

A counterpart's feminine face signals cooperativeness and encourages negotiators to compete

Eric Gladstone, Kathleen M. O'Connor

Samuel Curtis Johnson Graduate School of Management, Cornell University, United States



ARTICLE INFO

Article history:

Received 24 December 2011

Accepted 14 May 2014

Available online 8 July 2014

Accepted by Madan Pillutla

Keywords:

Negotiation

Facial-femininity

Concessions

Cooperative negotiation

Competitive negotiation

ABSTRACT

Early on, negotiators take each other's measure, drawing inferences that shape subsequent decisions and behaviors. In two studies, we investigate whether impressions based on the facial femininity of counterparts affect negotiators' behaviors. In our first experiment, we tested whether negotiators would choose counterparts with more feminine-featured faces over those with less feminine faces. As predicted, regardless of counterpart sex, negotiators preferred counterparts with more feminine-featured faces. When choosing agents, however, this preference reversed, indicating strategic decision making on the part of negotiators. In a second experiment, we tested our underlying claim that facial femininity evokes stereotypes of cooperativeness. It did, and in keeping with our main hypotheses, negotiators demanded more from their feminine-featured counterparts.

© 2014 Elsevier Inc. All rights reserved.

Introduction

Sitting down to negotiate for the first time, bargainers are likely to size up one another. For instance, one negotiator might take note of the other's sex or age or race. Looking more closely, she might notice that the person wears a friendly expression or that she is fidgeting with her papers. What inferences she draws from her observations of the other person—the other's intentions, beliefs, personality traits—are made quite quickly, nearly instantaneously (Malle & Holbrook, 2012). And the nature of the inference will carry consequences for the subsequent negotiation. Despite this, few studies have considered whether and how negotiators' initial impressions of one another shape their behaviors and outcomes.

In two studies, we examine whether initial impressions taken of prospective counterparts' faces matter for negotiations. In particular, we focus on how counterparts' feminine-featured faces—characterized by less prominent eye-brow ridges, disproportionately shorter faces, less laterally prominent cheek bones, mandibles, and chins, smaller noses and fuller lips resulting in a generally less robust face shape (Enlow, Hans, & McGrew, 1996; Farkas, 1981; Tanner, 1981)—evoke stereotypes in negotiators that can affect negotiators' decisions and behaviors.

Both empirical (Gerhart & Rynes, 1991; Stevens, Bavetta, & Gist, 1993) and experimental (Major & Konar, 1984; Major, Vanderslice, & McFarlin, 1984; Stevens et al., 1993) work shows a negotiation

disadvantage going to women. We posit that these effects may be connected to the stereotypes that are cued when negotiators see a feminine face. We will argue that a negotiator's facial femininity is assessed within moments of initial meeting. Drawing on work done in other quarters (Carré & McCormick, 2008; Stirrat & Perrett, 2010; Sanchez-Pages & Turiegano, 2010), we propose that a counterpart's facial femininity triggers stereotypes that direct negotiators' decisions and behaviors.

Results from two experiments designed to test these claims are intended to make two fundamental contributions. First, we unpack the effects of counterpart sex from those of counterpart femininity, and by doing so, we explore whether facial femininity cues stereotypes that shape how counterparts are treated. This allows us to make a second contribution: we will show that consequential perceptions form much earlier in the negotiation process than current research suggests.

Stereotypes, sex, and femininity

As Kulik and Olekalns (2012) note in their review, when it comes to negotiated employment contracts, women come away from the table with relatively lower salaries and less advantageous terms (e.g., Blau & Kahn, 2007). What explains these systematic outcome differences has been the subject of empirical scrutiny for the past decade or so (Bowles, Babcock, & McGinn, 2005; Haselhuhn & Kray, 2012; Kray & Gelfand, 2009; Stuhlmacher & Walters, 1999; Walters, Stuhlmacher, & Meyer, 1998). Focusing on the behavior and cognitions of the negotiators themselves,

E-mail addresses: eg366@cornell.edu (E. Gladstone), kmo8@cornell.edu (K.M. O'Connor)

studies show that women's reluctance to initiate negotiations (Babcock & Laschever, 2003; Bowles, Babcock, & Lai, 2007), their beliefs that they lack the necessary skills (Kray et al., 2001), and their tendency to adopt a more accommodating style (Amanatullah & Morris, 2010; Tinsley, Cheldelin, Schneider, & Amanatullah, 2009) conspire to undermine women's negotiated outcomes.

However, given the interdependent nature of negotiations, the behavior of female negotiators can only partially account for their deals; their partners, too, play a critical role. Noting this, a growing literature suggests that the stereotypes people hold of their female counterparts have a hand in shaping women's outcomes.

Observing that car dealers quoted women (and black buyers) higher prices on new cars relative to those quoted to men (and white buyers), Ayres and Siegelman (1995) explored the assumptions salespeople make about buyers. Their evidence showed that sellers relied on gender as a proxy for a customer's reservation price with salespeople assuming that women were willing to spend more on a new car compared to men. Consequently, salespeople quoted women relatively higher prices.

Findings from laboratory investigations similarly demonstrate that people treat male and female negotiators differently, and that these differences have their roots in the differential stereotypes people hold about men and women. Players in an ultimatum game—both men and women—have been shown to make more generous offers to male responders than to women (Solnick & Schweitzer, 1999). Because responders have the power to reject an offer, leaving zero payout for both, the authors concluded that players assume that men will require more money to accept a deal, and, conversely, that women are willing to take less. In a variation on this work, Aguiar and his colleagues (Aguiar, Brañas-Garza, Cobo-Reyes, Jimenez, & Miller, 2009) explored players' stereotypic beliefs about the generosity of men and women in a dictator game. In dictator games, an offerer makes an offer and the other side can simply accept the amount or not. The experimenters set out two boxes: one labeled “men” and the other “women,” indicating whether the offerer had been a male or female player in a previous study. Participants could select an offer from one of the two boxes. In this rather simple study, 63% of participants chose an offer from the box of women's offers, ostensibly because they believed that offers made by women would be relatively more generous to the participant than those made by men. Both empirical and experimental work shows that people stereotype women as less demanding when it comes to satisfying their own economic interests, allowing their counterparty to demand, and potentially collect, more. Notably, in a review of work in this domain, researchers have found that differences in the actual behavior of men and women are much smaller than differences in people's expectations about their behavior (Eckel, De Oliveira, & Grossman, 2008).

