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Abstract

This paper investigates beliefs concerning the gender gap in salary negotiations (GGSN) in a sample of 4,300 women, 1,000 men, and 105 HR managers residing in the U.S. The respondents believe in the existence of the GGSN, yet they misperceive its magnitude. Providing respondents with accurate information changes their beliefs about it. However, this does not lead to either an increased demand to join a salary negotiation course or a higher willingness-to-pay to get salary information. The analysis of the competing mental models that women hold reveals that the likely mechanism is the perceived backlash that they may experience from employers if they engage in salary negotiations. Finally, a survey of HR managers suggests that they view negotiating women as facing worse consequences in the workplace than negotiating men.

JEL-Codes: C930, D830, D910, J160, M520.

Keywords: beliefs, mental models, perceived backlash, negotiation, gender.

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1 Introduction

In many job sectors, women are paid less than men for the same job, which is a phenomenon known as the gender wage gap. Closing the gender wage gap is one of the most debated social issues in the U.S. (Pew Research, 2021).¹ because of its impact on women's labour market performance (Cullen and Perez-Truglia, 2022), as well as their marriage and fertility decisions (Bursztyn et al., 2017).²

The gender gap in salary negotiations (GGSN) plays a significant role in explaining a portion of the gender wage gap, accounting for 10-15% of the gap according to various studies (Biasi and Sarsons, 2022; Dreber et al., 2020; Reuben et al., 2017; Roussille, 2020; Säve-Söderbergh, 2019). Empirical evidence from experiments suggests that women tend to avoid salary negotiations altogether (Leibbrandt and List, 2015), and when they negotiate, they are less likely to be successful than men are (Bertrand, 2018).³ However, Exley et al. (2021) show that women are able to discern good opportunities to negotiate. There is also evidence that such gender differences in negotiations frequently apply to real estate markets (Andersen et al., 2021) and taxi markets (Castillo et al., 2013).

In this paper, I study the role of women's beliefs about the gender gap in the likelihood of starting a salary negotiation and how these beliefs affect the demand for a salary negotiation course provided by the American Association University Women (AAUW). Moreover, I explore the potential mechanisms linking women's beliefs and their actual behaviour.⁴ To study this question, approximately 4,300 female and 1,000 male participants and 105 HR managers residing in the U.S. were recruited through the experimental platform Prolific for a series of 7 studies. The main study aims to quantify the beliefs regarding the gender gap

¹<https://www.pewresearch.org/fact-tank/2021/05/25/gender-pay-gap-facts/>

²The economics literature attributes the origin of the gender wage gap to employers' discrimination (Blau and Kahn, 2017) and to labour market dynamics that penalize women such as relocation (Venator, 2021), child penalties (Cheng, 2021), shorter working shifts (Cortés and Pan, 2019), and the timing of job offer acceptance (Cortés et al., 2022b).

³Several factors could explain this evidence, such as public speaking aversion (Buser and Yuan, 2022), the gender of the employer (Biasi and Sarsons, 2022; Hernandez-Arenaz and Iriberry, 2018, 2023), gender differences in both competitiveness (Buser et al., 2020; Niederle and Vesterlund, 2007) and self-promotion (Exley and Kessler, 2022), differences in wage expectations (Kiessling et al., 2019), or even seemingly unrelated political events, such as the election of Donald Trump (Huang and Low, 2017).

⁴In other contexts, beliefs seem to be crucial in shaping people's behaviours, such as expressing political support (Haaland and Roth, 2020, 2021), female labour supply (Bursztyn et al., 2020a), education experiences (Aucejo et al., 2021; Delavande and Zafar, 2019), and health investment decisions (Bhalotra et al., 2020).

in starting salary negotiations among female respondents in a sample of 2,000 respondents. To establish an objective benchmark for the gender gap in the likelihood of starting a salary negotiation, the treatment group was provided with actual information from an existing study on negotiation behaviour to manipulate their beliefs exogenously and to investigate the relationship between beliefs and the demand for a salary negotiation course. The statistics of the information were based on Kray et al. (2024). The information provided about the treatment was in line with the strategy of salary negotiation workshops, where female participants are usually notified that more and more women are negotiating over their salaries. Post-treatment belief questions were used to examine the mechanisms behind this relationship. One of the plausible mechanisms I explore is the perceived backlash that women would face from employers if they were to negotiate their salary. If women's beliefs about the likelihood of negotiating are shifted downwards, then women should reduce the concern over the emergence of a penalty from such negotiations that prevents them from actually negotiating. An obfuscated follow-up conducted a few days later assessed the persistence of the effect of the information on the respondents. Crucially, I conducted the study in a controlled environment to measure the respondents' beliefs about the GGSN and to explore a set of mechanisms that cannot be studied in a field setting.

Negotiation courses are among the so-called fix-the-women policies borrowed from Recalde and Vesterlund (2022) that aim at reducing the gender gap by providing direct recommendations to female job seekers on how much they should ask for their salary or training to improve their negotiation skills (Ashraf et al., 2020). Most "fix-the-women" policies aim to educate women about the gender gap in salary negotiations and provide them with negotiation skill courses to improve their negotiating behaviour. Recalde and Vesterlund (2022) provides a comprehensive overview of the discussion on the different policy tools used to close the gender gap in salary negotiations.⁵ In contrast, "fix-the-institutions" policies are institutional changes such as banning information about the salary history of workers, banning negotiation itself, or increasing transparency in negotiations.

The main study documents four novel results. First, while women believed that

⁵Examples of such policies include Boston's training programs and the AAUW's Start Smart and Work Smart programs. For example, the American Association of University Women has initiated free nationwide negotiation workshops for 10 million women to "close the pay gap, one workshop at a time".

there is a gender gap in the likelihood of starting salary negotiations, on average, their estimates revealed that they thought of women being less likely to negotiate than men (Kray et al. (2024) shows that 54% female MBA students were negotiating their salary relative to 44% male MBA students). Second, the provision of information about the actual magnitude of the gap shifted upwards the respondents' beliefs about the gender gap in the salary asked for the same job but did not affect their demand for participation in a salary negotiation course (if anything, the information provision slightly decreased). The subsample who acted upon the information by joining the course was those of employed women. Third, I explored the potential reasons behind the null effect of the information treatment on the demand for a salary negotiation course. 60% of the respondents in the Control group were stating to be either "concerned" or "very concerned" that being active in the negotiations would cause a backlash from the employer. However, the information was not enough to significantly reduce backlash concerns. The result seems to suggest that information campaigns and initiatives aimed at increasing negotiation rates among women by emphasizing that it is socially acceptable for women to negotiate a salary and that many of them are doing it might not be an effective measure to induce them to negotiate even more. This finding is in line with the literature on anticipated discrimination and self-fulfilling prophecies in which minorities anticipate being discriminated against and refuse to invest in human capital (Coate and Loury, 1993; Gagnon et al., 2022; Leibbrandt and List, 2018; Lepage et al., 2022; Lundberg and Startz, 1983).⁶ Moreover, a robustness experiment where I provided another piece of information obtained from Babcock and Laschever (2003), where women were way less likely to start negotiations compared to men. This piece of information shifted downwards women's beliefs about their desired salary and increased backlash concerns. Finally, I rule out additional explanations, such as the information and course relevance only for educated women, a general lack of interest in the course, the respondents being too busy to join the course, and the experimenter demand effect.

In light of the findings about perceived backlash, I conducted two additional studies

⁶Using a model inspired by Bénabou and Tirole (2011), I rationalize these findings theoretically in the Appendix B.

to explore the relevance and origins of perceived backlash in negotiation interactions. In Study 2, I explore the primary concerns of women regarding the gender gap in salary negotiations with both open-text answers and quantitative beliefs. The study reveals two main competing mental models, namely, concerns over potential employer backlash against salary negotiations and the perception that women are less inclined to negotiate salaries than men are. Notably, the former is found to be more prevalent among employed women than among unemployed women, while the latter is more common among older women and those who identified as Republicans. This finding confirms the crucial role that perceived backlash has in the minds of women when thinking about negotiations. In Study 3, I explore the potential roots of perceived backlash. Therefore, I examine women's first- and second-order beliefs concerning the acceptability of salary negotiations for both male and female job candidates. Additionally, I investigate the perceptions of potential negative consequences associated with salary negotiations for prospective job candidates. The findings reveal that 95% of the respondents found it acceptable to negotiate salaries, but interestingly, they underestimated the proportion of women who share this perspective. As a result of this "pluralistic ignorance", participants believed that women who engage in salary negotiations could face backlash due to the prevailing perception that not negotiating salaries is aligned with gender norms. The results found among female respondents in Study 2 and Study 3 are perfectly mirrored in two identical studies with male respondents.

Are women's concerns about the backlash from employers justified? To answer this question, I recruited a sample of 105 HR managers through Prolific to participate in a within-subject vignette experiment with hypothetical job candidates. The results of the experiment indicate that HR managers perceived no difference in the likelihood of job offers for non-negotiating male and female candidates. However, they did believe in the existence of a "negotiation penalty", wherein candidates who attempted to negotiate were seen as less likely to receive a job offer. Notably, HR managers perceived that the negotiation penalty disproportionately affected the female candidates who negotiated. They were viewed as facing more severe repercussions than male candidates who negotiated. Furthermore, male candidates who attempted negotiations were perceived to have greater

chances of successful negotiations than their female counterparts. These findings highlight the presence of gender bias in the perceptions of negotiation outcomes within the hiring process among HR managers.

The evidence presented in this paper indicates that to address the gender wage gap through negotiations, it may be more effective to adopt "fix-the-institutions" policies. These policies work towards eliminating the social costs associated with initiating a negotiation, such as those arising from social norms, stereotypes, and perceived backlash, which are typically greater for women than men (Riley Bowles et al., 2007). Given the growing evidence that "pay transparency" policies might have limited impact on reducing the gender wage gap (see Bruett and Yuan (2022) for evidence in Germany and Frimmel et al. (2023) in Austria), more substantial policies could be more effective. The company Reddit has completely banned salary negotiations, which is paired with what some U.S. states have done on a larger scale by prohibiting employers from accessing salary history that has been negotiated in the past (Sinha, 2019).⁷

This paper contributes to various research strands. First, it adds to the literature that examines the gender gap in negotiations outside of laboratory settings (Bertrand, 2018; Biasi and Sarsons, 2022; Leibbrandt and List, 2015; Reuben et al., 2017; Roussille, 2020). Specifically, this paper measures beliefs about the gender gap among women from the general population in the U.S. and how these beliefs influence the demand for salary negotiation courses. The paper closest to mine is Cortés et al. (2024). While Cortés et al. (2024) study the impact of the information of the gender wage gap due to negotiations differences on beliefs and self-reported negotiation behavior, I study the impact of the information on the rate of women negotiating for their salary on their beliefs, willingness to join a salary negotiation course, and willingness to pay to learn for salary information. The former paper shows a limited impact of the information on cost-benefit of negotiations for women's behavior. Mine complements this evidence by documenting that informing women about the acceptability of negotiating the salary has a null impact on their skills

⁷Experimental research has demonstrated the beneficial effects of negotiation-ban policies. Under such a ban, gender gaps in earnings decrease, and productivity remains unaffected (Agan et al., 2020; Gihleb et al., 2019). These findings support the evidence from observational data that a salary history ban reduces the gender wage gap, particularly for job-switchers, without adversely affecting male job seekers (Hansen and McNichols, 2020; Sinha, 2019).

investments and what are the plausible mechanisms behind this effect.

Second, this work relates to the literature on beliefs about gender differences in performance (Bordalo et al., 2019), on gender gaps in individual traits or preferences (Coffman and Klinowski, 2023; Coffman et al., 2021; Exley and Nielsen, 2022; Exley et al., 2022), and on the gender wage gap (Settele, 2022). This paper relates to the literature studying how social norms affect individual behaviour in the labour market context (Boneva et al., 2022; Bursztyn et al., 2020b, 2017; Cortés et al., 2022a).

Third, I identify the role of perceived backlash from employers as the potential mechanism by which beliefs about the gender gap in salary negotiations affect the demand for salary negotiation courses, which is driven by misperceived gender norms about salary negotiations (Bursztyn et al., 2020b). Furthermore, the study reveals that perceived backlash is the prevailing concern among women regarding the gender gap in salary negotiations. This result is in line with the tendency of female workers to not disclose their past salary (Cowgill et al., 2022) and the reluctance to learn about other workers' salaries because of social image concerns (Seitz and Sinha, 2023). In doing so, I contribute to the literature not only on backlash in the workplace (Alan et al., 2022; Riley Bowles et al., 2007; Leibbrandt et al., 2018), in the laboratory (Babcock et al., 2017; Chakraborty and Serra, 2022) and field settings (Gangadharan et al., 2016), and in the household (Bergvall, 2022) but also on anticipated discrimination in educational settings (Lepage et al., 2022). More broadly, I contribute to the literature studying the effects of perceived discrimination on labour market supply (Gagnon et al., 2022; Leibbrandt and List, 2018), on the willingness to delete gender from the CV (Alston, 2019), and on the attribution of specific traits and abilities to people (Chauvin, 2018).

Finally, this work also examines the factors that drive the demand for salary negotiation courses, which aim to enhance women's human capital. Therefore, this paper contributes to the literature on the determinants of selection into investments in human capital (Del Carpio and Guadalupe, 2021; Cunha and Heckman, 2007; Wiswall and Zafar, 2017, 2021). Moreover, this paper adds to a small body of literature that estimates the demand for skills training. For instance, Maffioli et al. (2021) analyses the demand for a business training program in Jamaica.

The paper is structured as follows. Section 2 presents the experimental design of the Study 1, and Section 3 presents the evidence of changes in the respondents' beliefs about the gender gap in salary negotiations. Section 4 discusses the results from the Study 2 about the mental models that women hold about the gender gap in salary negotiations, and Section 5 documents the existence of misperceived gender norms about negotiations in Study 3. Section 6 presents the result of a survey with HR managers in Study 4, and finally, Section 7 concludes the paper.

2 Beliefs about the GGSN and Demand for Salary Negotiation Course (Study 1)

I implemented an incentivized online experiment with a sample of women drawn from the general population of the US. The sample consisted of 1,992 women living in the U.S. who were recruited on the online platform Prolific. I restricted my sample to women living in the U.S. who were above 18 years of age. Compared to a representative sample of the U.S. population, a Prolific sample is usually younger, which does not constitute a problem for the relevance of this study.⁸

Part 1: Demographics After providing consent to participate in the study and performing an attention check, I began the experiment by collecting respondents' basic demographic information (age, gender, employment status, ethnicity, income range, region where they are currently living), whether the respondents have children, and their marital status.

I concluded the first section of the experiment by asking the respondents to state the political party they identified the most with. Crucially, I collected these demographic variables at the beginning of the experiment to assess whether there was self-selection present at survey completion.

⁸According to Kiessling et al. (2019), 55 years is the age at which workers reach the peak salary and are less likely to change jobs.

Part 2: Prior Beliefs The respondents were informed that a study had been conducted by a leading US scholar on how many male and female MBA students negotiate their salary for their first job (Kray et al., 2024). The decision to focus on MBA students was driven by the fact that data on asked-for salaries are available for this specific category of people. This feature allowed me to ask about both prior and posterior beliefs about a comparable sample of people. To assess whether only the respondents with a high level of education responded to the information, I did not find that belief-updating was differentially affected by the education level of the respondents.

Then, I elicited the respondents' quantitative beliefs on the percentage of female MBA students who reportedly negotiated their salary based on the statistics from Kray et al. (2024), which is an objective quantitative benchmark for respondents' beliefs. To do so, I first provided the respondents with information on the percentage of male MBA students who reportedly negotiated their salary, which is 44%. This information is important because it provides a benchmark for respondents' beliefs on the gender gap in salary negotiations. Haaland and Roth (2021) use the same approach such that their benchmark study on labour market discrimination is based on Bertrand and Mullainathan (2004). Furthermore, the elicitation of beliefs was incentivized by extra payments given to participants after the survey in the case of correct answers.⁹ This not only ensured that the respondents were truly putting effort into the task but also reduced the opportunities for respondents to engage in politically motivated reasoning (Prior et al., 2015). The statistics that the respondents made guesses about are very difficult to retrieve from academic articles and unavailable to anyone without a subscription to academic journals. In addition, I controlled for the amount of time the respondents spent reading the text and performing the task as a proxy for their attention and commitment. Finally, I asked the respondents to what extent they were confident in the beliefs they had reported about the gender gap in salary negotiation.

Part 3: Randomization The respondents were then randomly allocated to one of two experimental conditions: **treatment** or **control**. The exact difference between these two

⁹The respondents knew that they could receive \$0.50 if their guess was correct.

experimental conditions is the amount of information received on the actual size of the gender gap in salary negotiation. In particular,

- **Treatment:** the respondents were informed that 54% of female MBA students engaged in negotiations about their salary;
- **Control:** no further information

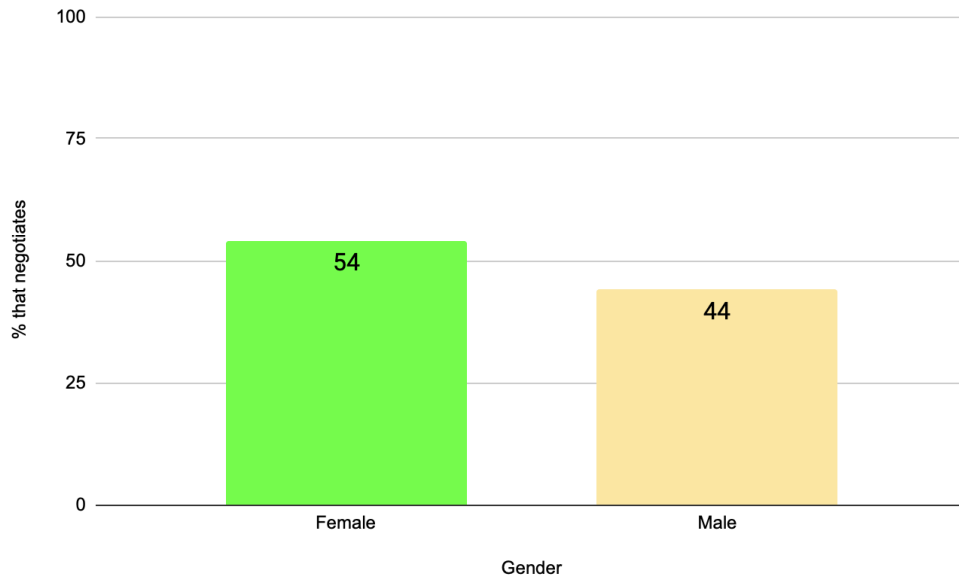
The information provided to the respondents in the treatment group mimicked what is usually done in the context of negotiation workshops, where women are informed that they are actually negotiating more often than what the men do.

Three details of the design are worth noting. First, the control group was a "pure" control group, which means that the respondents in this condition did not receive information relevant to this topic. The advantage of this approach is that it can precisely capture the impact of information on respondents' beliefs and demand for information (Haaland and Roth, 2020, 2021; Settele, 2022). Second, I provided the information treatments as feedback on respondents' guesses at the belief elicitation stage. This feature of the design aimed to reduce the experimenter demand effect (Haaland et al., 2021). Finally, the information was provided in histogram and digit format to ease the respondents' understanding. Figure 1 illustrates how the information treatment was provided.

Part 4: Choice-Based Measure - Demand for salary negotiation course I measured whether the respondents' beliefs about the salary negotiation course also affected their demand for a salary negotiation course. In particular, the respondents learned about the opportunity to join an online salary negotiation course from AAUW workshops at the end of the survey. The course combines information on how to approach negotiation, best practices, and what to avoid during a negotiation session.¹⁰ The content of the course is available for free; thus, the respondents could access it at any moment. The respondents were informed about these features. Upon clicking "yes" on the screen when asked about joining the salary negotiation course, the respondent was given access to the

¹⁰An example of the workshops organized by the AAUW can be found at the following: <https://www.aauw.org/resources/programs/salary/>

Figure 1: Information Treatment



salary negotiation course at the end of the study to avoid any spillover of the course's information content on the remaining questions. The demand for the salary negotiation course was coded as a binary variable.¹¹

Part 5: Posterior Beliefs I elicited respondents' posterior beliefs on the size of the gender gap in salary negotiation to assess whether the information treatment had shifted the respondents' beliefs. Given that the respondents from the treatment group received information about the size of the GGSN, I could not elicit their posterior beliefs using the question and scale. Therefore, I measured posterior beliefs by using a different measurement scale and a slightly different topic than those used to measure prior beliefs, as is commonly done in the information provision literature (see Haaland et al. (2021)). The posterior beliefs were based on the results of a field experiment by Bursztyn et al. (2017). This study collected data on the preferred first salary of both male and female MBA students. Specifically, I asked the respondents to report their quantitative beliefs on the

¹¹Figure C.1 in Appendix C shows that there is a large interest among people living in the U.S. in knowing how to negotiate their salary. This figure plots Google searches of "salary negotiation" from 2005 until 2022, normalized to sum up to 100.

average first salary reported by female MBA students.¹²

The elicitation of these beliefs was not incentivized because the respondents could hedge their responses to maximize their expected utility (for example, risk-averse respondents) (Charness et al., 2021). By comparing how the posterior beliefs varied across treatments, I assessed how the respondents updated their beliefs based on the information they received.

Part 6: Mechanisms of the Effect of Beliefs on Demand for the Negotiation Course

I asked all the participants to answer a battery of post-treatment questions to shed light on the underlying mechanisms behind the respondents' information demand. However, the framing of these questions was neutral to prevent the control group's respondents from inferring any conclusions about the GGSN. All these questions employed a 5-item Likert scale. Among the mechanisms, I considered the channels that previous research has highlighted to explain negotiation outcomes.

- **Effectiveness of the Course:** Women who are very sceptical about the negotiation courses might report not relying on the app to improve their negotiation skills. These beliefs should lead to a reduction in the demand for a salary negotiation course.
- **Lack of Negotiations Info:** Women often feel uninformed about negotiations. Thus, they would like to increase their knowledge about the negotiation process and its tactics. This (perceived) knowledge gap might lead to an increase in the demand for salary negotiations.
- **Lack of Salary Info:** Women might be less informed about the mean wages for their jobs in the U.S. labour market. Although Cullen and Perez-Truglia (2020) do not find gender differences in the willingness to be informed about peers' salaries, women might want to close this (perceived) knowledge gap and demand a negotiation course.

¹²I provided the respondents in my study with information about the average preferred salary of male MBA students, as outlined in the Prior Beliefs Elicitation section.

