

The Dynamics of Gender and Alternatives in Negotiation

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A substantial body of prior research documents a gender gap in negotiation performance. Competing accounts suggest that the gap is due either to women's stereotype-congruent behavior in negotiations or to backlash enacted toward women for stereotype-incongruent behavior. In this article, we use a novel data set of over 2,500 individual negotiators to examine how negotiation performance varies as a function of gender and the strength of one's alternative to a negotiated agreement. We find that the gender gap in negotiation outcomes exists only when female negotiators have a strong outside option. Furthermore, our large data set allows us to examine an understudied performance outcome, rate of impasse. We find that negotiations in which at least one negotiator is a woman with a strong alternative disproportionately end in impasse, a performance outcome that leaves considerable potential value unallocated. In addition, we find that these gender differences in negotiation performance are not due to gender differences in aspirations, reservation values, or first offers. Overall, these findings are consistent with a backlash account, whereby counterparts are less likely to come to an agreement and therefore reach a potentially worse outcome when one party is a female negotiator empowered by a strong alternative.

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A large body of research has documented a persistent gender gap in negotiation, whereby women systematically underperform in negotiations relative to their male counterparts (Babcock & Laschever, 2003; Kray & Thompson, 2004; Kugler et al., 2018; Mazei et al., 2015; Stuhlmacher & Walters, 1999). Given the power of negotiation to influence both social and organizational life—across one's career and across domains—it is important to identify and understand systematic differences in who benefits from negotiation and who does not, as well the conditions that lead individuals to be less or more successful in achieving their goals through negotiation. Whether and how someone negotiates can affect his or her salary, promotion chances, and general well-being (Bazerman & Neale, 1993; Marks & Harold, 2011; Neale & Lys, 2015a). In particular, the gender gap in pay has been attributed in part to gender differences in negotiations (Babcock & Laschever, 2003; Gerhart & Rynes, 1991). This has led some companies to ban salary negotiations altogether (Feintzeig & Silverman, 2015), and some cities like Boston and San Francisco to offer free negotiation workshops (Becker, 2017; Paquette, 2015) in hopes that closing the negotiation gender gap will lead to a commensurate reduction in pay inequity.

To shape effective interventions and policies, the field requires an improved understanding of what conditions might produce the gender gap in negotiation performance (Miller et al., 2017). Yet, it has been difficult to disentangle the causal forces responsible for this gender gap. In particular, two related but distinct narratives have emerged in the literature to explain why women underperform in negotiations compared to their male counterparts. The first narrative suggests that women are insufficiently assertive in potentially negotiable situations, both in initiating negotiations (Kray et al., 2001; Rubin & Brown, 1975) and in extracting value during negotiations. According to this narrative, individuals tend to see negotiations as conflictual interactions (Halevy & Phillips, 2015), a view that is inconsistent with traditional gender roles and gender stereotypes that constrain women's agentic behavior (Schein, 1975). As a result, women are frequently unwilling to behave in the assertive fashion that is associated with most individuals' schema of a typical negotiation (Kray & Thompson, 2004).

An alternative narrative suggests that women are willing to, and often do, negotiate assertively but suffer a backlash from both male and female negotiation partners as a result (Amanatullah & Morris, 2010; Bowles et al., 2007). Importantly, these two narratives would suggest different remedies to the gender gap in negotiations: Under the first account, an intervention might be most efficacious if it were to encourage women to behave more assertively, whereas under the second, such a recommendation would only exacerbate the gender gap. And yet, given current research, it is often difficult to distinguish between these two potential explanations and understand the predominant forces at work.

In this article, we tease apart these theoretical explanations by examining how women and men perform in negotiations when their outside option is strong versus weak. Negotiators often compare the quality of the outcomes that they might achieve via the focal

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negotiation to the quality of outcomes that they could achieve via other means (Kelley & Thibaut, 1978). The strength of one's alternative to a negotiated agreement can thus be a powerful driver of behavior (Brett et al., 1996; Kim & Fragale, 2005; Malhotra & Gino, 2011; Pinkley et al., 1994). Specifically, stronger (i.e., better) alternatives embolden negotiators to aim higher and behave more assertively (Morris et al., 1999). A strong alternative would thus help to counteract the gender gap if it were caused by female negotiators' insufficient assertiveness (i.e., the "tameless" account).¹ Put differently, if the gender gap in negotiation exists because women are insufficiently assertive in negotiation, the gender gap in negotiation performance should be smaller when women have strong rather than weak alternatives. In contrast, a strong alternative would likely exacerbate the gender gap in negotiation performance if the poorer performances of female negotiators were predominantly due to retaliation from counterparts (i.e., the "backlash" account). To the extent that a strong alternative empowers and liberates a negotiator to behave assertively during a negotiation (Fiske, 2010; Magee et al., 2007), female negotiators with strong alternatives would be the targets of more, rather than less, backlash from counterparts, resulting in a larger gender gap in negotiation performance.

Defining Negotiation Performance

We examine the effects of alternative strength and gender on two important measures of negotiation performance. Negotiation is typically defined as a situation in which two or more parties communicate to resolve their perceived conflict of interest (Thompson, 1990). Accordingly, a negotiator's performance is often conceptualized as the value that a negotiator extracts from the negotiated agreement (e.g., Thompson & Hastie, 1990). In situations in which there exist possible terms that would make all parties better off than their respective alternatives to a negotiated agreement (Sebenius, 1992), we can consider individual negotiation performance as consisting of two parts.

First, did the parties reach an agreement? When the zone of possible agreement is positive and an agreement was not reached, both parties have lost out on potential value. Second, if an agreement was reached, what was the value of that agreement for each party? Historically, research on negotiation performance has focused primarily on the second of these two outcomes, confining analyses of negotiation performance to negotiators who reached an agreement (e.g., Adair et al., 2001; Curhan & Pentland, 2007; de Dreu et al., 2000; Schaerer et al., 2018). This limits the field's understanding of negotiation performance in several ways. First, failure to consider dyads that reach an impasse can result in a selection bias in one's analyses of negotiation performance (Tripp & Sondak, 1992). Second, it can reduce the ecological validity of negotiations research because many real-world negotiations, in fact, do end in impasse and, when the zone of possible agreement is positive, potential value is lost for all parties (Ashenfelter & Currie, 1990).

Finally, and most important for the present research, the focus on the value of an agreed deal limits our understanding of gender differences in negotiations performance. Specifically, examining impasse rates could further disentangle the tameless and backlash accounts of the negotiation gender gap. Under a tameless account, impasse rates should be low because women negotiating in a stereotype-consistent manner would be less likely to engage in

the types of assertive behaviors that would lead negotiators to walk away from the table with no deal. Furthermore, a tameless account would predict that women negotiating in a stereotype-consistent manner would rather acquiesce to a low value offer than walk away from the bargaining table. Under a backlash account, however, women would be more likely to engage in more assertive negotiation tactics, making it more likely that their counterparts would walk away. Moreover, women with a strong alternative who negotiate in a stereotype-inconsistent manner, and who are exposed to backlash from their counterparts, should be more likely to walk away from the bargaining table. In this case, we would expect impasse rates to rise.

It should be noted that recent work has begun to look more carefully at impasse rates, perhaps in response to the acknowledgment that a better understanding of this underexplored outcome would contribute to our understanding of the negotiation process as a whole (Tripp & Sondak, 1992). For example, impasse rates have recently been used as a dependent measure when examining the impact of anger (Yip & Schweinsberg, 2017), nondiagnostic information (Wiltermuth & Neale, 2011), and empathy and perspective taking (Galinsky et al., 2008) on negotiation performance. However, to our knowledge, impasse rates have yet to be used as a primary measure when studying the role of gender in negotiation. By examining both impasse rates and agreement value, we can provide a more precise picture of gender differences in negotiation under differing alternative strengths.

Theory and Hypotheses

The aforementioned research on gender differences in negotiation has frequently found a performance gap between men and women. Men are more likely than women to initiate a negotiation in the first place (Babcock & Laschever, 2003; Kugler et al., 2018; Small et al., 2007). Once initiated, men feel more entitled to better outcomes (Barron, 2003) and ultimately obtain more value from the negotiation (Mazei et al., 2015; Stuhlmacher & Walters, 1999). Mazei et al. (2015) meta-analyzed 123 effect sizes on gender and negotiation and found a significant main effect where men achieved significantly better economic outcomes than women. This leads to our first hypothesis:

Hypothesis 1: Men will extract more value from negotiated deals than will women.

