

Research Article

Arbitrary Social Norms Influence Sex Differences in Romantic Selectivity

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ABSTRACT—Men tend to be less selective than women when evaluating and pursuing potential romantic partners. The present experiment employed speed-dating procedures to test a novel explanation for this sex difference: The mere act of physically approaching a potential romantic partner (vs. being approached), a behavior that is more characteristic of men than of women, increases one's attraction to that partner. This hypothesis was supported in a sample of speed daters ($N = 350$) who attended a heterosexual event where either men (eight events) or women (seven events) rotated from one partner to the next while members of the other sex remained seated. Rotators were significantly less selective than were sitters, which meant that the tendency for men to be less selective than women at events where men rotated disappeared at events where women rotated. These effects were mediated by increased self-confidence among rotators relative to sitters.

In an attempt to impress the gorgeous woman sitting at the bar, Maverick finds a microphone, approaches the woman, and serenades her with an off-key rendition of the Righteous Brothers' classic hit, "You've Lost that Loving Feeling." His decision to pursue her with such boldness is unusual, requiring the sort of uncommon self-confidence that causes people to earn nicknames like "Maverick." We suggest, however, that a toned-down version of Maverick's romantic initiation strategy is the norm rather than the exception in Western cultures. Strip away the microphone and the singing, and what remains? A man sees an attractive woman, and he approaches her to try to initiate a potential romantic relationship. What could be more mundane?

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Reversing the male and female roles, however, renders this relationship-initiation process much less ordinary. To be sure, there are women in Western cultures who regularly approach men to initiate romantic relationships, but such women are the exception rather than the rule. Although women frequently play an important role in initiating the courtship process (e.g., with eye contact, smiles, or hair flips; see Moore, 1985), even egalitarian men and women expect men to play the assertive, approach-oriented role when initiating romantic relationships, and women to play the more passive role, waiting to be approached (e.g., C.L. Clark, Shaver, & Abrahams, 1999; Laner & Ventrone, 1998; Rose & Frieze, 1993). In the present article, we examine whether the mere act of physically approaching potential romantic partners (vs. being approached by them)—even in the absence of any internal motivation to do so and when removed from the context of a traditional dating script—causes individuals to evaluate these partners as more desirable, to experience greater romantic chemistry with them, and to enact behaviors that increase the likelihood of a romantic relationship developing.

ROMANTIC SELECTIVITY

Heterosexual women tend to be more selective than heterosexual men in the dating realm. Indeed, a best-selling introductory psychology textbook recently summarized the relevant literature as follows: "People *select* their reproductive and sexual partners, and perhaps the most striking fact about this selection is that women are more selective than men" (Schacter, Gilbert, & Wegner, 2009, p. 631, italics in original). In a recent, large-scale study of on-line dating behavior, for example, men were approximately 1.5 times more likely than women to send a first-contact e-mail after viewing a given opposite-sex person's on-line dating profile—an effect that is all the more striking when considering that men browsed approximately twice as many profiles in the first place (Hitsch, Hortaçsu, & Ariely, 2009). In a well-controlled study, men were more willing than

women to go on a date with an attractive opposite-sex target depicted in a photograph (Townsend & Wasserman, 1998). In addition, across three samples, men were approximately 1.2 times more likely than women (58% vs. 48%) to accept a date from an opposite-sex research confederate who approached them on campus (R.D. Clark, 1990; R.D. Clark & Hatfield, 1989).

Several additional studies have employed speed-dating procedures to demonstrate this sex difference in romantic selectivity (Fisman, Iyengar, Kamenica, & Simonson, 2006; Kurzban & Weeden, 2005; Todd, Penke, Fasolo, & Lenton, 2007). Such procedures, which are characterized by both strong internal and strong external validity (see Finkel & Eastwick, 2008), are in many ways ideally suited to testing hypotheses related to romantic selectivity because participants indicate their romantic attraction toward numerous potential partners whom they have met in person. In speed-dating, participants attend an event where they go on a series of brief “dates” (approximately 4 min each) with members of their preferred sex (for an overview of speed-dating procedures, see Finkel, Eastwick, & Matthews, 2007). After the event, they indicate whether they would (“yes”) or would not (“no”) be interested in seeing each partner again. Men and women who *match* (mutual “yes” responses) are provided with the means to contact each other to arrange a follow-up meeting. Speed-dating studies reliably demonstrate that men respond “yes” to a larger proportion of their partners than women do (Fisman et al., 2006; Kurzban & Weeden, 2005; Todd et al., 2007).

