UC Berkeley

UC Berkeley Previously Published Works

Title

Not competent enough to know the difference? Gender stereotypes about women's ease of being misled predict negotiator deception

Permalink

<https://escholarship.org/uc/item/4r51711q>

Journal

Organizational Behavior and Human Decision Processes, 125(2)

ISSN

0749-5978

Authors

Kray, LJ
Kennedy, JA
Van Zant, AB

Publication Date

2014-11-01

DOI

10.1016/j.obhdp.2014.06.002

Peer reviewed

Not competent enough to know the difference? Gender stereotypes about women's ease of being misled predict negotiator deception

Laura J. Kray^{a,*}, Jessica A. Kennedy^{b,1}, Alex B. Van Zant^{a,1}

^a University of California, Berkeley, Berkeley, CA 94720, United States

^b University of Pennsylvania, Philadelphia, PA 19104, United States

ARTICLE INFO

Article history:

Received 22 April 2013

Accepted 17 June 2014

Available online 14 July 2014

Accepted by Madan Pillutla

Keywords:

Gender stereotypes

Deception

Negotiation

Competence

Warmth

Scrutiny

Ethical standards

ABSTRACT

We examined whether gender differences in the perceived ease of being misled predict the likelihood of being deceived in distributive negotiations. Study 1 ($N = 131$) confirmed that female negotiators are perceived as more easily misled than male negotiators. This perception corresponded with perceptions of women's relatively low competence. Study 2 ($N = 328$) manipulated negotiator gender, competence and warmth and found that being perceived as easily misled via low competence affected expectations about the negotiating process, including less deception scrutiny among easily misled negotiators and lower ethical standards among their negotiating counterparts. This pattern held true regardless of buyer and seller gender. Study 3 ($N = 298$) examined whether patterns of deception in face-to-face negotiations were consistent with this gender stereotype. As expected, negotiators deceived women more so than men, thus leading women into more deals under false pretenses than men.

© 2014 Elsevier Inc. All rights reserved.

Introduction

"... Salesmen ... categorize people into 'typical' buyer categories. During my time as a salesman I termed the most common of these the 'typically uninformed buyer'. ... [In addition to their lack of information, these] buyers tended to display other common weaknesses. As a rule they were indecisive, wary, impulsive and, as a result, were easily misled. Now take a guess as to which gender of the species placed at the top of this 'typically easy to mislead' category? You guessed it—women."

(Parrish, 1985, p. 3, as quoted by Ayres & Siegelman, 1995)

As the reformed car salesman's quote illustrates, women are often considered easier to mislead than men. The current research examines how this stereotype influences who is likely to be deceived in distributive negotiations, where one party's financial gain comes from another's direct loss. Given the unique hurdles that women face in negotiations (Kray & Thompson, 2005) and the detrimental effects of deception on both economic and psychological outcomes (Schweitzer, DeChurch, & Gibson, 2005), it is surprising that research has not yet determined whether a negotiator's gender influences the likelihood of being deceived.

Understanding how gender affects deception is important because women are disadvantaged in negotiations (Bowles & Kray, 2013; Kray & Thompson, 2005). Women typically perform worse than men at the bargaining table (Stuhlmacher & Walters, 1999), due in part to stereotype threat (Kray, Thompson, & Galinsky, 2001) and backlash (Amanatullah & Morris, 2010; Bowles, Babcock, & Lai, 2007). Deception could exacerbate these problems.

Across three studies, we investigate the relation between negotiator gender, the perceived ease of being misled, and the likelihood of being deceived. We address three major research questions: (1) Are women stereotyped as more easily misled than men?; (2) How do perceptions of competence and warmth contribute to this stereotype?; (3) Are patterns of deception consistent with this gender stereotype? To address these questions, we examined the content of the gender stereotype, predictions about how it affects the negotiating process, and actual deception patterns in face-to-face negotiations. To begin, we review the literature on deception and gender in negotiation.

Deception in negotiations

Negotiations are social interactions in which people mutually allocate scarce resources (cf. Thompson & Hastie, 1990). Given that self-interest is a guiding force in negotiations, it is not surprising that deception is prevalent (Lewicki, 1983; Schweitzer & Croson,

* Corresponding author.

E-mail address: kray@haas.berkeley.edu (L.J. Kray).

¹ These authors contributed equally and are listed in alphabetical order.

1999). Deception is inherently an interpersonal process; a lie is transmitted from one party to another. It typically involves a deliberate attempt by one party to conceal (Shell, 1999) or present incorrect information to another party (Aquino, 1998; Bok, 1978; Ekman, 1985; Lewicki, 1983). Though deception can be both *initiated* by characteristics of a focal negotiator as well as *triggered* via characteristics of a negotiating counterpart (Olekalns & Smith, 2007, 2009), the current research examines the latter question—whether deception is elicited by the perception that a negotiator is easily misled.

In deciding whether to be deceptive, negotiators may consider the risks, opportunities, and potential consequences of deception before acting (Gneezy, 2005). Negotiators use deception opportunistically (Elangovan & Shapiro, 1998; Mazar, Amir, & Ariely, 2008; Olekalns & Smith, 2007, 2009), and the mere perception that a counterpart is weak may elicit deception (Elangovan & Shapiro, 1998; Olekalns & Smith, 2007, 2009). We focus our investigation on deception in distributive negotiations, where opportunistic motives are most likely to be active (Malhotra & Gino, 2011; Murnighan, Babcock, Thompson, & Pillutla, 1999).

Because information dependency is a fundamental feature of negotiations (Kelley & Thibaut, 1969), deception has a number of negative consequences for its victims. Deception distorts targets' beliefs about their counterpart's interests, influences their decision making, and harms their profits, while raising those of deceivers (Schweitzer et al., 2005). Deception may also decrease the efficiency of negotiations by preventing negotiators from recognizing compatible interests, obscuring opportunities for joint gains, and causing negotiators to enter into agreements that are worse than their alternatives (Jap, Robertson, & Hamilton, 2011). As such, understanding the dynamics of the decision to deceive is critical.

To date, researchers have focused primarily on the question of whether the gender of a focal negotiator impacts his or her unethical behavior (DePaulo, Kashy, Kirkendol, Wyer, & Epstein, 1996; Dreber & Johannesson, 2008; Feldman, Forrest, & Happ, 2002; Kray & Haselhuhn, 2012; Lewicki & Robinson, 1998; Robinson, Lewicki, & Donahue, 2000). This research finds that men set lower ethical standards and report greater deceptive intent than do women in negotiations. By contrast to the evidence accumulating on this question, scant attention has been paid to the question of whether deception varies on the basis of a negotiating partner's gender. In other words, does gender predict whether a negotiator will be the target of deception?

The perceived ease of being misled

We expected women to be perceived as more easily misled than men in negotiations for two reasons. First, gender differences in the intensity of agency prescriptions (Bem, 1974; Eagly, 1997; Prentice & Carranza, 2002) may increase women's perceived ease of being misled relative to men. Agency includes projecting confidence, competence and the sense that one is knowledgeable in business (Kennedy, Anderson, & Moore, 2013; Prentice & Carranza, 2002). Women are expected to be less agentic than men (Eagly, 1997). In negotiations, women conform to these expectations. Relative to men, women report less knowledge about negotiating and less confidence in their ability to do so (Babcock, Gelfand, Small, & Stayn, 2006; Kray & Gelfand, 2009; Stevens, Bavetta, & Gist, 1993). By conveying high levels of capability (Fiske, Cuddy, Glick, & Xu, 2002), competence may signal deception is likely to be effectively scrutinized and thereby revealed. Conversely, less competent targets may be seen as easier to mislead.

Second, we consider whether gender differences in the intensity of warmth prescriptions (Bem, 1974; Eagly, 1997; Prentice & Carranza, 2002) affect the perceived ease of being misled. Warmth describes positive intentions toward others (Fiske et al., 2002).

Relatively intensified warmth prescriptions for women conflict with the assertive behaviors associated with effective negotiating in general (Amanatullah & Morris, 2010; Small, Gelfand, Babcock, & Gettman, 2007). Warmth prescriptions may decrease women's resistance to lies because directly confronting deception is considered impolite (Ekman, Friesen, O'Sullivan, & Scherer, 1980; O'Sullivan, Ekman, Friesen, & Scherer, 1985). If would-be deceivers interpret women's presumed warmth as an unwillingness to confront deception, then it too may produce an expectation that women are relatively easily misled.

Apart from the question of what underlies the gender stereotype suggesting women are more easily misled than men, we also consider what effect this stereotype may have on bargaining behavior. Perceptions that women are relatively easy to mislead may increase deception if negotiators take advantage of the opportunity to deceive implied by this perception. In particular, the perception that women are more easily misled may generate an expectation that they are relatively unlikely to exhibit the doubt and persistent questioning necessary to expose deception (Schweitzer & Croson, 1999). By being perceived as relatively unlikely to engage in the scrutinizing behaviors necessary to expose deception—whether because of their low competence or their high warmth—women may elicit deception if negotiators act opportunistically.