Importantly, however, several factors in the meta-analysis described above moderated this main effect of gender on negotiation performance. For example, decreased structural ambiguity (i.e., limited information about, or understanding of, economic aspects of the negotiation, such as financial benchmarks, limits, and standards for agreement; Bowles et al., 2005) mitigated the gender difference in economic outcomes, as did increased negotiation experience. This suggests that it is less productive to look for an overall main effect of gender, and instead more useful to

¹ While we focus on assertiveness here, the tameless account could also be explained by women being less ambitious. For now we have grouped these potential explanations together because they both would make the same empirical predictions and because they are typically grouped together within the literature (e.g., Kray et al., 2001). We return to the possibility that women may be less ambitious in negotiations in Study 2.

examine the factors that exacerbate or mitigate this gap. One particular factor that has yet to be studied within the context of gender is the strength of one's alternative option if no agreement were reached.

There is a robust literature examining how the value of one's alternative influences negotiation behavior and performance. Although negotiators can derive power from many aspects of a negotiation, one of the biggest sources of power in negotiation comes from the quality of the alternative that the negotiator has if she were unable to reach a deal with her counterpart. Negotiators with a strong alternative have been shown to feel more agentic and act more assertively, two established psychological consequences of having power (Magee & Galinsky, 2008). Stronger alternatives can thus lead negotiators to set more ambitious targets and perform better in the negotiation (Kim & Fragale, 2005; Pinkley et al., 1994). Indeed, even simulating a strong alternative in one's mind has been shown to increase one's negotiation outcomes (Schaerer et al., 2018). This leads to our second hypothesis:

Hypothesis 2: Negotiators with stronger alternatives will extract more value in negotiated agreements than negotiators with weaker alternatives.

How might the quality of the alternative available to a negotiator interact with her gender? The literature suggests two plausible options. First, it is possible that the presence of a strong alternative could help level the playing field between men and women, thereby reducing or even eliminating the gender gap in negotiation (Bowles et al., 2005). Negotiation is typically perceived as a stereotypically male endeavor (Kray et al., 2001), leading women to feel less comfortable engaging in what they may perceive to be a stereotype-incongruent behavior (Kray et al., 2002; Small et al., 2007). Research shows women feel more comfortable negotiating on behalf of someone else rather than for themselves, because doing so gives them a role-congruent reason for behaving more assertively (Amanatullah & Morris, 2010; Bowles et al., 2005). In a similar fashion, because a strong alternative causes negotiators to feel more empowered, possessing a strong alternative might give women a justification for setting more ambitious targets, behaving more assertively, and claiming more value than they otherwise would. In addition, increasing women's sense of power has been found to be an effective method to reduce the gender gap in initiating negotiations (Small et al., 2007). Because holding a strong alternative can increase one's sense of power (Kim & Fragale, 2005), it might constitute another method of promoting gender parity in negotiations. If this were true, we would expect that the gender gap in extracted value in a negotiation would be larger when negotiators possess a weaker alternative, but would shrink such that women would extract value similar to men when they possess a stronger alternative.

Hypothesis 3a: The gender gap in value extracted from negotiated agreements will be smaller when negotiators possess a strong alternative.

Alternatively, it is plausible that, although increasing a woman's sense of power may lead women to feel more comfortable behaving assertively in a negotiation, this greater assertiveness may lead female negotiators to face greater backlash from their counterparts (Amanatullah & Tinsley, 2013; Bowles et al., 2007). The backlash

effect in negotiation is due to stereotypes that women should not behave assertively (Rudman & Glick, 2008; Rudman et al., 2012). Women who do behave assertively are sanctioned by others, in this case, by their counterparts in the negotiation. This backlash effect has been documented when women behave assertively in a negotiation with either a male partner or a female partner (Bowles et al., 2007; Kulik & Olekalns, 2012). For example, women who negotiated assertively were rated as less likable and less appropriate for leadership roles than men who behaved in the same way (Amanatullah & Tinsley, 2013). Thus, if women with a stronger alternative were to engage in more assertive negotiation tactics than women with a weaker alternative, this increase in assertiveness may lead to even greater backlash for those women. If this were true, we would expect the established gender gap in negotiation to be smaller when negotiators have weaker alternatives and larger when negotiators have stronger alternatives. This is because women's negotiation counterparts tend to respond negatively to the assertive behavior that the stronger alternative engenders.

A closer look at the extant literature reveals that adjudicating between the tameness and backlash accounts is still very much an open question. For example, although Small et al. (2007) found an increase in self-reported comfort in initiating negotiation among women with a higher sense of power, they did not measure actual negotiation outcomes. Thus, they were unable to establish whether the greater comfort with initiating negotiation that comes with power also spills over to enhanced negotiation performance. Similarly, in the study by Amanatullah and Morris (2010), participants did not negotiate with a real counterpart, and instead reported the anticipated backlash they would receive. This is distinct from counterparts actually engaging in backlash behaviors. Finally, in the study by Bowles et al. (2005), participants did negotiate with a real counterpart but this counterpart knew whether participants were negotiating on behalf of themselves or another person. This means that differences in outcomes between these two conditions could be attributed either to differences in women's negotiation style when negotiating for themselves versus for others or to counterparts believing that it was more normative or appropriate for women to negotiate assertively on behalf of others (and thus tempering the backlash). We therefore propose the following competing hypothesis to H3a:

Hypothesis 3b: The gender gap in value extracted from negotiated agreements will be larger when negotiators possess a strong alternative.

Thus far, we have discussed only one form of negotiation performance—extracted value in negotiated agreements. However, as discussed earlier, one can gain additional insights on the dynamics of gender in negotiation by examining the rate of impasse in negotiations with positive zones of possible agreement as an additional measure of negotiation performance. Impasses can result from a number of characteristics of a negotiation, including asymmetric information (Roth & Murnighan, 1982), competitiveness (Malouf & Roth, 1981), and power imbalances (McAlister et al., 1986; Tripp & Sondak, 1992) between parties. One plausible hypothesis, consistent with the tameness account, is that women will try harder to avoid impasses than men will. To the extent that impasses are seen as generally aversive to negotiators (Tuncel et al., 2016), and harmful to

relationships in particular (O'Connor & Arnold, 2001; O'Connor et al., 2005), a tameness account would predict that women behaving in stereotype-congruent ways should be more willing to cede value to their counterpart to avoid an impasse. This leads to the following hypothesis:

Hypothesis 4a: Impasse rates will be lower in dyads with women regardless of the strength of alternatives.

Alternatively, if negotiating with a strong alternative exacerbates the gender gap due to heightened assertiveness and a backlash effect, we would expect to see a higher rate of impasses in negotiation dyads that include a female negotiator when both parties have a strong alternative. As mentioned above, impasses are generally an undesirable negotiation outcome (Tuncel et al., 2016), and can result from an excessively competitive and conflictual negotiation process. In particular, negotiations characterized by higher levels of anger (Yip & Schweinsberg, 2017) or lower levels of interpersonal trust (Giebels et al., 2003) are more likely to end in an impasse. Given that backlash against agentic female negotiators can engender either of these responses, one might find evidence of such backlash in differential rates of impasse. If women, indeed, were to engage in more assertive negotiation behaviors when they have a stronger alternative, and if a backlash against such assertive behavior exists, then this should be reflected in higher impasse rates in negotiations involving women with strong alternatives.

In particular, we would expect to find this increased impasse rate specifically in instances when a woman with a strong alternative is negotiating with a counterpart who also has a strong alternative. An individual with a strong alternative only needs to be assertive in demanding a better deal when her counterpart can resist with his or her own strong alternative. In cases where a woman with a strong alternative is negotiating with a counterpart with a weak alternative, we do not expect there to be an opportunity for the strong alternative woman to experience backlash, as there is little the counterpart can do to push back against a one-sided deal and she will therefore face less resistance in general. In other words, we propose the following alternative hypothesis:

Hypothesis 4b: Impasse rates will be higher in dyads that consist of at least one woman when both negotiators have strong alternatives.