Other empirical work shows that the assumptions people hold of men and women extend beyond their perceptions of what kinds of offers will be acceptable to their expectations of likely behavior. Conducting their study using a prisoner's dilemma game paradigm, King and his colleagues (King, Miles, & Kniska, 1991), for example, tested whether competitive strategies were more likely to be attributed to men than to women, and findings showed they were. People appear to believe that men will be more competitive and aggressive than women.

Recent work has drawn on the stereotype content model (SCM) (Fiske, Cuddy, Glick, & Xu, 2002) to understand the nature of stereotypes held about female negotiators, and why they undermine women at the table. According to the theory, individuals and groups are judged along two universal dimensions—their competence and their warmth (Cuddy, Fiske, & Glick, 2007). Warmth—the degree to which people are perceived as helpful,

trustworthy, likeable, kind, and so on—is a more primary judgment than competence, as it carries stronger emotional and behavioral effects. Studies show that, relative to men, women tend to be judged more highly on warmth and lower on competence (Huddy & Terkildsen, 1993; Eagly & Karau, 2002; Sanbonmatsu, 2002).

As Kraut et al. (2004) have noted, the competence characteristics that are part of male gender stereotypes are consistent with the characteristics of effective negotiators. Effectiveness is seen in terms of strength, rationality and assertiveness, aspects of competence. The warmth characteristics that align with female stereotypes map onto the characteristics of ineffective negotiators—weakness, submissiveness, and accommodation. The stereotypes people hold of women, generally, lead them to assume that women will be ineffective bargainers, and more specifically, less assertive in pursuing their own economic interests. These stereotypes and other similar processes explain why negotiators treat their male and female counterparts differently (Gupta, Turban, & Bhawe, 2008; Kraut et al., 2004; Magee, Galinsky, & Gruenfeld, 2007).

How early in the process stereotypes are primed has not been the subject of much empirical work. Yet, studies done away from the bargaining table show that people make nearly instantaneous inferences with just the smallest bit of visual information (Malle & Holbrook, 2012; Todorov, Said, Engell, & Oosterhof, 2008b; Zebrowitz, 2006). And the femininity of one's face provides strong visual information. Compared to less feminine faces, more feminine faces are marked by less laterally prominent cheek bones and mandibles, less prominent eye-brow ridges, and disproportionately shorter faces, which together produce a less robust face shape (Farkas, 1981; Enlow et al., 1996). More feminine faces also are marked by smaller noses and fuller lips (Tanner, 1981).¹

Both male and female observers across a number of studies exhibit the same biased judgments when they perceive feminine faces, inferring physical weakness, for instance (Zebrowitz, Fellous, Mignault, & Andreoletti, 2003). Observers also assume that targets with these facial features are relatively more nurturing and agreeable (Paunonen, Ewan, Earthy, Lefave, & Goldberg, 1999), and that these targets will display more cooperative and less aggressive behavior in everyday life (Carre, Morrissey, Mondloch, & McCormick, 2010). In contrast, observers judge people with more masculine facial features to be physically capable (Sell et al., 2009) as well as relatively more aggressive (Carré & McCormick, 2008; Carre et al., 2010).

On average, women's faces are more feminine than men's faces. Thus, it may be that the differential treatment men and women receive at the bargaining table is influenced, at least in part, by the stereotypes evoked by a counterpart's feminine features. In two studies, we investigate whether counterpart facial femininity will evoke stereotypes among would-be bargainers. And we consider how these stereotypes affect negotiators' expectations and behaviors. Below we outline our specific hypotheses (see Fig. 1).

Study 1

Negotiations are mixed motive interactions, with each party having incentives to cooperate to arrive at a mutually agreeable deal and to compete to collect as large a share of that agreement

¹ Facial femininity differs markedly from babyfacedness and facial trustworthiness. Babyfacedness refers to neotenic facial features such as round faces, disproportionately large eyes and noses, high foreheads, and small chins (Cunningham, Barbee, & Pike, 1990; Zebrowitz, 1997). Current evidence suggests that perceptions of trustworthy faces have little to do with the structure of the face, and are largely a function of latent facial expressions in the target (Todorov, Baron, & Oosterhof, 2008a).



Fig. 1. Study 1. Photographs of female and male faces modified to be more (left) or less feminine (right).

as possible. Particularly when issues are fixed sum (i.e., distributive), for one side to gain, the other side must capitulate (Pruitt & Kim, 1998). Compared to competitive counterparts who aim to collect as much as they can, regardless of the negotiator's own gains, more cooperative counterparts will concede more, allowing the negotiator to capture more value in the deal. Given this, it is not surprising that negotiators prefer counterparts who cooperate to those who compete (Halevy, Chou, & Murnighan, 2012).

Because facial femininity signals cooperativeness (Carre et al., 2010), we expect that people will prefer negotiation counterparts with more feminine facial characteristics, and that this will be true of both male and female prospective counterparts. Given the choice, this preference will translate into negotiators selecting a relatively more feminine-faced counterpart over one with a less feminine face.

Hypothesis 1. Regardless of counterparts' sex, people will prefer counterparts with more feminine-featured faces to those with less feminine-featured faces.

Identifying this preference, however, does not provide conclusive evidence that a negotiator's choice reflects a strategic decision about the likely cooperative behavior of the counterpart. Rather, selecting a feminine-featured counterpart may reflect a simple preference for feminine faces, regardless of context or role. To delineate the boundary conditions around the proposed effect, we posit an additional test.

When it comes to choosing an agent, a negotiator's calculus may look different from the one he/she uses when choosing a counterpart. Agents are third parties who act on behalf of principals (Arrow, 1985). When negotiators believe they lack particular

expertise, they are likely to hire an agent (Valley, White, Neale, & Bazerman, 1992). So, too, when negotiations are likely to be especially emotional or contentious do people opt for agents to conduct their negotiations (Rubin & Sander, 1988).