A striking field study by Ayres and Siegelman (1995) suggests greater opportunism toward women manifests in worse opening offers by their counterparts. These authors had both male and female actors follow a standardized script inquiring about new car purchases at various auto dealerships. Price quotes were significantly higher for women than for men. Because the trained actors adopted identical bargaining strategies, it is likely that the gender difference in offer quality derived from the expectation that women were more likely than men to pay a high markup. As Ayres and Siegelman suggested (1995, p. 317), "If sellers believe, for example, that women are on average more averse to bargaining than men, it may be profitable to quote higher prices to women customers." This research supports the notion that negotiators willingly act upon women's apparent bargaining weaknesses. Here we examine whether this opportunism extends to a greater willingness to deceive women than men in negotiations.

Summary of hypotheses

On the basis of this logic, we tested a series of four hypotheses with the goal of establishing a causal chain whereby stereotypes about women's ease of being misled influence negotiator deception. First, we expected women to be stereotyped as more easily misled than men in negotiations. Second, we expected this stereotype to correspond with gender stereotypes concerning competence and warmth. Third, we expected the perceived ease of being misled to lower expectations about negotiators' effectiveness at scrutinizing deception and their negotiating counterparts' ethical standards. Finally, and most centrally, we hypothesized that women would be deceived more than men in face-to-face distributive negotiations.

To test these hypotheses, we conducted three studies. First, we confirmed that the perceived ease of being misled is greater for female negotiators than male negotiators (Study 1). We also examined gender prescriptions and proscriptions as possible contributors to this perception. Next, we examined whether gender stereotypes affect the perceived ease of being misled and, in turn, expectations about focal negotiators' deception scrutiny and negotiating counterparts' ethical standards (Study 2). Finally, we examined whether the pattern of deception in a face-to-face distributive negotiation is consistent with gender differences in the perceived ease of being misled. To do so, we analyzed archival data from a

negotiation simulation in the MBA classroom (Study 3). Study 3 also examined one important consequence of deception—whether an agreement is reached between negotiators—thus allowing us to determine if gender discrimination in patterns of deception add to female negotiators' litany of disadvantages by inducing them to enter into more deals under false pretenses than male negotiators.

Study 1: Negotiator gender and the perceived ease of being misled

Our first study was designed to examine whether a gender stereotype exists suggesting women are more easily misled than men in negotiations. To do so, we manipulated the gender of a prospective buyer and examined sellers' expectations about the buyer. We also included a gender-neutral control condition so that we could determine whether it is the case that women are regarded as especially easy to mislead (versus men are especially difficult to mislead) relative to a baseline condition.

Method

Participants and design

Participants were 131 US workers (75 female, 56 male) of an online marketing research website. They were paid \$1. No other demographic information was provided. Gender of negotiating counterpart was the sole independent variable with three between-subject conditions (male, female, control).

Procedure

Participants were given five minutes to complete an online survey. The survey began, "Imagine you are selling your used car. After posting an ad on a community bulletin board, you were contacted by an interested buyer [Michael Taylor, Patricia Anderson]. Based on your initial interactions, the buyer [Michael, Patricia] appears to be a typical [male, female] negotiator." In the control condition, no information regarding the buyer's gender was provided.

We included eight gender stereotypical traits from Prentice and Carranza (2002).² We selected gender prescriptions that are stronger for females than males (warmth, kindness), gender prescriptions that are stronger for males than females (business sense, ambition), gender proscriptions that are stronger for males than females (gullible, naïve) and gender proscriptions that are stronger for females than males (arrogance, stubbornness). These traits are consistent with prior research findings (Eagly, 1997) suggesting warmth is prescribed for women whereas competence is prescribed for men. We also included four additional traits that we expected to correspond with our constructs (easily misled, impulsive, confident, knowledgeable). Traits were presented in randomized order. Participants read, "Please rate how likely it is that the buyer [Michael, Patricia] is as follows:" The response scale ranged from 1 (*very unlikely*) to 7 (*very likely*).

Results

To begin, we factor analyzed all of the items via a principal components analysis with varimax rotation. Three factors with eigenvalues greater than one emerged from the analysis: Ease of being misled ($\alpha = .85$): *easily misled, gullible, naïve, impulsive*; Competence ($\alpha = .79$): *good business sense, confident, knowledgeable, ambitious*; Warmth ($\alpha = .79$): *warm, kind, stubborn, arrogant*, with the final two items reverse-scored; Table 1 provides descriptive statistics.

² We also included items intended to measure anxiety, but do not report them for the sake of simplicity.

A series of 3 (buyer gender: male, female, or control) $\times$ 2 (participant gender: male or female) ANOVAs revealed three buyer gender main effects. First, consistent with our hypothesis, a main effect of buyer gender emerged for ease of being misled, $F(2, 125) = 3.84, p = .02, \eta_p^2 = .06$. Planned comparisons revealed that the male buyer was perceived as less easily misled than the female buyer, $F(1, 87) = 8.74, p = .004, \eta_p^2 = .09$. No difference emerged for how easily misled the female buyer, $F(1, 80) = 1.11, p = .30, \eta_p^2 = .01$, or the male buyer, $F(1, 83) = 2.37, p = .13, \eta_p^2 = .03$, were compared to the gender-neutral buyer. This suggests stereotypes about men and women contribute equally to the observed gender difference in the perceived ease of being misled. Participant gender, $p = .54$, and the interaction between buyer and participant gender, $p = .39$, were non-significant. Table 2 provides means for each factor by buyer condition.

Second, a main effect of buyer gender emerged for competence, $F(2, 125) = 2.71, p = .07, \eta_p^2 = .04$. Importantly, the hypothesized difference in expected competence between the female buyer and the male buyer was significant, $F(1, 87) = 4.54, p = .04, \eta_p^2 = .05$. Compared to the gender-neutral buyer, the female buyer was expected to be marginally less competent, $F(1, 80) = 3.35, p = .07, \eta_p^2 = .04$. No difference in competence emerged between the male and gender-neutral buyers, $F(1, 83) = 0.01, p = .91, \eta_p^2 < .001$. A marginally significant main effect of participant gender also emerged, $F(1, 125) = 3.37, p = .07, \eta_p^2 = .03$. Women ($M = 5.27, SD = 0.81$) expected the buyer to be more competent than did men ($M = 5.00, SD = 0.89$). The interaction between buyer and participant gender was not significant, $p = .71$.

Third, a main effect of buyer gender emerged for warmth, $F(2, 125) = 8.14, p < .001, \eta_p^2 = .12$. The female buyer was expected to be higher in warmth than the male buyer, $F(1, 87) = 15.10, p < .001, \eta_p^2 = .15$. Planned comparisons revealed this gender difference was driven by positive perceptions of the female buyer's warmth relative to the control condition, $F(1, 80) = 11.02, p = .001, \eta_p^2 = .12$. Participants did not perceive significantly different levels of warmth between the male and gender-neutral buyers, $F(1, 83) = 0.24, p = .63, \eta_p^2 = .003$. This suggests intensified female prescriptions, rather than relaxed masculine prescriptions, contributed to the gender difference. Participant gender, $p = .10$, and its interaction with buyer gender were non-significant, $p = .37$.

Mediation analysis

We examined whether women's lower perceived competence or higher perceived warmth corresponded with the perception that they are more easily misled than men. We tested these hypotheses using a simultaneous mediation analysis. It included data in the male and female buyer conditions only and controlled for participant gender. The bootstrapping analysis of mediation (Preacher & Hayes, 2004) with 10,000 resamples with replacement showed women's lower perceived competence [$-.50, -.06$] but not higher perceived warmth [$-.13, .28$] mediated the effect of buyer gender on perceived ease of being misled.

Discussion

Consistent with the car salesman's intuition, women were perceived as more easily misled negotiators than men. Neither women nor men were perceived as easy to mislead on an absolute level in

Table 1
Study 1: Means, standard deviations, and correlations between factors.

Factor	Mean	SD	1	2
1. Ease of being misled	3.19	1.10	–	
2. Competence	5.15	0.85	–.43***	–
3. Warmth	4.05	1.04	.13	.03

Table 2

Study 1: Factor means and standard deviations by buyer gender.

Factor	Female (n = 44)	Male (n = 47)	Control (n = 40)
1. Ease of being misled	3.49 _a (0.89)	2.85 _b (1.09)	3.27 _{ab} (1.22)
2. Competence	4.90 _a (0.87)	5.30 _b (0.75)	5.24 _{ab} (0.90)
3. Warmth	4.53 _a (0.80)	3.76 _b (1.06)	3.86 _b (1.10)

Note: Means with different subscripts differ at $p < .05$.

the sense that average ratings were not above the midpoint of the scale. Instead, men were perceived as especially difficult to mislead. Gender stereotypes about what traits are required and/or allowed of each gender informed the perception that men are less easily misled than women. Specifically, prescriptive mandates that men exhibit competence predicted the perceived ease of being misled. In contrast to our hypothesis, prescriptive mandates that women exhibit warmth did not affect this perception, suggesting appearing nice is less of a liability in potentially deceptive situations than is appearing incompetent. We also note that these perceptions held true irrespective of perceiver gender. Expectations about women's relatively low competence explained why they were perceived as easier to mislead than men, and this held true for male and female perceivers alike.