One plausible alternative to the backlash account proposed on H4b is that women are less likely to leverage a strong alternative to its full potential. In other words, it may be the case that women hope to achieve less out of a negotiation where they are in a powerful position than men do. Though this account would have difficulty explaining differences in impasse rates, to test whether gender moderates the goals that negotiators with strong alternatives set for themselves, we use two common measures of goal setting and assertiveness in negotiations: aspiration values and reservation prices.

An aspiration in a negotiation is the typically challenging goal that a negotiator hopes to achieve before the negotiation begins. If men are hoping to use their strong alternatives to achieve more than women, this could account for gender differences in impasse rates (4b) or value extracted from a negotiation (3b). This would be reflected in men reporting higher aspirations than women. However,

if women and men with strong alternatives do not hold different aspirations about how they want to perform, then we would expect no gender differences in aspirations. If this were the case, then it would be less plausible that women with strong alternatives are simply behaving less assertively than men (Amanatullah & Morris, 2010). We therefore propose the following pair of competing hypotheses:

Hypothesis 5a: Aspirations will be lower for women with a strong alternative than for men with a strong alternative.

Hypothesis 5b: Aspirations for men and women with a strong alternative will not meaningfully differ (i.e., will differ by less than a small effect size in an equivalence test framework).

The reservation value (sometimes called the reservation price, bottom line, threshold value, or resistance point; Lewicki & Litterer, 1985; Raiffa, 1982) is the deal a negotiator determines to be the minimally acceptable deal for him or herself in a given negotiation. Similar to aspirations, if women were insufficiently ambitious (i.e., the tameness account) even when empowered with a strong alternative, we would expect to see this reflected in lower (i.e., less ambitious) reservation values. If instead women were equally ambitious as men we would expect to see no difference in reservation values between genders. As a result, this would contribute to the evidence against the hypothesis that women with strong alternatives behave less assertively than similarly-empowered men. Instead, it is consistent with the hypothesis that women are being penalized for behaving similarly to men.

We therefore propose the following pair of competing hypotheses:

Hypothesis 6a: Reservation values will be lower for women with a strong alternative than for men with a strong alternative.

Hypothesis 6b: Reservation values for men and women with a strong alternative will not meaningfully differ (i.e., will differ by less than a small effect size in an equivalence test framework).

Equivalence Testing

Support for Hypotheses 5b and 6b requires evidence that any observed difference in the aspirations or reservation values between men and women with a strong alternative is smaller than a specified smallest effect size of interest, essentially hypothesizing no or minimal difference between groups. Frequentist methods of inferential statistics have traditionally been unable to test for evidence in favor of a lack of any difference between groups. However, recent methodological advancements have suggested that one way of doing so is to use equivalence testing. Originally developed for the field of medicine (Hauck & Anderson, 1984; Walker & Nowacki, 2011), equivalence tests allow researchers to test whether the difference between two samples is significantly different from a given pre-determined effect size close to zero. In other words, it provides support for a claim that there is less than a 5% chance that the given data would be observed if the true effect was larger than a certain Cohen's d , defined as the Smallest Effect Size Of Interest (SESOI;

Bonett, 2020; Lakens, 2017). Although relatively novel in the domains of management and psychology, equivalence tests have become more common in these fields in recent years (e.g., Converse & Dennis, 2018; Kristal & Whillans, 2020; Stoker et al., 2019; Zhang & Smith, 2018). We employ this technique to test Hypotheses 5–7 in order to tease apart the competing predictions put forth by the backlash and tameness accounts discussed above. We chose a small effect size in light of recent meta-analytic evidence suggesting that gender differences in negotiation, when they exist, tend to have a small effect size (Mazei et al., 2015). Specifically, following conventions around Cohen's d , we chose an effect size of $d = 0.20$, which is widely viewed as indicating a small effect (Cohen, 1988).

The Present Research

We conducted two studies to examine how gender and alternative strength shape negotiation performance. Study 1 was designed to test the hypotheses above in a well-powered setting with a culturally and professionally diverse sample of negotiators. Study 2 replicates tests of H5a and H5b as well as tests a follow-up hypothesis, described later in the article.

This article makes three important contributions to the current literature. First, we extend prior work on the underlying causes of the gender gap in negotiation performance. Specifically, as noted above, our experimental design in Study 1 allows us to disentangle the tameness mechanism from the backlash mechanism. Second, the nature of our data allows us to examine an often-disregarded outcome of negotiations: impasses. Though many real-world negotiations result in no agreement between the negotiating parties, research has rarely examined impasse rates as a dependent variable (Tripp & Sondak, 1992) because their low frequency in negotiation exercises makes them difficult to evaluate experimentally. Our study thus provides needed insight into when impasses are more or less likely to occur. Third, by conducting a study using a large sample of diverse participants (including MBA students and executives from five continents), we replicate and extend previous work in the negotiation literature with a robust sample. The majority of experimental work on gender in negotiations has used undergraduate students in Western educational institutions as participants (cf. Henrich et al., 2010). This means that little is known about the gender gap in negotiation among individuals later in their professional career and in non-Western cultures. In addition, many of the previous studies on gender and negotiation used smaller samples that were potentially underpowered to detect effects (cf. Simmons et al., 2011), especially with respect to research questions looking beyond main effects. By using a large and varied sample, the current research enables us to explore the extent to which past findings hold true in more mature and diverse populations.

Study 1

Study 1 employs a large sample of participants who, over the course of 5 years, all took part in the same negotiation exercise. The sample includes people with a wide variety of work experience. Although our sample is not representative of working adults in any single country or industry, it is exceptionally broad and consists of highly motivated MBA students, working adults, entrepreneurs, and executives from many different countries who elected to take a

course on negotiation or enroll in a nondegree educational program that offers negotiation training. The breadth of our samples comes from the inclusion of participants who took part in face-to-face and online negotiations; who vary substantially in terms of their age, career stage, industry, and organizational rank; and who come from diverse cultural backgrounds (as the training programs participants attended took place in various locations around the globe, including Brazil, Chile, China, India, the U.K., and the U.S.). Overall, roughly one quarter of the sample in Study 1 took part in the negotiation exercise outside of North America and roughly one quarter took part in the exercise in a virtual environment.

Methods

Participants

Participants consisted of 2,552 individuals (35.46% women) who participated in a negotiation exercise as part of one of 58 education sessions on negotiation (8 in-person MBA negotiation classes, 8 online negotiations classes, and 42 in-person executive education and certificate program sessions). In total, 19.36% of participants were full-time students (either MBA or undergraduate), 62.11% of participants were working adults, and 18.53% of participants were working adults with job titles indicating executive rank (e.g., “President,” “Chief Executive,” and “Vice President”; see Table 1 for a summary). The negotiation exercise took place in dyads. Of the 1,276 dyads, 13.94% were comprised of two women, 43.03% were comprised of one woman and one man, and the remaining 43.33% were comprised of two men.

Procedure

All participants took part in the New Recruit negotiation exercise (Neale, 1997). Participation in the study was open to all attendants in each of the sessions in which the exercise was taught during the aforementioned time period. The negotiation exercise was administered as an integral part of the educational curriculum (rather than as

Table 1
Sample Characteristics for Participants in Study 1

Gender	Number of participants
Male	1,647
Female	905
Location	
California	2,124
Bangalore	68
Beijing	84
New York	22
London	108
Santiago	56
Sao Paulo	112
Rank	
Full-time students	494
Working adults	1,585
C-suite executives	473

Note. Location refers to where the session took place. It does not necessarily correspond to the country of origin for participants (e.g., participants in California sessions may be visiting the U.S. from other countries, and participants in Beijing might be from other countries but working in China).

a separate or an add-on feature). The New Recruit negotiation exercise was either the only negotiation exercise or the first multi-issue, integrative negotiation exercise that participants encountered in the context in which the study took place. Thus, participants did not receive any specific training relevant to their performance within the study context prior to negotiating the New Recruit exercise. However, different participants varied in their previous exposure to, and experience with, negotiation simulations and real-world negotiations as part of their jobs. Finally, two factors contributed to participants' motivation to perform well in the New Recruit negotiation exercise. First, participants had opted into the negotiation training; hence, they were motivated to learn negotiation skills and have invested time, effort, and/or money to that end. Second, participants knew that their performance would be discussed in the debrief session following the negotiation, and ostensibly preferred their performance to compare favorably, rather than unfavorably, to their peers in the session.