Principals who are interested in doing well in their negotiations are not likely to want an agent who will make easy concessions to the other side. Rather, they will prefer agents who can be firm when negotiating the principal's interests. Thus, appearing too cooperative is likely to be less preferable in an agent than in a counterpart. This means that the strong preference people have for feminine-featured counterparts will be reversed for agents, as principals seek a less cooperative and more competitive representative.

Hypothesis 2. Regardless of agents' sex, people will prefer agents with less feminine-featured faces to those with more feminine-featured faces.

Method

We used a mixed between-subject. The conditions were: role (counterpart, agent), sex of photo set (male, female), and facial femininity (low, high). We conducted the experiment using Amazon Mechanical Turk.²

304 people participated; 162 (53.29%) were men, and 142 (46.71%) were women. Participants' average age was 32.09 ($SD = 10.4$) and ages ranged from 18 to 72. Participants received \$0.10 for participating with the potential to earn \$40.00 should they be chosen to participate in an upcoming negotiation experiment. Post de-briefing, participants were later selected at random and those selected were awarded the \$40.00.

We told participants to imagine that they would be taking part in a two-party negotiation, and that they needed to select either a counterpart or an agent (depending on experimental condition) from a photo set of pairs we described as twins.³ Participants then viewed a set of photographs of either two men or two women. Each set contained two photos: a more feminine-featured face and a less feminine-featured face.

We obtained the photos from the Perception Lab (www.perceptionlab.com). Researchers in that lab use photos of the faces of real people, modifying them by degree to be more or less feminine than the original neutral version. To do this, researchers assign quantitative values to features of the face—here, and in accordance with accepted definitions of facial femininity, the lateral size of the mandible, forehead, chin, eyebrow ridges, eye size and width apart, nose, fullness of lips, forehead slope, and lower jaw length. Researchers then can precisely manipulate the prominence or size of these features to create more masculine or feminine versions of these faces. Manipulations such as these are used routinely by those who study faces and facial emotion (Nomura et al., 2004; Oosterhof & Todorov, 2008; Scharlemann, Eckel, Kacelnik, & Wilson, 2001; Todorov et al., 2008a; Todorov et al., 2008b). For our studies, we selected photos that were 10% less feminine than the neutral version, and those that were 10% more feminine.

² AMT was developed as an online labor market. It is being used by experimentalists as a source of experimental data (Kraut et al., 2004). Comparisons of laboratory data and participants (Buhrmester, Kwang, & Gosling, 2011; Gosling & Johnson, 2010; Gosling, Sandy, John, & Potter, 2010; Gosling, Vazire, Srivastava, & John, 2004) indicate that the AMT samples are more representative than traditional college samples, and the data are at least as reliable. Results from experiments conducted via AMT were consistent with those collected in the lab of a Midwestern university, and collected on Internet boards (Paolacci, Chandler, & Ipeirotis, 2010).

³ To allay any suspicions on the part of participants about the facial similarities across photos, we introduced the twins cover story. However, we did not use photos of twins, but in fact, photos of the same person whose face was digitally altered to appear more or less feminine.

Table 1

Study 1. Means, standard deviations, and correlations among the study variables.

	M	SD	1	2	3	4	5
1 Participant Sex	1.47	0.50					
2 Target Sex	1.49	0.50	0.08				
3 Male Target Attractiveness	5.20	1.41	−0.13	0.15			
4 Female Target Attractiveness	5.40	1.30	−0.07	−0.12	0.17		
5 Role Condition	1.50	0.50	0.01	−0.09	−0.01	−0.08	
6 Participant Target Choice	0.47	0.50	−0.02	0.06	0.10	0.09	−0.37 [*]

Note: N = 304. 1 = male, 2 = female. 1 = counterpart, 2 = agent. 0 = less feminine featured target, 1 = more feminine featured target.

^{*} $p < .05$.

We manipulated the role through instruction. In the counterpart condition, participants read⁴:

You must choose one of the twins to be your *counterpart* in a negotiation.

This is the person who would sit across from you and with whom you would negotiate to try to reach a mutually-acceptable deal.

The agent instruction:

You must choose one of the twins to be your *agent* in a negotiation.

Your agent would act on your behalf, representing you at the negotiating table.

This person would sit across from the other side, represent you, and try to negotiate a mutually-acceptable deal.

Our primary dependent measure was participant choice for counterpart or agent. To rule out any potential confounding effects for attractiveness, we measured these perceptions. Using 7-point scales, participants assessed both the beauty and attractiveness of the person described (1 = not at all, 7 = extremely) ($\alpha = 0.93$).

Results and discussion

Table 1 shows the means, standard deviations, and intercorrelations among the study variables. There were no effects for participant sex on participants' choice of counterpart or agent, meaning that male and female participants did not systematically differ in their preference for more or less feminine-featured counterparts or agents ($\chi^2 = 0.173$ (304), $p = .70$). Thus, we did not include participant sex in subsequent analyses. Nor were there any effects for photo set sex on choice ($\chi^2 = 0.96$ (304), $p = .30$); the pattern and significance of findings for facial femininity were the same whether participants were choosing between two men or two women.

To rule out the possibility that perceived attractiveness affected choice for either male or female photo sets, we estimated a binary logistic regression. Attractiveness judgments of photos of men had no effect on participants' choices of counterpart or agent ($\beta = -0.14$, $t(162) = -0.32$, $p = .75$). Nor did attractiveness judgments of photos of women have an effect on participants' choice of counterpart or agent ($\beta = -0.32$, $t(142) = -0.84$, $p = .35$).

We ran a chi-square analysis to test whether facial femininity had an impact on people's preferences for counterparts and agents (H1 and H2). Results showed a significant effect of role (counterpart, agent) on whether participants selected a more or less feminine-faced target, ($\chi^2 = 22.85$, $p < .0001$). In keeping with Hypothesis 1, when selecting a counterpart participants preferred a more feminine faced person (62%) over one whose features were

less feminine (38%). However, as predicted in Hypothesis 2, this preference reversed when participants selected an agent with 64.8% choosing the agent with the less feminine face compared to 35.2% who chose the agent with the more feminine face. Fig. 2 displays a frequency count of participant choice of more, or less, feminine targets by role condition.