- **Other Dimensions:** Women negotiate along dimensions of the job other than wages (Wiswall and Zafar, 2017). There is a gender difference in the attributes that women and men find important when looking for a job. For example, women might be more prone to accept a lower-salary job that allows more time flexibility. Given these preferences, women might be less prone to demand salary negotiation tips because they do not need such tips.
- **Perceived Backlash:** Women are scared of experiencing a backlash from their employer when starting negotiations because they are expected to ask for less than men (Riley Bowles et al., 2007; Bursztyn et al., 2017).¹³

Obfuscated Follow-up A few days after the conclusion of the experiment, I recontacted 1,385 respondents for an obfuscated follow-up study (Haaland et al., 2021). I changed the graphic interface of the survey, and I removed any details that could link the respondents to the follow-up survey contained within Study 1.

In the follow-up, I elicited the respondents' beliefs about the importance of three societal issues: unemployment, the gender gap in salary negotiation and women's empowerment in the labor market, and inflation. The questions on unemployment and inflation had the purpose of obfuscating the real goal, which was to check whether the information treatment had persistently altered the respondents' beliefs on the importance of the gender gap in salary negotiation.

Experimenter Demand Effect Although the experimenter demand effects are usually moderate (de Quidt et al., 2018), I took several measures to minimize these concerns. First, prior belief elicitation was incentivized, while other behavioural measures mimicked individual behaviour to minimize the experimenter demand effect. Moreover, the demand for a salary negotiation course is a field outcome that makes the participant less prone to the experimenter demand effect. In addition, the experiment was designed in such a way as to preserve the respondents' anonymity, which also made the respondents less prone to

¹³Women might anticipate that verbal communication during the negotiation process with a male employer induces "toxic masculinity" (Huang and Low, 2022).

the experimenter demand effect. Furthermore, I obfuscated the information provision by phrasing it as feedback to the respondents' previous answers. Finally, a few days after Study 1, I recontacted 1,385 participants to join an obfuscated follow-up to assess whether the change in beliefs persisted over time and whether the experimenter demand effect was driving the results in Study 1.

Final Sample The final sample consisted of 1,992 respondents. Based on whether the variable was continuous or categorical, I ran either two-sided t-tests or chi-square tests to assess whether the randomization had fully worked. Table D1 in Appendix D.1 shows that the respondents in the control and treatment groups were comparable in terms of several observable characteristics. Thus, the randomization process was successful.

3 Results

3.1 Beliefs

The respondents reported believing that 34 female MBA students out of 100 had negotiated their job salary. The reported prior beliefs were identical on average across the control and treatment groups (p -value = 0.41). The respondents believed that there was a gender gap in salary negotiations because the perceived average rate of the female MBA students who negotiated a salary was significantly lower than the actual rate of men who negotiated a salary (44%, which I provided to the respondents as an anchor to reduce the dispersion in their prior beliefs).¹⁴ However, the respondents significantly underestimated the percentage of female MBA students who negotiated their salary, which was actually 54%.¹⁵

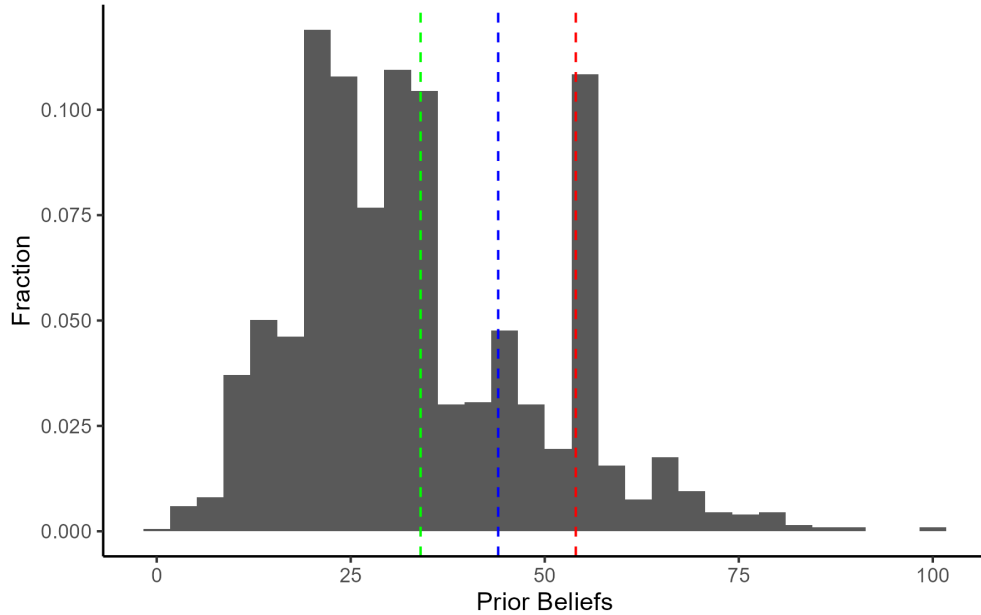
Figure 2 shows that there is significant heterogeneity in the prior beliefs held by the respondents. The distance between the two dotted lines provides a graphical visualization of the gender gap in salary negotiation. The respondents reported believing that, on average, 34% of female MBA students negotiated a salary, which is lower than the values

¹⁴ $t = -28$, $df = 1991$, p -value < 0.000001

¹⁵ $t = -57.133$, $df = 1991$, p -value < 0.000001

indicated by the two lines. Thus, the respondents misperceived the the direction of the gender gap in salary negotiations.

Figure 2: Prior Beliefs Distribution



Green line: Perceived % Women negotiating; Red line: % Women negotiating; Blue line: % Men negotiating

Note: The figure illustrates the distribution of the prior beliefs of the respondents about the percentage of MBA female students negotiating their salary. The green line is the average belief of the percentage of female MBA students who negotiated their salary. The red line indicates the percentage of female MBA students who negotiated their salary. The blue line represents the percentage of male MBA students who negotiated their salary. These benchmarks are based on Kray et al. (2024).

I also explored how demographic factors might have contributed to creating heterogeneity in the respondents' prior beliefs about the gender gap in salary negotiation. Figure F.1 in Appendix F.3 shows that, for example, White respondents and more educated and wealthier respondents tend to report lower beliefs about the percentage of female MBA students who negotiated their salary. In contrast, being older and a self-reported Republican seem to lead the respondents to report a higher rate of negotiating women.

Result 1: *The respondents misperceived the direction of the gender gap in salary negotiation.*

To measure the extent to which the respondents updated their beliefs about information provision, I asked a post-treatment question in my experiment about the intensive margin

of the gender gap in salary negotiation, using the amount of salary asked by female MBA students in Bursztyn et al. (2017) as an objective benchmark for posterior beliefs. The reason behind this decision is that it would have been trivial for the respondents in the treatment group to answer the prior belief question once more. Thus, I assessed whether the respondents in the treatment group reported having beliefs about the monetary size of the gender gap in salary negotiations that were significantly different from those held by the respondents in the control group. To test this, I regressed the respondents' posterior beliefs on a dummy indicator for the treatment group, as well as a set of demographic control variables and the respondents' prior beliefs (as shown in Equation 1).

$$Posterior_i = \beta_0 + \beta_1 T_i + \beta_2 Prior_i + B^T X_i + \epsilon_i \quad (1)$$

Table 1, Column 1 shows that the information treatment on the size of the gender gap in salary negotiations significantly shifted the posterior beliefs of the respondents in the treatment group. In particular, the respondents in the treatment group thought that female MBA students had higher salaries than did the respondents in the control group.

I then investigated whether changes in beliefs differed by the level of confidence that the respondents had while stating their prior beliefs. To test this hypothesis, I ran the same specification as that provided in Equation 1 but with an interaction term between the treatment dummy and a dummy indicator for the high level of confidence in prior beliefs. The estimates from Column (2) of Table 1 show that confidence in prior beliefs made the respondents more resistant to the update their beliefs. Moreover, I investigated whether the magnitude of the bias in prior beliefs mattered for belief updating by repeating the same specification as that provided in Equation 1 but with an interaction term between the treatment dummy and a variable for bias in prior beliefs.¹⁶ I defined bias in prior beliefs as the difference between the perceived rate of female MBA students negotiating their salary and the actual rate of female MBA students negotiating their salary. The estimates from Column (3) of Table 1 show that the larger the bias in prior beliefs was, the more pessimistic the shift in the respondents' posterior beliefs was.

¹⁶To avoid multicollinearity problems, I did not include prior beliefs in this regression because they were included in the above mentioned analysis.

Result 2: *The information about the gender gap in salary negotiations made the respondents' beliefs on women's negotiation behaviour more optimistic, and both the size of the bias in prior beliefs and the confidence in the prior beliefs moderated the belief-updating process.*

Table 1: Beliefs Updating

	<i>Dependent variable:</i>		
	Posterior Beliefs (1)	Posterior Beliefs (2)	Posterior Beliefs (3)
Treatment	14.934*** (0.737)	15.839*** (0.768)	4.976*** (1.164)
High Confidence		6.087*** (1.836)	
Bias Prior			0.458*** (0.032)
Prior	0.219*** (0.024)	0.216*** (0.024)	
Treatment x High Confidence		-10.258*** (2.588)	
Treatment x Bias Prior			-0.490*** (0.045)
Observations	1,992	1,992	1,992
Controls	YES	YES	YES
Control group mean (in thousands)	125	125	125
Adjusted R ²	0.223	0.229	0.266

Note: All specifications are OLS models. "Posterior beliefs" is a continuous variable that measures the asked salary of female MBA students. Column (1) looks at the effect of the treatment on "posterior beliefs". Column (2) looks at how treatment interacts with respondents' confidence in predicting "prior beliefs". The variable "High Confidence" has a value of 1 for the participants who report being either "extremely confident" or "very confident". Column (3) looks at how participants with different prior Beliefs react to the treatment. The variable "biased prior" is the difference between the respondents' prior beliefs and the true value which was 7. Robust standard errors are reported in parentheses. *Control* variables include age, White, Republican, education, income, employment, region, and prior beliefs (only in (1) and (2)). Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

3.2 The Demand for the Salary Negotiation Course

Approximately 44% of the respondents in the control group were willing to take up the salary negotiation course of the AAUW. In particular, the respondents in the control group with higher income were 0.04SD more likely to take up the course, as shown in Figure F.3 in Appendix F.3. Moreover, Figure F.4 in Appendix F.3 shows that the respondents in the control group who believed that the negotiation course would be useful were 0.18SD more likely to take up the course, as were those who reported having limited information about current salaries in the labour market (0.035SD more likely to take up the course). In contrast, those in the control group who reported knowing little about salary negotiations were 0.05SD less likely to take up the course.

Figure 4 shows that information provision had no impact on the demand for a salary negotiation course for the participants in the treatment group (p-value = 0.27). If anything, information provision caused a reduction in the demand for the negotiation course.

Figure 3: Treatment Effect on Demand for Negotiation Course

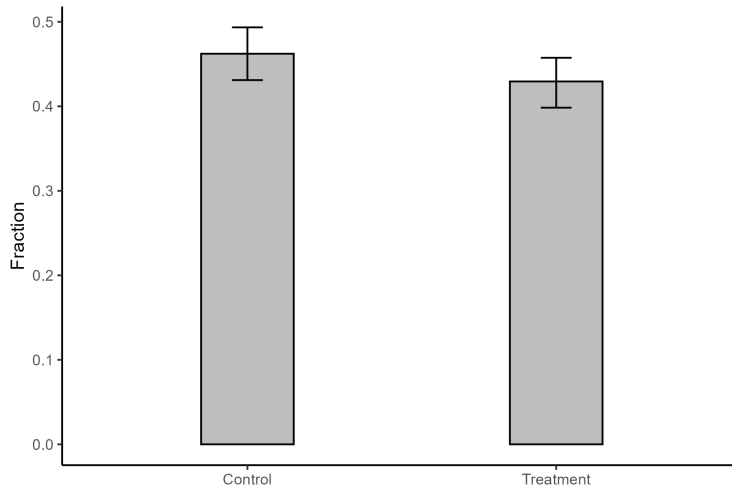


Figure 4: Treatment Effect on Demand for Negotiation Course

Note: The figure illustrates the demand for the salary negotiation course across the two experimental conditions. The y axis indicates the fraction of people who have joined the course. The x axis represents the two experimental conditions: Control and Treatment.

Finally, I explored whether the effect of the information treatment was heterogeneous along different dimensions. For example, one might wonder whether respondents with a

low education level do not change their behaviour because they perceive the information about the GGSN as relevant. Figure F.5 in Appendix F.4 plots the interaction terms between the treatment dummy and different demographic variables, as well as the bias in prior beliefs. I found that there was no heterogeneity in the demand for salary negotiation courses across education levels. In contrast, I found that the only relevant dimension for the heterogeneity analysis was being employed at the moment of the study. The treated respondents currently employed were approximately 26% more likely to take up the course than were those who were not working.

Result 3: *On average, informing the respondents about the gender gap in salary negotiations did not increase the demand for a salary negotiation course. The treated employed respondents were more likely to join the course.*

3.3 Mechanisms

I explored the potential reasons behind the null effect of the information treatment on the demand for a salary negotiation course. 60% of the respondents in the Control group were stating to be either "concerned" or "very concerned" that being active in the negotiations would cause a backlash from the employer. This is in line with one of the findings of Bursztyn et al. (2017), where almost three-quarters (73%) of women said they had avoided actions that they believed would help their careers because they were worried about looking too ambitious. This information might suggest the existence of a social norm under which women are not expected to negotiate, which in turn leads to perceived backlash if they do negotiate.

I assessed the effect of the information treatment on several belief questions elicited after the treatment. The results are shown in Table 2. The treatment did not affect respondents' beliefs on whether women have limited information about their negotiations or salaries. Similarly, the treatment did not affect the respondents' perceived usefulness of the negotiation course. However, Column (4) of Table 2 shows that the treatment reduced the respondents' perceived backlash from the employer if women were to negotiate their salary. However, the information was not enough to significantly reduce backlash concerns.

These results are in line with the literature on anticipated discrimination where minorities underinvest in human capital for the fear of being discriminated against (Campos-Mercade and Mengel, 2023; Coate and Loury, 1993; Lundberg and Startz, 1983). The result seems to suggest that information campaigns and initiatives aimed at increasing negotiation rates among women by emphasizing that it is socially acceptable for women to negotiate a salary and that many of them are doing it might not be an effective measure to induce them to negotiate even more.

In Appendix B, I rationalize the results of Study 1 using a model of investment in skills in the presence of social image concerns. Inspired by Bénabou and Tirole (2011), the agent of the model can invest in her negotiation skills, but this action will reveal her type of observer (one could think about an employer). By investing in negotiation skills, the employer will form beliefs that the agent is an "aggressive" type of agent. These beliefs will cause the agent to experience disutility. In equilibrium, this might explain underinvestment in negotiation skills.

Result 4: *Providing information that there is not a social norm about negotiations is not enough to reduce women’s concern about backlash from negotiating.*

Table 2: Mechanisms

	<i>Dependent variable:</i>					
	Limited Info Ne- gotiation	Limited Wage	Info	Other Factors	Perceived Back- lash	Course Usefulness
	(1)	(2)	(3)	(4)	(5)	
Treatment	-0.050 (0.044)	-0.064 (0.042)	0.026 (0.045)	-0.044 (0.043)	-0.003 (0.044)	
Observations	1,992	1,992	1,1992	1,1992	1,992	
Controls	YES	YES	YES	YES	YES	
Control group mean	0	0	0	0	0	
Adjusted R ²	0.032	0.081	0.003	0.038	0.016	

Note: The specifications are OLS models with robust standard errors. All the dependent variables have been z-scored using the answers of the respondents from the control group. They are elicited using Likert scale ranging from 1 to 5. "Limited info negotiation" asks whether the respondents believe they have limited information about negotiation in general. "Limited info wage" asks whether the respondents believe they have limited information about the wages in their job sectors. "Other factors" asks whether the respondents believe that other factors are also relevant while negotiating. "Perceived backlash" is the perceived backlash that respondents believe they will receive from the employer while negotiating. "Course usefulness" asks whether the respondents perceive the negotiation course to be useful. *Control* variables include age, White, Republican, education, income, employment, region, and prior beliefs. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

3.4 Follow-up

One week after Study 1, I recontacted the respondents from Study 1 via Prolific to join a follow-up study. To minimize any potential experimenter demand effect, I obfuscated the follow-up by changing the interface, removing any details that could make them recall the experimenter's identity, and not mentioning the gender gap in salary negotiations at any time during the recruitment phase.¹⁷

I managed to obtain 1,385 respondents out of 1,992 from Study 1 to join the follow-up, which implies a recontacting rate of around 70%. Table E1 in Appendix E.1 shows that the respondents who were allocated to the treatment group in Study 1 were equally likely to join and complete the follow-up survey compared to the respondents in control group.

In the follow-up survey, I asked questions about the following three topics to measure the respondents' concerns: rising inflation, taxation, the gender gap in salary negotiations, and the empowerment of women in the labor market. While the last topic aimed at assessing the persistence of the treatment effect on the respondents' beliefs, the first two topics served the purpose of obfuscating the real intentions of the experimenter. Columns 1 and 4 from Table E2 in Appendix E.2 show that the treated respondents were less concerned about the gender gap in salary negotiations and more confident in women's empowerment in the labor market than the respondents from the control group. However, the change in beliefs was not enough to significantly reduce these concerns over time.

3.5 Additional Study

To assess the robustness of the results from Study 1, I have conducted an additional version of this experiment. The only difference between these two versions of the study is the content of the information provided. In the robustness experiment, I provided information about the rate of female MBA students negotiating the salary from Babcock and Laschever (2003). In this case, only 7% of women were negotiating the salary relative to 57% of male MBA students. The robustness experiment is otherwise identical to Study 1.

If the perceived backlash is actually the mechanism that drives the null effect of the

¹⁷I recontacted the respondents using a different account as well.

beliefs change on the demand for the salary negotiations, then providing the information that only 7% of women were negotiating the salary will make the posterior beliefs more pessimistic, will not increase the demand for the salary negotiations course, and will increase the perceived backlash.

I recruited 1,324 female respondents on Prolific to join the robustness experiment. Column 1 of Table G1 in Appendix G shows that providing the information that only 7% of female MBA students were negotiating the salary significantly shifted the posterior beliefs of the respondents in the treatment group. In particular, the respondents in the treatment group thought that female MBA students had lower salaries than did the respondents in the control group.

Figure G.1 in Appendix G shows that information provision had no impact on the demand for a salary negotiation course for the participants in the treatment group (p -value = 0.27). If anything, information provision caused a reduction in the demand for the negotiation course.

Additionally, the treatment did not affect the respondents' perceived usefulness of the negotiation course. However, Column (4) of Table G2 in Appendix G shows that the treatment increased the respondents' perceived backlash from the employer if women were to negotiate their salary. The treatment increased the perceived backlash by 10.2% SD. The coefficient for perceived backlash was significant at the 10% level (p -value = 0.06). This result seems to suggest that the treatment had a null impact (if anything negative) on the respondents' demand for the salary negotiation course because of a greater perceived backlash from the employer.

In the follow-up survey with 1,032 respondents, I asked questions about the following three topics to measure the respondents' concerns: rising inflation, taxation, and the gender gap in salary negotiations. While the last topic aimed at assessing the persistence of the treatment effect on the respondents' beliefs, the first two topics served the purpose of obfuscating the real intentions of the experimenter. Columns 2 and 3 of Table G3 in Appendix G show that the treated respondents did not report higher concerns about inflation and taxation than the respondents from the control group. In contrast, Column 1 from Table G3 in Appendix G shows that the treated respondents were 10% more concerned

about the gender gap in salary negotiations than the respondents from the control group.

3.6 Discussion of the Alternative Explanation

Is the Information Relevant Only for Educated Women? One might wonder whether the null result for the demand for a negotiation course can be explained by the fact that information about MBA students is relevant only to educated women. If this were the case, women with at least a college degree should be more likely to update their beliefs. However, there was no heterogeneity in beliefs found according to education level.¹⁸

Is the Course Relevant Only for Educated Women? Another plausible mechanism that could explain the null result of the information treatment on the demand for the salary negotiation course is the heterogeneity in the take up of the course masking the null effect. If this were the case, then women with at least a college degree should be more likely to take up the course because it is more relevant for them than it is for women without a bachelor's degree. Figure F.5 shows that there is no heterogeneity present in the demand for salary negotiations by education level.

Is there a Lack of Interest in the Course? The information treatment did change women's beliefs but did not change their demand for the salary negotiation course. The conjectured mechanism is that the treatment increased the perceived backlash that women face from employers. However, it could be possible that women do not perceive the course as useful for them; therefore, the information provided did not increase the demand for the course. In contrast, 60% of the respondents in the control group reported believing that the course was useful. The results are very similar for the respondents in the Treatment group. Crucially, the course was made available to the respondents at the end of the experiment to avoid self-selection in the answers to mechanism questions. Likely, a perceived low usefulness of the course is not responsible for the result of the information treatment on the demand for the salary negotiation course. Finally, Figure C.1 in Appendix C shows

¹⁸The regression's coefficient for the interaction term between the treatment dummy and a dummy that takes the value 1 if the respondent has at least some years of college is equal to -0.19363 and p-value = 0.900967.

that U.S. individuals are very interested in searching for information on how to negotiate their salary.

The Respondents Might be Busy One might argue that the respondents did not want to join the salary negotiation course because they were too busy to complete the course right away, which might explain the absence of treatment effects. While this concern could be valid to some extent, there are different reasons why this factor was unlikely to have played a role. First, this concern would apply to respondents from both the treatment and control groups; thus, its impact would cancel out when comparing the behaviour of the respondents across treatments. Moreover, 44% of the respondents actually decided to join the course, which suggests that this concern was likely less important. Finally, I emphasized to the respondents that they could click on the link to join the course, which would open another browsing window that allowed them to complete the course whenever they had the time.

Is There an Experimenter Demand Effect? The main finding of de Quidt et al. (2018) is that the effect of the experimenter demand is usually moderate; thus, all the steps I took to minimize this effect in the experiment (which are discussed in Section 2) should reduce concerns about the importance of the experimenter demand effect in this context. Moreover, if the experimenter demand effect was driving the effect of the information on the demand for the negotiation course, then the take-up rate for the course would have increased.

4 Mental Models about the Gender Gap in Salary Negotiations (Study 2)

Based on the results from Section ?? and Section F.9, I explored in more depth the perceived backlash from employers and its drivers. To do so, I ran an additional survey with 500 female respondents currently living in the U.S. who were recruited on Prolific. The aim of this survey is to measure the respondents' mental models about the gender gap in

salary negotiations. Mental models are defined as "beliefs over a causal link between two variables" (Andre et al., 2022). In particular, I explored which factors the respondents think are causing the gender gap in salary negotiations.