Study 2: Expected effects of being easily misled on negotiating processes

The previous study confirmed the existence of a cultural stereotype suggesting women are more easily misled than men in negotiations. The perceived ease of being misled was negatively correlated with perceived competence, but uncorrelated with perceived warmth. The pattern suggests that women are perceived to be easy deception targets because of their relatively low expected competence. In the current study, we directly manipulated negotiator gender, along with competence and warmth, to causally assess what underlies the gender stereotype about women's ease of being misled.

Another goal of this study was to examine how the negotiating process may be affected by the perceived ease of being misled. To do so, we examined whether this perception affects expectations about focal negotiators' effectiveness at scrutinizing deception and their counterpart's likely ethical standards. Whereas self-reports of behavioral intentions tend to be inaccurate in ethical domains, predictions of others' behaviors tend to be quite accurate and representative of population base rates (Epley & Dunning, 2000). As such, we measured expectations about negotiators in general, rather than asking about whether participants themselves would relax their ethical standards when negotiating with an easily misled negotiator. We expected that being perceived as easily misled would correspond with an expectation that negotiating counterparts will adopt relatively low ethical standards. In particular, we were interested in identifying whether behaviors associated with the perceived ease of being misled (i.e., ineffective deception scrutiny) predict expected ethical standards of negotiating counterparts. By failing to exhibit the types of behaviors that deter deception, negotiators may elicit deception (Olekals, Kulik, & Chew, 2014).

The previous study examined the perceived ease of being misled in the context of used car sales. In the current study, we sought to test our theoretical account in the context of antique furniture sales. In so doing, we were able to test whether gender stereotypes about the perceived ease of being misled generalize beyond the stereotypically masculine context of used car sales. If the distributive negotiating context in general elicits opportunistic motives, then we should expect to see evidence of women's perceived ease of being misled in less overtly gendered contexts.

Table 3

Study 2: Means, standard deviations, and correlations between variables.

Variable	Mean	SD	1	2
1. Buyer ease of being misled	3.73	1.50	–	
2. Buyer deception scrutiny	3.50	1.26	–.48***	–
3. Seller ethical standards	3.26	1.28	–.26***	.36***

*** $p < .001$.

Method

Participants

Participants were 394 Amazon Mechanical Turk workers who completed a survey in exchange for \$0.75. We conducted four comprehension checks along the way, including an assessment of buyer gender. After eliminating participants who did not pass all four checks, we had a final sample of 328 participants. Among them, 116 were female (35%). The average age of the sample was 32 years old ($SD = 9.78$). The ethnicity of the sample is as follows: 74% Caucasian, 7% African American, 5% Hispanic, 11% Asian, 1% Native American, 2% other.

Experimental design

We conducted a 2 (warmth: low, high) $\times$ 2 (competence: low, high) $\times$ 2 (buyer gender: male, female) between-subjects experimental design.

Procedure

Participants read the following scenario involving the sale of an antique chair:

Imagine someone (the Seller) is selling an antique chair, which is estimated to be worth \$1250 according to a popular antique furniture buying guide. One of the chair's legs is defective, and would cost \$250 to have it fixed correctly. To prepare it for sale, the Seller tightened the leg temporarily; the Seller knows it will become wobbly again with use. However, the only way the Buyer can learn about this issue now is if the Seller were to disclose the defect.

Participants were told that an interested buyer had contacted the seller. We varied warmth and competence using terms from Study 1. To manipulate warmth, the buyer was either described as "warm and kind" (high) or "stubborn and arrogant" (low). To manipulate competence, the buyer was either described as "having good business sense and ambition" (high) or "lacking good business sense and ambition" (low). We also varied buyer gender, using the names Mike Taylor and Patty Anderson. After describing the buyer, we measured the buyer's perceived ease of being misled with 4 items ($\alpha = .93$) from Study 1: gullible, easily misled, naïve, and impulsive. Participants indicated the extent to which the items described the buyer on a scale ranging from 1 (*not at all*) to 7 (*extremely*).

We then measured expectations about the seller's ethical standards with 7 items ($\alpha = .94$): "How committed is the seller to maintaining the highest ethical standards with the buyer?", "How likely is the seller to omit pertinent information to the buyer (reverse-scored)?", "When negotiating with the buyer, to what extent is the seller likely to be truthful?", "To what degree is the seller likely to be committed to disclosing all possible considerations to the buyer?", "How likely is the seller to feel that it is necessary to reveal the whole truth to the buyer?", and "How obligated will the seller feel to act in a completely trustworthy and honest manner in dealing with the buyer?" Participants responded to each question on a scale ranging from 1 (*not at all*) to 7 (*extremely*).

Next we assessed the buyer's expected deception scrutiny. Participants read that the seller lied to the buyer as follows, "Before agreeing to purchase the chair, the Buyer asks the Seller, 'Can you please confirm that the chair is in good working order?' The Seller's response to this question was, 'Yes, the chair is in mint condition.'"

Participants indicated expected deception scrutiny with 6 items ($\alpha = .92$): whether the buyer would doubt the seller's response, be skeptical of the seller's response, persist in questioning the seller, continue to scrutinize the chair's condition, believe the seller (reverse-scored), and be satisfied with the seller's response (reverse-scored). Participants indicated what they expected would happen next on a scale ranging from 1 (*definitely not what will happen*) to 7 (*definitely what will happen*).³

At the conclusion of the survey, we included manipulation checks of competence and warmth, as well as measuring demographic information. Competence and warmth items were assessed using identical items from the manipulations on scales ranging from 1 (*not at all*) to 7 (*extremely*).

Results

Unless otherwise indicated, we conducted all analyses using a 2 (participant gender) $\times$ 2 (buyer gender) $\times$ 2 (buyer warmth) $\times$ 2 (buyer competence) ANOVA. Though we limited our analyses to those who passed all four comprehension checks, all effects that are reported at $p < .05$ remain at $p < .05$ when analyzing the entire sample, suggesting that sample restrictions did not influence our pattern of findings. Table 3 provides descriptive statistics and correlations. Our manipulations served their intended purpose, as participants perceived the low competence buyer ($M = 3.27$, $SD = 1.33$) to be less competent than the high competence buyer ($M = 5.15$, $SD = 1.29$), $F(1, 312) = 142.97$, $p < .001$, $\eta_p^2 = .31$, and the low warmth buyer ($M = 2.34$, $SD = 1.24$) to be less warm than the high warmth buyer ($M = 5.70$, $SD = 1.29$), $F(1, 312) = 509.80$, $p < .001$, $\eta_p^2 = .62$. We did not observe any other effects for either of the manipulation check items.

Buyer's perceived ease of being misled

Consistent with the correlational evidence reported in Study 1, the low competence buyer ($M = 4.67$, $SD = 1.20$) was perceived to be more easily misled than the high competence buyer ($M = 2.78$, $SD = 1.13$), $F(1, 312) = 192.47$, $p < .001$, $\eta_p^2 = .38$. We also observed a marginally significant main effect for warmth, such that the high warmth negotiator ($M = 3.88$, $SD = 1.39$) was perceived to be more easily misled than the low warmth negotiator ($M = 3.59$, $SD = 1.60$), $F(1, 312) = 3.47$, $p = .06$, $\eta_p^2 = .01$. No other effects were statistically significant.

Buyer's expected deception scrutiny

As hypothesized, the low competence buyer ($M = 3.07$, $SD = 1.09$) was expected to scrutinize deception less than the high competence buyer ($M = 3.93$, $SD = 1.28$), $F(1, 312) = 31.32$, $p < .001$, $\eta_p^2 = .09$. We also observed a main effect for warmth, such that the high warmth negotiator ($M = 3.28$, $SD = 1.12$) was expected to scrutinize deception less than the low warmth negotiator ($M = 3.71$, $SD = 1.36$), $F(1, 312) = 11.55$, $p < .001$, $\eta_p^2 = .04$.⁴ No other effects reached statistical significance.

³ We also measured the extent to which the seller was expected to be concerned by the possibility of retaliation from the buyer. However, we observed no significant effects for this measure and therefore do not discuss it further.

⁴ We also identified an unexpected four-way interaction, $F(1, 312) = 3.95$, $p < .05$, $\eta_p^2 = .01$. Given that it was not hypothesized, we simply note it here and call on future research to replicate and explain it. Notably, we found a buyer gender $\times$ warmth $\times$ competence interaction among male participants, $F(1, 204) = 6.06$, $p = .01$, but not female participants, $F(1, 108) = 0.49$, $p = .49$. Whereas a buyer gender $\times$ warmth interaction emerged for males evaluating the high competence buyer, $F(1, 106) = 7.06$, $p = .009$, no such interaction emerged for males evaluating the low competence buyer, $F(1, 59) = 0.08$, $p = .77$. Specifically, males considered the highly competent male buyer as more likely to scrutinize deception when he was low in warmth ($M = 4.39$, $SD = 1.24$) as opposed to high in warmth ($M = 3.55$, $SD = 1.04$), $F(1, 57) = 8.09$, $p = .006$. In contrast, males considered the female buyer as slightly less likely to scrutinize deception when she was low in warmth ($M = 3.94$, $SD = 1.27$) as opposed to high in warmth ($M = 4.25$, $SD = 0.98$), though the effect was not significant, $F(1, 49) = 0.96$, $p = .33$. No other effects were statistically significant.