Many scholars explain the robust sex difference in romantic selectivity in terms of the different adaptive problems facing ancestral women and men (e.g., Buss & Schmitt, 1993; C.L. Clark et al., 1999; Symons, 1979; Todd et al., 2007; Townsend & Wasserman, 1998; Trivers, 1972). According to this evolutionary perspective, human females, like other mammalian females, generally invest more resources in a given offspring than males do. Women’s minimum investment is 9 months of gestation, whereas men’s is a single act of sexual intercourse. Largely because of this asymmetry, the reproductive costs of an ill-advised mating decision are considerably higher for women. Evolutionary scholars have suggested that the sex difference in romantic selectivity reflects a domain-specific adaptive mechanism that evolved to manage these sex-differentiated costs and benefits among *Homo sapiens*’ ancestors. Indeed, the evidence for greater female selectivity is so obviously congruent with well-established evolutionary theorizing that one speed-dating research team played down its own evidence for this effect as “unsurprising” (Kurzban & Weeden, 2005, p. 240).¹

¹Many evolutionary psychologists argue that the sex difference in selectivity will be large in short-term mating contexts, such as one-night stands, but small (or even nonexistent) in long-term mating contexts, such as selecting a marital partner (R.D. Clark, 1990; R.D. Clark & Hatfield, 1989; Buss & Schmitt, 1993; Kenrick, Groth, Trost, & Sadalla, 1993). Dating, including speed dating, likely represents a middle ground between emotionally meaningless, one-time sexual encounters and long-term, committed pair bonding, so perhaps sex differences in such contexts should be of intermediate magnitude.

The compelling evidence for greater female selectivity notwithstanding, definitive evidence for this sex difference awaits an empirical test that rules out the pervasive confound that, in romantic contexts, men are far more likely to approach women than women are to approach men (C.L. Clark et al., 1999; Laner & Ventrone, 1998; Rose & Frieze, 1993). Published speed-dating studies of romantic selectivity provide particularly striking examples of this confound: In all of them, men always rotated from partner to partner, whereas women always remained seated. Such procedures mimic the rotational scheme employed in virtually all events hosted by professional speed-dating companies, and correspond to normative initiation dynamics in most other dating environments (i.e., men approach and women are approached).

MIGHT APPROACHING (VS. BEING APPROACHED) MAKE INDIVIDUALS LESS SELECTIVE?

Could a confound as trivial as which sex romantically approaches the other cause (or at least contribute to) the robust sex difference in romantic selectivity? There are reasons to think that it might. One reason, which is grounded in the extensive literature demonstrating the subtle mutual influence between the body and the mind (see Barsalou, Niedenthal, Barbey, & Ruppert, 2003), is that physical, embodied approach could lead to romantic approach. In other words, physical approach could lead to a tendency to find a given romantic target appealing, or, in other words, to be unselective. Although no previous research has examined the effects of embodied approach in romantic contexts, many studies suggest that it causes individuals to experience approach-related cognitions in nonromantic contexts, including positive evaluations of target stimuli. For example, seated participants who placed their palms on the bottom of a table and pressed up (a pose associated with approach) rated neutral Chinese ideographs as more appealing than did seated participants who placed their palms on the top of the table and pressed down (a pose associated with avoidance; Cacioppo, Priester, & Berntson, 1993). In addition, non-Black participants who had been trained to pull a joystick toward themselves (approach) when a picture of a Black person appeared subliminally on the computer screen and to push the joystick away from themselves (avoidance) when a picture of a White person appeared subsequently exhibited more positive implicit attitudes toward Blacks and behaved more warmly toward them than did non-Black participants who performed either the opposite joystick task or a side-to-side (neutral) joystick task (Kawakami, Phills, Steele, & Dovidio, 2007).