In this survey, I collected the respondents' demographic information, as well as their prior beliefs on the size of the gender gap in salary negotiations. I also asked about the specific job sector where the respondents worked. The purpose of this question was to identify whether the participant worked in a job sector that is male dominated. I classified a job sector as male dominated based on the shares of male workers in that sector using employment data from US Labour Statistics (2020) and the requirement of negotiation skills. Thus, the job classification was partly based on the negotiation skills needed to perform them. I used the *O*NET* database to complete the classification (Deming, 2017; Hansen et al., 2021). *O*NET* is a database that contains information about all the job categories classified in the U.S. labour market. It provides information about job duties, soft skills, and the technological skills required to perform those jobs. One of the soft skills considered was negotiation skills.

Next, I measured the respondents' mental models about the gender gap in salary negotiations by using open text boxes. In particular, the respondents were asked to report the reasons behind the gender gap in salary negotiations. The reason for employing open-text responses was to avoid any potential priming effect when survey respondents first thought about the topic (Ferrario and Stantcheva, 2022). Finally, I measured the respondents' beliefs about the causes behind the gender gap in salary negotiations by asking them to attach weights to different reasons why the gap exists.

4.1 Descriptives

The open-text answers were processed in different steps. First, I used the package *quanteda* to pre-process the text data by removing numbers, punctuation, symbols, and separators Benoit et al. (2018). Moreover, I removed stop words that did not have a relevant meaning (e.g., "I", "that" or "and"). Figure 5 provides a graphical representation of the common expressions that the respondents used to discuss the causes behind the gender gap in

salary negotiations. The more an expression was used, the thicker the expression appeared in the word cloud. The respondents listed some attributes that women seem to lack in regard to negotiations ("confidence", "confident"), as well as what they should do ("be taught", "speak"). On the other hand, the respondents highlighted the concerns that women feel about negotiations ("fear"), and their worry about appearing to not be an ideal candidate to their employer if they were to negotiate the salary ("aggressive", "assertive", "demanding").¹⁹

Keyness analysis investigates whether some words are relatively more frequent than others in the text analysed. Calculating "keyness" requires computing a score for features that occur differentially across different categories. Here, the categories were defined by reference to a "target" document index in the corpus of the text, with the reference group consisting of all other documents.

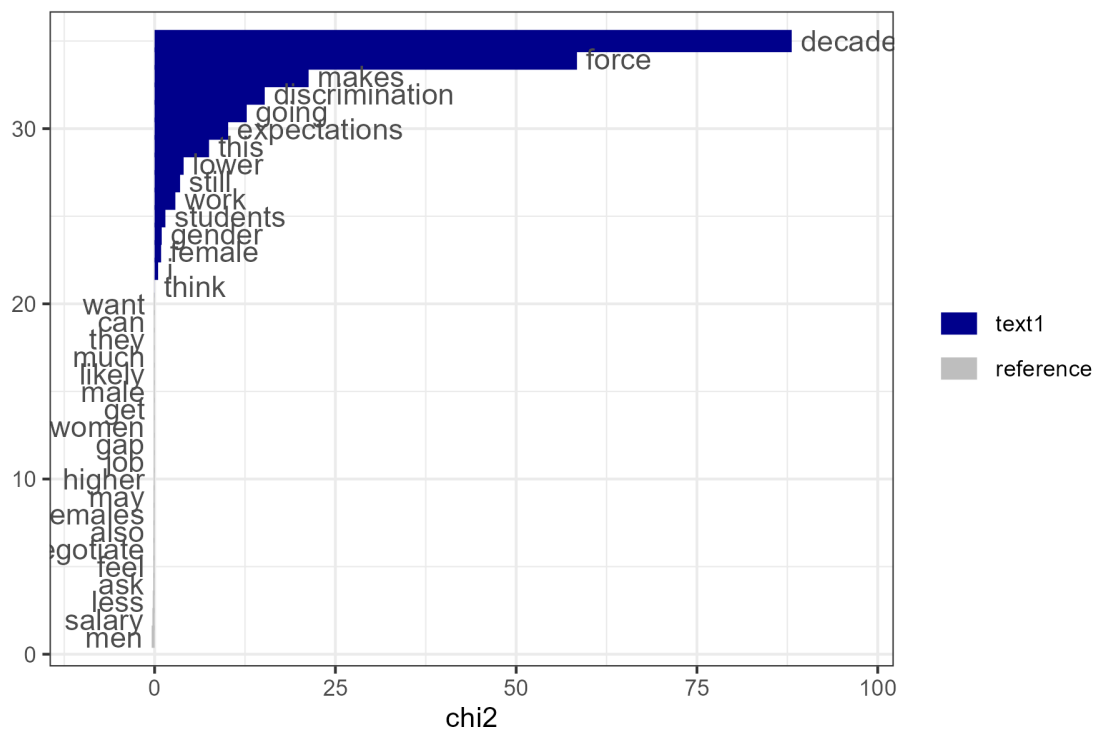
Figure 6 shows that some words were relatively more frequent than a reference group of words. For example, the word "decade" was the most commonly used word for emphasizing that the gender gap in salary negotiations reflects a long-lasting pattern over time. Furthermore, the word "force" indicates that women feel forced to behave in an established way about salary negotiations. Moreover, "discrimination" seems to suggest that women think that some form of discrimination from the employer is going on when they think about the gender gap in salary negotiations. Finally, the word "expectations" suggests that women have to fulfill others' expectations regarding their negotiating behaviour.

4.2 Mental Models

Following Andre et al. (2022) and Gehring and Grigoletto (2023), research assistants hand-coded and classified the respondents' mental models about the gender gap in salary negotiations to capture the underlying reasoning about the gender gap in salary negotiations. Three main mental models emerged. Approximately 54% of the respondents thought that the reasons behind the gender gap in salary negotiations were either the perceived backlash that women anticipate from their employers or the violations of social

¹⁹Figure H.1 plots the absolute frequency of the words in the respondents' narratives.

Figure 6: Keyness Plot



Note: The figure illustrates the keyness plot of the words used in the open text responses by their frequency with which they appear in the mental models of the respondents.

norms/stereotypes concerning their agreeableness. Approximately 31% of the respondents believed that the gap is driven by women’s shy attitude, as well as their lack of competitiveness. Finally, 13% of the respondents thought that the gap is the result of historical discrimination that women have faced in the labour market.²⁰ This is in line with one of the findings of Bursztyn et al. (2017), where almost three-quarters (73%) of the women said they had avoided actions they believed would help their careers because they were worried about looking too ambitious.

Table 3 summarizes the three main mental models about the gender gap in salary negotiations discussed above and presents some examples of these reasons.

Table 3: Overview of the Mental Models for the GGSN

Type of Narrative	Category	Example
Blaming society	Backlash, Stereotypes	"I believe the gender gap in this situation is caused by women feeling guilty for asking for more. Women exist in a society that tells them that the man should be the breadwinner and they should be satisfied with whatever wage they obtain. Asking for more would be consider selfish and make them seem ungrateful for what they already have."
Blaming women	Shyer, Less Competitive	"The lack of self confidence/ belief that their skill are good enough. While men may have the tendency to over exaggerate their skill sets, women may undersell their abilities and not believe their skill set meets the value of a raise."
Discrimination	Consequences of historical discrimination	"Men are seen as better workers when that’s not always the case. Men are more likely to have increased salaries based on the fact that they’re men."

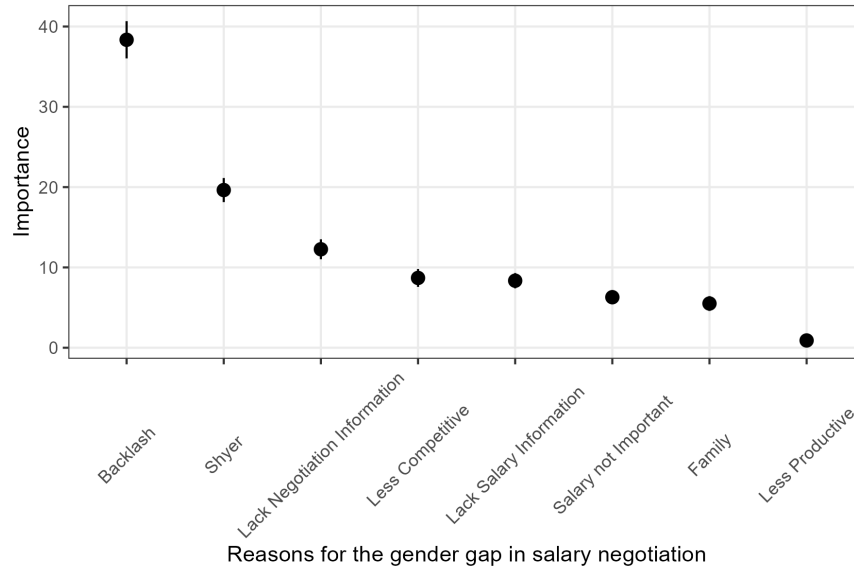
Overall, the mental models that discussed the topics of backlash and stereotypes tended to be more complex than other mental models. Gehring and Grigoletto (2023) define a narrative as “complex” if it shows a complex structure in the character-role narrative framework. This framework decomposes the structure of the mental model based on the roles that the characters take in the mental model (e.g., “hero”, “villain”, etc.). The mental model that discussed backlash and stereotypes usually had the following three characteristics: “society”, “women”, and “employer/company”. The common mental model flow related to the negative role that society has on women in terms of stereotypes (e.g., being agreeable) and how women interact with employers because of the perceived backlash. The other groups of mental models focused on women being “less competitive”

²⁰The remaining 2% of the answers either did not fit with these three main categories or were meaningless.

and “shyer” than men, either because of historical reasons or without any justification. These groups of mental models had fewer characters and were simpler. Furthermore, I explored the respondents’ quantitative beliefs about the reasons behind the gender gap in salary negotiations. The respondents had to allocate 100 points across eight different reasons why there is a gender gap in salary negotiations. The reasons are as follows: "Women are not informed enough about salary negotiations"; "Women are not informed enough about salaries"; "Salaries are not important to women"; "Women do not negotiate because they fear backlash from the employer"; "Women are less competitive than men; women are shyer than men"; "Women are more interested in negotiating to favour their family"; and "Women are less productive than men". The more important a reason is, the greater the number of points attached to that specific reason is. This elicitation method not only offers quantitative insight, but also provides respondents with preexisting categories to think about their answers.

Figure 7 summarizes what the respondents thought were the most important reasons why women do not negotiate their salaries. First, perceived backlash from employers was, on average, the most important reason for the gender gap in salary negotiations for respondents. Second, the belief that women are shyer than men in regard to negotiations was thought the second most important reason for the gender gap in salary negotiations. Finally, women not being informed about negotiations and the other remaining reasons seemed to have an equal level of average importance to the respondents.

Figure 7: Reasons for the Gender Gap in Salary Negotiations



Note: The figure illustrates trends in politicization of conversations by academics and general users on Twitter from 2016 to 2022. Monthly aggregated scatter plots display expressed stance for each topic, with a LOESS applied for trend visualization. Standard errors are depicted in the shaded region. In the "All" panel, around 40% of tracked US academics expressed opinions on predefined political issues, compared to 5-10% of general users. Variations and spikes are observed across topics, with Climate Action and Racism showing the largest disparities. Climate Action witnessed significant declines during the COVID-19 pandemic onset. Mid-2020 saw a surge in attention to Racism, reflecting the outcry after the George Floyd incident. Other topics exhibit stable increasing trends, with occasional short-lived spikes, notably in Abortion Rights around changes in laws in 2022. Immigration discussions, while less frequent, maintained regularity, with heightened attention during the 2016 presidential election.

I explored the heterogeneity in the beliefs about the reasons behind the gender gap in salary negotiations by focusing on the beliefs of the employed respondents, who accounted for 60% of the sample. Two dimensions were particularly relevant: whether their reported job sector requires the respondents to make use of negotiation skills according to *O*NET* and whether they work in male-dominated, female-dominated, or gender-neutral job sectors, based on data on the gender composition of job sectors obtained from the U.S. Labour Bureau. Jobs are considered to be male dominated (female dominated) if the majority of workers in that sector are male (female). The remaining jobs are classified as gender neutral.²¹

²¹The job categories included in this list are as follows: community and social service occupations; education, training, and library occupations; health care practitioners and technical occupations; health care support occupations; personal care and service occupations; office and administrative support occupations; computer and mathematical occupations; architecture and engineering occupations; building and

Therefore, I grouped the job categories by different levels of negotiation skills needed; then, I divided them into two groups, namely, those with a required level of negotiation skills above the median and those with a required level of skills below the median.

Among the respondents who reported being employed, 41% reported working in sectors where above-median negotiation skills are required for their job. Figure H.2 shows that there was no heterogeneity found in terms of the reasons for the gender gap in salary negotiations among the respondents who reported working in job sectors that require above or below the median level of negotiation skills. Furthermore, 49% of the employed respondents reported working in male-dominated job sectors, 31% of them reported working in female-dominated job sectors, and the remaining 20% of them reported working in gender-neutral job sectors. Figure H.3 shows that there was no heterogeneity found in the reasons for the gender gap in salary negotiations according to the gender connotations of the jobs of the respondents.

I investigated the drivers behind these quantitative beliefs to shed light on the origin of these beliefs. Figure H.5 shows the correlation between beliefs about backlash and respondents' demographic variables. The evidence seems to suggest that employed respondents tended to attach more weight to backlash because women do not negotiate. In contrast, relatively older respondents and Republicans tended to give less importance to backlash from employers. Instead, Figure H.6 shows that Republican respondents tended to consider female shyness to be the main reason why women do not negotiate their salary. Finally, Figure H.7 shows that older respondents tended to attribute the gender gap in salary negotiations to the lack of information about negotiations by women.

In a similar study, I recruited 500 male respondents from Prolific. The results showed that the mental models that men form to explain the reasons behind the gender gap in salary negotiations are in line with women's mental models. Moreover, Figure H.4 documents men's reasons behind the GGSN. The two dominant mental models among men were as follows: perceived backlash and women being shy than men.

ground cleaning and maintenance occupations; farming, fishing, and forestry occupations; construction and extraction occupations; installation, maintenance, and repair occupations; production occupations; legal occupations; life, physical, and social science occupations; sales and related occupations; and apartments, design, entertainment, sports, and media occupations.

Result 6: *The main mental models behind the gender gap in salary negotiations are as follows: women anticipating backlash from employers and women being shy and less confident than men.*

To empirically validate the mental models' measurement, Table 4 presents the correlations between the type of mental models that respondents reported in the text responses and the quantitative beliefs about the reasons behind the gender gap in salary negotiations. There is a strong positive (negative) correlation found between holding mental models in line with backlash content and the quantitative belief about the importance of backlash (women being shy than men) in shaping the gender gap in salary negotiations. Both mental models can be seen as substitutes for and opposing ways of reasoning that people use to think about the gender gap in salary negotiations.

Table 4: Correlations between Mental Models and Reasons

	<i>Dependent variable:</i>		
	Narrative Backlash (1)	Backlash (2)	Narrative Shyer (3)
Backlash	0.007*** (0.001)	-0.005*** (0.001)	-0.002*** (0.001)
Shyer	-0.002* (0.001)	0.006*** (0.001)	-0.003*** (0.001)
Observations	499	499	499
Controls	YES	YES	YES
Mean	0.53	0.31	0.13
Adjusted R ²	0.218	0.207	0.034

Note: The specifications are all OLS models with robust standard errors. The dependent variables indicate with dummy variables whether the narrative that the respondents hold relates to backlash or stereotyping, to women being shy than men and to discrimination. The variables "backlash" and "shyer" indicate the weight that the respondents attach respectively to perceived backlash and being shy as reasons why women do not negotiate. *Control* variables include age, White, Republican, education, income, employment, region, and prior beliefs. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

5 Gender Norms about Negotiations and Perceived Backlash (Study 3)

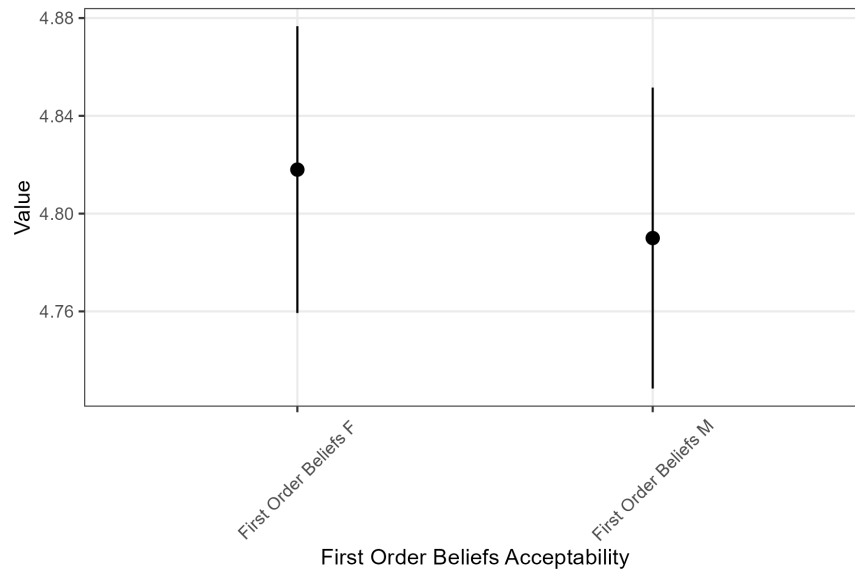
Study 3 focused on investigating the relationship between women's beliefs about the acceptability of salary negotiations and their perceived backlash. The study aimed to explore whether gender norms regarding negotiations contribute to the anticipation of potential backlash that women may experience if they attempt to negotiate their salaries. To achieve this goal, the study assessed women's first- and second-order beliefs about the acceptability of salary negotiations. First-order beliefs refer to women's direct perceptions of whether salary negotiations are considered acceptable. Second-order beliefs, on the other hand, pertain to women's perceptions of how others, such as employers or colleagues, view the acceptability of salary negotiations. By examining the alignment between women's beliefs about the acceptability of negotiations and their perceptions of potential backlash, this research sought to establish a link between gender norms and the anticipated negative consequences of salary negotiations for women.

For this purpose, I conducted an additional survey with 500 female respondents from the U.S. recruited via Prolific. The survey design of Study 3 closely mirrored the design of gender norm elicitation proposed by Bursztyn et al. (2020b) and Bursztyn et al. (2023). After collecting respondents' demographic information and their prior beliefs about the GGSN, I measured the respondents' qualitative first-order beliefs (FOB) about the extent to which they believe it is acceptable for both men and women to negotiate a salary. Moreover, I measured the quantitative second-order beliefs (SOB) about the extent to which other women and men believe it is acceptable for them to negotiate a salary. Finally, I elicited the respondents' qualitative perceived backlash from the employer in case of negotiations for both men and women.

Figure 8 displays the results of female respondents' first-order beliefs (FOB) about the acceptability of negotiating a salary for both men and women. The y-axis shows the value of acceptance of negotiation behaviour, where 5 means "very acceptable" and 1 "not acceptable at all". The data illustrate that, on average, respondents perceived salary negotiations to be highly acceptable for both genders. Remarkably, more than 95% of the

respondents believed that negotiating a salary is either "acceptable" or "very acceptable" for both men and women. Notably, this pattern of acceptability remained consistent regardless of whether the negotiator is male or female.²²

Figure 8: First Order Beliefs about Negotiation Acceptability



Note: The figure displays the female respondents average beliefs to the questions: "How acceptable do you think if a [woman/man] negotiates her salary with the employer?" The answers range from 1 ('Not acceptable at all') to 5 ('Very acceptable'). The value on the left represents the acceptability beliefs about a woman negotiating her salary, while the value on the right represents the acceptability beliefs about a man negotiating his salary.

Figure 9 presents the results of the respondents' second-order beliefs (SOB) about the acceptability of negotiating a salary. The analysis of these beliefs indicates that respondents believed that approximately 37% of women, similar to them, thought that negotiating a salary is acceptable. Notably, despite this belief, almost all respondents personally believed that negotiating a salary is acceptable.

This finding suggests that there was an underestimation of the perceived gender norm regarding salary negotiations. In other words, respondents believed that a smaller proportion of women in their social group view negotiations as acceptable compared to the actual belief that almost all respondents hold.

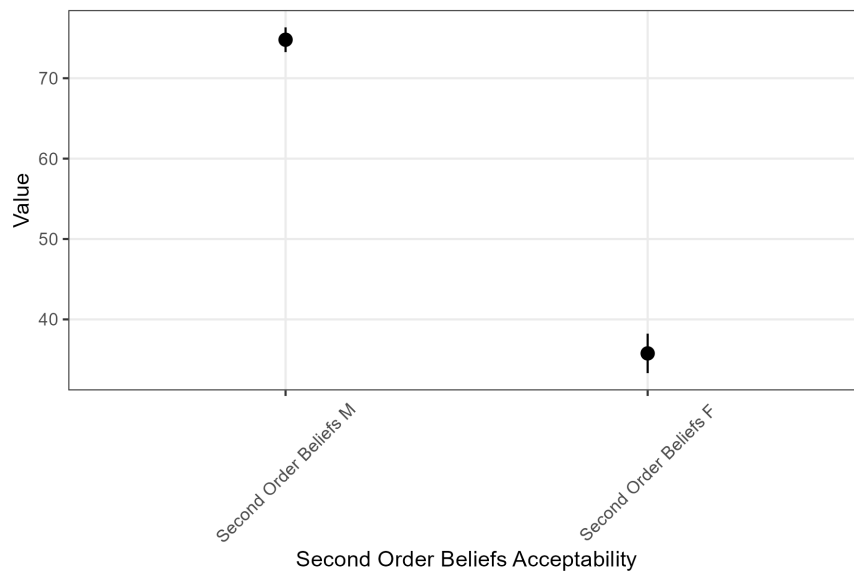
It is crucial to consider the potential influence of social desirability bias on respondents'

²²Furthermore, the study explored potential heterogeneity in acceptability beliefs based on respondents' job sectors. Figure H.8 and Figure H.9 present the findings related to this analysis.

answers to second-order belief questions. Social desirability bias refers to the tendency of respondents to provide answers that align with societal norms or appear more socially acceptable. This bias may impact respondents' responses to questions related to the perceptions of others, leading them to underestimate the extent to which others hold similar views.

However, it is noteworthy that in a meta-analysis on misperceptions about others, Bursztyn and Yang (2022) found that this concern is unlikely to play a significant role. In other words, the impact of social desirability bias on the assessment of second-order beliefs may not be substantial based on the evidence provided by previous research.

Figure 9: Second Order Beliefs about Negotiation Acceptability



Note: The figure displays the female respondents average beliefs to the questions: "Out of 100 [women/men], how many of them do you think find acceptable to negotiate their salary?". The value on the left represents the second order beliefs of the acceptability for a woman negotiating her salary, while the value on the right represents the second order beliefs of the acceptability for a man negotiating his salary.