Seller's expected ethical standards

As hypothesized, the seller was expected to have lower ethical standards when negotiating with a low competence buyer ($M = 3.05$, $SD = 1.21$) than with a high competence buyer ($M = 3.48$, $SD = 1.32$), $F(1, 312) = 8.16$, $p = .005$, $\eta_p^2 = .03$. We also observed a main effect for warmth, such that a high warmth buyer ($M = 3.40$, $SD = 1.21$) was expected to produce higher ethical standards for sellers than a low warmth negotiator ($M = 3.13$, $SD = 1.34$), $F(1, 312) = 4.56$, $p = .03$, $\eta_p^2 = .01$. Rather than lowering counterparts' expected ethical standards, warmth led to the expectation that counterparts would have relatively high ethical standards. No other effects were statistically significant.

Mediation analysis

To examine whether perceived competence affects expected deception scrutiny by creating the perception that a negotiator is easily misled, we conducted an initial mediation analysis. A bootstrapping procedure with 10,000 replications revealed a significant indirect effect for the buyer's perceived ease of being misled, 95% CI = [.47, .94], suggesting that it mediated the effect of buyer competence on expected deception scrutiny.

We also examined whether expected deception scrutiny mediated the link between the buyer's perceived ease of being misled and the seller's expected ethical standards. In the interest of demonstrating a mediation chain beginning with the buyer's competence, we first entered buyer competence and perceived ease of being misled into a single model predicting expectations of the seller's ethical standards. As expected, the buyer's perceived ease of being misled negatively predicted expectations of the seller's ethical standards ($p < .001$), but buyer competence did not ($p = .95$). We then expanded on this model by including expectations of the buyer's expected deception scrutiny as a predictor and found that the effect of the perceived ease of being misled was reduced ($p = .07$) while the effect of expected deception scrutiny was significant ($p < .001$). After running a bootstrap with 10,000 replications, we found a significant indirect effect for expected deception scrutiny on the relationship between the buyer's perceived ease of being misled and expectations of the seller's ethical standards, 95% CI = [−.17, −.05]. See Fig. 1 for a visual summary of the double mediation model.

Discussion

The results of this study shed further light on the relation between gender and the perceived ease of being misled in negotiations. An initial goal of our study was to determine the causal role that competence and warmth play in shaping perceptions of negotiators' ease of being misled. Consistent with the correlational evidence from Study 1, low competence corresponded with an expectation of being easily misled. However, whereas warmth did not predict the ease of being misled in Study 1, the current study found that high warmth increased the expectation that a negotiator would be easily misled. Consistent with these general trait expectations, both competence and warmth predicted behavioral expectations for focal negotiators corresponding with being easily misled. Low competence negotiators were expected to be relatively ineffective at scrutinizing deception and, similarly, high warmth negotiators were expected to be poor deception scrutinizers. These perceptions and corresponding behavioral expectations held true irrespective of buyer gender and seller gender. Likewise, these effects for competence and warmth operated independently from one another.

Despite the parallels in how low competence and high warmth affected expectations of focal negotiators' deception scrutiny, only low competence led to the expectation that negotiating counterparts would relax their ethical standards. By contrast, high warmth

Fig. 1. Study 2 mediation analyses.

led to the expectation that negotiating counterparts would raise their ethical standards. These findings suggest that appearing incompetent puts negotiators at greater risk of opportunistic deception than does appearing nice.

Taken together, these results lay out a causal chain whereby the buyer's perceived competence influences the seller's expected ethical standards by influencing perceptions and expectations of the buyer. Participants tended to consider incompetent buyers as unlikely to scrutinize deception because they were perceived as easily misled. In turn, the perception that incompetent buyers were unlikely to scrutinize deception led to the expectation that sellers would relax their ethical standards. Overall, the results suggest that being perceived as low in negotiating competence is a liability because it elicits opportunistic deception.

Study 3: Gender bias in negotiator deception

Studies 1 and 2 offered support for the initial three hypotheses. First, female negotiators were perceived as more easily misled than male negotiators. Second, this perception corresponded with gender stereotypes about women's relatively low negotiating competence and, to a lesser degree, high warmth. Third, being perceived as relatively easily misled due to low competence lowered expectations of a negotiating counterpart's ethical standards. This occurred because being perceived as more easily misled increased expectations that deception would not be effectively scrutinized. The current study was designed to test our final hypothesis concerning whether actual patterns of deception in face-to-face negotiations are consistent with gender stereotypes about women's ease of being misled.

The previous studies examined the perceived ease of being misled across two negotiation contexts, including used car and antique furniture sales. In the current study, we examined real estate negotiations, where 57% of professional real estate agents are women (National Association of Realtors, 2012). In so doing, we sought to demonstrate that, broadly speaking, female negotiators are at risk of being targeted by opportunistic deception in distributive negotiations.

We also examined whether women's elevated deception exposure negatively impacts their negotiating deals. A particular type of lie that can harm negotiators occurs in impasse settings (i.e., where negotiators' interests do not overlap). In this context, lies are told to lure a target negotiator into a deal under false pretenses (Jap et al., 2011). The current study examined this type of deception. We expected that, if negotiators act on the perception that female negotiators are relatively easily misled, then female negotiators should have higher agreement rates than male negotiators. In negotiations with negative bargaining zones, this represents a

negative outcome because it fails to meet negotiators' minimal requirements for agreement.

Negotiation setting and simulation

To test our hypotheses, an archival dataset was created using existing measures from an MBA negotiation course. In this course, students completed face-to-face negotiation role-playing exercises followed by post-negotiation online surveys on a weekly basis. We selected this context for a number of reasons. First, students were motivated to perform. Preparation and effort in negotiation exercises were graded, and reputational incentives motivated students to reach attractive deals. After each exercise, the precise terms of each negotiating pair's agreement were summarized in written form and shared with the entire class, thus providing clear and immediate reputational incentives to do well. Second, as in real world negotiations, deception carried the risk of discovery and harm to relationships and reputations. Instructors debriefed the classes after each negotiation by explaining key terms of the deal and each role's interests in the negotiation. As a result of this debriefing process, students were virtually assured that any deception occurring during negotiations would ultimately be revealed to their negotiating partners. Past research has confirmed that behavior in these simulations affects reputations and ongoing relationships among classmates (Anderson & Shirako, 2008).

One negotiation exercise in particular was designed to introduce the concept of ethics. This provided an ideal context for testing our hypotheses about the relation between target negotiator gender and deception. The negotiation task (described in detail below) involved a buyer–seller real estate transaction designed to pose the following ethical dilemma to buyers: Should they lie about their intended use of the property to facilitate a deal that might not otherwise occur? Prior to debriefing the exercise (i.e., revealing the buyers' true intentions), participants completed a post-negotiation survey that included all dependent variables.

We measured deception by the buyer in two ways. First, we coded sellers' open-ended descriptions of what buyers told them about their intentions. Two independent judges coded these descriptions for deception. Second, we measured buyers' lie admissions, a common method for assessing dishonesty (cf. DePaulo et al., 1996; McCabe, Butterfield, & Trevino, 2006). Agreement rate served as a measure of deception consequences.

Method

Participants

Participants were 298 full-time M.B.A. students (221 male) at a public west coast business school who were enrolled in

Table 4

Study 3: Means, standard deviations, and correlations between variables.

	Variable	Mean	SD	1	2	3	4
1.	Gender (B)	0.76	0.43	–			
2.	Gender (S)	0.59	0.49	–.06	–		
3.	Deception (S, coded)	2.08	1.20	–.01	–.27***	–	
4.	Lie Admissions (B)	0.13	0.33	–.01	–.26***	.34***	–
5.	Agreement	0.75	0.43	.04	–.13*	.19**	.05

Note: Gender = 0 for females, 1 for males.

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

one of six sections of a negotiation course. They comprised 149 dyads (65 male–male, 23 female buyer–male seller, 48 male buyer–female seller, 13 female–female). The sample included 80% of students enrolled in the course; excluded students either did not participate in the negotiation or failed to complete the post-negotiation survey. Dyads were included if at least one member of the dyad submitted an agreement report. Given that men comprised approximately 75% of M.B.A. enrollment, data from 6 sections of negotiation classes across 3 semesters were combined to enable the analysis of a full factorial design.⁵ The negotiation exercise occurred in approximately the 4th week of a 15-week course. Two female instructors taught the six sections.

Procedure

Participants were given one hour to negotiate the “Bullard Houses” role-playing exercise (Karp, Gold, & Tan, 1998), which describes a real-estate negotiation. The seller’s agent in the negotiation is instructed to sell the property to a known, reputable buyer for “tasteful” and preferably residential purposes. The buyer’s agent represents a client that intends to build on the property a commercial high-rise hotel that caters to tourists and convention visitors, a use inconsistent with the sellers’ interests. Participants were randomly assigned to negotiate as the buyer’s agent (“buyer”) or the seller’s agent (“seller”) in a real estate negotiation. Following prior research (Jap et al., 2011; Kern & Chugh, 2009), we chose this negotiation because it involves the potential for deception. Buyers’ agents had the opportunity to either tell the truth, misrepresent, or tell an outright lie about their intentions in order to lure the seller into a deal. Sellers were instructed only to sell the property to a known, reputable buyer for “tasteful” and preferably residential purposes. Buyers were prohibited from revealing under any circumstances that their client intended to build a commercial high-rise hotel catering to tourists and convention visitors, a use inconsistent with the sellers’ interests. However, at no point were buyers instructed to tell a blatant lie of commission.