In the exercise, participants were randomly assigned to the role of Candidate or Recruiter and negotiated the details of a job offer according to a designated payoff structure. Candidates and Recruiters gained or lost points for deals across eight different issues including salary, starting bonus, job location, job assignment, health insurance, vacation days, starting date, and moving expense repayment (see the Appendix for payoff structure and online supporting materials for further information). Dyads were free to proceed through the negotiation in any way they chose. Anecdotal observation suggests that some dyads proceeded issue by issue, while others negotiated using packages of issues (e.g., combining issues by stating that they would take \$84,000 as a salary only if they received a 10% signing bonus), and that different dyads proceeded through the issues in different orders depending on idiosyncratic preferences.

We randomly assigned all Candidates and Recruiters to possess either a weak or a strong alternative. This alternative represented the number of points they would receive if they chose not to make a deal (or were unable to reach a deal) with their negotiation partner. Participants with the strong alternative had an additional sheet attached to their payoff and instructions packet that explained that they already had an outside offer (another candidate in the case of Recruiters or another job offer in the case of Candidates) worth 4,500 points (coded as 1 in the data). Participants with the weak alternative had a sheet attached that was equivalent to the strong alternative sheet, except that the outside offer was instead worth 2,200 points (coded as 0 in the data). Participants did not know the value of their partner's alternative. A pareto-efficient deal in this negotiation exercise produces a joint gain of 13,200. Thus, negotiators could improve their outcome substantially even when both parties had a strong alternative.

All in-person participants had 20 min to prepare alone and silently and then had 30 min to complete their face-to-face negotiation. Negotiators in a virtual environment were provided their specific role materials electronically and then completed a planning document. Once they completed the planning document, they scheduled the negotiation at a mutually agreeable time to meet virtually with their counterpart. The negotiation itself took place synchronously (primarily over video-chat platforms) and participants had 30 min to complete the negotiation. A negotiation agreement was complete only if both parties agreed on values for all eight issues; otherwise, the negotiation was declared an impasse.

Before leaving to negotiate, participants in all online sessions and some in-person negotiation sessions (total $k = 12$, $n = 754$) were required to complete a short survey containing additional dependent measures (aspiration price and reservation price). The data were collected under Stanford's Institutional Review Board (IRB) #19533, "Conflict and Cooperation."

Measures

Individual Performance

Individual performance was measured as the number of points a participant claimed in the negotiation exercise (Thompson, 1990). Individual performance in our data set ranged from a low of $-4,800$ points to a high of $13,200$ points, with the median participant in our data earning $5,100$ points. Individual performance was calculated by adding up the points that a participant earned across the distributive, integrative, and congruent issues. Because some issues carried negative point values, participants could end a negotiation with a negative number of points, however, doing so proved exceedingly rare ($<2\%$ of negotiators).

For dyads that reached an impasse, the value of the alternative was entered as the individual performance measure. It was clear to the negotiators that a failure to reach a negotiated agreement meant that they would end the exercise with the value of their alternative. Imputing the value of the alternative is thus the most reasonable treatment for impasse values because by reaching an impasse, the participants agreed that they will extract only the value of their alternative from the exercise.

Negotiation Impasse

If both participants in a dyad could not agree on a negotiation outcome by the end of the exercise, the dyad is considered to have reached an impasse. Impasse is a binary outcome ($1 = \text{impasse}$, $0 = \text{no impasse}$). As stated above, if the dyad reached an impasse, both participants' individual performance scores were entered as the value of their respective alternatives in the negotiation. In addition to imputing participants' individual outcomes in these cases based on the value of their alternative, we also analyzed the likelihood of ending the negotiation in an impasse as a function of negotiators' gender and quality of alternative in separate analyses.

Aspiration Price

In a subset of sessions ($k_{\text{sessions}} = 12$, $n_{\text{participants}} = 754$), participants responded to the following question ascertaining their aspiration price before they negotiated either in person or online with their partner: "What is your aspiration (the points representing an optimistic assessment of what you could achieve in this negotiation)?"

Reservation Price

In a subset of sessions ($k_{\text{sessions}} = 12$, $n_{\text{participants}} = 775$), participants responded to the following question ascertaining their reservation price before they negotiated either in person or online with their partner: "What is your reservation price (the least number of points you will accept in a negotiated agreement)?" These were the only additional measures collected in this subset of sessions.

Additional Variables

In addition to these dependent measures, we recorded negotiator gender (Male = 1, Female = 0), partner gender (Male = 1, Female = 0), hierarchical rank (Students = -1, Working Adults = 0, Executives = 1), negotiation location (California, Bangalore, Beijing, London, Santiago, or Sao Paulo), negotiator role (Recruiter = 1, Candidate = 0), and negotiation medium (Online = 1, In person = 0).

Results

Descriptive statistics is shown in Table 2. For all analyses on individual performance, we conducted linear regressions (unless otherwise stated) using robust standard errors with errors clustered at the session level, using Dibiassi's (2016) implementation in R statistics software to account for our nested data structure (Gelman & Hill, 2006). Clustered standard errors as a method of dealing with nested data has become more popular in organizational research in recent years (e.g., Chang et al., 2019; Gupta et al., 2018; Satterstrom et al., 2019; Welsh et al., 2020) because they are more accurate and provide a more conservative test than other methods (Welsh et al., 2020). In addition, we included several control variables: The rank of the negotiator, the role of the negotiator, the gender of one's negotiation partner, the alternative of one's negotiation partner, the country in which the session took place, and the negotiation medium. In our tables, we show models with and without these control variables for completeness, but the coefficients we reference are from the models with the control variables included, unless otherwise stated.

Hypothesis 1: Do Men Extract More Value than Women in Negotiated Agreements?

Male negotiators did not earn significantly more points than female negotiators, $B = 0.06$, $SE = 0.05$, $t(2,539) = 1.25$, $p = .210$, see Table 3, Model 3. We further analyzed this question excluding all impasses. Excluding impasses, male negotiators still did not earn significantly more points than female negotiators, $B = 0.07$, $SE = 0.06$, $t(2,189) = 1.30$, $p = .194$, see Table 3, Model 6. Though the difference in each sample (i.e., with, as well as without, impasses) was directionally consistent with prior work documenting a gender gap in negotiation performance, neither attained statistical significance despite our large sample. Hypothesis 1 was thus not supported.

Hypothesis 2: Do Negotiators with Strong Alternatives Extract More Value in Negotiated Agreements?

Controlling for other factors, participants who negotiated with a strong alternative of 4,500 points extracted an average of 810.31 points more in the negotiation than those who performed with a weak alternative of 2,200 points, $B = 0.38$, $SE = 0.05$, $t(2,540) = 8.38$, $p < .001$, see Table 4, Model 3. We also examined if strong alternatives improved negotiation performance even when impasses were excluded. Removing impasses, we still found the same pattern of results, $B = 0.36$, $SE = 0.05$, $t(2,190) = 7.55$, $p < .001$, see Table 4, Model 6, such that negotiators with strong alternatives extracted an average of 778.03 more points than those with weak

alternatives, controlling for other factors. Hypothesis 2 was thus supported.

Hypotheses 3a and 3b: Does Having a Strong Alternative Differentially Affect Men and Women?

To examine our competing Hypotheses H3a and H3b, we regressed individual performance on both gender and alternative as well as the interaction of these two variables. We found a significant interaction, $B = 0.21$, $SE = 0.08$, $t(2,538) = 2.71$, $p = .007$, see Figure 1 and Table 5, Model 2, such that when both men and women had weak alternatives, they performed similarly, $B = -0.04$, $SE = 0.07$, $t(2,538) = -0.54$, $p = .590$, but when negotiators had a strong alternative, the gender gap emerged and men significantly outperformed women, $B = 0.17$, $SE = 0.05$, $t(2,538) = 3.20$, $p = .001$. Put differently, when a male negotiator had a strong alternative, controlling for other factors, he extracted roughly 964.06 more points as a result of this alternative (as compared with a male negotiator with a weaker alternative). In contrast, female negotiators with a strong alternative were able to use this alternative to extract only 530.87 points of value (as compared to female negotiators with a weaker alternative). Thus, men benefitted significantly more than women from having a strong alternative. We further examined this finding excluding all impasses and found the same significant interaction, $B = 0.18$, $SE = 0.09$, $t(2,188) = 2.11$, $p = .035$, see Figure 1 and Table 5, Model 4. We thus found evidence in support of the backlash account (i.e., Hypothesis 3b) rather than the tameness account (i.e., Hypothesis 3a).