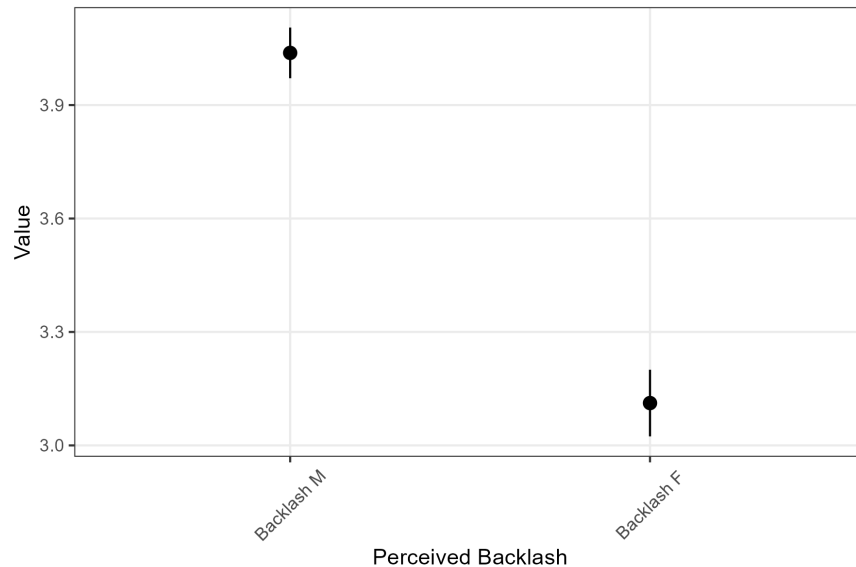
Figure 10 illustrates that female respondents perceived a gender gap in the anticipated backlash if salary negotiations were to occur with their employer. The y-axis represents the value of the consequences that people expected to face if they were to negotiate, where 5 means "very positive" and 1 means "very negative". These findings align with the results observed in Study 1 and Study 2, indicating that women anticipate more negative consequences for negotiating a salary than men. This suggests that women indeed expect

backlash if they engage in salary negotiations.

A plausible explanation for this result could be rooted in the misperception of the gender norm surrounding salary negotiations. Women may underestimate the extent to which other women actually view negotiating as acceptable. This phenomenon is known as pluralistic ignorance, wherein individuals wrongly assume that their beliefs are different from those of others in the same social group. In the context of salary negotiations, this misperception could lead women to perceive potential sanctions or backlash if they were to violate the perceived norm by negotiating their salaries (Bursztyn et al., 2020b).

The emergence of pluralistic ignorance, combined with women's underestimation of the acceptability of negotiations among their peers, might contribute to the perceived gender gap in anticipated backlash during salary negotiations.²³

Figure 10: Perceived Backlash



Note: The figure displays the female respondents average beliefs to the questions: "How likely do you think is that a [woman/man] who negotiates [her/his] salary will receive a job offer from the employer?" The answers range from 1 ('Very unlikely') to 5 ('Very likely'). The value on the left represents the backlash beliefs about a woman negotiating her salary, while the value on the right represents the backlash beliefs about a man negotiating his salary.

Finally, Table G7 summarizes the results of correlations between second-order beliefs about the acceptability of women negotiating and the perceived backlash that both women

²³To investigate potential sources of heterogeneity in these beliefs, the study explored the influence of respondents' job sectors. Figure H.10 and Figure H.11 present the results related to this analysis.

and men would face if they were to negotiate their salary. There is a strong correlation between the potential negative consequences that women would face if they were to negotiate and the respondents' beliefs about how acceptable it is to negotiate.

I also recruited 500 male respondents from Prolific to document potential differences in their beliefs about the acceptability of salary negotiations. Similarly to the results for female respondents, 93% of men found it acceptable for women to negotiate their salary. However, they thought that only 40% of women find it acceptable to do so. Moreover, the perceived backlash that women were expected to face from their employer if they were to negotiate was greater than the perceived backlash that men were expected to face in the same situation. The patterns in the beliefs documented in Figure H.12, Figure H.13, and Figure H.14 closely mirror those among female respondents.

Result 7: *Respondents underestimated how acceptable other women think negotiating their salary is, and the emergence of this gender norm is likely to drive perceived backlash.*

6 Beliefs of HR Managers (Study 4)

The findings from Study 1, Study 2, and Study 3 highlight the significance of perceived backlash in shaping women's beliefs and behaviours regarding salary negotiations. To empirically assess whether respondents' concerns about potential employer backlash are valid, an additional study involving a sample of HR managers was conducted.

I recruited a sample of 105 HR managers through Prolific to participate in a within-subject vignette experiment. The study presented four hypothetical scenarios to the HR managers, each of which described individuals with identical backgrounds and skills who were applying for the same job. Among these scenarios, two hypothetical candidates were female, and the remaining two were male. Importantly, one female candidate and one male candidate attempted to negotiate their salaries during the interview. For each scenario, I elicited the likelihood that the candidates would receive a job offer. Finally, I collected HR managers' beliefs about the size of the gender gap in salary negotiations. These beliefs about the likelihood of succeeding in the negotiations by receiving a job offer

were elicited using a 5-point Likert scale.

The study presents several key findings based on the responses of the 105 HR managers participating in the within-subject vignette experiment. First, HR managers' beliefs about the gender gap in salary negotiations were, on average, slightly more optimistic than the beliefs of the respondents in the previous three studies. This implies that the surveyed HR managers perceived a smaller gender gap in salary negotiations. However, the difference was not statistically significant at the conventional 0.05 level ($t = -1.8975$, $df = 112.43$, $p\text{-value} = 0.06033$). Second, HR managers reported that the likelihood of receiving a job offer for the nonnegotiating male job candidates was identical to that for the nonnegotiating female job candidates. This finding suggests that the HR managers did not perceive any gender differences in the likelihood of job offers for the candidates who did not attempt to negotiate ($t = 1.0293$, $df = 104$, $p\text{-value} = 0.3057$). Third, the male and female job candidates who attempted to negotiate their salaries were perceived to be less likely to receive a job offer than were identical candidates who did not negotiate. A negotiating penalty was observed for both the male candidate ($t = -2.9323$, $df = 104$, $p\text{-value} = 0.004138$) and the female candidate ($t = -4.1597$, $df = 104$, $p\text{-value} = 6.574e-05$). Fourth, compared with the male candidates, HR managers believed that the female candidates faced a greater negotiation penalty in terms of the likelihood of receiving job offers when attempting salary negotiations. This finding indicates a gender disparity in the perceived outcomes of negotiation attempts ($t = 2.2433$, $df = 104$, $p\text{-value} = 0.027$). Finally, among the candidates who attempted to negotiate, the HR managers believed that the male job candidate was more likely to succeed in these negotiations to obtain the requested salary than was the female job candidate. This highlights a perceived gender difference in the success of negotiation attempts ($t = 4.0722$, $df = 104$, $p\text{-value} = 9.105e-05$).

Result 8: *The surveyed HR managers believed there was a negotiation penalty present in terms of the likelihood of receiving a job offer for the job candidates who negotiated. The penalty was seen as larger for female candidates; conditional on negotiations, female candidates were seen as being less likely to succeed.*

7 Conclusions

This paper provides evidence of the effect of beliefs about the gender gap in salary negotiations on the demand for a salary negotiation course. Drawing on a large sample of women living in the U.S., I documented that women think that female MBA students are 20% less likely to negotiate their salary compared to male MBA students. Relative to an objective benchmark from Kray et al. (2024), they dramatically misperceive the direction of the gap.

Once I provided evidence about the size of the gender gap in salary negotiations, the respondents updated their beliefs, but they did not increase their demand for a salary negotiation course. The potential mechanism driving the muted demand in the negotiation course is the increased perceived backlash from the employer in case of negotiations. The effect of the information on the demand for salary negotiations is not very heterogeneous. Only employed women responded positively to treatment.

I also further investigated the role of backlash that women perceive from employers. To shed light on this topic, I conducted a second study to elicit women's mental models on the reasons behind the gender gap in salary negotiations, as well as their quantitative beliefs. Three dominant mental models emerged. The main mental model attributed the gender gap in salary negotiations to the perceived backlash that women perceive from employers as a result of societal norms and stereotyping. The second most frequent mental model is that women are actually shyer than men in regard to negotiating. These two mental models serve as substitutes, and both are validated by the quantitative beliefs of the respondents about the reasons why the gender gap in salary negotiations arises.

In an additional study (Study 3), I examined women's first- and second-order beliefs concerning the acceptability of salary negotiations for both male and female job candidates. Additionally, I investigated the perceptions of potential negative consequences associated with salary negotiations for prospective job candidates. The findings revealed that 95% of the respondents found it acceptable to negotiate salaries, but interestingly, they underestimated the proportion of women who share this perspective. As a result, the participants believed that women who engage in salary negotiations may face backlash due to the prevailing perception that not negotiating salaries aligns with gender norms.

The results among female respondents in Study 2 and Study 3 were perfectly mirrored in two identical studies conducted with male respondents.

Finally, I recruited a sample of 105 HR managers through Prolific to participate in a within-subject vignette experiment. In this study, I presented four hypothetical scenarios to the HR managers, each of which described individuals with identical backgrounds and skills who were applying for the same job. Among these scenarios, two hypothetical candidates were female, and the remaining two were male. Specifically, one female candidate and one male candidate attempted to negotiate their salary during the interview. The results of the experiment indicate that the HR managers perceived no difference in the likelihood of job offers for the non-negotiating male and female candidates. However, they believed in the existence of a negotiation penalty, wherein candidates who attempt to negotiate are seen as less likely to receive a job offer. Notably, the HR managers perceived that the negotiation penalty disproportionately affects female candidates who negotiate; these women are viewed as facing more severe repercussions than male candidates who negotiate. Furthermore, male candidates who attempt negotiations are perceived as having greater chances of successful negotiations than their female counterparts. These findings highlight the presence of gender bias in the perceptions of negotiation outcomes within the hiring process among HR managers.

To conclude, the evidence from this paper highlights the potential unintended consequences of informing women about the gender gap in salary negotiations because having such information might reduce the likelihood of women signing up for a salary negotiation course to help improve their negotiation skills. Due to the perceived backlash expected from employers, many women will not take up the course. This piece of evidence, combined with the evidence from Exley et al. (2021), should inform policy-makers that policies that aim to close the gender gap in salary negotiations should primarily include “fix-the-institutions” aspects rather than “fix-the-women” aspects.

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Beliefs about the Gender Gap in Salary negotiations

A Overview of the Experimental Designs

Table A1: Overview of the Experimental Design

Study	Participants	Description
Study 1	1,992 women living in U.S.	Measuring beliefs about GGSN to see how they affect demand for negotiation course and potential mechanisms
Follow-up Study 1	1,385 women living in the U.S.	Persistence of the information treatment and effect of the beliefs on WTP for salary information
Additional Study 1	1,324 women living in U.S.	Measuring beliefs about GGSN to see how they affect demand for negotiation course and potential mechanisms (different information)
Additional Study 1 Follow up	1,032 women living in U.S.	Persistence of the information treatment
Study 2a	500 women living in the U.S.	Eliciting reasons for GGSN using text and quantitative beliefs
Study 2b	500 men living in the U.S.	Eliciting reasons for GGSN using text and quantitative beliefs
Study 3a	500 women living in the U.S.	Eliciting reasons FOB and SOB about the acceptability of salary negotiation and perceived backlash
Study 3b	500 men living in the U.S.	Eliciting reasons FOB and SOB about the acceptability of salary negotiation and perceived backlash
Study 4	105 HR managers living in the U.S.	Eliciting beliefs about the likelihood of getting hired and whether the negotiation is successful

B The model

Individual A lives for four periods: $t = 0, 1, 2, 3$. In period 0, Nature draws both the individual's initial negotiation skills, $n \in [0, 1]$, and her type $s \in \{low, high\}$. In period 3, individual A might receive an output with w unit of wage or nothing. The probability of receiving the unit utility depends on individual A 's initial negotiation skills endowment and the negotiation skills investment decision in the previous periods. Individual A can decide if and how to invest in her negotiation skills, in period $t = 1$, and pay the costs. In period $t = 2$, a potential employer, E , observes A 's investment decision. Individual A , gains utility from the beliefs of the employer on her type. Everything equal, she prefers that E believes that she is high type. In period 3, she receives the unit utility or nothing.

Period 0 The nature draws the negotiation skills level of the individual A . The initial negotiation skills $n \in [0, 1]$ with continuous and strictly positive (between 0 and 1) probability distribution function $f(n)$ with mean μ_n . The nature also draws the type of the individual $s \in \{low, high\}$.

Period 1 Individual A decides the type of investment in her negotiation skills $i \in \{0, 1, 2\}$. She can either (1) not invest ($i = 0$), (2) invest in negotiation skills by joining a negotiation course ($i = 1$). The cost of the course is $c(i)$:

$$c(i) = \begin{cases} 0 & i = 0 \\ c_1 & i = 1 \end{cases}$$

Depending on the investment decision, the probability of receiving the w unit utility in period 3 can increase by $b(n, i)$, where:

$$b(n, i) \begin{cases} 0 & i = 0 \\ b_1(n) & i = 1 \end{cases}$$

with $b_1(n)$ being continuous, differentiable, and decreasing function ($b_1'(n) < 0, i \in \{1\}$).

The latter assumption intuitively means that the lower negotiation skills of the individual, the more effective the negotiation course is. We assume $b_1(1) = 0$, meaning that the perfectly skilled individual would not benefit from the investment options.

Period 2 There is an employer in period 2: E . Individual A , receives utility from the beliefs that this employer forms about A being high type ($s = high$). E assigns a probability $\hat{p}_E(n)$ for each individual with negotiation skills level n to be the high type. The higher the negotiation skills, the higher probability assigned to the individual being the high type ($\hat{p}'_E(n) > 0$) is. We also assume $\hat{p}_E(n)$ is convex ($\hat{p}''_E(n) \geq 0$). This assumption intuitively means that the beliefs of the observer are more sensitive to a reduction in skills when individuals are fully skilled compared to when individuals are unskilled.

Following Bénabou and Tirole (2011), the observer does not observe any of the type or negotiation skills of individual A . The only information available to the observer is the investment decision i . Therefore, $P(i) \equiv \int_E^1 \hat{p}_E(n) f(n|i) d(m)$, where $P(i)$ gives the probability of A being the high type and $f(n|i)$ the pdf of the negotiation skills to be n given the investment decision i . Individual A receives $\lambda_E P(i)$ in terms of utility. λ_E can be thought of as how much the individual cares about her image to the observer. The observer can be thought of as a social observer who forms beliefs on the type of individual A , given the investment (care-seeking) decisions. The probability is the association between the care-seeking and the individual being the high type. This is rooted in the associations between negotiation skills and being the high type.

Period 3 A receives a unit of utility with probability $w(n) + b(n, i)$. $b(n, i)$ can be thought of as the marginal utility in period 3 of investment decision i in period 1 for an individual with initial negotiation skills n .

Assumptions

Here we assume that individuals are uniformly distributed on the unit interval of negotiation skills, $f(n) = 1$. However, the results hold under milder conditions, namely, if the

distribution of initial negotiation skills satisfies the following:

$$\forall n^* \in [0, 1] : (1 - F(n^*)) \mathbb{E}(n|n \leq n^*) + F(n^*) \mathbb{E}(n|n \geq n^*) \geq n^*$$

B.1 Solution

For any individual with initial negotiation skills n , the expected utility (under Von Neumann--Morgenstern utility function) at the time of investment decision is:

$$\mathbb{E}(U(i, n)) = w(n) + b(n, i) + \lambda_E P(i) - c(i)$$

so for any n :

$$\mathbb{E}(U(i, n)) = \begin{cases} w(n) + \lambda_E P(0) & i = 0 \\ w(n) + b_1(n) + \lambda_E P(1) - c_1 & i = 1 \end{cases}$$

so, the solution to this problem can be identified by $i^*(n)$. In other words, knowing the investment decisions for all the initial negotiation skills characterizes the equilibrium.

Pooling Equilibria

The pooling equilibria occur when the individual always decides to seek a certain type of investment independent of the initial negotiation skills; $i^*(n) = i^*$. So, for all initial negotiation skills levels, the investment decision is similar. For each pooling equilibrium, it is required that the expected utility of the investment decision is higher than the other investment options. The only possible pooling equilibrium is the pooling equilibrium where nobody invests:

$$b_i(n) \leq c_i \quad \forall n \in [0, 1], i \in \{0, 1\}$$

In a context with low benefits of investments (especially for those with worse negotiation skills $n = 0$) and high costs of investment, nobody is going to invest.¹ Here we assume that the investment decisions are uninformative about the type of individuals (because

¹This condition is sufficient for having a pooling equilibrium where nobody invests under the reasonable assumption of no (off-equilibrium) association of investment and having better than the average negotiation.

everybody has the same strategy independent of her type). In other words, the individuals would not benefit in terms of observer beliefs, if they change their investment decisions. So, we assume the off-equilibrium belief of the observer is similar to the equilibrium belief; $f(n|i) = f(n)$.

With uninformative investment decisions, there is no pooling (or separating) equilibrium which everybody invests. The reason is that, for skilled individuals, it is always strictly beneficial to not invest given no benefit of investment, and nonzero costs.²

Separating Equilibria

One can show that in all the separating equilibria, there are some individuals who do not invest in negotiation skills. This is due to the fact that for $n = 1$, the benefits of investing is zero while the costs are nonzero.³ Consequently, we consider two partially separating equilibria where the more skilled individuals do not invest, $i = 0$, and less skilled individuals invest $i = 1$. So, in case of a partially separating equilibrium, there exists a threshold n^* that individuals with $n < n^*$, all invest in their negotiation skills, and the ones above do not invest (there is no mixed equilibrium).

In this equilibrium characterized by n^* , investment in negotiation skills signals that $n < n^*$:

$$P(i) = \frac{1}{n^*} \int_0^{n^*} \hat{p}_E(n) dn = \mu_s(n < n^*)$$

and in case of no investment:

$$P(0) = \frac{1}{1 - n^*} \int_{n^*}^1 \hat{p}_E(n) dn = \mu_s(n > n^*)$$

Note that $P(0) > P(i)$. Given that individual with initial negotiation skills n^* is indifferent between investing and not investing:

$$\frac{b_i(n^*) - c_i}{\lambda_E} = P(0) - P(i) = \mu_s(n > n^*) - \mu_s(n < n^*) \quad (2)$$

²The pooling equilibria that everybody invests $i = 1$ is only possible under the unrealistic off-equilibrium beliefs that not investing is a signal for worse negotiation skills ($b_1(1) = 0$, $c_1 > 0$).

³Given the patterns explained, it is safe to assume that not investing cannot be associated with worse negotiation skills.

So, the net benefit of investment at the threshold $(b_i(n^*) - c_i)$ relative to the perceived backlash from the employer (λ_E) is equal to the image costs of investment. One can show:

$$\begin{aligned}\frac{\partial n^*}{\partial \lambda_E} &< 0 \\ \frac{\partial n^*}{\partial c_i} &< 0 \\ \frac{\partial n^*}{\partial b_i(n)} &\geq 0 \forall n \in [0, 1]\end{aligned}$$

The results indicate that if the importance of perceived backlash or the (monetary or perceived backlash) costs of investing, a smaller fraction of individuals (n^*) invest in their negotiation skills. In the presence of image concerns, the investment behavior in negotiation skills is always suboptimal in the sense that some individuals who would benefit from investing ($b_i(n) > c_i$) do not invest in negotiation skills because of the perceived backlash from the employer. Another observation is that if the benefits of negotiation courses increase more people invest in negotiation skills.

C Evidence from Google Search

Figure C.1 plots the Google trend data of the words "how to negotiate salary" in the U.S. Google Trend data summarize how many times a given sentence has been searched on Google since 2004, and then Google Trend provides a standardized measure of the intensity of this specific search (from 0 to 100). In the U.S. people search quite intensively for information on how to negotiate a job salary and this search has had an overall positive trend since the aftermath of the Great Recession.