The fact that the strong preference for people with more feminine faces reversed itself in the agent condition supports our claim that participants do not simply prefer feminine-featured faces. Rather, would-be negotiators' preferences and choices for feminine-featured faces appear to be contingent on the negotiation-related decision they make. Participants prefer to negotiate against those with more feminine featured faces, but prefer those with less feminine featured faces to negotiate on their behalf.

Participants' clear preference for negotiating against a feminine-featured face is consistent with other work showing that people view these faces as relatively more cooperative and less aggressive compared to masculine-featured faces (Carre et al., 2010; Sell et al., 2009). Notably, sex of counterpart made no difference to their choice; both men and women preferred negotiation counterparts—whether male or female—with more feminine faces.

As we postulated, people appear to make quick, but consequential decisions based on the femininity of others' faces. Moreover, these decisions are rooted in calculations about which face—and what kind of behavior—is more appropriate for what kind of role.

It is one thing to prefer a particular kind of face in an agent or a counterpart. It is another to glimpse a face that is feminine or not, draw an inference, and then act on that inference in ways that direct the course of negotiation. In a second experiment, we measure negotiators' offer patterns as well as their perceptions of their counterparts to determine whether preferences for feminine faces are consequential and why this might be.

Study 2

Because it evokes a stereotype of cooperativeness, a counterpart's feminine face is likely to prime a particular set of expectations and behaviors among negotiators. Whereas in Study 1 we inferred cooperative stereotypes, here we explicitly investigate whether these stereotypes are present, and whether they play a role in negotiations. We begin by hypothesizing that feminine features will cue cooperative stereotypes in the minds of negotiators.

Hypothesis 3. Prior to the negotiation, bargainers will expect greater cooperative behavior from a counterpart with a more feminine-featured face than from one with a less feminine face.

In single-shot negotiations there is no shadow of the future to shape negotiators' behaviors. Compared to situations in which negotiators will be facing off again, in these situations, negotiators have been shown to try to collect as much as they can for themselves (Ben-Yoav & Pruitt, 1984), without much regard for the other's interests. Holding a stereotype about the likely

⁴ Slight variations in these instructions have been used, and the patterns and significance of the findings remain the same.

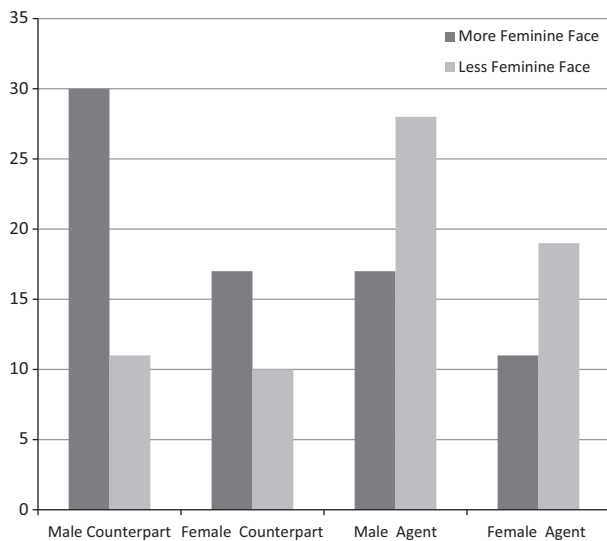


Fig. 2. Study 1. Frequency count of participants' choices for more or less feminine featured male and female targets by agent or counterpart condition.

cooperativeness of a counterpart, negotiators paired with feminine-featured counterparts will likely see even lower barriers to maximizing their interests. Thus, we expect that negotiators should feel freer to demand more from these counterparts than from those with less feminine-featured faces.

Hypothesis 4. Negotiators will demand more from (concede less to) counterparts with more feminine-featured faces than to those with less feminine-featured faces.

Method

We used a mixed between-subject and within-subject design. The two between-subjects conditions were sex of photo set (male, female), and facial femininity (low, high). Participant sex was a within-subject factor, meaning male and female participants could be randomly assigned to either of the sex or facial femininity conditions. 108 undergraduate and MBA students at a large north-eastern university participated in exchange for \$5. Sixty-four (59%) were men. Participants' average age was 25.3 ($SD = 2.01$), and ages ranged from 18–29.

Once they had arrived in the laboratory, we told participants that they would test a new experimental software package designed for digital negotiations, and that they would be negotiating with a participant in another room in the lab. In fact, to control for the behavior of the other negotiator, all participants negotiated against a computer software program in which the offers and messages were identical within each of the two negotiation conditions (program and messages adapted from Hilty & Carnevale, 1993). As a performance incentive, participants were told that the number of points they earned in their deals would be converted to lottery tickets for an upcoming raffle; the more points they got by the end of the simulated negotiation, the better their odds of winning a \$40.00 cash prize. Because the others' behavior was simulated, the behavior and outcomes of the participants were constrained. Thus, we awarded the \$40 on the basis of a random draw.

Participants read a brief description of the study in which they were informed that they would be playing the role of a student-manager in a student-run company. Their task was to reach an agreement on three employment issues (evaluations, discounts on events, and bonuses) (see Appendix A). Participants then received a pack of information about their ostensible counterparts.

All participants read that their counterparts had rated themselves as having average levels of negotiation experience. Participants also received a photograph of the counterpart and this served as our manipulation of counterpart sex and facial femininity. We used the four photographs (male, female, more feminine, less feminine) that we had used in Study 1.

We instructed participants to make the first offer. Negotiations could go to seven rounds, though participants were unaware of the number of rounds ahead of time. They were told that failure to reach agreement would result in the loss of all points, and forfeiture of the opportunity to win a prize. All participants were still negotiating when we ended the experiment at Round 7.

To get the cleanest test of Hypothesis 4, we focused on first round offers made by the participant. We simply summed the value to the participants of the offer on each of the three issues. Round 1 offer is the primary dependent variable.