Buyers were faced with the decision of whether to be truthful versus dishonest to sellers about their client’s intended use of the property. Buyers exhibiting total honesty could inform the seller that they were prohibited from revealing the intended use of the property, though doing so could raise suspicion and thereby potentially increase the risk of reaching an impasse. Alternatively, various degrees of dishonesty could be employed: Buyers could claim that they were unaware of their client’s intended use, focus on ambiguous terms like “residential” (though a hotel “houses” people, it is short-term and requires different zoning than long-

term residences), or blatantly lie by claiming that their client intended to put the property to a use consistent with the seller’s interests (e.g., brownstones).

Dependent measures

We report our dependent measures below. Degrees of freedom vary across analyses because some negotiators did not complete all dependent measures of the study and some dyads only had one respondent.

Buyer deception

Buyer deception was assessed on the basis of sellers’ open-ended responses to the following question: “What is your understanding of the intended use of the property by the buyer?” Two independent judges coded each description according to the degree to which it was deceptive and had the potential to distort the seller’s perception of reality. The following 5-point scale was used: 0 (truth but violated orders by revealing client’s intent, i.e. “high-rise commercial hotel”), 1 (truth but did not reveal client’s intent, i.e. “not authorized to reveal”), 2 (vague and subjective, i.e. “façade will remain intact” or “uncertain” use), 3 (misleading, emphasis on “residential” use), and 4 (blatant lie, i.e. “luxury condominiums”). Inter-rater reliability was high ($\alpha = .90$), so the ratings were averaged. Eleven sellers did not report what the buyer told them about the intended use of the property, resulting in a sample of 138 dyads for this measure.

Buyer lie admission

With the goals of establishing convergent validity with our coded deception measure and obtaining an actual measure of buyers’ self-perceived degree of honesty, we also assessed buyers’ own lie admissions. Lie admissions were measured by asking buyers if they lied to sellers about the intended use of the property. We coded no as “0” and yes as “1.” A total of 15 buyers did not indicate whether they lied to their negotiating partner, leaving a total of 134 dyads for this measure.

Dyadic agreement

Agreement rates were examined, coding impasse as “0” and agreement as “1.”

Results

Preliminary analyses

Descriptive statistics for all study variables are provided in Table 4. Assuring inter-dyadic agreement about what the buyer told the seller, we obtained a significant correlation between buyer deception (reported by sellers) and buyer lie admissions.

⁵ Lie admissions did not vary over time, $\chi^2 (2,131) = .90$, $p = .40$, suggesting contamination was not a problem.

Table 5

Hierarchical linear models predicting seller reports of buyer deception in Study 3.

	(1) Coded deception	(2) Lie admissions	(3) Agreement
Buyer gender	–0.10 (.27)	–0.13 (.66)	0.14 (.45)
Seller gender	–0.65 (.21)**	–1.70 (.59)**	–0.69 (.41)*
Instructor fixed effect	Yes	Yes	Yes

Note: Numbers represent coefficient estimates (robust standard errors in parentheses). Model 1 is a linear regression model. Models 2 and 3 are logistic regression models. Buyer gender = 0 if female, 1 if male; Seller gender = 0 if female, 1 if male; Negotiator role = 0 if buyer, 1 if seller.

** $p < .01$.

* $p < .10$.

To account for the hierarchical nature of the dataset and unbalanced cell sizes,⁶ models use an instructor fixed effect and robust standard errors unless otherwise noted.

Buyer deception

As illustrated by Model 1 of Table 5, a main effect emerged for seller gender, $t(134) = -3.15$, $p = .002$, $\beta = -.26$. As hypothesized, female sellers ($M = 2.46$, $SD = 1.20$) were deceived to a greater degree than male sellers ($M = 1.81$, $SD = 1.13$). Male and female buyers did not differ in the extent to which they were deceptive, $t(134) = -0.37$, $p = .71$.

Buyer lie admission

We estimated a logistic regression model with buyer gender and seller gender as predictors. Table 5 provides coefficient estimates with buyer gender and seller gender as predictors (Model 2). Corroborating the pattern of deceit observed in sellers' reports, buyers admitted to being more deceitful to female sellers (22%) than to male sellers (5%), $z = -2.89$, $p = .004$, $OR = 0.18$, providing further support for our hypothesis. Again, lie admissions did not vary by buyer gender, $z = -0.20$, $p = .85$. In Table 6, we describe the proportion of buyers who admitted to deceiving their counterpart by buyer and seller gender.

Agreement

Overall, 75% of dyads reached agreement. We expected that deceived negotiators would have higher agreement rates than non-deceived negotiators. Consistent with this notion, sellers' amount of experienced deception predicted agreement rates, $r(135) = .19$, $p = .02$. Given that females were deceived more than males and that deceived negotiators were more likely to reach an agreement than non-deceived negotiators, we expected that female sellers would be more likely to reach agreements. A marginally significant effect emerged for seller gender whereby dyads with female sellers (82%) reached more deals than dyads with male sellers (70%), $z = -1.67$, $p = .09$, $OR = 0.50$ (see Model 3 in Table 5). Buyer gender did not influence agreement rates, $z = 0.32$, $p = .75$.

Mediation analysis

In testing our prediction about the impact of deception on negotiation outcomes, we conducted mediation analyses for agreement rates. We expected that deception disproportionally directed at

⁶ Due to the large number of males relative to females in our dataset, gender imbalances exist for both roles. Though this issue does not bias the estimated means or standard deviations of our sample, it does create two issues that may bias statistical tests. First, it reduces the power of statistical tests (cf. Aguinis, 1995; Aguinis & Stone-Romero, 1997). Though we cannot address this issue, we note that it renders our hypothesis tests more conservative than would occur with a more balanced gender distribution in an equivalently sized sample of negotiators. The second issue with this gender imbalance is that it results in greater variability surrounding the sampled standard error of measures collected for females relative to those collected for males, which can increase the likelihood of heteroskedasticity. To account for this issue, we conduct statistical tests using Huber–White standard error estimates, which are robust to the standard assumption of homogeneous variance across observations (Huber, 1967; White, 1980).

Table 6

Buyer lie admissions by buyer gender and seller gender in Study 3.

Buyer gender	Seller gender		Overall
	Female	Male	
Female	16.7% ($n = 12$)	11.1% ($n = 18$)	13.3%
Male	23.9% ($n = 46$)	3.4% ($n = 58$)	12.5%
Overall	22.4%	5.3%

Fig. 2. Study 3: Agreement mediation analysis.

female sellers would result in higher agreement rates for female, compared to male, sellers. To test this possibility, we examined whether the amount of buyer deception mediated the relationship between seller gender and agreement rates. As illustrated in Fig. 2, seller gender predicted the degree of buyer deception in a linear regression model ($p = .002$) and dyad-level agreement in a logistic regression model ($p < .10$, marginally significant). However, when controlling for the effect of deception on dyad-level agreement, the effect of seller gender on agreement was non-significant ($p = .25$) while the degree of buyer deception continued to have an effect on agreement rates ($p = .06$). After adjusting coefficients and standard errors according to the procedure outlined by MacKinnon and Dwyer (1993) for mediation with binary response variables, we conducted a bootstrap analysis with 10,000 replications, in line with the recommendations of Preacher and Hayes (2004). The 95% confidence interval for the indirect effect was $[-.13, -.001]$. This analysis suggests that buyer deception mediated the relationship between seller gender and agreement rates. Dyads were more likely to reach an agreement with female sellers because buyers were more likely to deceive female sellers than male sellers. Though buyer deception mediated the higher agreement rates in dyads with female sellers, buyer lie admissions did not mediate this relationship ($p = .41$), suggesting the lie had to be believed by sellers to be effective.

Exploratory analysis of deception type

To determine the precise nature of the gender bias in deception, we conducted an exploratory frequency analysis based on the

Fig. 3. Study 3: Frequency of response type by seller gender.

5-point coding scheme described above (see Fig. 3).⁷ In so doing, we determined that buyers were significantly more likely to communicate blatantly deceptive intentions to female sellers than to male sellers, $\chi^2(1, 138) = 8.27, p = .004$. Conversely, buyers were significantly more likely to convey truthfully that they could not reveal their client's intentions to male sellers than to female sellers, $\chi^2(1, 138) = 4.07, p = .04$, though they were no more likely to reveal their client's intentions to male sellers than to female sellers, $\chi^2(1, 138) = 1.35, p = .25$. No significant gender effects emerged for vague, $\chi^2(1, 138) = 0.73, p = .39$ or misleading statements, $\chi^2(1, 138) = 1.24, p = .27$.

Discussion

We examined whether a gender bias emerges in who negotiators deceive. As hypothesized, female negotiators were deceived more so than male negotiators. This tendency was observed across multiple measures of deception, including revealed deception (through systematic coding) and admitted deception (through self-reports).