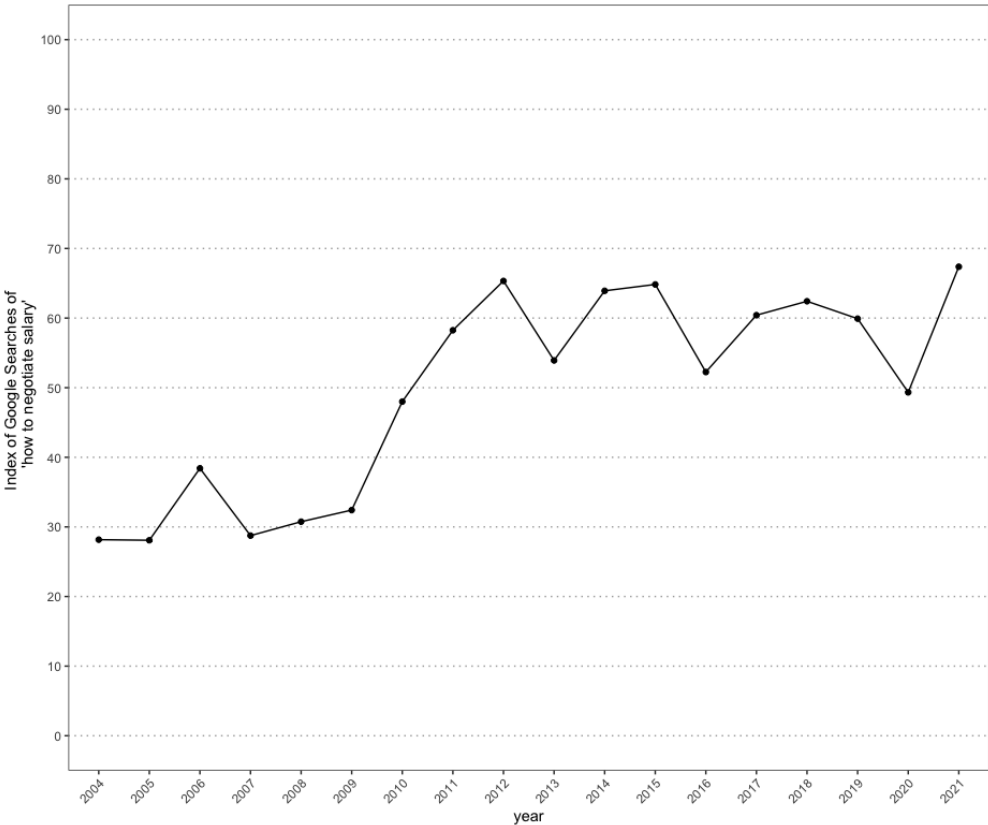


Figure C.1: Google Trend data in the US of 'how to negotiate salary' since 2004

D Additional Tables Study 1

D.1 Randomization checks

Table D1: Randomization check

Variables	Control	Treatment	p-value
Age	25.6	25.0	0.3959
White	0.68	0.65	0.10
Republican	0.19	0.16	0.051
Education			0.95
Some High School	0.004	0.007	
High School	0.102	0.114	
Some College	0.232	0.221	
2-year College	0.114	0.121	
4-year College	0.378	0.371	
Master's degree	0.133	0.130	
Doctoral degree	0.015	0.017	
JD, MD, MBA	0.018	0.018	
Income			0.57
Less than \$15.000	0.064	0.058	
\$15.000 - \$24.999	0.077	0.067	
\$25.000 - \$49.999	0.214	0.227	
\$50.000 - \$74.999	0.214	0.224	
\$75.000 - \$99.999	0.161	0.155	
\$100.000 - \$149.999	0.166	0.154	
\$150.000 - \$200.000	0.047	0.066	
More than \$200.000	0.054	0.048	
Employed	0.500	0.499	0.71
Region			0.25
Northeast	0.185	0.158	
Midwest	0.189	0.187	
South	0.42	0.42	
West	0.205	0.234	
Observations	993	999	

Note: The table shows the demographic characteristics for the sample broken down into Treatment and Control group. chi square-tests were used to assess whether demographic variables followed the same distribution between Treatment and Control. The third column reports p-values. Age is a continuous variable of the age of the participant. White gets value 1 if the participant reports to be of White ethnicity. Republican gets value 1 if the participant reports to identify with the Republican party. Education is broken down into the different levels of education. Income is broken down into different income brackets. Employed is a dummy that gets value 1 if the participant is either full-time or part-time employee. Region is broken down into four categorical variables for the U.S. macro regions. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

E Additional Tables Follow up

E.1 Attrition

Table E1: Follow-up:Attrition

	<i>Dependent variable:</i>	
	(1)	Complete (2)
Treatment	-0.028 (0.021)	-0.026 (0.021)
Observations	1,992	1,992
Controls	NO	YES
Control group mean	0.70	0.70
Adjusted R ²	0.0004	0.011

*Note:*The specification is an OLS model with robust standard errors. Column (1) looks at the effect of the treatment on whether the participants are more likely to join the follow-up survey. The variable Complete gets value 1 if the participants completes the follow-up survey as well. *Control* variables include: Age, White, Republican, Education, Income, Employment, Region, Prior Beliefs. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

E.2 Manipulation Check

Table E2: Follow-up: Manipulation Check

	<i>Dependent variable:</i>				
	ClosedGGSNS (1)	ImportanceTAX (2)	ImportanceINF (3)	Empowerment (4)	WTP Wages (5)
Treatment	0.046 (0.053)	0.083* (0.048)	0.065 (0.055)	0.001 (0.049)	0.070 (0.155)
Observations	1,385	1,385	1,385	1,385	1,385
Controls	YES	YES	YES	YES	YES
Control group mean	0	0	0	0	3.87
Adjusted R ²	-0.0002	0.196	0.006	0.041	0.019

Note: The specifications are all OLS model with robust standard errors. The importance about gender gap in salary negotiation, inflation and taxation are z-scored using the mean and the standard deviation from the control group. *Control* variables include: Age, White, Republican, Education, Income, Employment, Region, Prior Beliefs. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

F Additional Figures Study 1

F.1 Drivers of Prior Beliefs

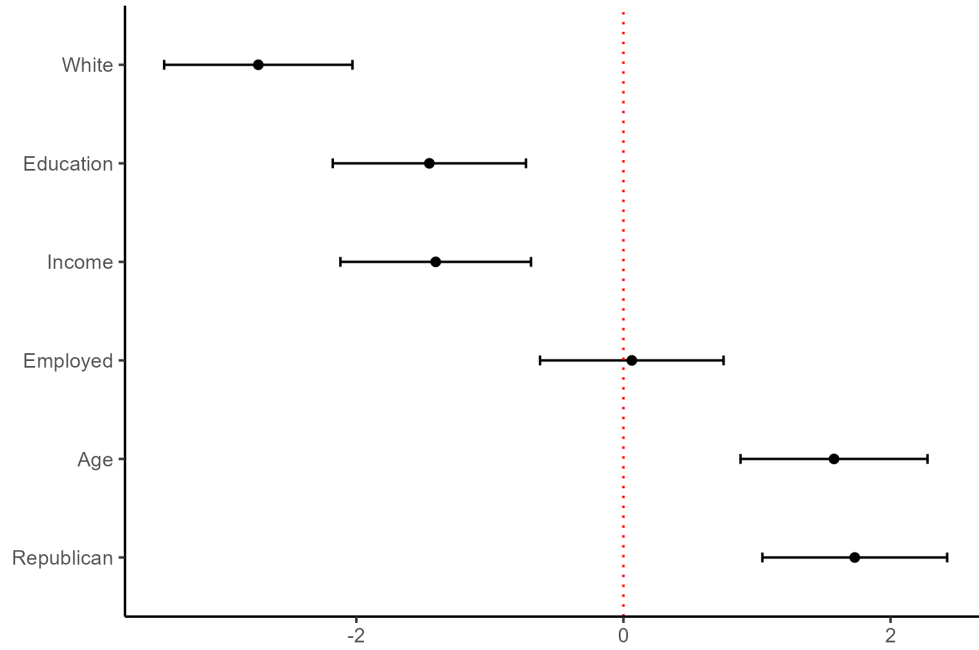


Figure F.1: Drivers of Prior Beliefs

F.2 Posterior Beliefs Distribution

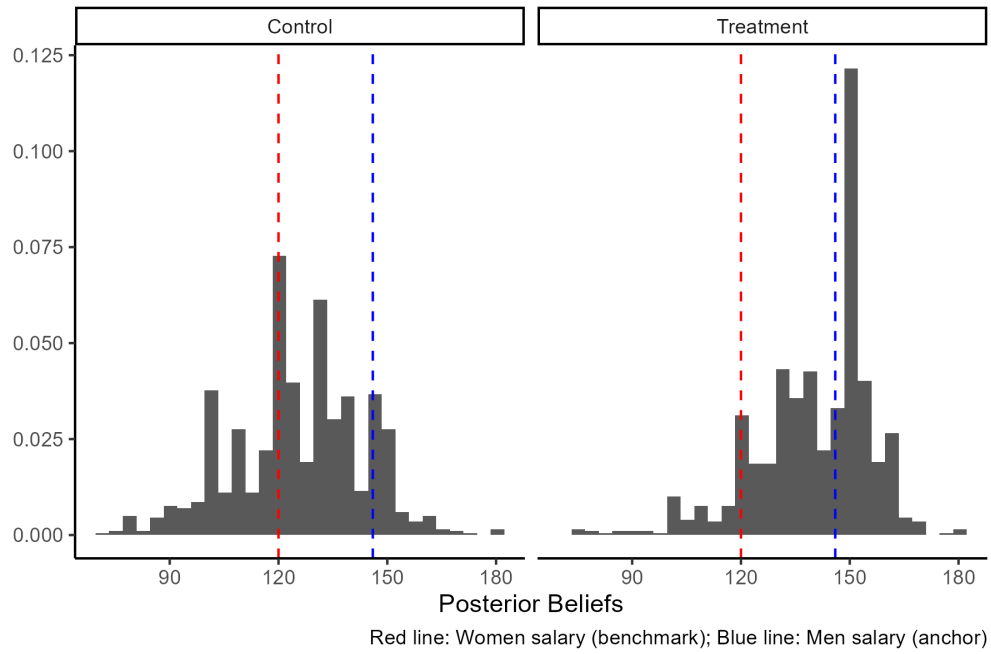


Figure F.2: Posterior Beliefs Distribution

F.3 Drivers of Demand for Negotiation Course

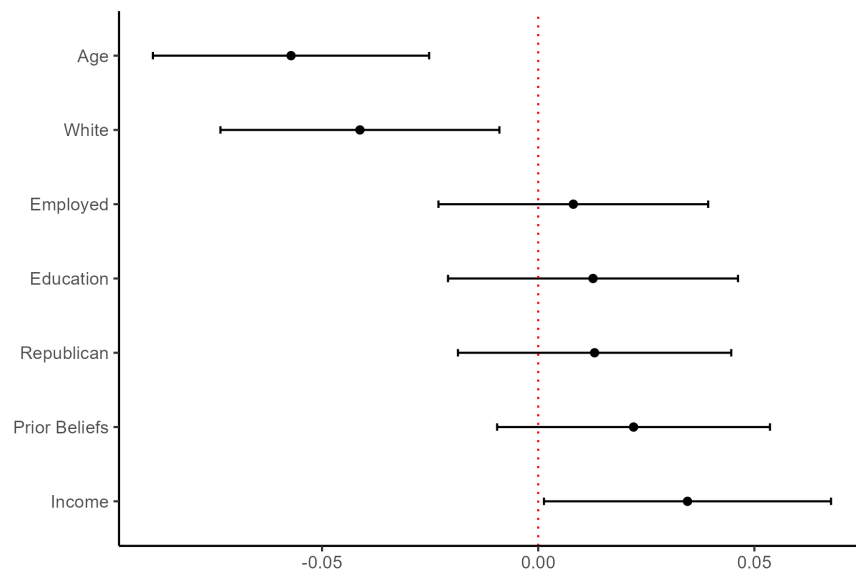


Figure F.3: Drivers of Demand for Negotiation Course

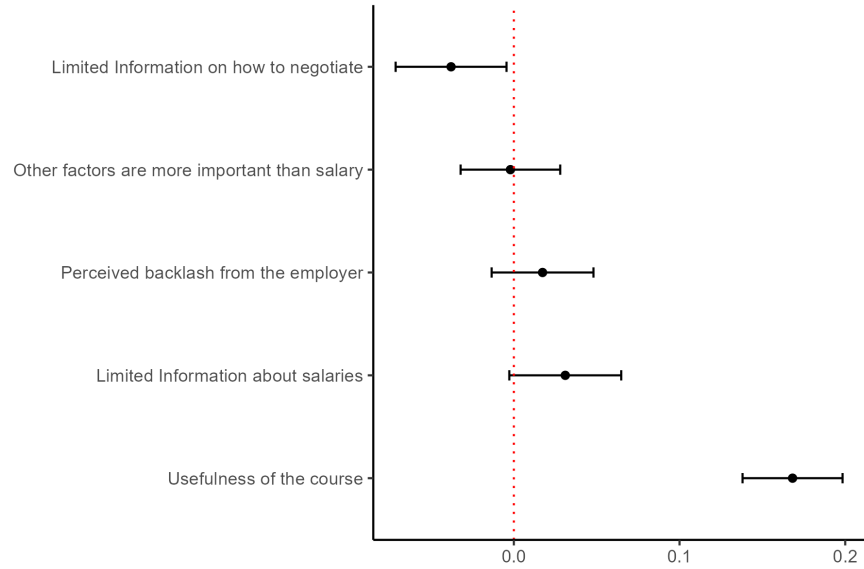


Figure F.4: Drivers of Demand for Negotiation Course

F.4 Heterogeneous Treatment Effect

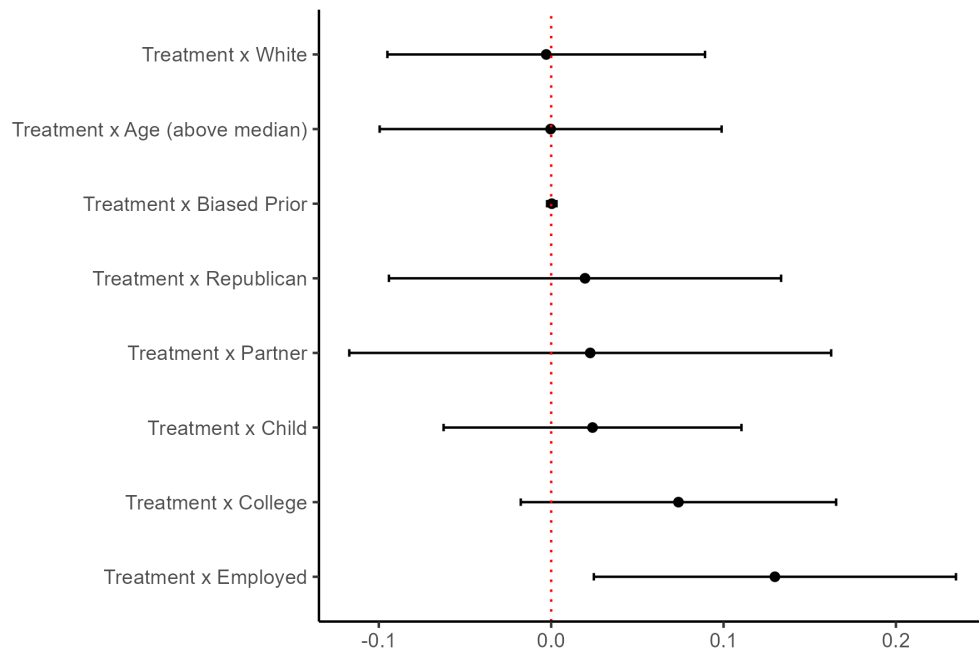


Figure F.5: Heterogeneous Treatment Effects

F.5 Mechanisms

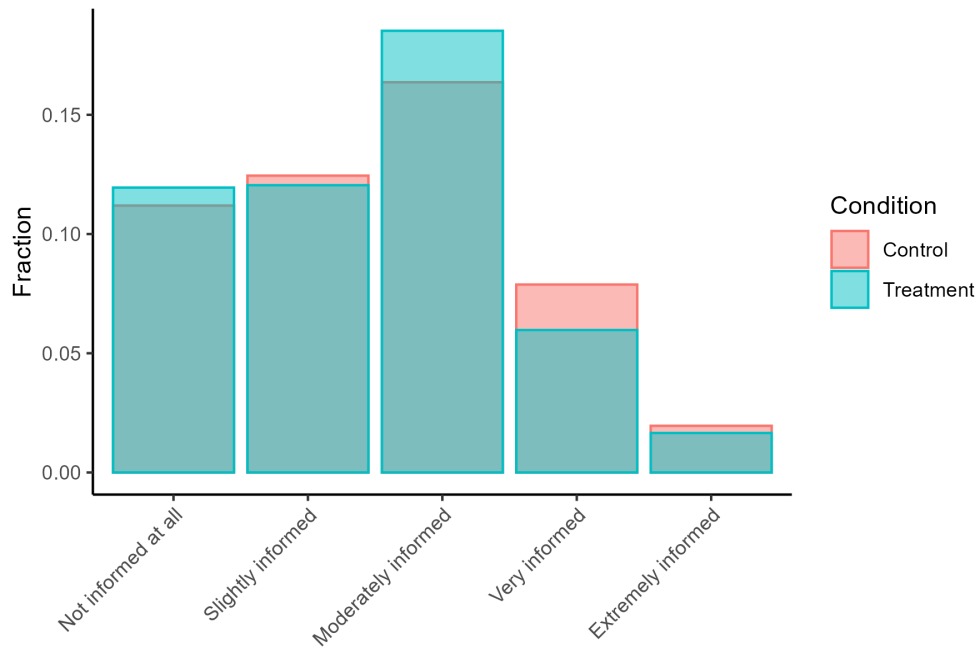


Figure F.6: Beliefs about Perceived Limited Information on Salary Negotiation

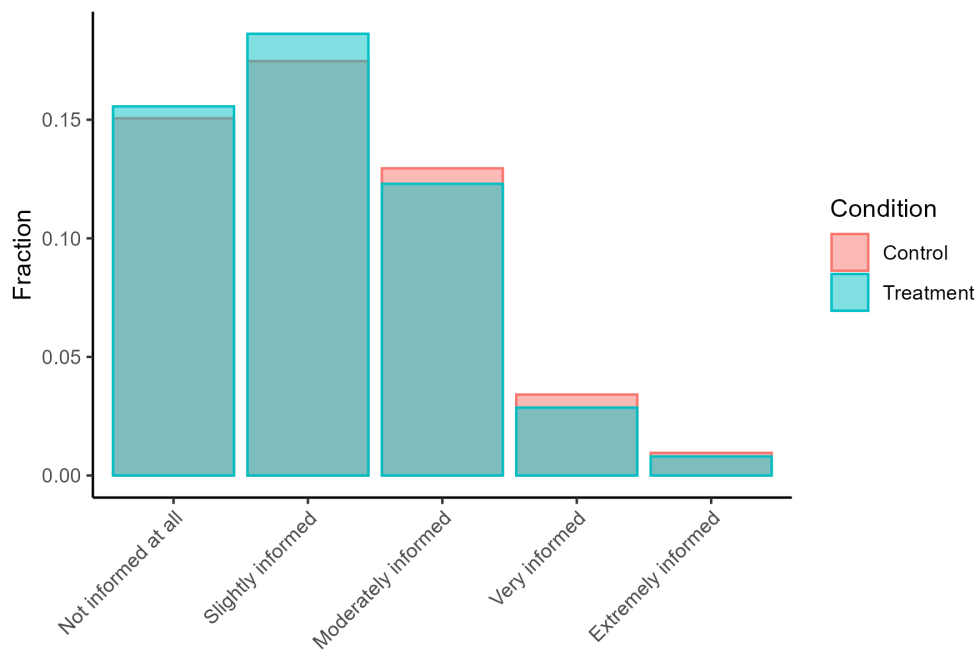


Figure F.7: Beliefs about Perceived Limited Information on Salary in Job Sectors

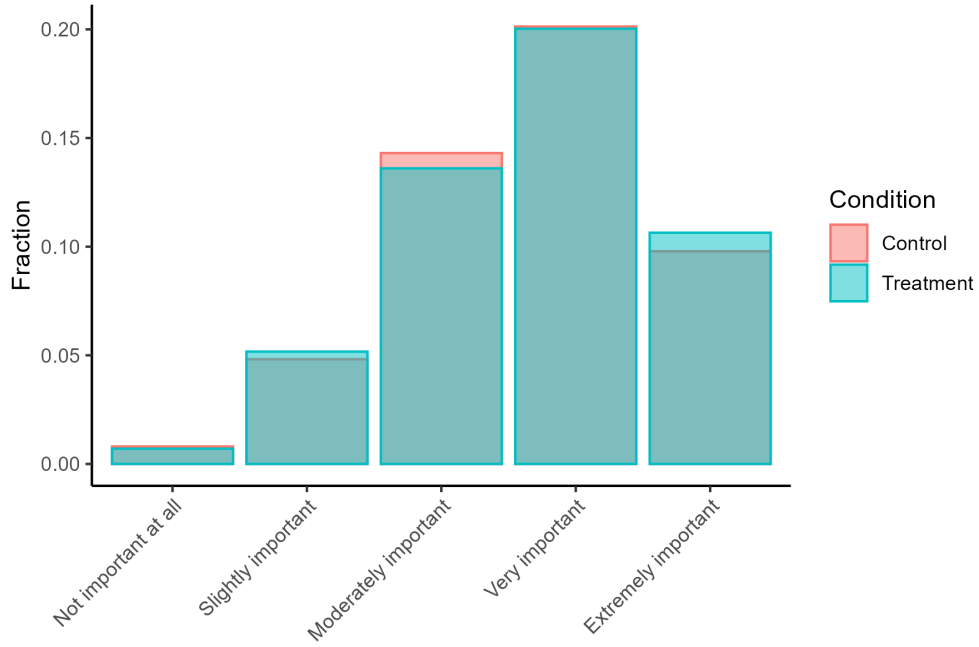


Figure F.8: Beliefs about Perceived Importance of Other Factors

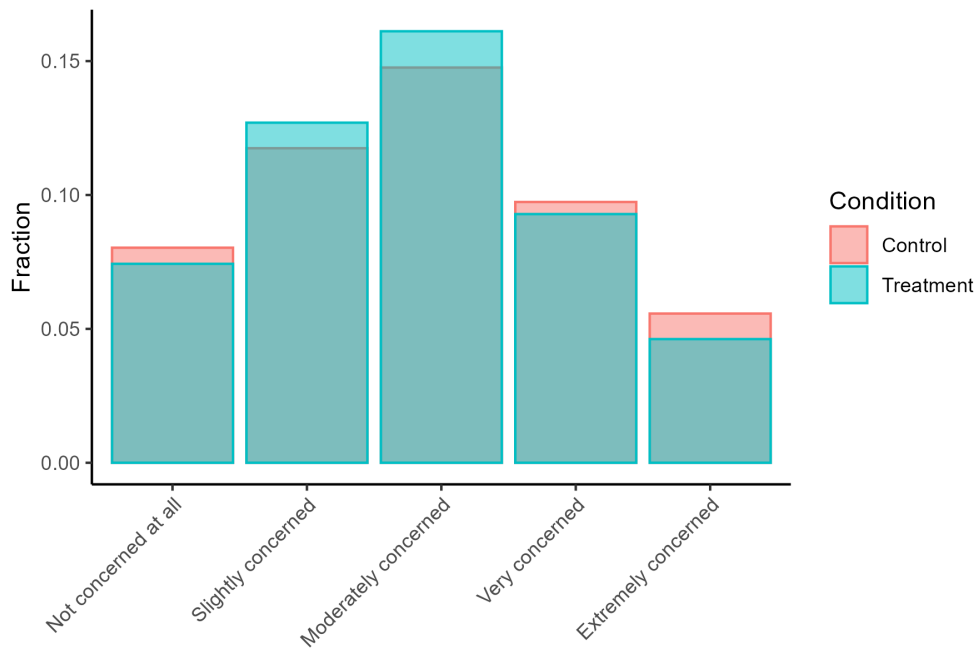


Figure F.9: Beliefs about Perceived Backlash from Employers

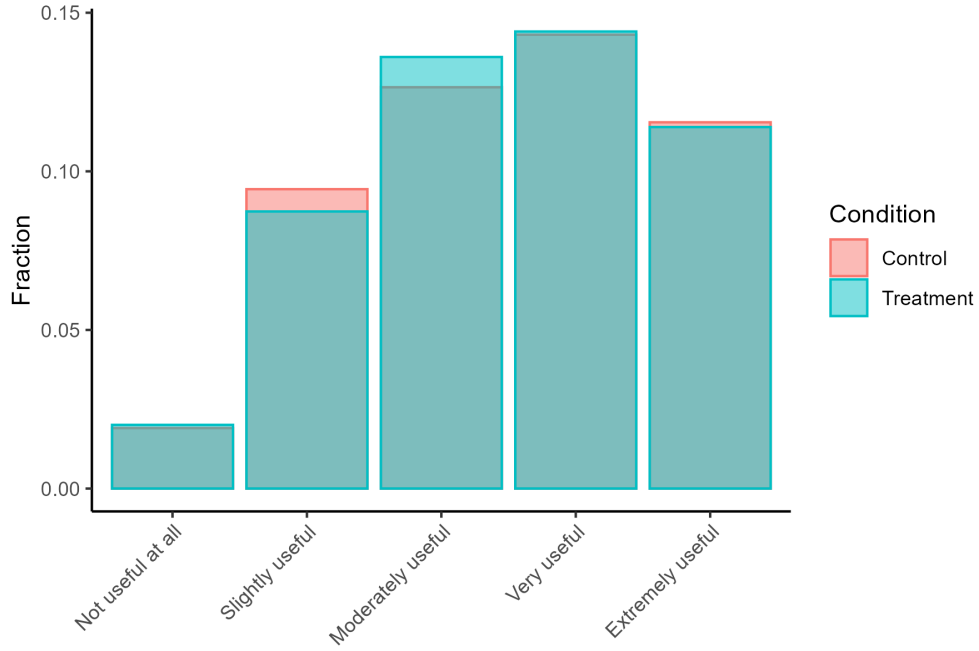
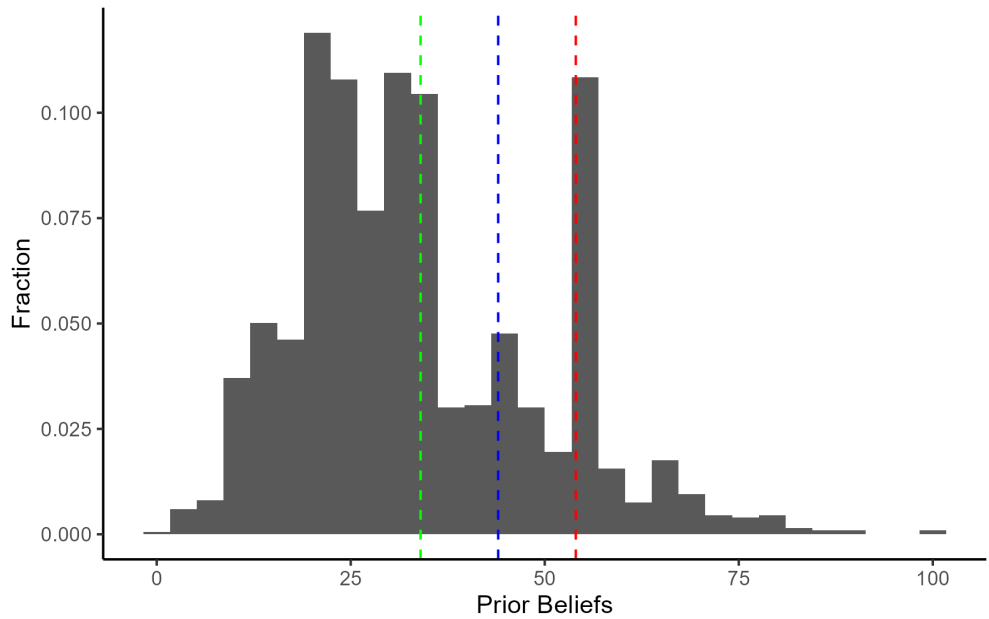