Prior to the negotiation, participants reported their prospective counterpart's likely cooperativeness. This index comprised four items: perceived cooperativeness, trustworthiness, warmth, and likeability (1 = not at all, 7 = extremely), ($\alpha = 0.83$). Participants also rated their counterparts' photographs on two dimensions—beauty and competence (1 = not at all, 7 = extremely). We measured beauty using two items: how physically attractive is the individual, and how good looking is the individual ($\alpha = 0.89$). We measured competence using two items: how capable is the individual, and how competent is the individual ($\alpha = 0.88$). The likely cooperativeness, beauty and competence variables allow us to account for potentially confounding effects in our analyses.

Results and discussion

Table 2 shows the means, standard deviations, and intercorrelations among the study variables. Feminine faces were not judged to be more beautiful ($M = 3.76$, $SD = 1.87$) than less feminine faces ($M = 3.33$, $SD = 1.74$), $t(108) = -1.21$, $p = .23$). Nor were there differences in perceived competence between counterparts with more feminine ($M = 5.49$, $SD = 2.12$) and less feminine faces ($M = 5.52$, $SD = 1.88$), $t(108) = 0.09$, $p = .92$). Thus, any differences we find for the effects of facial femininity cannot be attributed to differences in either perceived attractiveness or competence.

We tested whether counterpart sex affected our major dependent variables. In fact, negotiators anticipated that female counterparts would be more cooperative ($M = 7.0$, $SD = 1.22$) relative to male counterparts ($M = 5.79$, $SD = 1.58$), $t(108) = -4.41$, $p < .001$. Given the work we reviewed above, this is not a surprising finding (e.g., Amanatullah & Morris, 2010, Tinsley et al., 2009; Walters et al., 1998). This does mean that in our analyses of cooperativeness, we need to control for counterpart sex.

According to Hypothesis 3, feminine features will evoke cooperative stereotypes among negotiators, leading negotiators to expect more cooperative behavior from feminine-faced counterparts than from those with less feminine faces. This was the case. Controlling for sex of counterpart, negotiators expected those with more feminine features to be more cooperative ($M = 6.84$, $SD = 1.23$) than those with less feminine features ($M = 6.05$, $SD = 1.66$), ($F(2, 108) = 7.69$, $p < .01$). This finding supports our claim that counterparts' feminine facial features cue cooperative stereotypes in negotiators.

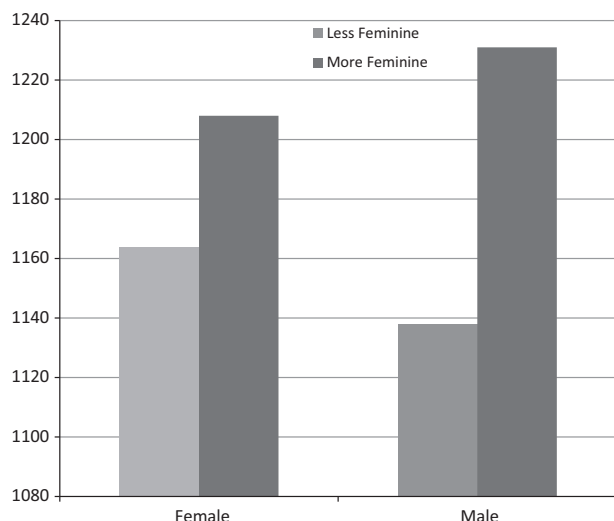
In Hypothesis 4, we put these stereotypes to the test, postulating that they would influence negotiators by encouraging them to make more demanding offers at the bargaining table. Initial tests showed that neither participant sex nor counterpart sex had an impact on participants' offer behaviors. However, facial femininity did have a significant effect. Participants demanded more from counterparts with more feminine facial characteristics than from those with less feminine features, providing evidence that

Table 2

Study 2. Means, standard deviations, and correlations among the study variables.

	M	SD	1	2	3	4	5	6
1 Participant Sex	1.61	0.49						
2 Counterpart Sex	1.5	0.5	0.15					
3 Facial Femininity Condition	0.47	0.5	−0.00	0.08				
4 Counterpart Attractiveness	3.54	1.81	0.15	0.14	0.11			
5 Counterpart Competence	5.51	1.99	0.17	0.11	−0.00	0.33*		
6 Counterpart Likely Cooperativeness	6.39	1.53	0.22*	0.39*	0.27*	0.11	0.17	
7 First Round Offer	1187.4	129.26	0.05	0.07	0.23*	−0.05	0.11	0.21*

Note: N = 108. 1 = male, 2 = female. Less feminine counterpart = 0, more feminine counterpart = 1.

* $p < .05$.**Fig. 3.** Study 2. Points demanded by participant by more and less feminine featured male and female counterparts.

counterpart facial features affect the course of negotiations (Fig. 3), ($F(1, 108) = 5.97, p < .05$).

General discussion

A great deal of negotiation research tracks the back and forth of the interaction to uncover the behaviors that drive particular outcomes (Brett et al., 2007; Olekalns, Smith, & Walsh, 1996). Studies of the impact of initial impressions, however, suggest negotiators' offers and messages may be shaped much earlier in the process, and, in fact, at the earliest moments of introduction (Ambady, Bernieri, & Richardson, 2000; Ambady & Rosenthal, 1992). Yet, we know very little about what happens during this early sizing-up phase of negotiation.

Our primary goals were to investigate what happens in those initial moments, and whether what happens makes a difference for negotiators' expectations, decisions, and tactics. Our investigation centered on whether and how an immediately noticeable characteristic of a prospective partner—facial femininity—influences would-be negotiators. We argued that counterpart facial femininity would cue stereotypes in negotiators that would affect how they viewed their partners as well as how demanding participants would be of the ostensible other. Moreover, we theorized that these characteristics would make a difference whether the counterpart was male or female. Indeed, results from two experiments showed that counterpart facial femininity cued assumptions about counterparts' likely cooperativeness, and these assumptions accounted for negotiators' choice of partners as well as their treatment of counterparts during the negotiation.