These findings point to yet another disadvantage facing women at the bargaining table. In addition to being offered less favorable deal terms (Ayres & Siegelman, 1995) and incurring social penalties for negotiating that men escape (Bowles et al., 2007), women are also disproportionately targeted for opportunistic deception. This study also provides some evidence that being disproportionately deceived led female sellers to enter into more deals under false pretenses than male sellers. Reaching agreement represented a negative outcome for sellers because the buyers' intended use of the property was inconsistent with the sellers' interests.

This study also provides some insight into what type of deception female negotiators experienced. Previous research has distinguished between two forms of deception, lies of commission and lies of omission (Bok, 1978; O'Connor & Carnevale, 1997; Schweitzer & Croson, 1999; Spranca, Minsk, & Baron, 1991). Whereas the former involves blatantly false statements, the latter involves misrepresentation. Lies of commission are considered more serious and observed less often than lies of omission (Schweitzer & Croson, 1999; Spranca et al., 1991). We observed a

significant gender difference in the experience of lies of commission versus honest responses. Specifically, women were told more blatant lies than men, and men were provided more honest responses than women. The gender bias in deception appears driven by a greater propensity to tell women blatant lies in a situation in which men tend to be told the truth.

General discussion

This research explores a novel phenomenon in behavioral negotiations research: Negotiators act opportunistically by deceiving women more frequently than men. In Study 1, we documented a previously overlooked gender stereotype relevant to negotiations that may explain this pattern: Women are viewed as easier to mislead than men. We determined that this perception was predicted most reliably by the relatively low competence expected of female negotiators. Study 2 found that the perceived ease of being misled stereotype has predictable effects on negotiators' expectations about the bargaining process. We found that the perception of being easily misled reduced expected scrutiny of deception and, in turn, the expected ethical standards of negotiating counterparts. Finally, we found that this stereotype has pernicious effects for women. Specifically, Study 3 showed that women experienced more deception than men in a face-to-face distributive negotiation. We also provided some evidence to suggest women's heightened propensity of being deceived leads them into more deals under false pretenses than men.

Theoretical contributions

Our research adds to the growing body of literature suggesting that gender stereotypes are important drivers of negotiation performance (Amanatullah & Tinsley, 2013; Bowles et al., 2007; Kray & Babcock, 2006; Kray, Galinsky, & Thompson, 2002; Kray & Thompson, 2005; Kray et al., 2001). Gender stereotypes suggesting women are easier to mislead confront them with unique negotiating hurdles. Whereas past research has shown that the activation of stereotypes can affect negotiators' assertiveness and outcomes, the current research shows that gender stereotypes also affect the ethics of negotiating counterparts in distributive negotiations. Although blatant deception was not the modal response in our behavioral study, this relatively low frequency event had important consequences on negotiation processes and outcomes. We found that women's disproportionate exposure to deception lured them into more deals under false pretenses than men. In negotiations outside of the classroom and laboratory, this may translate into greater implementation costs for women than men when their negotiating counterparts' true intentions come to light.

The pattern of deception may suggest gender prescriptions and proscriptions (Prentice & Carranza, 2002) apply not only to how men and women act themselves, but also to how others act toward each gender. Just as men and women are allowed to exhibit distinct negative characteristics, interaction counterparts may be allowed to interact differently with men and women. Our results suggest the proscription against deception may be relaxed in interactions with female negotiators or intensified in interactions with male negotiators. Deceiving men may be viewed, implicitly or explicitly, as worse than deceiving women.

Overall, we found compelling evidence in support of an opportunistic model of negotiator deception (Malhotra & Gino, 2011; Murnighan et al., 1999; Olekalns & Smith, 2007), such that negotiators take advantage of their counterparts' perceived incompetence. By contrast, we did not find evidence that being perceived as easily misled due to high warmth poses the same

⁷ Overall, only 16% of buyers engaged in blatant deception in comparison to 30% who were completely truthful by either revealing their client's intentions or stating that they are not authorized to discuss those intentions. Thus, although the task may seem to license buyers to engage in deception because it prohibits them from revealing their client's intentions, a minority of buyers were blatantly deceptive and some even engaged in the unauthorized act of telling sellers their client's true intentions.

risk as low competence. The ability to rationalize dishonest behavior is often a critical precursor to unethical behavior (Gino & Ariely, 2012; Lewis et al., 2012; Shalvi, Dana, Handgraaf, & De Dreu, 2011) and perceiving a counterpart as too incompetent to scrutinize deception may provide a better justification for deception than simply being too nice. These results suggest that deception in distributive negotiations may be a form of succumbing to moral temptation (Monin, Pizarro, & Beer, 2007) posed by the perception that a negotiating counterpart “had it coming” by lacking competence.

Our studies painted a more nuanced picture of the role that perceived warmth plays in negotiator deception. Whereas Study 1 found no correlational association between the ease of being misled and warmth, Study 2 found a positive relationship. However, Study 2 also suggests that, rather than triggering deception, perceived warmth may have a mitigating effect on negotiators’ deceptive tendencies. This pattern is consistent with prior research suggesting that, in non-competitive contexts, people use deception to protect women, rather than take advantage of them. For example, in a study examining deception in everyday social interactions, women were told more “white lies” (i.e., low stakes lies meant to protect a target’s feelings rather than to increase a focal actor’s material gain) than men (DePaulo et al., 1996). More recently, Gino and Pierce (2010) found that participants reported greater willingness to cheat to help a female peer than a male peer. In both studies, interactions with females were characterized by protective, not opportunistic, motives.

By utilizing a full factorial design with respect to dyadic gender composition across the studies, the current research is among the first to test the simultaneous effects of both negotiators’ gender on deception. We are the first to show that the gender of one’s negotiating counterpart influences the propensity to deceive. Diverging from past research (Dreber & Johannesson, 2008; Kennedy & Kray, 2013; Kray & Haselhuber, 2012; Lewicki & Robinson, 1998; Robinson et al., 2000), we found no effects of focal negotiator gender on deception. Women were not more honest than men. One explanation could be that female negotiators in Study 3 were acting as agents. They represented a client. Women may lower their ethical standards when negotiating on behalf of others due to prescriptions requiring them to support others (Amanatullah & Tinsley, 2013). Just like negotiating on behalf of others has been shown to eliminate gender differences in performance (Bowles et al., 2007), advocating for others may moderate gender differences in ethical behavior in negotiations (Kouchaki & Kray, 2014). Because agents can cite local social utility—the fact that their behavior benefited others—as one excuse for acting deceptively (Ayal & Gino, 2011), acting in one’s own capacity may reduce women’s deceit of other women.

The current research also begs the question of whether gender stereotypes regarding women’s relative ease of being misled are accurate. Some evidence suggests not. Past work has established that women are better at decoding nonverbal cues than men (Hall, 1978), though no better at catching a liar (Ekman & O’Sullivan, 1991). The gender difference in agreement rates in Study 3 suggests women were in fact more easily misled. However, what we do not know is whether, if deceived at identical rates, women would have found the lies to be more believable than men. We also distinguish the ease of being misled here from gullibility as defined in the literature as trust in the presence of clear reasons to distrust (Gurtman, 1992; Rotter, 1980). These data do not speak to gullibility per se because sellers did not have clear a priori reasons for distrusting buyers’ assurances about the intended use of the property (i.e., they had not negotiated previously) and had no ability to independently verify the buyer’s intentions in the role play simulation.

Limitations and directions for future research

Future research is needed to identify the boundary conditions of opportunistic deception toward women. The current research demonstrates an effect in distributive bargaining settings without much consideration for the manner in which actor characteristics or non-opportunistic motives may influence the likelihood of deception. First, researchers should consider whether individual differences in egalitarian ideologies (Tetlock, 2000) or moral identity (Aquino & Reed, 2002) attenuate the gender bias in deception. Second, researchers should consider the circumstances under which gender stereotypes about women’s relatively low competence lead men to be deceived more so than women. In addition to offensive moves triggered by opportunity, deception may be conceptualized as defensive moves aimed at preventing exploitation. If a counterpart is perceived to be aggressive and competitive, then negotiators may rationalize pre-emptive deceit as a means of self-protection against exploitation (Aquino, 1998; Lewicki, 1983; Murnighan et al., 1999; Pruitt & Kimmel, 1977; Steinel & De Dreu, 2004; Tenbrunsel, 1998). For example, Rubin, Pruitt, and Kim (1994) found that individuals felt greater license to deceive negotiating targets perceived to be competitive than those perceived to be cooperative. Likewise, negotiators expecting to interact with a competitive target report more lenient ethical standards than negotiators expecting to interact with a cooperative target (Lewicki & Spencer, 1990; Steinel & De Dreu, 2004). It is an open question whether men, who are more competitive than women in negotiations (Walters, Stuhlmacher, & Meyer, 1998), are instead deceived more so than women when self-defense is a dominant motive. Finally, future research is needed to understand the relation between gender and protective deception that directly affects a negotiating counterpart, rather than a neutral third party, as in recent research (Gino & Pierce, 2010).