Hypotheses 4a and 4b: Do Dyads with a Female Negotiator, Especially One with a Strong Alternative, Arrive at Impasses More Frequently than Other Dyads?

We then examined our second dependent variable, impasse rates, and our competing Hypotheses H4a and H4b. For a full description of the impasse rates by dyad composition see Table 6. To test these hypotheses, we used binomial logistic regression with standard errors clustered at the session level and dummy variables controlling for location. To determine if women were less likely to reach an impasse than men, we regressed impasse rate on a dummy-variable representing each of the three possible dyadic gender compositions (Male–Male, Male–Female, and Female–Female) controlling for the possible combination of alternatives (Weak–Weak, Weak–Strong, and Strong–Strong). We found no significant main effect for differences in impasse rate as a function of gender composition. Put differently, on average, Female–Female dyads were no less likely to reach impasse than Male–Male dyads, $B = 0.33$, $SE = 0.23$, $z = 1.43$, $p = .153$. Similarly, Male–Female dyads were no less likely to reach impasse than Male–Male dyads, $B = 0.26$, $SE = 0.18$, $z = 1.47$, $p = .143$. Hypothesis H4a (i.e., the tameness account) was thus not supported.

To determine if women with a strong alternative were more likely to reach an impasse, we regressed impasse rate on the interaction of the three possible dyadic gender compositions (Male–Male, Male–Female, and Female–Female) with the three combinations of alternatives (Weak–Weak, Weak–Strong, and Strong–Strong). We found two significant interactions such that Female–Female dyads had significantly higher rates of impasse when both parties had a Strong Alternative, $B = 0.50$, $SE = 0.22$, $z = 2.23$, $p = .026$, and that

Table 2
Mean Values, Standard Deviations, and Correlations With Confidence Intervals

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Gender (<i>M</i> = 1)	2,552	0.65	0.48										
2. Partner gender (<i>M</i> = 1)	2,552	0.65	0.48	.06**									
				[.02, .10]									
3. Alternative (strong = 1)	2,552	0.49	0.50	.00	.01								
				[−.03, .04]	[−.03, .04]								
4. Partner alternative (strong = 1)	2,552	0.49	0.50	.01	.00	.02							
				[−.03, .04]	[−.03, .04]	[−.02, .06]							
5. Role (recruiter = 1)	2,552	0.50	0.50	−.01	.01	.01	−.01						
				[−.05, .03]	[−.03, .05]	[−.03, .05]	[−.05, .03]						
6. Rank	2,552	−0.01	0.62	−.06**	−.07**	−.01	.00	−.00					
				[−.10, −.02]	[−.11, −.03]	[−.05, .03]	[−.04, .04]	[−.04, .04]					
7. Individual performance	2,552	5216.46	2113.13	.03	−.01	.19**	−.12**	−.11**	−.06**				
				[−.00, .07]	[−.05, .03]	[.15, .23]	[−.16, −.08]	[−.15, −.07]	[−.10, −.02]				
8. Negotiation impasse	2,552	0.14	0.34	−.03	−.03	.14**	.14**	.00	−.00	−.28**			
				[−.07, .01]	[−.07, .01]	[.10, .17]	[.10, .17]	[−.04, .04]	[−.04, .03]	[−.32, −.24]			
9. Aspiration price	754	9829.08	2967.90	−.11**	.00	.11**	−.04	−.07	.35**	.05	.05		
				[−.18, −.04]	[−.07, .07]	[.04, .18]	[−.11, .03]	[−.14, .00]	[.28, .41]	[−.02, .12]	[−.02, .12]		
10. Reservation price	775	4327.84	2100.83	−.04	.06	.32**	.04	.02	−.08*	.05	.13**	.20**	
				[−.11, .03]	[−.01, .13]	[.26, .38]	[−.03, .11]	[−.05, .09]	[−.15, −.01]	[−.02, .12]	[.06, .20]	[.13, .27]	
11. Negotiation medium (online = 1)	2,552	0.26	0.44	.01	.01	−.00	−.00	.00	.01	.00	.05**	.35**	−.08*
				[−.03, .05]	[−.03, .05]	[−.04, .04]	[−.04, .04]	[−.04, .04]	[−.03, .05]	[−.04, .04]	[.01, .09]	[.28, .41]	[−.15, −.01]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. Significant correlations should be interpreted with caution because they involve no controls or clustered errors terms.

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

Table 3*Predicting Negotiation Performance as a Function of Negotiator Gender in Study 1*

	Dependent variable					
	Individual performance (with impasses)			Individual performance (no impasses)		
	(1)	(2)	(3)	(4)	(5)	(6)
Own gender ($M = 1, F = 0$)	0.072 (0.047)	0.061 (0.047)	0.063 (0.050)	0.085 [†] (0.051)	0.081 (0.054)	0.072 (0.056)
Rank		-0.108** (0.029)	-0.109** (0.030)		-0.125** (0.035)	-0.128** (0.035)
Partner gender ($M = 1, F = 0$)			-0.031 (0.052)		-0.050 (0.056)	-0.051 (0.056)
Partner alternative			-0.256** (0.041)			-0.207** (0.044)
Own alternative			0.383** (0.046)			0.363** (0.048)
Location—Bangalore		-0.055 (0.043)	-0.047 (0.048)		-0.023 (0.073)	-0.006 (0.081)
Location—Beijing		-0.077 (0.052)	-0.075 (0.052)		-0.033 (0.041)	-0.023 (0.048)
Location—London		0.102* (0.042)	0.104* (0.047)		0.076 (0.057)	0.090 (0.062)
Location—Santiago		0.074* (0.036)	0.089* (0.042)		-0.024 (0.040)	-0.002 (0.044)
Location—Sao Paulo		0.078 (0.068)	0.088 (0.069)		0.019 (0.080)	0.046 (0.077)
Role (recruiter = 1)		-0.224** (0.052)	-0.230** (0.052)		-0.265** (0.059)	-0.267** (0.059)
Negotiation medium			0.017 (0.047)			0.057 (0.042)
Constant	-0.046 (0.040)	0.066 (0.043)	0.020 (0.053)	-0.055 (0.044)	0.110** (0.041)	0.026 (0.050)
Observations	2,552	2,552	2,552	2,202	2,202	2,202
R^2	0.001	0.018	0.071	0.002	0.025	0.070
Adjusted R^2	0.001	0.015	0.066	0.001	0.021	0.065

Note. Standard errors in parentheses are clustered at the session level.

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Male–Female dyads similarly had significantly higher rates of impasse when both parties had a Strong Alternative, $B = 0.33$, $SE = 0.12$, $z = 2.62$, $p = .009$. Hypothesis H4b (i.e., backlash account) was thus supported.

Hypotheses 5a and 5b: Do Women with Strong Alternatives Set Significantly Tamer Aspiration Values than Men with Strong Alternatives?

To examine these hypotheses, we subset the data to examine only those participants assigned to the strong alternative condition ($n = 371$; for additional analyses on participants in the low alternative condition, see online supporting materials.) We then regressed participant gender on aspiration values, clustering standard errors by session and dyad to control for shared error variance and controlling for participant role and negotiation medium (online vs. in-person). We did not find any significant differences in aspirations set by gender among those with a strong alternative, $B = -0.11$, $SE = 0.11$, $t(367) = -0.97$, $p = .332$, with male negotiators with a strong alternative setting aspirations an average of 296 points lower than female negotiators with strong alternatives, though this difference did not reach statistical significance. Overall, this evidence is more consistent with H5b than with H5a.

As mentioned earlier, because Hypothesis H5b predicts a null effect, we took an additional step to perform an equivalence test for this hypothesis (Bonett, 2020; Lakens, 2017). Because we are predominantly interested in ruling out an alternative explanation wherein female negotiators set lower aspiration values than male negotiators, we focus our attention on the minimal effect size for which there is a 5% or less chance that our data would be observed if women in fact set lower aspirations. We find that we can conclude that if women do set lower aspirations, the effect size for such an effect would have to be smaller than $d = 0.15$. Given conventions of Cohen's d interpretations which note that 0.20 is a small effect (Cohen, 1988), this effect size would have to be quite small were it to reliably exist.

Hypotheses 6a and 6b: Do Women with Strong Alternatives Set Significantly Tamer Reservation Values than Men with Strong Alternatives?