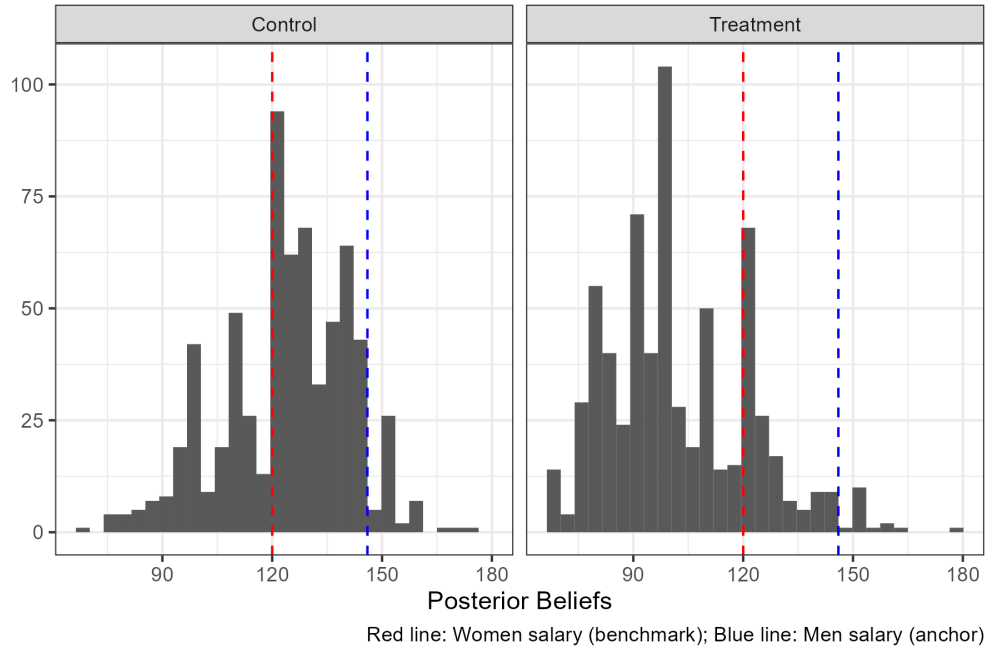
Figure F.10: Beliefs about Perceived Usefulness of Negotiation Course

F.6 Additional Study with different information

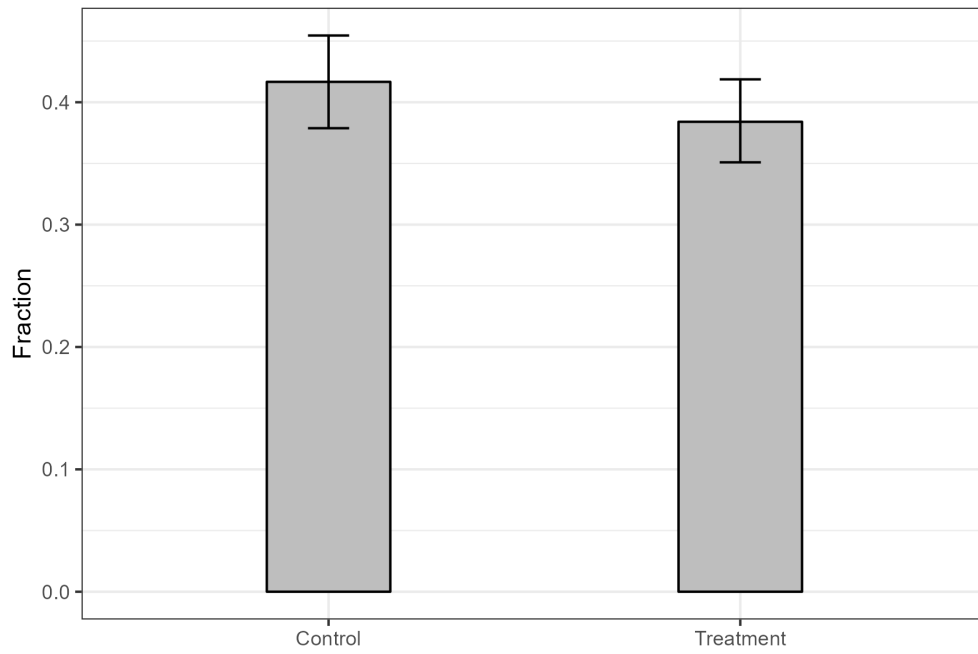


Green line: Perceived % Women negotiating; Red line: % Women negotiating; Blue line: % Men negotiating

Prior Beliefs Distribution



Posterior Beliefs Distribution by Treatment



Demand for Salary Negotiation Course

G Additional Tables Study 1 Additional, Study 2 and Study 3

Table G1: Beliefs Updating Study 1 Additional

	<i>Dependent variable:</i>		
	Posterior Beliefs (1)	Posterior Beliefs (2)	Posterior Beliefs (3)
Treatment	-22.08*** (0.952)	-22.19*** (0.983)	-15.98*** (2.31)
Confidence		3.97 (2.72)	
Biased Prior			0.500*** (0.048)
Treatment x Confidence		2.50 (3.92)	
Treatment x Biased Prior			-0.202*** (0.07)
Observations	1,324	1,324	1,324
Controls	YES	YES	YES
Control group mean (in thousands)	124	124	124
Adjusted R ²	0.34	0.343	0.344

Note: All specifications are OLS models. “Posterior beliefs” is a continuous variable that measures the asked salary of female MBA students. Column (1) looks at the effect of the treatment on “posterior beliefs”. Column (2) looks at how treatment interacts with respondents’ confidence in predicting “prior beliefs”. The variable “confidence” has a value of 1 for the participants who report being either “extremely confident” or “very confident”. Column (3) looks at how participants with different prior Beliefs react to the treatment. The variable “biased prior” is the difference between the respondents’ prior beliefs and the true value which was 7. Robust standard errors are reported in parentheses. *Control* variables include age, White, Republican, education, income, employment, region, and prior beliefs (only in (1) and (2)). Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

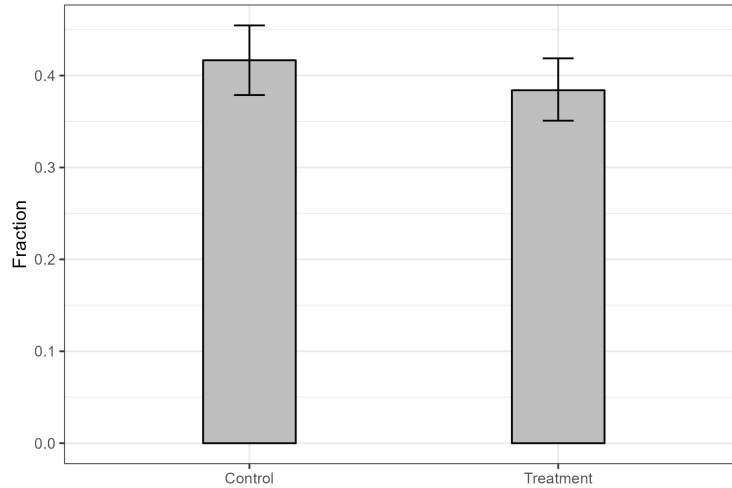


Figure G.1: Treatment Effect on Demand for Negotiation Course

Table G2: Mechanisms Study 1 Additional

<i>Dependent variable:</i>						
	Limited Info Negotiation	Limited Wage	Info	Other Factors	Perceived Backlash	Course Usefulness
	(1)	(2)	(3)	(4)	(5)	
Treatment	0.0006 (0.057)	-0.004 (0.052)	0.037 (0.056)	0.102* (0.054)	0.026 (0.055)	
Observations	1,324	1,324	1,324	1,324	1,324	
Controls	YES	YES	YES	YES	YES	
Control group mean	0	0	0	0	0	
Adjusted R ²	0.05	0.09	0.015	0.073	0.002	

Note: The specifications are OLS models with robust standard errors. All the dependent variables have been z-scored using the answers of the respondents from the control group. They are elicited using Likert scale ranging from 1 to 5. "Limited info negotiation" asks whether the respondents believe they have limited information about negotiation in general. "Limited info wage" asks whether the respondents believe they have limited information about the wages in their job sectors. "Other factors" asks whether the respondents believe that other factors are also relevant while negotiating. "Perceived backlash" is the perceived backlash that respondents believe they will receive from the employer while negotiating. "Course usefulness" asks whether the respondents perceive the negotiation course to be useful. *Control* variables include age, White, Republican, education, income, employment, region, and prior beliefs. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table G3: Follow-up:Manipulation Check

		<i>Dependent variable:</i>		
		Importance GGSN	Importance TAX	Importance INF
		(1)	(2)	(3)
Treatment		0.097* (0.059)	0.053 (0.057)	0.006 (0.065)
Observations		1,012	1,012	1,012
Controls		YES	YES	YES
Control group	mean	0	0	0
Adjusted R ²		0.144	0.216	0.027

Note: The specifications are all OLS model with robust standard errors. The importance about gender gap in salary negotiation, inflation and taxation are z-scored using the mean and the standard deviation from the control group. *Control* variables include: Age, White, Republican, Education, Income, Employment, Region, Prior Beliefs. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table G4: Randomization check

Variables	Control	Treatment	p-value
Age	37.5	38.3	0.39
White	0.75	0.733	0.49
Republican	0.135	0.146	0.45
Education			0.37
Some High School	0.01	0.003	
High School	0.105	0.125	
Some College	0.206	0.194	
2-year College	0.12	0.138	
4-year College	0.386	0.365	
Master's degree	0.148	0.138	
Doctoral degree	0.007	0.015	
JD, MD, MBA	0.017	0.02	
Income			0.91
Less than \$15.000	0.097	0.09	
\$15.000 - \$24.999	0.084	0.084	
\$25.000 - \$49.999	0.268	0.246	
\$50.000 - \$74.999	0.19	0.21	
\$75.000 - \$99.999	0.151	0.159	
\$100.000 - \$149.999	0.136	0.128	
\$150.000 - \$200.000	0.05	0.05	
More than \$200.000	0.023	0.033	
Employed	0.497	0.502	0.84
Region			0.53
Northeast	0.175	0.197	
Midwest	0.205	0.202	
South	0.43	0.395	
West	0.19	0.204	
Observations	660	664	

Note: The table shows the demographic characteristics for the sample broken down into Treatment and Control group. chi square-tests were used to assess whether demographic variables followed the same distribution between Treatment and Control. The third column reports p-values. Age is a continuous variable of the age of the participant. White gets value 1 if the participant reports to be of White ethnicity. Republican gets value 1 if the participant reports to identify with the Republican party. Education is broken down into the different levels of education. Income is broken down into different income brackets. Employed is a dummy that gets value 1 if the participant is either full-time or part-time employee. Region is broken down into four categorical variables for the U.S. macro regions. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table G5: Samples Study 2 and Study 3 - Women

Variables	Study 2	Study 3
Age		
18 - 24	0.284	0.150
25 - 34	0.324	0.254
35 - 44	0.160	0.214
45 - 54	0.124	0.180
55 - 64	0.068	0.148
65 or older	0.040	0.054
White	0.708	0.764
Republican	0.104	0.164
Education		
Some High School	0.012	0.012
High School	0.122	0.110
Some College	0.258	0.240
2-year College	0.108	0.116
4-year College	0.378	0.368
Master's degree	0.098	0.132
Doctoral degree	0.012	0.010
JD, MD, MBA	0.008	0.012
Income		
Less than \$15.000	0.074	0.068
\$15.000 - \$24.999	0.126	0.094
\$25.000 - \$49.999	0.280	0.248
\$50.000 - \$74.999	0.172	0.228
\$75.000 - \$99.999	0.144	0.162
\$100.000 - \$149.999	0.104	0.130
\$150.000 - \$200.000	0.050	0.04
More than \$200.000	0.050	0.03
Employed	0.6	0.52
Region		
Northeast	0.166	0.186
Midwest	0.188	0.210
South	0.376	0.420
West	0.270	0.184
Observations	500	500

Note: The table shows the demographic characteristics for the samples of Study 2 and Study 3. Age is a categorical variable of the age of the participant. White gets value 1 if the participant reports to be of White ethnicity. Republican gets value 1 if the participant reports to identify with the Republican party. Education is broken down into the different levels of education. Income is broken down into different income brackets. Employed is a dummy that gets value 1 if the participant is either full-time or part-time employee. Region is broken down into four categorical variables for the U.S. macro regions.

Table G6: Samples Study 2 and Study 3 - Men

Variables	Study 2	Study 3
Age		
18 - 24	0.110	0.07
25 - 34	0.324	0.321
35 - 44	0.292	0.269
45 - 54	0.116	0.193
55 - 64	0.106	0.071
65 or older	0.052	0.073
White	0.676	0.748
Republican	0.188	0.201
Education		
Some High School	0.004	0.013
High School	0.132	0.143
Some College	0.200	0.181
2-year College	0.096	0.107
4-year College	0.406	0.413
Master's degree	0.124	0.105
Doctoral degree	0.018	0.010
JD, MD, MBA	0.020	0.023
Income		
Less than \$15,000	0.060	0.047
\$15,000 - \$24,999	0.090	0.081
\$25,000 - \$49,999	0.236	0.233
\$50,000 - \$74,999	0.208	0.263
\$75,000 - \$99,999	0.150	0.157
\$100,000 - \$149,999	0.162	0.121
\$150,000 - \$200,000	0.054	0.043
More than \$200,000	0.040	0.050
Employed	0.656	0.624
Region		
Northeast	0.164	0.215
Midwest	0.182	0.223
South	0.404	0.347
West	0.250	0.213
Observations	500	500

Note: The table shows the demographic characteristics for the samples of Study 2 and Study 3. Age is a categorical variable of the age of the participant. White gets value 1 if the participant reports to be of White ethnicity. Republican gets value 1 if the participant reports to identify with the Republican party. Education is broken down into the different levels of education. Income is broken down into different income brackets. Employed is a dummy that gets value 1 if the participant is either full-time or part-time employee. Region is broken down into four categorical variables for the U.S. macro regions.

Table G7: Correlations between Second Order Beliefs and Backlash

	<i>Dependent variable:</i>
	Second Order Beliefs Female (1)
Backlash against Women	3.927*** (1.399)
Backlash against Men	-5.860*** (1.790)
Observations	500
Controls	YES
Mean	37
Adjusted R ²	0.035

Note: The specifications are all OLS models with robust standard errors. The dependent variable is the second order beliefs about the acceptability of women negotiating. The variables Backlash against Women and Backlash against Men indicate how much women think that women and men negotiating will not face consequences. *Control* variables include: Age, White, Republican, Education, Income, Employment, Region. Significance code: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

H Additional Figures Study 2 and Study 3

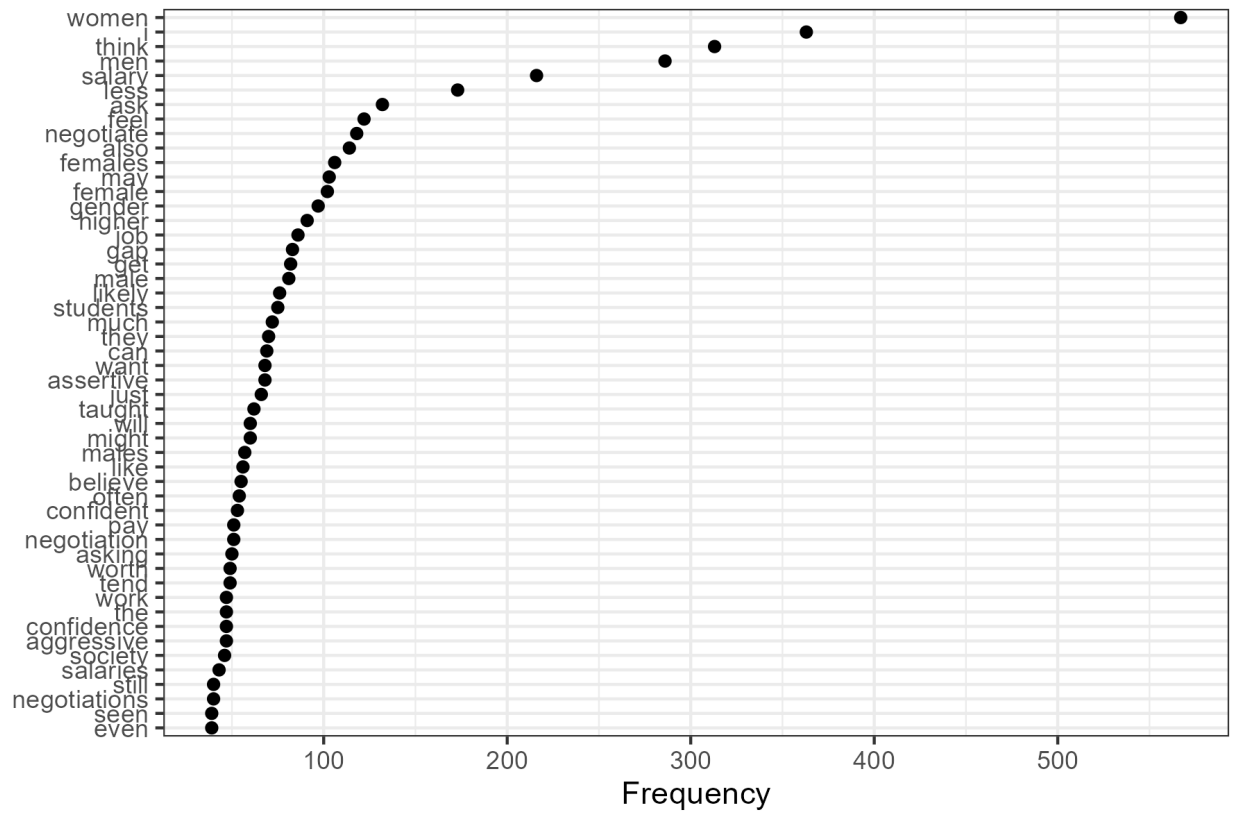


Figure H.1: Words' Frequency

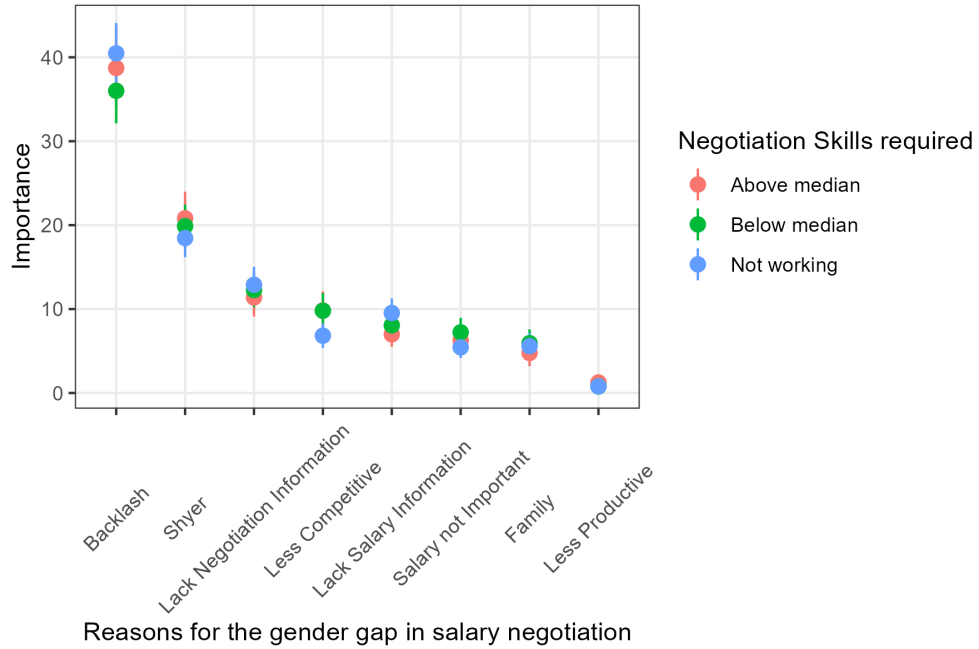


Figure H.2: Reasons for the Gender Gap in Salary Negotiation by Negotiation Skills Required