Speed dating provides an efficient means of examining the effects of approaching (vs. being approached by) potential romantic partners in part because it has an embodied-approach manipulation inherently embedded in its core structure. At all heterosexual speed-dating events, one sex (virtually always the men) rotates from partner to partner while the other sex sits to

await the next partner's arrival. Just as pressing one's hand upward on the bottom of the table or pulling a joystick toward oneself causes individuals to experience approach-related cognitions, we suggest that walking toward speed-dating partners (i.e., approaching them) could result in more positive evaluations than staying seated while partners approach.

We further suggest that such approach behavior should make individuals feel more self-confident on their speed dates. The logic underlying this self-confidence prediction derives from the concept of *situated conceptualization*, which suggests that general categories become meaningful when paired with particular contexts (Barsalou et al., 2003). We suggest that, just as anger becomes meaningful when in context (e.g., anger at one's spouse, the world, or oneself), approach behavior takes on a particular meaning in romantic contexts. Specifically, approach behavior is meaningfully related to self-confidence and to the male gender role, two constructs that are highly correlated (Spence & Helmreich, 1978). Building on evidence that "embodied states can function as cues that trigger situated conceptualizations" (Barsalou et al., 2003, p. 84), we suggest that embodied romantic approach (a traditionally masculine behavior) promotes feelings of self-confidence, and that this bolstered self-confidence may mediate the link between embodied approach and romantic approach.

A second reason why having men approach and women be approached in romantic settings could cause (or contribute to) the robust sex difference in romantic selectivity is that being repeatedly approached could make individuals feel particularly desirable, which could in turn cause them to become selective. According to the *scarcity principle*, individuals tend to place less value on objects or opportunities that are plentiful than on those that are rare (Cialdini, 2001). An individual who is approached repeatedly by opposite-sex individuals could make the attribution that these approaching individuals like and want to be near him or her. Participants in a speed-dating study might be sufficiently preoccupied with their own behavior that they fail to adjust this attribution to account fully for situational factors (i.e., speed-dating procedures *require* that the members of one sex approach the members of the other) that could have caused them to be repeatedly approached (see Osbourne & Gilbert, 1992). These approached individuals, gaining confidence as they sense that they are desired by many potential partners, might become more romantically selective. (Indeed, speed daters who are well liked tend to experience less romantic desire for their partners than do speed daters who are not well liked; Eastwick, Finkel, Mochon, & Ariely, 2007.)

HYPOTHESES

If either the embodied-approach or the scarcity explanation is correct, then speed daters who approach their partners (*rotators*) should be less selective regarding their partners than should speed daters who are seated (*sitters*), and should evaluate these

partners as more desirable, experience greater chemistry with them, and say "yes" to a larger percentage of them (*rotation hypothesis*). Results supporting this hypothesis would have implications for the sex differences in selectivity discussed earlier. We predicted that, consistent with the general tendency for men to be more oriented toward romantic approach than women, male participants would show greater romantic approach (romantic desire, romantic chemistry, and "yes" responses) toward their speed-dating partners (i.e., they would be less selective) when they approached and women sat, but that this sex difference would diminish and perhaps even disappear when women approached and men sat (*sex-moderation hypothesis*). We did not predict that the robust finding that women are more selective than men would be significantly reversed when women approached and men sat (we thought that subtly reversing embodied-approach dynamics at a speed-dating event would probably be insufficient to reverse a lifetime of men approaching and women being approached), but rather expected that this effect would be significantly and perhaps completely diminished.

Finally, we examined whether the level of self-confidence participants experienced on their speed dates statistically mediated these sex-moderation effects. Assessing mediation by self-confidence allowed us to test whether the potential effects of rotating versus sitting were due to embodied-approach or to scarcity dynamics. The embodied-approach idea—that approaching in romantic contexts activates masculine, agentic self-perceptions—predicts the following mediational model: rotating → increased confidence → strong romantic approach (low selectivity). In contrast, the scarcity idea—that being repeatedly approached in romantic contexts makes individuals feel like they have many options—predicts the following mediational model: sitting → increased confidence → weak romantic approach (high selectivity). If the sex-moderation effects are driven by embodied-approach processes rather than by scarcity processes, then the mediational analyses should support the former mediation model rather than the latter.