We next examined Hypotheses H6a and H6b. To examine these hypotheses, we again subset the data to examine only those participants assigned to the strong alternative condition (for additional analyses on participants in the low alternative condition, see online supporting materials.) We then regressed participant gender on reservation values, clustering standard errors by session and dyad

Table 4*Predicting Negotiation Performance as a Function of Negotiator Alternative in Study 1*

	Dependent variable					
	Individual performance (with impasses)			Individual performance (no impasses)		
	(1)	(2)	(3)	(4)	(5)	(6)
Own alternative	0.376** (0.044)	0.376** (0.044)	0.383** (0.046)	0.368** (0.048)	0.366** (0.048)	0.363** (0.048)
Rank		-0.109** (0.030)	-0.109** (0.030)		-0.117** (0.036)	-0.128** (0.035)
Own gender ($M = 1, F = 0$)			0.063 (0.050)			0.072 (0.056)
Partner gender ($M = 1, F = 0$)			-0.031 (0.052)			-0.051 (0.056)
Partner alternative			-0.256** (0.041)			-0.207** (0.044)
Location—Bangalore		-0.051 (0.044)	-0.047 (0.048)	-0.133 (0.111)	-0.035 (0.088)	-0.006 (0.081)
Location—Beijing		-0.088* (0.040)	-0.075 (0.052)	-0.155** (0.057)	-0.063 (0.047)	-0.023 (0.048)
Location—London		0.092* (0.039)	0.104* (0.047)	-0.047† (0.027)	0.054 (0.054)	0.090 (0.062)
Location—Santiago		0.097** (0.032)	0.089* (0.042)	-0.115** (0.038)	-0.024 (0.036)	-0.002 (0.044)
Location—Sao Paulo		0.091 (0.057)	0.088 (0.069)	-0.057 (0.060)	0.029 (0.064)	0.046 (0.077)
Role (recruiter = 1)			-0.230** (0.052)			-0.267** (0.059)
Negotiation medium			0.017 (0.047)			0.057 (0.042)
Constant	-0.186** (0.033)	-0.193** (0.035)	0.020 (0.053)	-0.156** (0.035)	-0.172** (0.033)	0.026 (0.050)
Observations	2,552	2,552	2,552	2,202	2,202	2,202
R^2	0.035	0.040	0.071	0.035	0.039	0.070
Adjusted R^2	0.035	0.038	0.066	0.033	0.036	0.065

Note. Standard errors in parentheses are clustered at the session level.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

to control for shared error variance and controlling for participant role and negotiation medium (online vs. in-person). We found no significant difference in reservation values set by gender among those

with a strong alternative, $B = -0.22$, $SE = 0.22$, $t(382) = -0.99$, $p = .323$, with male negotiators with a strong alternative on average setting reservations around 340 points lower than female negotiators with a strong alternative, though this difference did not reach statistical significance. We again performed an equivalence test and found that we were able to reject an effect size of larger than $d = 0.31$, a small to medium effect size based on Cohen's (1988) standards. This is larger than our proposed smallest effect size of interest. This evidence, though more consistent with H6b than with H6a, is therefore inconclusive.

Discussion

Study 1 found robust evidence that women empowered with a strong alternative perform worse than men who have the same alternative. In particular, we found that the gender gap between male and female negotiation performance is exacerbated when the negotiator possesses a strong alternative. This was true when looking at both the value extracted by the negotiator and impasse rates. This finding emerged in a high-powered experiment that used a diverse sample of participants with a broad range of work experiences from a wide variety of geographic locations in both virtual and in-person negotiation environments.

Somewhat unexpectedly, we did not find support for an overall main effect of gender on value extracted in the negotiation (H1). At

Figure 1
The Effects of Gender and Alternative Strength on Value Extracted in Candidate-Recruit Negotiation in Study 1. Error Bars Represent 95% Confidence Intervals

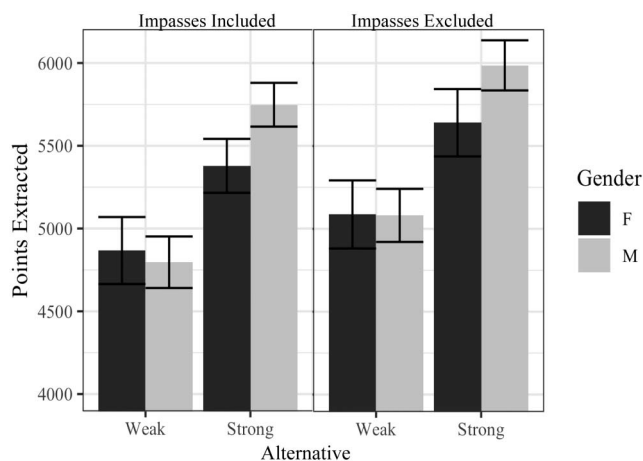


Table 5*Predicting Negotiation Performance as a Function of the Interaction Between Negotiator Gender and Alternative in Study 1*

	Dependent variable			
	Individual performance (with impasses)		Individual performance (no impasses)	
	(1)	(2)	(3)	(4)
Own alternative	0.375** (0.044)	0.251** (0.068)	0.363** (0.047)	0.246** (0.074)
Own gender ($M = 1, F = 0$)	0.063 (0.048)	−0.038 (0.071)	0.065 (0.052)	−0.010 (0.073)
Rank	−0.096** (0.027)	−0.107** (0.030)	−0.114** (0.031)	−0.126** (0.035)
Partner gender ($M = 1, F = 0$)		−0.034 (0.052)		−0.054 (0.056)
Partner alternative		−0.258** (0.041)		−0.210** (0.044)
Location—Bangalore		−0.034 (0.048)		0.002 (0.078)
Location—Beijing		−0.075 (0.052)		−0.025 (0.048)
Location—London		0.103* (0.046)		0.088 (0.059)
Location—Santiago		0.096* (0.042)		0.004 (0.045)
Location—Sao Paulo		0.082 (0.068)		0.041 (0.077)
Role (recruiter = 1)		−0.229** (0.052)		−0.268** (0.059)
Negotiation medium		0.022 (0.046)		0.061 (0.042)
Gender × Alternative		0.205** (0.076)		0.179* (0.085)
Constant	−0.227** (0.052)	0.085 (0.063)	−0.213** (0.053)	0.081 (0.059)
Observations	2,552	2,552	2,202	2,202
R^2	0.040	0.073	0.040	0.072
Adjusted R^2	0.039	0.068	0.039	0.066

Note. Standard errors in parentheses are clustered at the session level.

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

first glance, this may seem at odds with the previously mentioned meta-analysis that found men overall received more value in negotiations than women (Mazei et al., 2015). However, as we also discussed earlier, this main effect included multiple caveats, leading the authors to note that “gender differences in negotiations are contextually bound and can be subject to change” (Mazei et al., 2015, p. 85). As demonstrated in the present study, the strength of

one’s alternative appears to be one important moderator that helps determine when a gender difference can be expected.

We propose that these findings provide suggestive evidence in favor of the backlash account of the gender gap in negotiations, which claims that women who use a strong alternative to behave assertively have more conflictual negotiations because their partners respond negatively to this assertive behavior. This greater conflict results in both lesser gains from the strong alternative than similarly empowered male negotiators are able to claim, as well as a higher likelihood of a negotiation resulting in impasse. Female negotiators in dyads with strong alternatives were far more likely to end the negotiation in impasse. This finding is inconsistent with a tameness account and more consistent with a backlash account.

This study further finds that, when empowered with a strong alternative, men and women set similarly ambitious aspirations and do not set significantly different reservation values as compared to their weak alternative counterparts. Although it is difficult to draw strong conclusions from the reservation value finding in particular, we believe these findings are helpful in further disentangling the tameness and backlash accounts. Given that women empowered with a strong alternative achieve worse negotiated agreements and reach more impasses than their empowered male counterparts, the fact that these women set similarly ambitious targets (i.e., aspiration values)

Table 6*Impasse Rates by Dyadic Composition in Study 1*

Gender composition	Alternative composition	Total dyads	% Impasses
Female–Female	High–High	46	36.96
	High–Low	90	10.00
	Low–Low	42	4.76
Male–Female	High–High	125	33.00
	High (W)–Low (M)	275	13.77
	High (M)–Low (W)	149	8.76
	Low–Low	148	6.71
Male–Male	High–High	148	16.22
	High–Low	260	11.92
	Low–Low	145	7.59

and report similarly low reservation values as men suggest that women are not behaving more tamely than men when empowered. Instead, this evidence suggests that women may face different penalties than men do when they use their strong alternative to aim higher. To offer further evidence of this, we replicate this finding and extend it to first offers in Study 2.