When given the option to select a counterpart, both male and female participants strongly preferred those with more feminine features, and this was true regardless of whether participants were deciding between two male counterparts or two females. However, this preference was reversed when people were tasked with choosing an agent with people strongly preferring the person with the less feminine face. That role made a significant difference in preferences indicates that negotiators do not have a blanket preference for either less, or more, feminine faces in negotiation but rather, they discriminate based on the desired behavior associated with a particular role. The result also suggested that facial femininity evoked cooperative stereotypes that could account for preference differences.

Results from a second experiment confirmed that counterpart facial femininity cued a cooperative stereotype. Moreover, the impact of these features on negotiators' behavior extended beyond expectations to influence negotiator tactics. In the 1st Round, negotiators paired with counterparts with more feminine features demanded significantly more than those paired with individuals with less feminine features, as we had predicted.

Contributions

A wealth of studies documents a negotiation disadvantage going to women (Babcock & Laschever, 2003; Gerhart & Rynes, 1991; Stuhlmacher & Walters, 1999). Counterparts routinely offer them less than they offer men, for instance, giving them deals of relatively low value. Prompted by this work, we considered the idea that the femininity of counterparts' facial features—immediately available before any conversation takes place—may be enough to cue negotiators to expect and demand more from some negotiators. Indeed, both men and women with more feminine-featured faces were offered less in negotiation, confirming our notion that femininity is a powerful cue in negotiation.

To date, scholars have largely overlooked how negotiators' physical appearance affects the quality of deals they reach. What little work has been done has shown quite clearly that more physically attractive negotiators receive more generous offers than do those who are less attractive (Solnick & Schweitzer, 1999). That work combined with our findings argues that visual information is a potent factor in negotiation, and as Solnick and Schweitzer showed, exerts considerable effects on negotiators' ability to collect value. Moreover, this visual information—though presented quite briefly and very early in the process—has persistent and consequential effects.

It is likely not possible to adjust the femininity of one's features. However, knowing about the role feminine features play may encourage negotiators to make decisions to negotiate via technology or telephone in ways that are likely to pay off for them.

Nascent work on the importance of facial features in negotiation suggests that scholars may be paying too much attention to what is said (Olekalns et al., 1996; Wang, Northcraft, & Van

Kleef, 2012; Young, Bauman, Chen, & Bastardi, 2012) and how it is said (Cheshin, Rafaeli, & Bos, 2011) and not enough to who says it (see, however, Bowles et al., 2007). In fact, a great deal of negotiation research over the last decade or so has come to rely heavily on the coding of what is said during negotiation (Hine, Murphy, Weber, & Kersten, 2009; Tinsley, O'Connor, & Sullivan, 2002). While appropriate for certain questions, emphasizing what is said may have come at a cost to examining other aspects of communication, including attention to who is doing the communicating.

Limitations and future directions

It stands to reason that if negotiators make consistently high demands of their feminine featured counterparts, performance outcomes will be impacted. For instance, when counterparts have relatively low power, they may be more likely to capitulate to demanding negotiators, giving negotiators a greater share of the pie. However, if the counterpart is relatively powerful, the negotiation may very well break down in the face of negotiator demandingness. Both examples suggest that the impact of femininity on offer behavior will carry consequences for outcomes, though future work should explore this possibility.

In our studies, participants viewed photographs of their counterparts (or prospective agents), and then had no additional visual contact with their counterparts. Given the leanness of the situation, the photographs we presented may have carried more weight in participants' decisions and behaviors than would be the case if the two parties had maintained visual contact throughout the interaction. Alternatively, with little reminder of what the counterpart looked like, the effects of the photograph may be rather conservative compared to what might be found if the visual were present throughout the negotiation. Future work should investigate these possibilities.

Along these lines, interactions between participants and (simulated) counterparts were restricted to a computer-mediated setting. Settings that allow negotiators to see a counterpart's body posture, or hear a voice may amplify or diminish the effects of facial information on negotiators. That is, the cooperative stereotype cued by a feminine-featured counterpart may be undercut by a negotiator who relies on stereotypically male postures or has a relatively deep voice, diminishing the likely impact of facial features on the negotiation. So, too, might repeated interaction decrease the saliency, and thus the effect, of facial femininity. More work should be done to establish the scope conditions around the effects we document.

According to dual-process models, people process information either in quick, heuristic ways or in deeper more thoughtful, ways (Chaiken & Trope, 1999). What makes a difference is an individual's epistemic motivation—his or her desire to expend the resources necessary to engage in deep, effortful cognitive processing to develop a more accurate understanding of the world (De Dreu & Carnevale, 2003; Kruglanski, 1999; Van Kleef, De Dreu, & Manstead, 2004). It may be that participants who have higher epistemic motivation—either due to individual differences or to situational demands—will be less likely to rely on facial femininity as a cue in negotiation. Future work should continue to investigate how initial visual impressions make a difference.

Conclusion

How a negotiator looks makes a difference to how he or she is treated (e.g., Solnick & Schweitzer, 1999). Here, we showed that facial femininity cues beliefs about likely cooperativeness, and leads people to prefer more feminine-faced people as their negotiation counterparts. As predicted, more feminine-faced

counterparts encouraged negotiators to demand more from them when they squared off. This implies that it may behoove negotiators to be aware of the impact of their visual presentation on their counterparts, and to make decisions on how to negotiate—face-to-face or over the phone or via text or email—depending on how they are likely to be treated.

Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at <http://dx.doi.org/10.1016/j.obhdp.2014.05.001>.