METHOD

We hosted 15 heterosexual speed-dating events for 350 undergraduates (174 women and 176 men; mean age = 19.57 years, $SD = 1.10$). Participants went on 4-min speed dates with approximately 12 opposite-sex individuals. For each event, we randomly determined whether men (eight events) or women (seven events) rotated.

Immediately after each date, participants completed three-item measures of their *romantic desire* for that partner (e.g., "I was sexually attracted to my interaction partner"; $\alpha = .88$) and their *romantic chemistry* with that partner (e.g., "My interaction partner and I had a real connection"; $\alpha = .91$), using scales from 1 (*strongly disagree*) to 9 (*strongly agree*). They also reported the degree to which they experienced *self-confidence* on that date

(1 = *not at all*, 9 = *extremely*). Shortly after returning home from the event, participants recorded on the study's Web site whether they would ("yes") or would not ("no") be interested in seeing each partner again.

RESULTS

Results from multilevel modeling analyses, which accounted for the nonindependence deriving from the fact that each participant rated approximately 12 targets, supported the rotation hypothesis. Relative to sitters (coded -0.5), rotators (coded 0.5) experienced greater romantic desire for ($M_s = 4.83$ vs. 5.13), $b = 0.29$, $t(3,739) = 2.72$, $p = .007$, $p_{\text{rep}} = .959$, and greater romantic chemistry with ($M_s = 4.67$ vs. 4.94), $b = 0.27$, $t(3,739) = 2.72$, $p = .007$, $p_{\text{rep}} = .959$, their speed-dating partners, and they responded "yes" to a significantly larger percentage of them (43.07% vs. 47.86%), $b = 0.21$, $e^b = 1.23$, $t(349) = 1.96$, $p = .051$, $p_{\text{rep}} = .876$. These effects were not significantly moderated by participant's sex, $|t|s < 1.15$, $ps > .252$.

As depicted in Figure 1, our results also supported the sex-moderation hypothesis (sex coded: $-0.5 = \text{men}$, $0.5 = \text{women}$; rotation sex coded: $-0.5 = \text{men rotate}$, $0.5 = \text{women rotate}$). The Sex \times Rotation Sex interaction was significant (or marginally significant) for all three dependent measures—romantic desire: $b = 0.51$, $t(3,739) = 2.43$, $p = .015$, $p_{\text{rep}} = .938$; romantic chemistry: $b = 0.50$, $t(3,739) = 2.55$, $p = .011$, $p_{\text{rep}} = .947$; and percentage of "yes" responses: $b = 0.40$, $t(349) = 1.87$, $p = .063$, $p_{\text{rep}} = .860$. When men approached and women sat (as was the case in all previous studies), men experienced greater romantic desire for, $b = -0.59$, $t(2,091) = -3.97$, $p < .001$, $p_{\text{rep}} = .986$, and greater romantic chemistry with, $b = -0.41$, $t(2,091) = -3.09$, $p = .002$, $p_{\text{rep}} = .979$, their speed-dating partners than women did, and they responded "yes" to a larger percentage of these partners, $b = -0.29$, $e^b = 0.75$, $t(190) = -1.91$, $p = .058$, $p_{\text{rep}} = .867$. In contrast, when women approached and men sat, none of these sex differences approached significance, $|t|s < 0.74$, $ps > .459$.

Finally, mediational analyses supported our embodied approach perspective rather than the scarcity perspective. The Sex \times Rotation Sex interaction positively predicted self-confidence, $b = 0.51$, $t(3,697) = 2.39$, $p = .017$, $p_{\text{rep}} = .934$. In addition, three mediated moderation analyses (Baron & Kenny, 1986)—one each for romantic desire, romantic chemistry, and percentage of "yes" responses—revealed that the Sex \times Rotation Sex interaction effects were significantly reduced (two to non-significance) after including self-confidence in the model, Sobel $z_s > 2.33$, $ps < .020$, $p_{\text{rep}s} > .927$. This mediation was also relevant to the rotation hypothesis (which collapsed across participant sex): Rotators reported more self-confidence than sitters, $b = 0.23$, $t(3,697) = 2.16$, $p = .031$, $p_{\text{rep}} = .907$, and three mediational analyses (one for each dependent measure) revealed that the effect of the approach manipulation on the dependent variables was significantly reduced (one to nonsig-