Study 2

If aspirations reflect a negotiator's ideal goal prior to entering a negotiation, then his or her first offer reflects an initial action in pursuit of that goal. First offers are a powerful driver of negotiation outcomes (Galinsky & Mussweiler, 2001) and higher first offers represent a more assertive (and sometimes acrimonious) start to a negotiation (Jeong et al., 2020; Schweinsberg et al., 2012). Thus, they provide a good test of whether men and women differ in their initial assertiveness when empowered with a strong alternative. Similar to the aspiration and reservation value hypotheses (H5a–b and H6a–b), a difference in men and women's stated first offers would indicate a gender difference in expectations surrounding the negotiation, whereas a null result would suggest that men and women are entering the negotiation with similar goals (Amanatullah & Morris, 2010). In other words, the tameness account predicts the following:

Hypothesis 7a: First offers will be lower for women with a strong alternative than for men with a strong alternative.

In the same vein, the backlash account instead predicts the following:

Hypothesis 7b: First offer values for men and women with a strong alternative will not meaningfully differ (i.e., will differ by less than a small effect size in an equivalence test framework).

We test this new hypothesis, as well as replicating H5a/H5b, in Study 2.

Methods

Participants

We recruited 403 workers from Amazon's Mechanical Turk to complete this study in exchange for payment. We removed those who chose a gender other than "Male" or "Female" ($n = 1$) and those who failed the manipulation check item ($n = 41$), yielding a

final sample of 361 participants (45.7% women). All findings remain consistent if all participants are included.

Procedure and Measures

The data were collected under Stanford IRB #19533, "Conflict and Cooperation." After completing informed consent, participants were asked to imagine that they were in the process of looking for a new job and were considering two potential companies that would offer more than their current salary. In the Strong Alternative condition, participants were informed that they had negotiated an offer at Company A that would pay them 7% more than their current salary. In the Weak Alternative condition, participants were informed that they had negotiated an offer at Company A that would pay them 3% more than their current salary. We phrased the offer in percentages rather than points (as in the previous studies) or dollars to make it more believable for participants who could be entering the study with many different current salaries as their starting points. Participants were told that they were about to negotiate their offer at Company B. To further emphasize the strength or weakness of the alternative, participants read the following: "You feel like you're [not] in a great position for this negotiation because you have a relatively [strong/weak] offer at Company A if Company B doesn't hire you."

Participants responded to two items that served as our dependent measures using sliding scales ranging from 0 to 15.

Aspiration Price

We asked participants to fill in the following blank using the aforementioned scale: "My target in this Negotiation with Company B is to gain ____% salary."

Planned First Offer

We asked participants to imagine that the hiring manager at company asked them what they were looking for in terms of salary. They then filled in the following blank: "I'm looking for you to offer a salary that is ____% more than my current salary."

Results and Discussion

We first tested H5a and H5b, see Table 7 for descriptive statistics and zero-order correlations. We regressed participant gender and participant alternative on aspiration values. We found that having a strong alternative significantly increased one's aspiration, $B = 0.86$, $SE = 0.10$, $t(358) = 8.95$, $p < .001$, with those with a strong

Table 7
Study 2 Descriptive Statistics and Zero-Order Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Gender ($F = 1$)	0.46	0.50			
2. Alternative (strong = 1)	0.54	0.50	-.05 [-.15, .05]		
3. Aspiration price	9.17	3.00	-.04 [-.14, .06]	.43** [.34, .51]	
4. Planned first offer	10.41	3.20	.00 [-.10, .10]	.29** [.19, .38]	.71** [.65, .76]

alternative setting aspirations that were on average 2.57% higher than those with a weak alternative. We did not find any significant differences in aspirations set by gender, $B = -0.10$, $SE = 0.29$, $t(358) = -0.35$, $p = .730$. We also did not find any significant interaction between negotiator gender and negotiator alternatives on aspiration price, $B = -0.58$, $SE = 0.58$, $t(357) = -1.00$, $p = .318$. We again performed an equivalence test and found that we were able to reject an effect size of larger than $d = 0.26$, a relatively small effect size based on Cohen's (1988) standards, albeit slightly larger than the convention for a small effect size, of $d = 0.20$. We thus found evidence more consistent with H5b than with H5a.

We then tested H7a and H7b. We regressed participant gender and participant alternative on planned first offers. We found that having a strong alternative significantly increased one's planned first offer, $B = 0.57$, $SE = 0.10$, $t(358) = 5.64$, $p < .001$, with those with a strong alternative reporting first offers around 1.83% higher than those with a weak alternative. We did not find any significant differences in planned first offers by gender, $B = 0.033$, $SE = 0.10$, $t(358) = 0.32$, $p = .748$. We also did not find any significant interaction between negotiator gender and negotiator alternative, $B = -0.59$, $SE = 0.65$, $t(357) = -0.90$, $p = .366$. We again performed an equivalence test and found that we were able to reject an effect size of larger than $d = 0.20$, a small effect size based on Cohen's (1988) standards. We thus found evidence more consistent with H7b than with H7a.

General Discussion

In this article, we sought to accomplish three goals. First, we looked to contribute to the literature on gender in negotiation by examining the interplay of gender and alternatives in shaping negotiation outcomes. Exploring the interaction between these two variables allowed us to disentangle two possible sources of the gender gap in negotiation outcomes: (a) that women are insufficiently assertive in negotiation (the tameness account) and (b) that women are willing to negotiate assertively but face a backlash when doing so (the backlash account). We found evidence that suggests that the backlash account may better explain the gender gap in negotiation performance than the tameness account. Female negotiators empowered by a strong alternative underperformed their male counterparts and were also more likely to reach a value-destroying impasse rather than a more profitable negotiated agreement. The higher impasse rates, in particular, indicate a conflictual dynamic in the negotiation that is more consistent with a process of backlash than with tameness at the bargaining table.

In addition, we sought to replicate two central findings in the negotiation literature—the gender gap and the power of alternatives—with a large sample that was professionally and culturally diverse. Surprisingly, although we did replicate the enhancing effect of strong alternatives on negotiation outcomes, we did not find that women underperformed male counterparts on average. Instead, our results suggest that only women with stronger alternatives underperformed compared to similarly empowered male negotiators.

We believe there are several possible explanations for this finding, which would be interesting for future research to explore. First, in our study, all the women and men who attended the educational sessions took part in the negotiation exercise, and thus, any relative differences in performance due to a reluctance to initiate negotiations were removed (cf. Small et al., 2007). Situations where someone must

choose to initiate the negotiation are likely to exacerbate the gender gap in negotiation performance. For example, women who decide to initiate negotiations may pursue the ensuing negotiation more tentatively than their male counterparts, or women may be penalized more for initiating negotiations in the first place (Bowles et al., 2007).

Second, in contrast with some prior studies, our negotiation task contained integrative, distributive, and congruent components, rather than only distributive components. Whereas the lay schema of negotiation is more in line with the "fixed pie" of distributive issues (Halevy & Phillips, 2015; Neale & Bazerman, 1983), women may perform better when a negotiation also contains integrative or congruent issues. To the extent that negotiation dyads in our study discovered such mutually beneficial issues early in the negotiation process, it may have improved the relative performance of female negotiators.

Third, the use of concrete alternatives may have functioned as potent anchors that reduced variance in negotiator behavior and performance relative to negotiations in which men and women do not receive well-defined alternatives (and may therefore form very different impressions of the value of their alternative; Pinkley et al., 1994). Future research may examine directly whether men and women provide different evaluations of the quality of ill-defined and well-defined alternatives to a negotiated agreement. Finally, it is possible that societal change empowering women at a cultural level has shrunk the effect size of the gender gap in negotiation. Women's earnings, compared to men's, have risen in the past few decades (Blau & Kahn, 2007; cf. England et al., 2020); the current results may show that the gender gap in negotiation performance has similarly shrunk, making it difficult to detect even with large sample sizes and substantial statistical power.