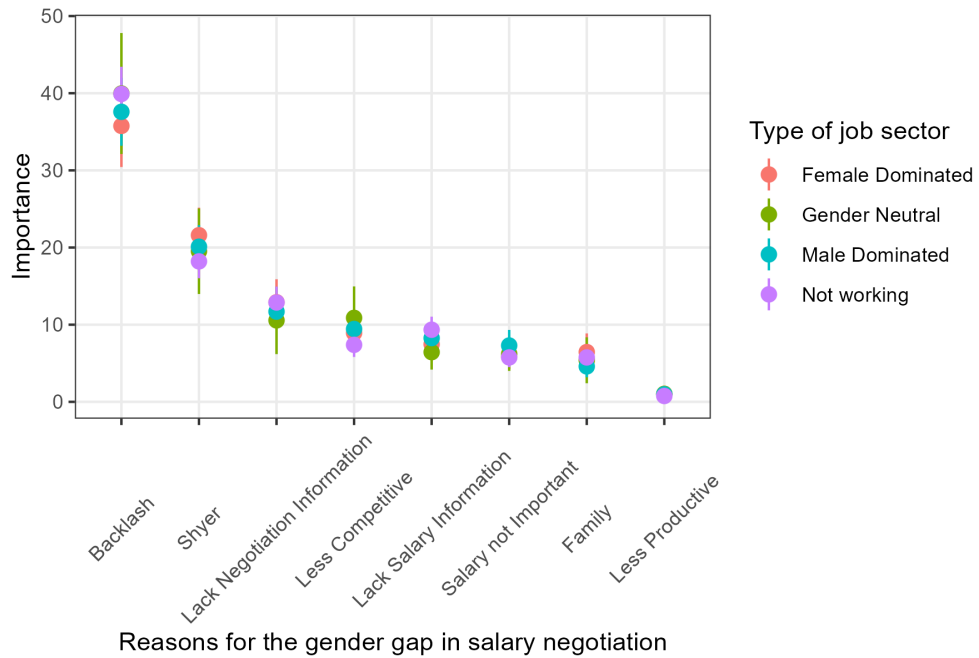


Figure H.3: Reasons for the Gender Gap in Salary Negotiation by Job Sector

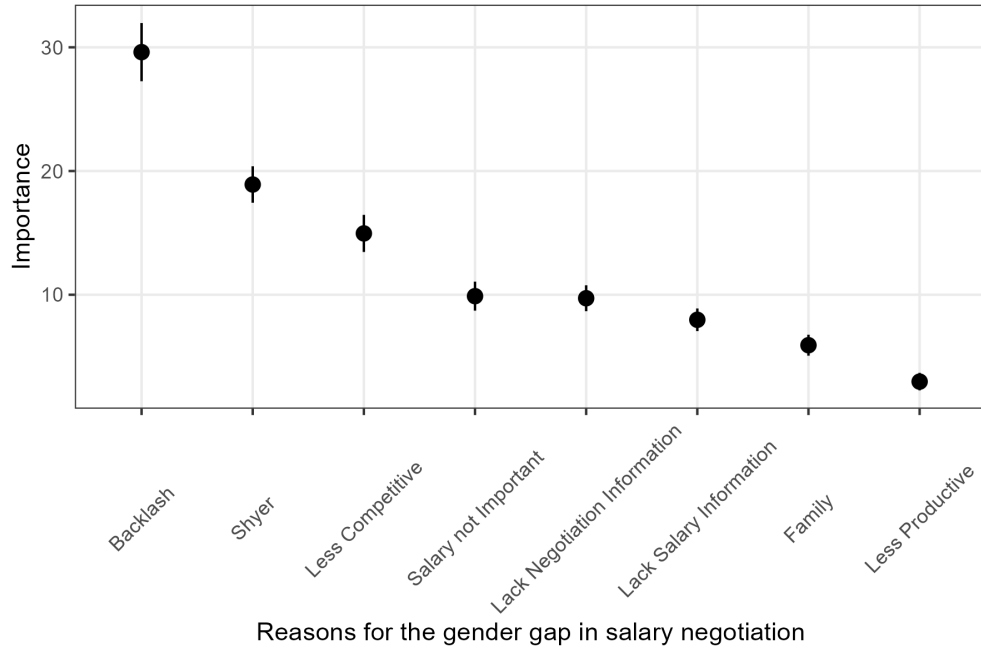


Figure H.4: Reasons for the Gender Gap in Salary Negotiation by Men

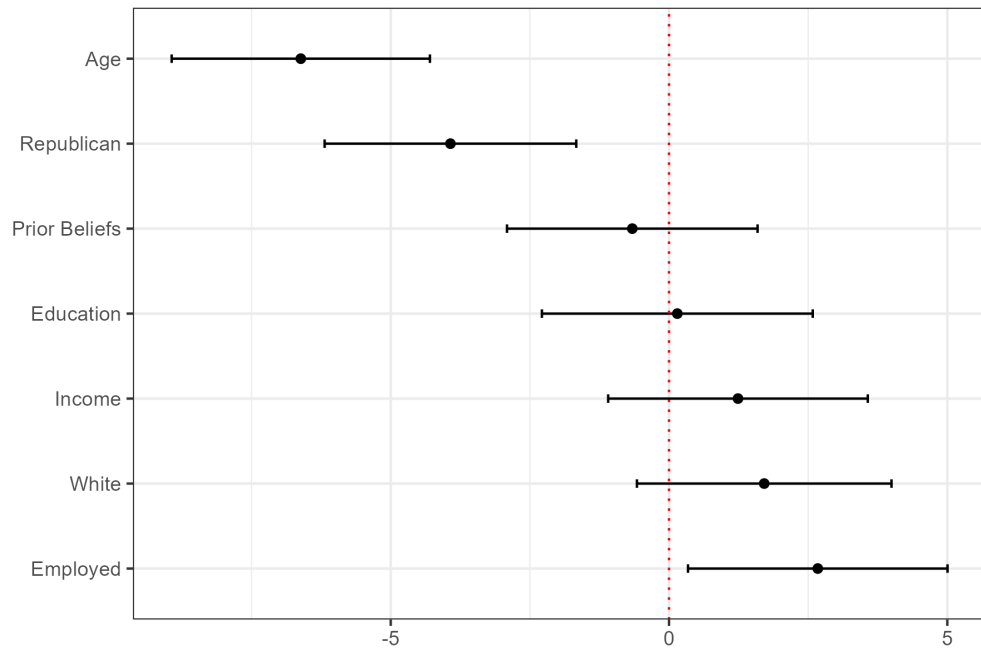


Figure H.5: Importance of Backlash

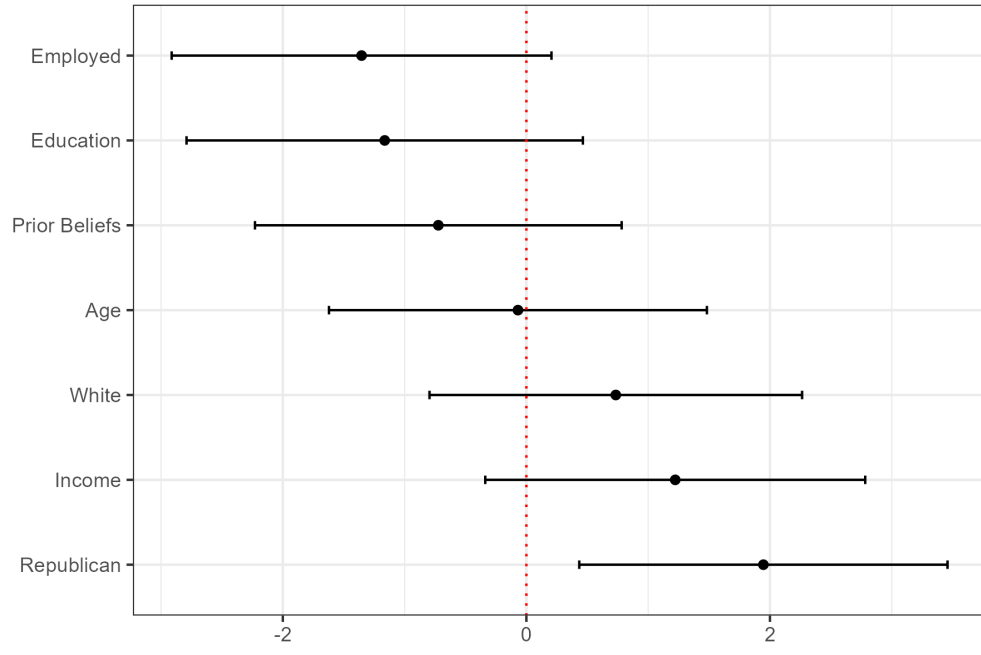


Figure H.6: Importance of Women Being Shy

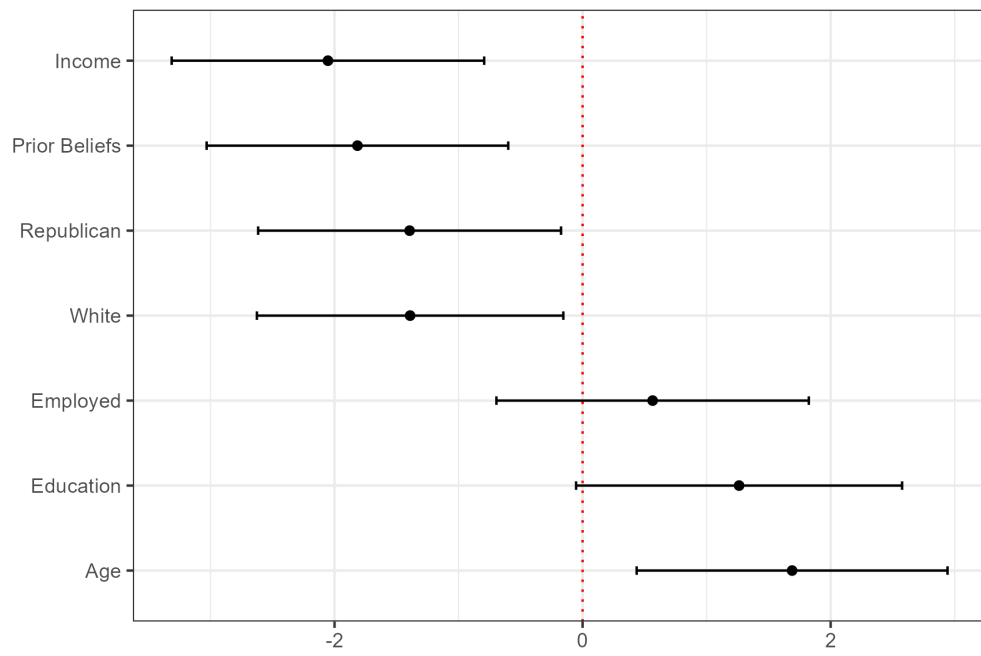


Figure H.7: Importance of Lack of Negotiation Information

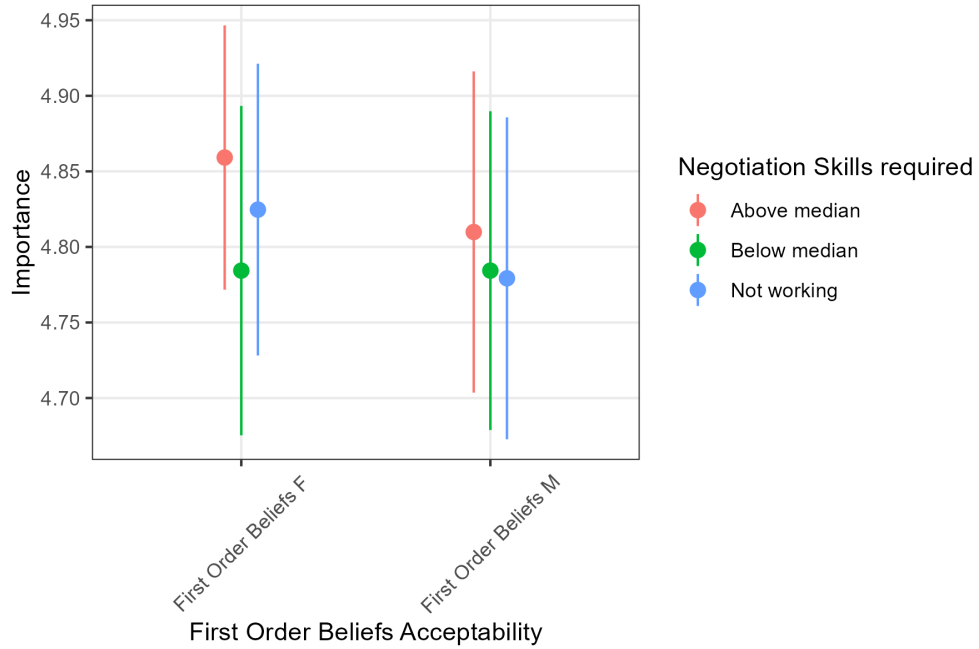


Figure H.8: FOB about Negotiation Acceptability by Negotiation Skills Required

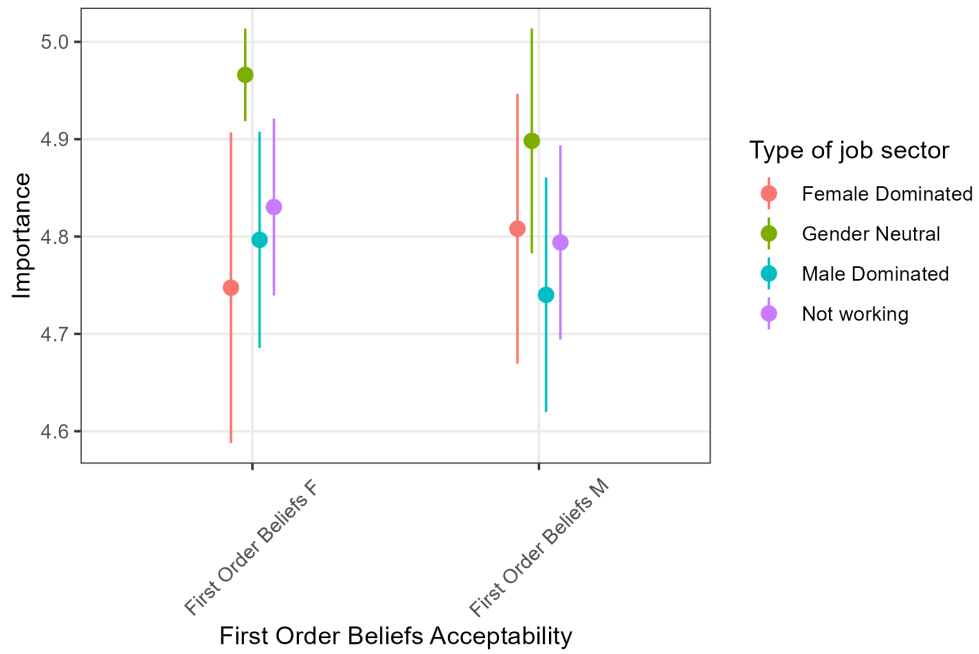


Figure H.9: FOB about Negotiation Acceptability by Job Sector

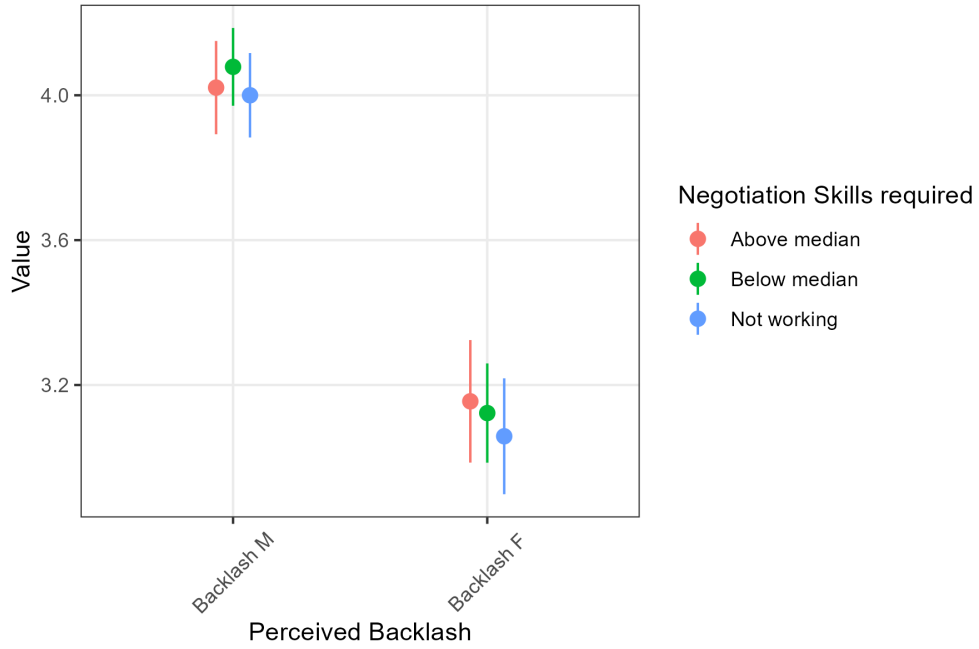


Figure H.10: Perceived Backlash by Negotiation Skills Required

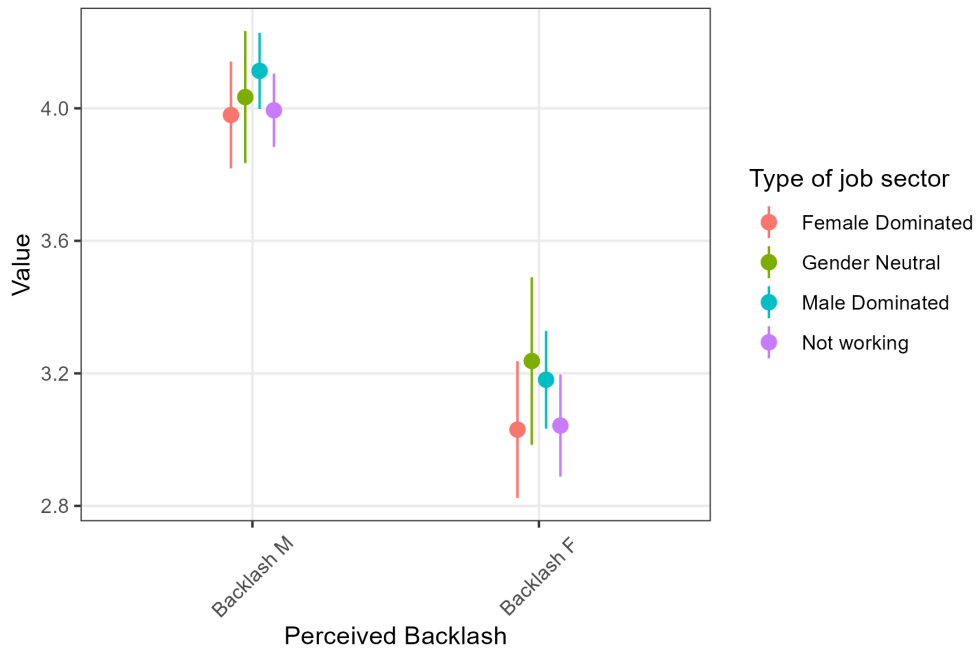


Figure H.11: Perceived Backlash by Job Sector

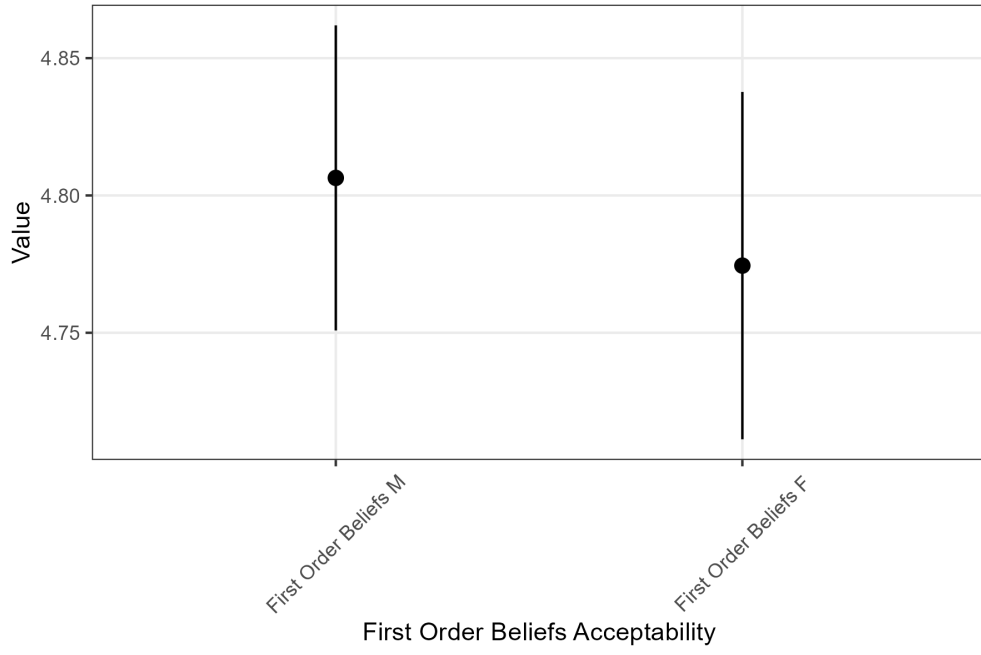


Figure H.12: FOB about Negotiation Acceptability by Men

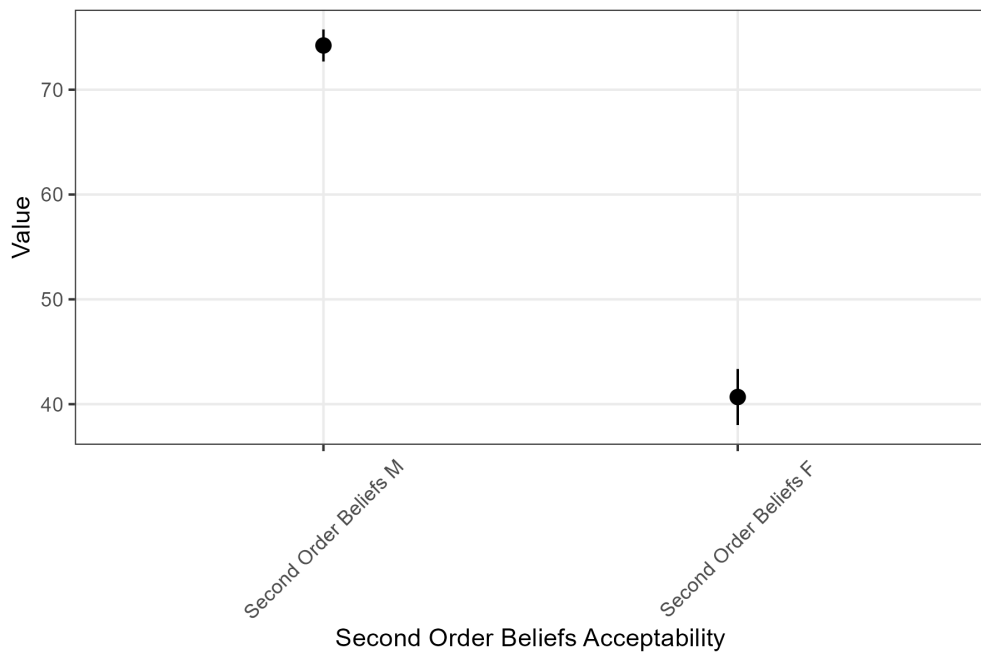


Figure H.13: SOB about Negotiation Acceptability by Men

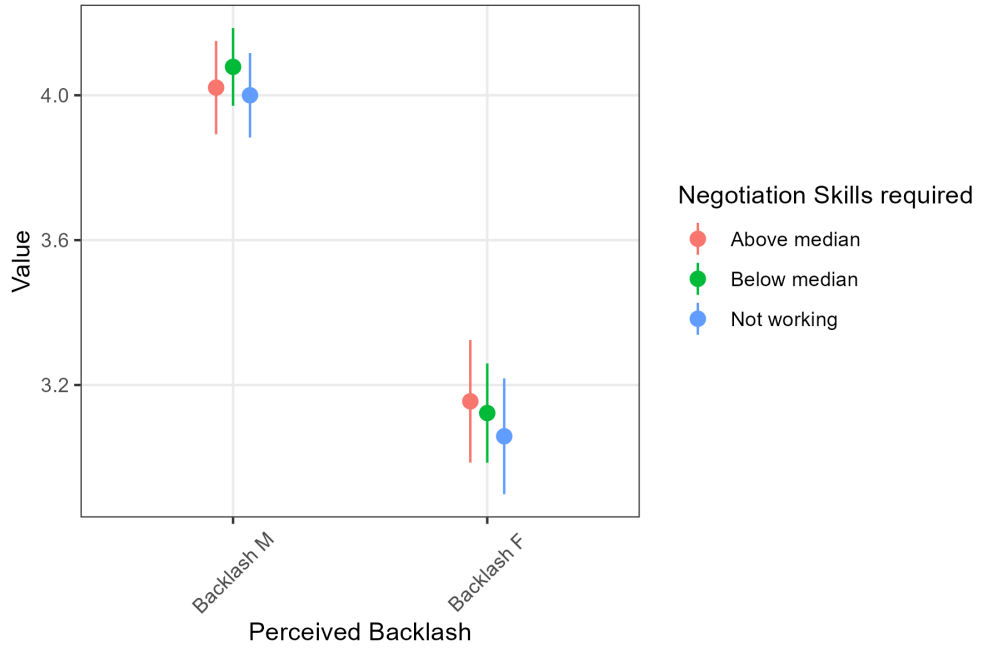


Figure H.14: Perceived Backlash by Men

I Instructions

I.1 Study 1

Thank you for participating in this survey. Completing it will take about 7 minutes.