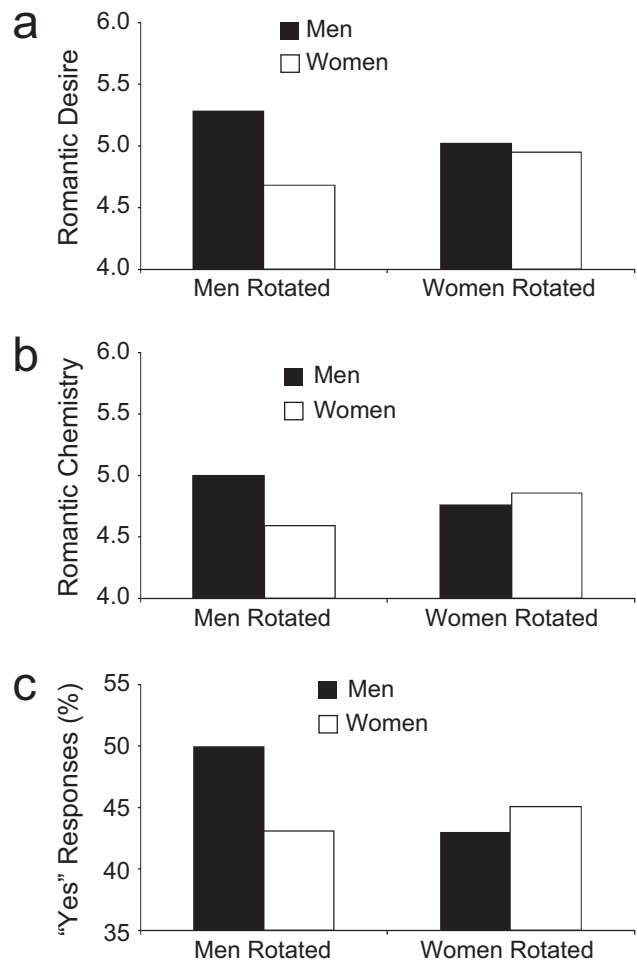


Fig. 1. Men's and women's (a) romantic desire for their speed-dating partners, (b) romantic chemistry with their partners, and (c) percentage of "yes" responses to their partners as a function of which sex rotated.

nificance after including self-confidence in the model, Sobel $z_s > 2.12$, $ps < .034$, $p_{\text{rep}s} > .902$. Consistent with the embodied-approach idea, our results showed that approaching (vs. being approached) made women and men feel more confident, and this confidence seemed to promote their tendencies to experience romantic desire toward and romantic chemistry with their speed-dating partners—and to respond "yes" to their partners at a significantly higher rate.

DISCUSSION

Results supported the hypothesis that speed daters who approached partners (rotators), relative to those who stayed seated (sitters), would experience greater romantic desire toward and greater romantic chemistry with their speed-dating partners, and that they would respond "yes" to their partners at a higher rate. These results replicated the well-established finding (Fisman et al., 2006; Kurzban & Weeden, 2005; Todd et al., 2007) that women are more selective than men at speed-dating events—but this replication emerged only when men rotated.

When women rotated (a procedural feature absent from previous speed-dating studies), sex differences in romantic desire, romantic chemistry, and percentage of “yes” responses disappeared. The Sex \times Rotation Sex interaction effects were significantly mediated through feelings of self-confidence on the speed date, with participants who rotated experiencing greater self-confidence than those who sat.