Despite not finding that female negotiators underperformed relative to male negotiators, we do not wish to paint an overly rosy picture of gender dynamics in negotiation. Though the gap between men and women on average appears smaller, our results suggest that positions of relative power may exacerbate gender dynamics such that a female negotiator empowered by a strong alternative does not reap the same benefits from that alternative as her male counterpart (cf. Magee et al., 2007). Instead, empowered female negotiators, as referenced above, are more likely to fail to reach an agreement with their counterparts.

We argue that the backlash effect appears to be the more plausible explanation. Under the backlash account, women with a strong alternative are empowered to be equally ambitious and assertive as their male counterparts, but aiming high is perceived differently when enacted by empowered women than by empowered men. This suggests that, when the gender gap does persist, it may be due less to women behaving in stereotype-congruent ways (i.e., in line with traditional gender roles, e.g., Stevens et al., 1993), and more to the negative effects of women behaving in stereotype-incongruent ways which, in turn, prompts a backlash from their negotiation counterparts (Rudman & Phelan, 2008), thereby leading to more frequent impasses.

Given the increased societal emphasis on helping women advance to leadership positions (Sandberg, 2013), this result is particularly troubling and worthy of future research. If having a stronger alternative functions similarly to other manifestations of higher power in social interactions (e.g., Brescoll & Uhlmann, 2008; Rudman et al., 2012), our results offer support to the notion that women are likely to face greater backlash as they climb the hierarchical ladder in organizations. Indeed, stereotype-related backlash is a primary contributor

to what has been termed the “glass ceiling” effect limiting the promotion of women to high levels of organizations (Cotter et al., 2001; Heilman, 2001). This research lends further credence to the notion that it may be difficult for women to reach higher rank positions in organizations even though women may actually often practice advantageous leadership styles once they achieve these positions of higher rank (Rosette & Tost, 2010).

Limitations and Future Directions

It is important to acknowledge several limitations to the current research so that future work might improve and build on it. First, the current studies focus primarily on a single negotiation exercise that mimics a job offer negotiation. Though this exercise contains a diverse set of issues (distributive, integrative, and congruent), it limits the generalizability of the study. To the extent that job negotiations in particular make traditional gender schemas more salient to negotiators, this could make negotiators more sensitive to deviations from these traditional gender roles (Kray et al., 2001, 2002).

Second, although we were able to obtain certain indicators of how individuals were thinking going into the negotiation (e.g., reported first offers and reservation values) as well as the final outcome, the dynamics of the negotiation itself remain a black box. Future research would benefit from examining the actual (verbal and nonverbal) behaviors of the parties during the negotiation process. For example, coding videotapes from in-person negotiations or chat transcripts from online negotiations could be used to further examine the hypotheses we put forth here.

In addition, though our sample in Study 1 is larger and more diverse than a typical experimental study of negotiations, it is still insufficient to allow a high-powered examination of the role of additional demographic factors interacting with gender or alternatives. For example, future research would be well-served to examine more closely the interaction between race and gender in negotiation performance. To date, startlingly little research has looked at whether the effect of gender on negotiation performance is dependent on the race of the negotiator (cf. Toosi et al., 2019). Given that race has been found to affect first offers in a buyer–seller situation (Ayres & Siegelman, 1995), investigating the impact of the intersection of race, gender, and alternatives—all forms of social or situational power—may shed light on how these different instantiations of power impact negotiated outcomes among a diverse set of negotiators (Hernandez et al., 2019).

Furthermore, although our sample is exceptionally diverse in terms of participants’ ages, cultural backgrounds, educational and work experiences, industries, and organizational ranks relative to samples previously employed in experimental research on negotiation, it is not a nationally representative sample of working adults in a given country. Plausibly, our sample consists of individuals with greater interest and motivation to hone their negotiation skills as evident from their choice to enroll in an elective course or a nondegree program that offers a negotiation workshop. Although this feature of our sample facilitated engagement with the New Recruit negotiation exercise, it may limit the generalizability of our findings to individuals who are similarly motivated. Our sample is also notably different from prior negotiation studies that often, though not exclusively, use college undergraduates or similar groups as the sample population (Henrich et al., 2010). Our article thus offers a new vantage point on previously examined questions.

Finally, it is important to note that, although the interaction we explore is statistically significant, gender and one’s alternative still explain relatively little variance in our data. Although a small effect size does not necessarily imply that the effect is unimportant (Prentice & Miller, 1992), there are a number of reasons why we expect that the variance explained by gender would be larger in real-world settings. First, the participants in Study 1 negotiated in an educational context and were supervised by a faculty member. This important contextual feature may have limited the degree to which the negotiators engaged in backlash against women who behaved in stereotype-inconsistent ways as compared with negotiators’ propensity to do so in unsupervised real-world employment negotiations. Second, a key part of the negotiation exercise in Study 1 was that results were displayed to all other members of the class after the negotiation finished, and people knew that they may be called on to explain or justify their behavior in the negotiation. The potentially heightened accountability may have tempered backlash compared to other settings because participants may have been particularly aware of having to justify their behavior to the professor and the class later.

Managerial Implications

Many organizational efforts to shrink the gender gap in pay or performance focus on altering the behavior of women to make it more akin to that of men (e.g., Sandberg, 2013). Recent research, however, has suggested that an alternative solution might be to focus on changing the behavior of the advantaged rather than the disadvantaged (DiTomaso, 2015; Phillips & Lowery, 2018). Our research provides some support for this latter perspective. Namely, we find suggestive evidence that poor performance among women with strong alternatives in a negotiation context may be better explained not by women failing to “lean in” enough (e.g., set ambitious aspirations) but by different reactions to women compared to men behaving in similar ways (e.g., a higher rate of impasses). As a result, managers looking to reduce gender gaps in the workplace may want to install guidelines and processes to minimize the possibility that such backlash occurs, rather than encouraging the disadvantaged to act more like the advantaged in negotiations.

We also provide evidence for why limiting negotiation opportunities (e.g., on salary) in some instances may help to close the gender gap more than simply providing women with greater help on how to negotiate. We do not mean to imply that organizations should get rid of negotiations entirely—both because this would be impractical and likely impossible, and because negotiations can often provide powerful opportunities for both the organization and the individual to achieve benefits that might not otherwise be possible (Neale & Lys, 2015b). Rather than proscribing negotiation, we propose that organizations carefully examine contexts that may be most susceptible to these backlash effects and design policies and implement procedures to mitigate the harmful effects of backlash.

Conclusion

Though the gap in gender performance in negotiation may be shrinking in society, our findings show that female negotiators that possess a strong alternative to a negotiated agreement do not benefit as much as men who possess an equally strong alternative. Female negotiators with strong alternatives were significantly more likely to end their negotiations in an impasse, a suboptimal outcome in the

exercise, consistent with a backlash account of the gender gap in negotiation. By conducting high-powered studies with large and diverse samples, negotiation researchers will be able to better understand fundamental processes influencing negotiations in the workplace and beyond.

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(Appendix follows)

Appendix

The New Recruit Payoff Structure

Issue	Issue type	Possible choices	Recruiter points	Candidate points
Salary	Distributive	\$90,000	−6,000	0
		\$88,000	−4,500	−1,500
		\$86,000	−3,000	−3,000
		\$84,000	−1,500	−4,500
		\$82,000	0	−6,000
Starting date	Distributive	September 15	0	2,400
		October 1	600	1,800
		October 15	1,200	1,200
		November 1	1,800	600
		November 15	2,400	0
Job assignment	Congruent	Division A	0	0
		Division B	−600	−600
		Division C	−1,200	−1,200
		Division D	−1,800	−1,800
		Division E	−2,400	−2,400
Location	Congruent	New York	1,200	1,200
		Boston	900	900
		Chicago	600	600
		Atlanta	300	300
		San Francisco	0	0
Signing bonus	Integrative	10%	0	4,000
		8%	400	3,000
		6%	800	2,000
		4%	1,200	1,000
		2%	1,600	0
Vacation days	Integrative	30 days	0	1,600
		25 days	1,000	1,200
		20 days	2,000	800
		15 days	3,000	400
		10 days	4,000	0
Insurance	Integrative	Blue cross	0	800
		Prudential	800	600
		Kaiser	1,600	400
		CIGNA	2,400	200
		Insure America	3,200	0
Moving expenses	Integrative	100%	0	3,200
		90%	200	2,400
		80%	400	1,600
		70%	600	800
		60%	800	0

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