References

- Aguar, F., Brañas-Garza, P., Cobo-Reyes, R., Jimenez, N., & Miller, L. M. (2009). Are women expected to be more generous? *Experimental Economics*, 12(1), 93–98.
- 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(2), 256–267.
- Ambady, N., Bernieri, F. J., & Richardson, J. A. (2000). Toward a histology of social behavior: Judgmental accuracy from thin slices of the behavioral stream. *Advances in Experimental Social Psychology*, 32, 201–271.
- Ambady, N., & Rosenthal, R. (1992). Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis. *Psychological Bulletin*, 111(2), 256–274.
- Arrow, K. J. A. (1985). Agency costs versus fiduciary duties. In J. W. Pratt & R. J. Zeckhauser (Eds.), *Principals and agents: The structure of business*. Boston, MA: Harvard Business School Press.
- Ayres, I., & Siegelman, P. (1995). Race and gender discrimination in bargaining for a new car. *The American Economic Review*, 304–321.
- Babcock, L., & Laschever, S. (2003). *Women don't ask: Negotiation and the gender divide*. Princeton University Press.
- Ben-Yoav, O., & Pruitt, D. J. (1984). Resistance to yielding and the expectation of cooperative future interaction. *Journal of Experimental Social Psychology*, 4, 323–335.
- Blau, F. D., & Kahn, L. M. (2007). The gender pay gap. *The Economists' Voice*, 4(4).
- 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(1), 84–103.
- Bowles, H. R., Babcock, L., & McGinn, K. L. (2005). Constraints and triggers: Situational mechanics of gender in negotiation. *Journal of Personality and Social Psychology*, 89(6), 951–965.
- Brett, J. M., Olekalns, M., Friedman, R., Goates, N., Anderson, C., & Lisco, C. (2007). Sticks and stones: Language, face, and online dispute resolution. *Academy of Management Journal*, 50, 85–99.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality data? *Perspectives on Psychological Science*, 6(1), 3–5.
- Carre, J. M., Morrissey, M. D., Mondloch, C. J. U., & McCormick, C. M. (2010). Estimating aggression from emotionally neutral faces: Which facial cues are diagnostic? *Perception*, 39, 356–377.
- Carré, J. M., & McCormick, C. M. (2008). In your face: Facial metrics predict aggressive behaviour in the laboratory and in varsity and professional hockey players. *Proceedings of the Royal Society B: Biological Sciences*, 275, 2651–2656.
- Chaiken, S., & Trope, Y. (Eds.). (1999). *Dual-process theories in social psychology*. Guilford Press.
- Cheshin, A., Rafaeli, A., & Bos, N. (2011). Anger and happiness in virtual teams: Emotional influences of text and behavior on others' affect in the absence of non-verbal cues. *Organizational Behavior and Human Decision Processes*, 116(1), 2–16.
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2007). The BIAS map: behaviors from intergroup affect and stereotypes. *Journal of personality and social psychology*, 92(4), 631.
- Cunningham, M. R., Barbee, A. P., & Pike, C. L. (1990). What do women want? Facialmetric assessment of multiple motives in the perception of male facial physical attractiveness. *Journal of Personality and Social Psychology*, 59(1), 61.
- De Dreu, C. K., & Carnevale, P. J. (2003). Motivational bases of information processing and strategy in conflict and negotiation. *Advances in Experimental Social Psychology*, 35, 235–291.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573.
- Eckel, C., De Oliveira, A., & Grossman, P. J. (2008). Gender and negotiation in the small: Are women (perceived to be) more cooperative than men? *Negotiation Journal*, 24(4), 429–445.
- Enlow, D. H., Hans, M. G., & McGrew, L. (1996). *Essentials of facial growth*. (pp. 259–260). Saunders: Philadelphia.
- Farkas, L. G. (1981). *Anthropometry of the head and face in medicine*. New York: Elsevier, pp. 199–201.