Another important direction for future research is to examine whether the nature of the negotiation context moderates our effects. Recently, Bear and Babcock (2012) found that women underperformed relative to men in a negotiation over an overtly masculine topic (motorcycle headlights), but that this economic disadvantage was mitigated in a negotiation over an overtly feminine topic (jewelry beads). Though we examined the relation between gender and deception across three negotiation contexts—used cars, furniture, and real estate—it is possible that the tasks themselves were all gendered in a way that psychologically disadvantaged women. It is possible that modifying the context in which negotiations occur would reduce women’s perceived ease of being misled. For example, in negotiation contexts in which women are perceived to be particularly skillful—such as in navigating interpersonal conflict in romantic or family relationships—men may be perceived to be more easily misled than women. While worthy of future inquiry, this possible boundary condition does not minimize the importance of our effects because most negotiation domains are typed as masculine (Bowles & Kray, 2013).

Our model indicates that women are highly deceived because of stereotyped expectations that they will be unlikely to scrutinize lies effectively. Given the classroom context in which the archival data were collected in Study 3, we cannot say whether deception scrutiny actually differed by gender as negotiations were not recorded. We leave this question for future research. On one hand, it may be that women’s initial questioning about the buyer’s intentions was perceived to be ineffective, thus eliciting opportunistic deception. We also note an alternate possibility that our data cannot address: it is possible that women were less accepting of vague responses than men, thus eliciting more precise (but blatantly deceptive) answers. Given recent research showing gender differences in negotiator persistence depend on counterpart gender (Bowles & Flynn, 2010), it suggests the answer may not be simple.

More work is clearly needed to understand the negotiating processes leading up to the observed gender bias in who gets deceived.

A key strength of Study 3 is that it was conducted in the MBA classroom, where students are highly motivated to perform and to maintain positive reputations with their peers. Though the realism of the context enhances external validity, questions of generalizability still exist. At least three characteristics differentiate this sample from the general population. First, graduate students studying business cheat more than their non-business peers (McCabe et al., 2006). Second, although self-selection may lead more competitive people to pursue business degrees, the economic models emphasized in business education may also reinforce a self-interest perspective (Frank, Gilovich, & Regan, 1993). Finally, the deliberative, analytical approach emphasized in business education may have exacerbated unethical behavior (Zhong, 2011). Whether these findings generalize to populations whose education is less heavily based on economic principles of rationality and self-interest is a question for future research.

Practical implications and conclusion

Our findings may help to explain the persistent gender gap in labor participation and advancement in business. Though women make up 47% of the United States labor force, they comprise just 4% of *Fortune* 500 CEOs and only 16% of *Fortune* 500 board seats (Catalyst, 2012). Our research suggests one reason why women may hesitate to negotiate (Small et al., 2007) and shy away from competition (Niederle & Vesterlund, 2007), arguably two critical activities for career advancement. We show that, when women do negotiate, they are disproportionately deceived, and this increases their risk of entering into deals under false pretenses. Given that women react more negatively than men to ethical compromises in pursuit of profit and status in organizations (Kennedy & Kray, 2013), the current research suggests women's disproportionate exposure to deception in negotiations may exacerbate their aversion to bargaining and, possibly, remaining in business.

A growing body of literature highlights the unique obstacles facing women negotiators. The current research contributes by demonstrating that gender affects exposure to opportunistic deception at the bargaining table. When opportunistic deception is directed more at women than at men, it suggests the negotiating playing field is *unlevel* (i.e. tipped in men's favor). Our findings suggest that removing women from the "typically easy to mislead" category in negotiators' minds may be an important next step in the quest to level the playing field. Until this cultural stereotype is disconfirmed, women may be well advised to heed the perennial negotiating advice: *caveat emptor*, or buyer beware.

Acknowledgments

We are grateful for the generous financial support of the Institute for Research on Labor and Employment at the University of California, Berkeley and for helpful feedback provided by Michael Haselhuhn.

References

- Aguinis, H. (1995). Statistical power with moderated multiple regression in management research. *Journal of Management*, 21(6), 1141–1158.
- Aguinis, H., & Stone-Romero, E. F. (1997). Methodological artifacts in moderated multiple regression and their effects on statistical power. *Journal of Applied Psychology* (1), 192–206.
- Amanatullah, E. T., & Morris, M. W. (2010). Negotiating gender roles: Gender differences in assertive negotiating are mediated by women's fear of backlash and attenuated when negotiating on behalf of others. *Journal of Personality and Social Psychology*, 98, 256–267.
- Amanatullah, E. T., & Tinsley, C. H. (2013). Punishing female negotiators for asserting too much...or not enough: Exploring why advocacy moderates

- backlash against assertive female negotiators. *Organizational Behavior and Human Decision Processes*, 120, 110–122.
- Anderson, C., & Shirako, A. (2008). Are individuals' reputations related to their history of behavior? *Journal of Personality and Social Psychology*, 94, 320–333.
- Aquino, K. (1998). The effects of ethical climate and the availability of alternatives on the use of deception during negotiation. *International Journal of Conflict Management*, 9, 195–217.
- Aquino, K., & Reed, A. II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83, 1423–1440.
- Ayal, S., & Gino, F. (2011). Honest rationales for dishonest behavior. In M. Mikulincer & P. R. Shaver (Eds.), *The social psychology of morality: Exploring the causes of good and evil*. Washington, DC: American Psychological Association.
- Ayres, I., & Siegelman, P. (1995). Race and gender discrimination in bargaining for a new car. *American Economic Review*, 85, 304–321.
- Babcock, L., Gelfand, M., Small, D., & Stany, H. (2006). Gender differences in the propensity to initiate negotiations. In D. D. Crèmer, M. Zeelenberg, & J. K. Murnighan (Eds.), *Social psychology and economics* (pp. 239–259). Mahwah, NJ: Lawrence Erlbaum.
- Bear, J. B., & Babcock, L. (2012). Negotiation topic as a moderator of gender differences in negotiation. *Psychological Science*, 23(7), 743–744.
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Clinical and Consulting Psychology*, 42, 155–162.
- Bok, S. (1978). *Lying: Moral choices in public and private life*. New York: Pantheon.
- Bowles, H. R., Babcock, L., & Lai, L. (2007). Social incentives for gender differences in the propensity to initiate negotiations: Sometimes it does hurt to ask. *Organizational Behavior and Human Decision Processes*, 103, 84–103.
- Bowles, H. R., & Flynn, F. (2010). Gender and persistence in negotiation: A dyadic perspective. *Academy of Management Journal*, 53, 769–787.
- Bowles, H. R., & Kray, L. J. (2013). Negotiation is a man's game: Ultimate truth or enduring myth? *Gender & Work: Challenging Conventional Wisdom. Research symposium in honor of 50 years of women MBA*. Harvard Business School Press.
- Catalyst. (2012). U.S. women in business. <<http://www.catalyst.org/publication/132/us-women-in-business>>.
- DePaulo, B. M., Kashy, D. A., Kirkendol, S. E., Wyer, M. M., & Epstein, J. A. (1996). Lying in everyday life. *Journal of Personality and Social Psychology*, 70, 979–999.
- Dreber, A., & Johannesson, M. (2008). Gender differences in deception. *Economics Letters*, 99, 197–199.
- Eagly, A. H. (1997). Sex differences in social behavior: Comparing social role theory and evolutionary psychology. *American Psychologist*, 52, 1380–1383.
- Ekman, P. (1985). *Telling lies: Clues to deceit in the marketplace, marriage, and politics*. New York: W.W. Norton.
- Ekman, P., Friesen, W. V., O'Sullivan, M., & Scherer, K. R. (1980). Relative importance of face, body, and speech in judgments of personality and affect. *Journal of Personality and Social Psychology*, 38, 270–277.
- Ekman, P., & O'Sullivan, M. (1991). Who can catch a liar? *American Psychologist*, 46, 913–920.
- Elangovan, A. R., & Shapiro, D. L. (1998). Betrayal of trust in organizations. *Academy of Management Review*, 23, 547–566.
- Epley, N., & Dunning, D. (2000). Feeling "holier than thou": Are self-serving assessments produced by errors in self- or social prediction? *Journal of Personality and Social Psychology*, 79, 861–875.
- Feldman, R. S., Forrest, J. A., & Happ, B. R. (2002). Self-presentation and verbal deception: Do self-presenters lie more? *Basic and Applied Social Psychology*, 24, 163–170.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878–902.
- Frank, R. H., Gilovich, T., & Regan, D. T. (1993). Does studying economics inhibit cooperation? *Journal of Economic Perspectives*, 7, 159–171.
- Gino, F., & Ariely, D. (2012). The dark side of creativity: Original thinkers can be more dishonest. *Journal of Personality and Social Psychology*, 102(3), 445–459.
- Gino, F., & Pierce, L. (2010). Robin hood under the hood: Wealth-based discrimination in illicit customer help. *Organization Science*, 21, 1176–1194.
- Gneezy, U. (2005). Deception: The role of consequences. *American Economic Review*, 95, 384–394.
- Gurtman, M. B. (1992). Construct validity of interpersonal personality measures: The interpersonal circumplex as a nomological net. *Journal of Personality and Social Psychology*, 63(1), 105–118.
- Hall, J. A. (1978). Gender effects in decoding nonverbal cues. *Psychological Bulletin*, 85(4), 845–857.
- Huber, P. J. (1967). *The behavior of maximum likelihood estimates under nonstandard conditions*, Vol. 1. *Proceedings of the fifth Berkeley symposium on mathematical statistics and probability* (pp. 221–233).
- Jap, S., Robertson, D. C., & Hamilton, R. (2011). The dark side of rapport: Agent misbehavior face-to-face and online. *Management Science*, 57, 1610–1622.
- Karp, R., Gold, D., & Tan, M. (1998). Bullard houses (p. 12). In J. M. Brett (Ed.), *Teaching materials for negotiations and decision making*, 2008. Evanston, IL: Northwestern University, Dispute Resolution Research Center.
- Kelley, H. H., & Thibaut, J. W. (1969). *Group problem solving*, 4. Reading: Addison-Wesley.
- Kennedy, J. A., Anderson, C., & Moore, D. M. (2013). When overconfidence is revealed to others: Testing the status-enhancement theory of overconfidence. *Organizational Behavior and Human Decision Processes*, 122, 266–279.