These mediational results were more consistent with the embodied-approach explanation than with the scarcity explanation. It seems that embodied approach in romantic settings (a traditionally masculine behavior) significantly boosted individuals’ self-confidence, which in turn increased their tendencies toward romantic approach (i.e., made them less selective). That said, the evidence for the embodied-approach mechanism is preliminary. Indeed, an alternative explanation that, like the scarcity explanation, situates the mechanism within the sitters rather than within the rotators is also consistent with the present results. According to this alternative explanation, just as being presented with a large array of options can be demotivating and cause individuals not to make a choice (Iyengar & Lepper, 2000), perhaps being repeatedly approached by romantic partners can be overwhelming, causing individuals to experience less self-confidence and ultimately to eschew romantic approach (i.e., to be selective). Definitive conclusions about the mechanisms driving our effects await future research.²

Implications

The present findings have implications for the social norms surrounding the initiation of romantic relationships. Although Western civilization has become increasingly egalitarian over the past century, certain social institutions remain gendered, some in subtle, almost invisible, ways. The present research identified powerful consequences of a particularly subtle gender bias: the near-universal tendency to have men rotate and women sit at heterosexual speed-dating events. At first blush, this rotational scheme feels like an arbitrary, trivial solution to the logistical problem of ensuring that all of the women speed-date all of the men and vice versa. Executives from a popular speed-dating company confided in us that they have men rotate because (a) women often have more accessories with them at events (e.g., purses), (b) men never seem to mind rotating, and (c) it just seems more chivalrous

²Other alternative explanations are also plausible. For example, perhaps approaching potential romantic partners (vs. being approached by them) influences how much anxiety one experiences; influences self-perceptions that one is action oriented, risk taking, or invested in making this dyadic interaction successful; and so forth. Another alternative explanation builds on the idea that individuals can misattribute their own physiological arousal to incorrect sources (Schachter & Singer, 1962). Perhaps standing up and walking several steps to the next partner caused rotators to experience increased physiological arousal (e.g., elevated heart rate), which they misattributed to romantic interest (see Foster, Witcher, Campbell, & Green, 1998). Although we cannot rule out this explanation, we find it implausible in part because our rotation manipulation would be the weakest arousal induction in the misattribution literature—far weaker, for example, than the low-arousal condition in Dutton and Aron’s (1974) classic bridge study.

that way. Speed-dating scholars have appropriately adopted many procedures from professional speed-dating companies, so it is not surprising that this gendered norm has largely persisted, even for events organized and hosted by scholars. The present results, however, present a cautionary note: Even subtle gender norms can have important consequences for romantic dynamics.

What implications do the present findings have for the extensive literature demonstrating that women are more selective than men when choosing mates (e.g., Fisman et al., 2006; Kurzman & Weeden, 2005; Symons, 1979; Todd et al., 2007; Trivers, 1972)? On the one hand, this sex difference did not significantly reverse at events where women rotated, so on average there was at least an overall trend in the present data for men to experience greater romantic approach (i.e., to be less selective) than women.³ On the other hand, the gendered norm we manipulated in the present study is just one of a universe of possible norms that could in principle affect romantic attraction, and our participants almost certainly had a lifelong history of navigating such norms that no subtle laboratory manipulation could readily erase. Given that men are generally expected, if not required (as at professional speed-dating events), to approach in romantic contexts, perhaps this factor alone could be sufficient to explain why women tend to be more selective than men. The present results are at least partially consistent with this possibility.⁴

Conclusion

In summary, we experimentally manipulated a small component of the gender script across speed-dating events: who physically approaches whom. Having women approach and men sit caused women to behave more like men (less selective than usual) and men to behave more like women (more selective than usual), thereby eradicating the robust sex difference in romantic selectivity. It would be fascinating to examine whether changes over time in embodied-approach sex differences (who physically approaches whom) predict changes over time in romantic-selectivity sex differences. To the degree that romantic-approach sex differences disappear, perhaps romantic-selectivity sex differences will follow suit.

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³The main effect of participant’s sex was significant for romantic desire, $p < .001$; marginally significant for romantic chemistry, $p = .059$; and nonsignificant for the percentage of “yes” responses, $p = .292$.

⁴Some scholars have argued that the tendencies in romantic settings for men to approach and for women to be approached reflect humans’ evolutionary heritage, not socialization processes alone (e.g., Grammer, 1989). The present research was not designed to distinguish between cultural and evolutionary origin theories for human romantic approach tendencies. Rather, we sought to suggest that even a slight normative manipulation is sufficiently powerful to override the robust tendency for men to be less selective than women when evaluating potential romantic partners, regardless of the cultural or evolutionary origin of approach tendencies.

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