse circumstances that men and women encounter in their culture and in their personal lives (Eagly et al., 2009). As described above, there may well be evolutionary foundations for some of the cultural patterns that underlie the meaning of responsiveness in initial acquaintanceships. It is therefore reasonable to expect that the meaning of responsiveness will be affected by gender-specific mating strategies and that its effect on men's and women's sexual response will be governed by different mechanisms: selectivity in women, as discussed above, and perceived sexual availability in men (e.g., Buss & Schmitt, 1993). Although some of these evolved mechanisms may not involve conscious awareness, they may have rationalized manifestations that are culturally embedded. Yet, because our research did not determine the mechanism underlying women's perceptions of a new acquaintance, more studies are needed to explore the causal pathways that link provision of responsiveness and mating preferences.

Men are more likely than women to adopt short-term mating strategies (Schmitt, Shackelford, & Buss, 2001) and to be motivated not to miss mating opportunities (e.g., Haselton & Buss, 2000). Hence, men are likely to pay attention to women's receptivity cues and to overestimate their sexual interest during cross-sex interactions (Haselton & Buss, 2000; La France, Henningsen, Oates, & Shaw, 2009). In line with this research, men may interpret a woman's responsiveness as a sign of sexual interest and react accordingly with heightened sexual arousal. There are, however, circumstances in which men may benefit from shifting to long-term mating strategies. One such situation is when a woman with higher mate value (e.g., a responsive and feminine woman), who presumably demands greater investment, can be attracted (Buss & Schmitt, 1993).

Our findings point to the possibility that responsiveness activates these two mating strategies in men. Men may interpret responsiveness as sexual interest and be sexually interested in new acquaintances who appear receptive to their potential advances. Indeed, as the findings show, female partners' responsiveness heightens men's sexual arousal, regardless of their perceived femininity. In these cases, responsiveness may encourage the pursuit of short-term mating opportunities. At the same time, men may perceive a potential partner's responsiveness as a marker of femininity and mate value. These perceptions may increase sexual attraction to this partner and heighten the desire to bond with her. In other words, responsiveness may heighten sexual arousal and the desire for a long-term relationship, as long as it indicates gender typicality. In such cases, sexual desire may serve as a gatekeeper in initial encounters that ensures that only suitable partners will be pursued (Birnbaum, 2014; Birnbaum & Reis, 2012).

Limitations, Conclusion, and Future Directions

Our findings indicate that the elusive spark of attraction in initial encounters may be influenced by perceived responsiveness and that the nature of this influence depends on whether the new acquaintance is perceived as gender typical. Although these findings speak to one mechanism that helps explain why men find responsive women sexually attractive, they do not reveal the mechanism that underlies women's desires in new acquaintanceships. Our study, thus, does not provide a clear answer as to why women differ from men in their reaction to responsive strangers. Moreover, because this study did not assess perceptions of mate value, it cannot indicate when and why partner responsiveness will motivate the pursuit of short-term versus long-term mating opportunities.

Instead, our research raises additional questions about how men and women react to expressions of intimacy in the initial stages of acquaintanceship. For example, do women interpret responsiveness differently than men or are they just reluctant to report sexual attraction to responsive strangers after so little interaction? Are women more varied than men in the meaning they assign to responsiveness in early dating? Clearly, future studies should measure additional potential mediators (e.g.,

attributions for the partner's behavior, perceived mate value) and use other methods (e.g., implicit and behavioral measures of attraction) to further test whether different mechanisms govern men's and women's perceptions of responsiveness and mate preferences in new acquaintanceships.

Despite these limitations, the present research sheds light on the nature of the intimacy–desire linkage in the context of relationship initiation by identifying some of the processes whereby prospective partners' responsiveness leads to perceiving these partners as more attractive. Recent research has suggested that attraction to partners who provide the potential for intimacy emerges from early interpersonal experiences that each person carries forward to adult interactions (Birnbbaum & Reis, 2012) as well as from the interpersonal dynamics between potential partners (see review by Finkel & Baumeister, 2010). Our study adds to this research and implies that attraction is grounded in cultural traditions. In particular, categorical gendered thinking, which reflects cultural beliefs and prevails in the dating realm, shapes the meaning that people ascribe to expressions of intimacy. Eventually, this contextually based meaning of a prospective partner's responsiveness may determine the activation of the motivational mechanism for the pursuit of this partner. Of course, the meaning of responsiveness may change as a relationship progresses from initial encounters to steady dating, such that both men and women may perceive it in positive terms and react correspondingly with heightened sexual desire. Certainly, more research is needed to elucidate the nature of the intimacy–desire linkage in both sexes across different stages of relationship development.

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