- Kennedy, J. A., & Kray, L. J. (2013). Who is willing to sacrifice sacred values for money and social status?: Gender differences in reactions to ethical compromises. *Social Psychological and Personality Science*, 5, 52–59.
- Kern, M. C., & Chugh, D. (2009). Bounded ethicality: The perils of loss framing. *Psychological Science*, 20, 378–384.
- Kouchaki, M., & Kray, L. (2014). *Representation role moderates gender differences in negotiators' ethical standards*. Harvard University (Unpublished manuscript).
- Kray, L., & Babcock, L. (2006). Gender in negotiations: A motivated social cognitive analysis. In L. L. Thompson (Ed.), *Negotiation theory and research* (pp. 203–223). Madison, CT: Psychosocial Press.
- Kray, L. J., Galinsky, A. D., & Thompson, L. (2002). Reversing the gender gap in negotiations: An exploration of stereotype regeneration. *Organizational Behavior and Human Decision Processes*, 87, 386–410.
- Kray, L. J., & Gelfand, M. (2009). Relief versus regret: The impact of gender and negotiating norm ambiguity on reactions to having one's first offer accepted. *Social Cognition, Special Issue on Negotiations*, 27, 414–432.
- Kray, L. J., & Haselhuhn, M. P. (2012). Male pragmatism in negotiators' ethical reasoning. *Journal of Experimental Social Psychology*, 48, 1124–1131.
- Kray, L. J., & Thompson, L. (2005). Gender stereotypes and negotiation performance: An examination of theory and research. In B. M. Staw & R. M. Kramer (Eds.), *Research in organizational behavior*, 26 (pp. 103–182). Greenwich, CT: JAI.
- Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, 80, 942–958.
- Lewicki, R. J. (1983). Lying and deception: A behavioral model. In M. H. Bazerman & R. J. Lewicki (Eds.), *Negotiating in organizations* (pp. 68–90). Beverly Hills, CA: Sage.
- Lewicki, R. J., & Robinson, R. (1998). Ethical and unethical bargaining tactics: An empirical study. *Journal of Business Ethics*, 17, 665–682.
- Lewicki, R. J., & Spencer, G. L. (1990). *Lies and dirty tricks: Perceptions of marginally ethical negotiating tactics*. (Unpublished manuscript).
- Lewis, A., Bardi, A., Flint, C., Mason, C., Smith, N., Tickle, C., et al. (2012). Drawing the line somewhere: An experimental study of moral compromise. *Journal of Economic Psychology*, 33(4), 718–725.
- MacKinnon, D. P., & Dwyer, J. H. (1993). Estimating mediated effects in prevention studies. *Evaluation Review*, 17(2), 144–158.
- Malhotra, D., & Gino, F. (2011). The pursuit of power corrupts: How investing in outside options motivates opportunism in relationships. *Administrative Science Quarterly*, 56, 559–592.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45, 633–644.
- McCabe, D. L., Butterfield, K. D., & Trevino, L. K. (2006). Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action. *Academy of Management Learning and Education*, 5, 294–305.
- Monin, B., Pizarro, D. A., & Beer, J. S. (2007). Deciding versus reacting: Conceptions of moral judgment and the reason-affect debate. *Review of General Psychology*, 11, 99–111.
- Murnighan, J. K., Babcock, L., Thompson, L., & Pillutla, M. (1999). The information dilemma in negotiations: Effects of experience, incentives and integrative potential. *International Journal of Conflict Management*, 10, 313–339.
- National Association of Realtors (2012). *The 2012 NAR Member Profile*. <<http://www.realtor.org/field-guides/field-guide-to-quick-real-estate-statistics>>.
- Niederle, M., & Vesterlund, L. (2007). Do women shy away from competition? Do men compete too much? *Quarterly Journal of Economics*, 122, 1067–1101.
- O'Connor, K. M., & Carnevale, P. J. (1997). A nasty but effective negotiation strategy: Misrepresentation of a common-value issue. *Personality and Social Psychology Bulletin*, 23, 504–515.
- Olekalns, M., Kulik, C. T., & Chew, L. (2014). Sweet little lies: Social context and the use of deception in negotiation. *Journal of Business Ethics*, 120, 13–76.
- Olekalns, M., & Smith, P. (2007). Loose with the truth: Predicting deception in negotiation. *Journal of Business Ethics*, 76, 225–238.
- Olekalns, M., & Smith, P. (2009). Mutually dependent: Power, trust, affect and the use of deception in negotiation. *Journal of Business Ethics*, 85, 347–365.
- O'Sullivan, M., Ekman, P., Friesen, W. V., & Scherer, K. R. (1985). What you say and how you say it: The contribution of speech content and voice quality to judgments of others. *Journal of Personality and Social Psychology*, 48, 54–62.
- Parrish, D. (1985). *The car buyer's art*. Bellflower, CA: Book Express.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavioral Research Methods, Instruments, and Computers*, 34, 717–731.
- Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. *Psychology of Women Quarterly*, 26, 269–281.
- Pruitt, D. G., & Kimmel, M. J. (1977). Twenty years of experimental gaming: Critique, synthesis, and suggestions for the future. *Annual Review of Psychology*, 28, 363–392.
- Robinson, R., Lewicki, R. J., & Donahue, E. (2000). Extending and testing a five factor model of ethical and unethical bargaining tactics: Introducing the SINS scale. *Journal of Organizational Behavior*, 21, 649–664.
- Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American Psychologist*, 35(1), 1–7.
- Rubin, J. Z., Pruitt, D. G., & Kim, S. H. (1994). *Social conflict: Escalation, stalemate, and settlement*. New York: McGraw-Hill.
- Schweitzer, M., & Croson, R. (1999). Curtailing deception: The impact of direct questions on lies and omissions. *International Journal of Conflict Management*, 10, 225–248.
- Schweitzer, M. E., DeChurch, L. A., & Gibson, D. E. (2005). Conflict frames and the use of deception: Are competitive negotiators less ethical? *Journal of Applied Social Psychology*, 35, 2123–2149.
- Shalvi, S., Dana, J., Handgraaf, M. J. J., & De Dreu, C. K. W. (2011). Justified ethicality: Observing desired counterfactuals modifies ethical perceptions and behavior. *Organizational Behavior and Human Decision Processes*, 115(2), 181–190.
- Shell, G. R. (1999). *Bargaining for advantage: Negotiation strategies for reasonable people*. New York: Penguin.
- Small, D. A., Gelfand, M., Babcock, L., & Gettman, H. (2007). Who goes to the bargaining table? The influence of gender and framing on the initiation of negotiation. *Journal of Personality and Social Psychology*, 93, 600–613.
- Spranca, M., Minsk, E., & Baron, J. (1991). Omission and commission in judgment and choice. *Journal of Experimental Social Psychology*, 27, 76–105.
- Steinel, W., & De Dreu, C. K. W. (2004). Social motives and strategic misrepresentation in social decision making. *Journal of Personality and Social Psychology*, 86, 419–434.
- Stevens, C. K., Bavetta, A. G., & Gist, M. E. (1993). Gender differences in the acquisition of salary negotiation skills: The role of goals, self-efficacy, and perceived control. *Journal of Applied Psychology*, 78, 723–735.
- Stuhlmacher, A. F., & Walters, A. E. (1999). Gender differences in negotiation outcome: A meta-analysis. *Personnel Psychology*, 52, 653–677.
- Tenbrunsel, A. E. (1998). Misrepresentation and expectations of misrepresentation in an ethical dilemma: The role of incentives and temptation. *Academy of Management Journal*, 41, 330–339.
- Tetlock, P. E. (2000). Cognitive biases and organizational correctives: Do both disease and cure depend on the politics of the beholder? *Administrative Science Quarterly*, 45, 293–326.
- Thompson, L. L., & Hastie, R. (1990). Social-perception in negotiation. *Organizational Behavior and Human Decision Processes*, 47, 98–123.
- Walters, A. E., Stuhlmacher, A. F., & Meyer, L. L. (1998). Gender and negotiator competitiveness: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 76, 1–29.
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica*, 48(4), 817–838.
- Zhong, C. B. (2011). The ethical dangers of deliberative decision making. *Administrative Science Quarterly*, 56, 1–25.