- Fiske, S. T., Cuddy, A. J., 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(6), 878.
- Gerhart, B., & Rynes, S. (1991). Determinants and consequences of salary negotiations by male and female MBA graduates. *Journal of Applied Psychology*, 76(2), 256–262.
- Gosling, S. D., & Johnson, J. A. (2010). *Advanced methods for conducting online behavioral research*. American Psychological Association.
- Gosling, S. D., Sandy, C. J., John, O. P., & Potter, J. (2010). Wired but not WEIRD: The promise of the Internet in reaching more diverse samples. *Behavioral and Brain Sciences*, 33(2–3), 94.
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies. *American Psychologist*, 59(2), 93–104.
- Gupta, V. K., Turban, D. B., & Bhawle, N. M. (2008). The effect of gender stereotype activation on entrepreneurial intentions. *Journal of Applied Psychology*, 93(5), 1053.
- Halevy, N., Chou, E. Y., & Murnighan, J. K. (2012). Mind games: The mental representation of conflict. *Journal of Personality and Social Psychology*, 102(1), 132.
- Haselhuhn, M. P., & Kray, L. J. (2012). Gender and Negotiation. In B. M. Goldman & D. L. Shapiro (Eds.), *The psychology of negotiations in the 21st century workplace: New challenges and new solutions*. New York: Taylor and Francis, New York, p. 293.
- Hilty, J. A., & Carnevale, P. J. (1993). Black-hat/White-hat strategy in bilateral negotiation. *Organizational Behavior and Human Decision Processes*, 55, 444–469.
- Hine, M. J., Murphy, S. A., Weber, M., & Kersten, G. (2009). The role of emotion and language in dyadic E-negotiations. *Group Decision and Negotiation*, 18(3), 193–211.
- Huddy, L., & Terkildsen, N. (1993). Gender stereotypes and the perception of male and female candidates. *American Journal of Political Science*, 119–147.
- King, W. C., Miles, E. W., & Kniska, J. (1991). Boys will be boys (and girls will be girls): The attribution of gender role stereotypes in a gaming situation. *Sex Roles*, 25(11–12), 607–623.
- Kraut, R., Olson, J., Banaji, M., Bruckman, A., Cohen, J., & Couper, M. (2004). Psychological research online: Report of board of scientific affairs' advisory group on the conduct of research on the Internet. *American Psychologist*, 59(2), 105–117.
- 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(6), 942.
- Kray, L. J., & Gelfand, M. J. (2009). Relief versus regret: The effect of gender and negotiating norm ambiguity on reactions to having one's first offer accepted. *Social Cognition*, 27(3), 418–436.
- Kruglanski, A. W. (1999). Motivation, cognition, and reality: Three memos for the next generation of research. *Psychological Inquiry*, 10(1), 54–58.
- Kulik, C. T., & Olekalns, M. (2012). Negotiating the gender divide lessons from the negotiation and organizational behavior literatures. *Journal of Management*, 38(4), 1387–1415.
- Magee, J. C., Galinsky, A. D., & Gruenfeld, D. H. (2007). Power, propensity to negotiate, and moving first in competitive interactions. *Personality and Social Psychology Bulletin*, 33(2), 200–212.
- Major, B., & Konar, E. (1984). An investigation of sex differences in pay expectations and their possible causes. *Academy of Management Journal*, 27(4), 777–792.
- Major, B., Vanderslice, V., & McFarlin, D. B. (1984). Effects of pay expected on pay received: The confirmatory nature of initial expectations. *Journal of Applied Social Psychology*, 14(5), 399–412.
- Malle, B. F., & Holbrook, J. (2012). Is there a hierarchy of social inferences? The likelihood and speed of inferring intentionality, mind, and personality. *Journal of Personality and Social Psychology*, 102(4), 661.
- Nomura, M., Ohira, H., Haneda, K., Iidaka, T., Sadato, N., Okada, T., et al. (2004). Functional association of the amygdala and ventral prefrontal cortex during cognitive evaluation of facial expressions primed by masked angry faces: An event-related fMRI study. *Neuroimage*, 21(1), 352–363.
- Olekalns, M., Smith, P. L., & Walsh, T. (1996). The process of negotiating: Strategy and timing as predictors of outcomes. *Organizational Behavior and Human Decision Processes*, 68(1), 68–77.
- Oosterhof, N. N., & Todorov, A. (2008). The functional basis of face evaluation. *Proceedings of the National Academy of Sciences*, 105(32), 11087–11092.
- Paolacci, G., Chandler, J., & Ipeirotis, P. G. (2010). Running experiments on amazon mechanical turk. *Judgment and Decision Making*, 5(5), 411–419.
- Paunonen, S. V., Ewan, K., Earthy, J., Lefave, S., & Goldberg, H. (1999). Facial features as personality clues. *Journal of Personality*, 67, 555–583.
- Pruitt, D. G., & Kim, S. H. (1998). Social conflict. *The Handbook of Social Psychology*, 2, 470–503.
- Rubin, J. Z., & Sander, F. E. A. (1988). When should we use agents? Direct vs. representative negotiation. *Negotiation Journal*, 4, 395–401.
- Sanbonmatsu, K. (2002). Gender stereotypes and vote choice. *American Journal of Political Science*, 20–34.
- Sanchez-Pages, S., & Turiegano, E. (2010). Testosterone, facial symmetry and cooperation in the prisoners' dilemma. *Physiology & Behavior*, 99(3), 355–361.
- Scharlemann, J. P., Eckel, C. C., Kacelnik, A., & Wilson, R. K. (2001). The value of a smile: Game theory with a human face. *Journal of Economic Psychology*, 22(5), 617–640.
- Sell, A., Cosmides, L., Tooby, J., Sznycer, D., von Rueden, C., & Gurven, M. (2009). Human adaptations for the visual assessment of strength and fighting ability from the body and face. *Proceedings of the Royal Society B: Biological Sciences*, 276, 575–584.
- Solnick, S. J., & Schweitzer, M. E. (1999). The influence of physical attractiveness and gender on ultimatum game decisions. *Organizational Behavior and Human Decision Processes*, 79(3), 199–215.
- 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(5), 723–735.
- Stirrat, M., & Perrett, D. I. (2010). Valid facial cues to cooperation and trust male facial width and trustworthiness. *Psychological Science*, 21(3), 349–354.
- Stuhlmacher, A. F., & Walters, A. E. (1999). Gender differences in negotiation outcome: A meta-analysis. *Personnel Psychology*, 52(3), 653–677.
- Tanner, J. M. (1981). Growth and maturation during adolescence. *Nutrition Reviews*, 39(2), 43–55.
- Tinsley, C. H., Cheldelin, S. I., Schneider, A. K., & Amanatullah, E. T. (2009). Women at the bargaining table: Pitfalls and prospects. *Negotiation Journal*, 25(2), 233–248.
- Tinsley, C. H., O'Connor, K. M., & Sullivan, B. A. (2002). Tough guys finish last: The perils of a distributive reputation. *Organizational Behavior and Human Decision Processes*, 88(2), 621–642.
- Todorov, A., Baron, S. G., & Oosterhof, N. N. (2008a). Evaluating face trustworthiness: A model based approach. *Social Cognitive and Affective Neuroscience*, 3(2), 119–127.
- Todorov, A., Said, C. P., Engell, A. D., & Oosterhof, N. N. (2008b). Understanding evaluation of faces on social dimensions. *Trends in Cognitive Science*, 12(12), 455–460.
- Valley, K. L., White, S. B., Neale, M. A., & Bazerman, M. H. (1992). Agents as information brokers: The effects of information disclosure on negotiated outcomes. *Organizational Behavior and Human Decision Processes*, 51, 220–236.
- Van Kleef, G. A., De Dreu, C. K., & Manstead, A. S. (2004). The interpersonal effects of emotions in negotiations: A motivated information processing approach. *Journal of Personality and Social Psychology*, 87(4), 510.
- 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), 1–29.
- Wang, L., Northcraft, G. B., & Van Kleef, G. A. (2012). Beyond negotiated outcomes: The hidden costs of anger expression in dyadic negotiation. *Organizational Behavior and Human Decision Processes*, 119(1), 54–63.
- Young, M. J., Bauman, C. W., Chen, N., & Bastardi, A. (2012). The pursuit of missing information in negotiation. *Organizational Behavior and Human Decision Processes*, 117(1), 88–95.
- Zebrowitz, L. A. (1997). *Reading faces: Window to the soul?* Westview Press.
- Zebrowitz, L. A. (2006). Finally, faces find favor. *Social Cognition*, 24(5), 657–701.
- Zebrowitz, L. A., Fellous, J. M., Mignault, A., & Andreoletti, C. (2003). Trait impressions as overgeneralized responses to adaptively significant facial qualities: Evidence from connectionist modeling. *Personality and Social Psychology Review*, 7(3), 194–215.