This study is part of a scientific research project. More detailed instructions will be provided. This study has received ethical approval, therefore the information you will find in the survey is truthful.

By clicking NEXT you explicitly give us your consent that:

- We can collect your anonymous, non-sensitive personal data (like age, income, etc).
- We can use this personal data for scientific purposes.
- We can store your personal data on our safe-guarded university servers for up to 10 years.
- We can make anonymized data available to other researchers online.
- You are an American citizen.
- You are at least 18 years old.

We promise to protect your data according to the new General Data Protection Regulation (GDPR) laws.

In case you have doubts on the experiment, do not hesitate to contact us at **capozza@ese.eur.nl**

Introduction Study 1

On top of your fixed earnings, you will earn a bonus payment which will depend on your decisions in the study. The bonus payment ranges from 0.00 \$ to 2.00 \$.

Today, we ask you to complete some tasks.

Important! At the end of the survey, some participants will receive a bonus payment. The bonus payment depends on the answers you will provide in specific questions. The precise rules will be specified in later screens.

Every participant could be selected to get the bonus. It is therefore in your best interest to answer carefully.

Introduction Study 1

In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies. To show that you read our questions carefully, please choose both "Extremely interested" and "Not at all interested" below:

Extremely interested

Very interested

A little bit interested

Almost not interested

Not at all interested

Attention Check Study 1

What is your age?

What is your household's gross income in 2020 in US dollars?

Less than \$15,000

\$15,000 - \$24,999

\$25,000 - \$49,999

\$50,000 - \$74,999

\$75,000 - \$99,999

\$100,000 - \$149,999

\$150,000 - \$200,000

Demographics Part 1

Which of the following best describes your ethnic identity?

African American/Black

Asian American/Asian

Caucasian/White

Native American

Hawaiian/Pacific Islander

Other

Prefer not to say

Demographics Part 2

What is your employment status?

Employed full time

Employed part time

Unemployed looking for work

Unemployed not looking for work

Retired

Student

Disabled

Demographics Part 3

In which region do you currently reside?

Northeast (CT, ME, MA, NH, RI, VT, NK, NY, PA)

Midwest (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)

South (DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX)

West (AZ, CO, ID, NM, MT, UT, NV, WY, AK, CA, HI, OR, WA)

I am currently not living in the U.S.

Demographics Part 4

Do you have children?

Yes

No

What is your current civil status?

Single

Married

Divorced

Widow

Demographics Part 5

In politics, as of today, how do you consider yourself?

Democrat

Republican

Independent

Demographics Part 6

Erasmus
University
Rotterdam


You are going to start the survey. You are going to perform different tasks.

You will be asked to state your opinions on some real-life topics.

When your are ready, click on the NEXT button to start with the survey.

NEXT

Intermezzo

Please, read carefully the following text.

A researcher from Carnegie Mellon University conducted a research to study whether there are **gender differences in salary negotiation**. The research did so by studying the behaviour of MBA students when they were negotiating the salary for their jobs.

The researcher ensured that the MBA students were fairly similar with each others (e.g. same grades, experience and background characteristics). The researcher wanted to compare how many male MBA students and how female MBA students did negotiate their salary.

When you are ready, click the NEXT button to continue.

NEXT

Instructions

In this task you have the opportunity to win a bonus of \$1 if you answer correctly to the following question.

According to the study mentioned before, **57% male** MBA students have negotiated the salary of their job. In your opinion, what is the percentage of **female** MBA students who **have negotiated** the salary of their job?

Please move the slider to provide your answer. Note that the initial value of the slider is **random** and it is not the actual answer.

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
% of female MBA students negotiating their salary



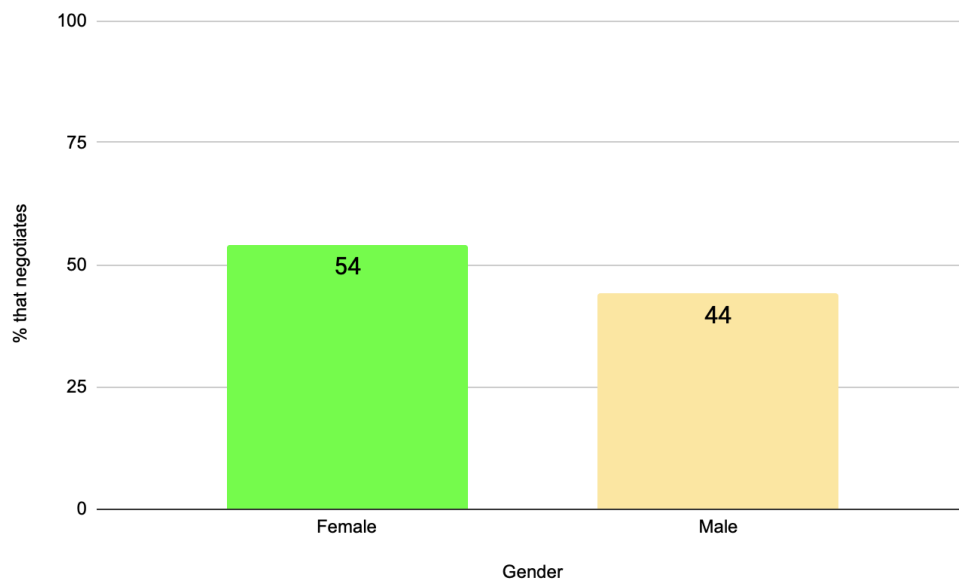
NEXT

Prior Beliefs

How confident are you about the answer of previous question?

- Not at all confident
- Somewhat confident
- Fairly confident
- A lot confident
- Very confident

Confidence



Information Treatment

I offer the opportunity to access to an online module to learn **how to improve your negotiation skills**. You can choose whether you want to have access to it. I will provide a link at the end of the survey.

Do you want to access to an online module on how to improve your negotiation skills?

Yes

No

Information Demand

Researchers from University of Chicago, Harvard University and UCLA have studied the gender differences in the desired annual salary of MBA students in the first year after the graduation. The compensation includes base pay, performance pay, and equity, but excluding signing bonus.

The have found that **single male students** ask \$146.000 as desired annual salary.

In your opinion, what is the average **desired annual salary** that single female students ask? For example, the value 146 on the slider means \$146.000.

Move the slider to the value you think it is correct. Note that the initial value of the slider is **random**.

70 80 90 100 110 120 130 140 150 160 170 180
\$ in thousands

Desired annual salary of single female MBA student



NEXT

Posterior Beliefs

While negotiating with your employer, how important would you consider to negotiate over **non-monetary factors** (e.g. flexible working hours, maternity leave) relatively to negotiate over your salary?.

Extremely important

Very important

Moderately important

Slightly important

Not at all important

Mechanisms Part 1

Are you informed on **how to successfully negotiate** your salary?

Extremely informed

Very informed

Moderately informed

Slightly informed

Not informed at all

Mechanisms Part 2

How **useful** do you think that joining a salary negotiation online course will be to improve your negotiation skills?

Very useful

Somewhat useful

Moderately useful

Slightly useful

Not useful at all

Mechanisms Part 3

Are you informed about the **mean wage in your job sector**?

Extremely informed

Very informed

Moderately informed

Slightly informed

Not informed at all

Mechanisms Part 4

Are you concerned to face **backlash** from your employer if you are negotiating over your salary?

Extremely concerned

Very concerned

Moderately concerned

Slightly concerned

Not at all concerned

Mechanisms Part 5

In one of the questions, you have reported to be interested in some suggestions on how to improve your negotiation skills. The information is provided by the workshops of AAUW.

Here it is the link to open access information: [Tips to improve your negotiation skills](#)

If you click on the link, a new window with the article will appear. After that, you can click NEXT, but you will still be able to read the information when you like.

Screen with Salary Negotiation tips

I.2 Obfuscated Follow-up

Thank for your participation! Completing the survey will take just few minutes.

This study is part of a scientific research project. More detailed instructions will be provided. This study has received ethical approval, therefore the information you will find in the survey is truthful.

By clicking NEXT you explicitly give us your consent that:

- **We can collect your anonymous, non-sensitive personal data (like age, income, etc).**
- **We can use this personal data for scientific purposes.**
- **We can store your personal data on our safe-guarded university servers for up to 10 years.**
- **We can make anonymized data available to other researchers online.**
- **You are an American citizen.**
- **You are at least 18 years old.**

We promise to protect your data according to the new General Data Protection Regulation (GDPR) laws.

Introduction Follow-up

***In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies.**

To show that you read our questions carefully, please write 333 when we ask what is your favourite number.

What is your favourite number?

***Write your Prolific ID below:**

Attention Check Follow-up

You are going to start the survey. You are going to perform different tasks.

You will be asked to state your opinions on some real-life topics.

When you are ready, click on the NEXT button to start with the survey.

Next page >

Intermezzo Follow-up

***How important is that the government redistributes wealth by heavy tax on the rich?**

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important

Next page >

Obfuscated questions Part 1

How much do you think the gender gap in salary negotiation has been closed in the recent years?

- None at all
- A little
- A moderate amount
- A lot
- A great deal

Next page >

Manipulation check

How important is to mitigate the increase of inflation in the U.S. economy?

- Not at all important
- Slightly important
- Moderately important
- Very important
- Extremely important

Next page >

Obfuscated questions Part 2

How much do you think women feel empowered in the current labor market

- None at all
- A little
- A moderate amount
- A lot
- A great deal

Manipulation check 2

Here, we ask you to state a price you are willing to pay to get access to the information about the salary distribution across job sectors in the U.S. We will randomly select some respondents and have their decisions implemented. If selected, we will reach out to you via Prolific message.

A computer will bid against you. The computer's bid will be between \$0 and \$10 independent of your price.

If your price is higher than the computer's bid, you will receive information about the salary distribution in the U.S. across job sectors. In this case, you won't receive any money.

If your stated price is below or equal to the computer's bid, you receive a payment equal to the computer's bid. In this case, you won't receive information about the salary.

Regardless of the computer's bid, it is always in your best interests to report the highest price you would be willing to get access to the salary information.

What is your stated price to learn the information about the salary distribution? Move the slider to insert your answer.

Your Bid



Next page >

Negotiation Task

I.3 Study 2

Thank you for participating in this survey. Completing it will take about 7 minutes.

This study is part of a scientific research project. More detailed instructions will be provided. This study has received ethical approval, therefore the information you will find in the survey is truthful.

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- We can collect your anonymous, non-sensitive personal data (like age, income, etc).
- We can use this personal data for scientific purposes.
- We can store your personal data on our safe-guarded university servers for up to 10 years.
- We can make anonymized data available to other researchers online.
- You are an American citizen.
- You are at least 18 years old.

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Introduction Study 2

On top of your fixed earnings, you will earn a bonus payment which will depend on your decisions in the study. The bonus payment ranges from 0.00 \$ to 2.00 \$.

Today, we ask you to complete some tasks.

Important! At the end of the survey, some participants will receive a bonus payment. The bonus payment depends on the answers you will provide in specific questions. The precise rules will be specified in later screens.

Every participant could be selected to get the bonus. It is therefore in your best interest to answer carefully.

Introduction Study 2

In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies. To show that you read our questions carefully, please choose "Extremely interested" below:

Extremely interested

Very interested

A little bit interested

Almost not interested

Not at all interested

Attention Check Study 2

Please explain: What is your opinion about the yearly switch to daylight saving time? Do you like it or dislike it? Please use about 15-30 words.

NEXT

Validation

What is your age?

What is your household's gross income in 2020 in US dollars?

Less than \$15,000

\$15,000 - \$24,999

\$25,000 - \$49,999

\$50,000 - \$74,999

\$75,000 - \$99,999

\$100,000 - \$149,999

\$150,000 - \$200,000

Demographics Part 1

Which of the following best describes your ethnic identity?

African American/Black

Asian American/Asian

Caucasian/White

Native American

Hawaiian/Pacific Islander

Other

Prefer not to say

Demographics Part 2

What is your employment status?

Employed full time

Employed part time

Unemployed looking for work

Unemployed not looking for work

Retired

Student

Disabled

Demographics Part 3

In which region do you currently reside?

Northeast (CT, ME, MA, NH, RI, VT, NK, NY, PA)

Midwest (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)

South (DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX)

West (AZ, CO, ID, NM, MT, UT, NV, WY, AK, CA, HI, OR, WA)

I am currently not living in the U.S.

Demographics Part 4

Do you have children?

Yes

No

What is your current civil status?

Single

Married

Divorced

Widow

Demographics Part 5

In politics, as of today, how do you consider yourself?

Democrat

Republican

Independent

Demographics Part 6

Erasmus
University
Rotterdam


You are going to start the survey. You are going to perform different tasks.

You will be asked to state your opinions on some real-life topics.

When you are ready, click on the NEXT button to start with the survey.

NEXT

Intermezzo

In this task you have the opportunity to win a bonus of \$1 if you answer correctly to the following question.

According to the study mentioned before, **57 out of 100 male** MBA students have negotiated the salary of their job. In your opinion, out of 100 **female** MBA students how many of them **have negotiated** the salary of their job?

Please move the slider to provide your answer. Note that the initial value of the slider is **random** and it is not the actual answer.

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Number of female MBA students who have negotiated the salary



NEXT

Prior Beliefs

Please, read carefully the following text.

A researcher from Carnegie Mellon University conducted a research to study whether there are **gender differences in salary negotiation**. The research finds that **57% male MBA students** negotiate their salary, while only **7% of female MBA students** negotiate their salary.

Researchers from University of Chicago, Harvard University and UCLA have studied the gender differences in the desired annual salary of MBA students in the first year after the graduation. They have found that **single male students ask \$146.000** as desired annual salary, while **single female students ask \$120.000** as desired annual salary.

Which factors do you think caused the gender gap in salary negotiation? Please respond in two/three full sentences.

Text Response

There are several potential explanations why there is a gender gap in salary negotiation in the U.S. labor market. Below, we show a list of possible factors driving this gap. We are interested in how do you think each of the factors below contributed to the current gender gap in salary negotiation. Therefore, we ask you to allocate 100 points across these factors.

Think of these 100 points as percentages. For example, if you think that one factor was solely responsible for the gender gap in salary negotiation, you should assign that factor 100 points and 0 to all the other factors. If you think that all the factors are equally important you should assign 12.5 points to each of these factors.

How much do you think these factors below contributed to the current gender gap in salary negotiation? Please allocate 100 points between the different factors proportional to their importance.

Women expect to face backlash from their employers, if they negotiate their salary	<input type="text" value="0"/>
Women are less competitive than men	<input type="text" value="0"/>
Women do not consider salary as the most importance dimension of their compensation	<input type="text" value="0"/>
Women are less productive than men	<input type="text" value="0"/>
Women do not have enough information on the average salary in the job sector	<input type="text" value="0"/>
Women do not have enough information on how to negotiate the salary	<input type="text" value="0"/>
Women ask less because they feel to invest more resources in the family	<input type="text" value="0"/>
Women are shyder than men when it comes to negotiation	<input type="text" value="0"/>
Total	<input type="text" value="0"/>

Factors

I.4 Study 3

Thank you for participating in this survey. Completing it will take about 7 minutes.

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- We can use this personal data for scientific purposes.
- We can store your personal data on our safe-guarded university servers for up to 10 years.
- We can make anonymized data available to other researchers online.
- You are an American citizen.
- You are at least 18 years old.

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In case you have doubts on the experiment, do not hesitate to contact us at **capozza@ese.eur.nl**

Introduction Study 3

On top of your fixed earnings, you will earn a bonus payment which will depend on your decisions in the study. The bonus payment ranges from 0.00 \$ to 2.00 \$.

Today, we ask you to complete some tasks.

Important! At the end of the survey, some participants will receive a bonus payment. The bonus payment depends on the answers you will provide in specific questions. The precise rules will be specified in later screens.

Every participant could be selected to get the bonus. It is therefore in your best interest to answer carefully.

Introduction Study 3

In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies. To show that you read our questions carefully, please choose "Extremely interested" below:

Extremely interested

Very interested

A little bit interested

Almost not interested

Not at all interested

Attention Check Study 3

What is your age?

What is your household's gross income in 2020 in US dollars?

Less than \$15,000

\$15,000 - \$24,999

\$25,000 - \$49,999

\$50,000 - \$74,999

\$75,000 - \$99,999

\$100,000 - \$149,999

\$150,000 - \$200,000

Demographics Part 1

Which of the following best describes your ethnic identity?

African American/Black

Asian American/Asian

Caucasian/White

Native American

Hawaiian/Pacific Islander

Other

Prefer not to say

Demographics Part 2

What is your employment status?

Employed full time

Employed part time

Unemployed looking for work

Unemployed not looking for work

Retired

Student

Disabled

Demographics Part 3

In which region do you currently reside?

Northeast (CT, ME, MA, NH, RI, VT, NK, NY, PA)

Midwest (IL, IN, MI, OH, WI, IA, KS, MN, MO, NE, ND, SD)

South (DE, DC, FL, GA, MD, NC, SC, VA, WV, AL, KY, MS, TN, AR, LA, OK, TX)

West (AZ, CO, ID, NM, MT, UT, NV, WY, AK, CA, HI, OR, WA)

I am currently not living in the U.S.

Demographics Part 4

Do you have children?

Yes

No

What is your current civil status?

Single

Married

Divorced

Widow

Demographics Part 5

In politics, as of today, how do you consider yourself?

Democrat

Republican

Independent

Demographics Part 6

Erasmus
University
Rotterdam


You are going to start the survey. You are going to perform different tasks.

You will be asked to state your opinions on some real-life topics.

When you are ready, click on the NEXT button to start with the survey.

NEXT

Intermezzo

In this task you have the opportunity to win a bonus of \$1 if you answer correctly to the following question.

According to the study mentioned before, **57 out of 100 male** MBA students have negotiated the salary of their job. In your opinion, out of 100 **female** MBA students how many of them **have negotiated** the salary of their job?

Please move the slider to provide your answer. Note that the initial value of the slider is **random** and it is not the actual answer.

0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100

Number of female MBA students who have negotiated the salary

NEXT

Prior Beliefs

How acceptable do you think it is for a woman to negotiate the salary with an employer?

Totally unacceptable

Slightly unacceptable

Neutral

Slightly acceptable

Totally acceptable

FOB Female

How acceptable do you think it is for a man to negotiate the salary with an employer?

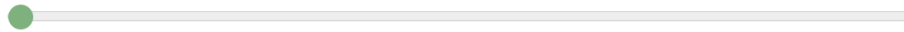
- Totally unacceptable
- Slightly unacceptable
- Neutral
- Slightly acceptable
- Totally acceptable

FOB Male

Out of 100 women, how many of them do you think find acceptable to negotiate their salary with an employer?

0 10 20 30 40 50 60 70 80 90 100

Number of women



Out of 100 men, how many of them do you think find acceptable to negotiate their salary with an employer?

0 10 20 30 40 50 60 70 80 90 100

Number of men



SOB

What are the consequences for a woman of trying to negotiate the salary with an employer?

Extremely bad

Somewhat bad

Neither good nor bad

Somewhat good

Extremely good

Backlash Female

What are the consequences for a man of trying to negotiate the salary with an employer?

Extremely bad

Somewhat bad

Neither good nor bad

Somewhat good

Extremely good

Backlash Male

I.5 Study 4

Thank you for participating in this survey. Completing it will take about 7 minutes.

This study is part of a scientific research project. More detailed instructions will be provided. This study has received ethical approval, therefore the information you will find in the survey is truthful.

By clicking NEXT you explicitly give us your consent that:

- We can collect your anonymous, non-sensitive personal data (like age, income, etc).
- We can use this personal data for scientific purposes.
- We can store your personal data on our safe-guarded university servers for up to 10 years.
- We can make anonymized data available to other researchers online.
- You are an American citizen.
- You are at least 18 years old.

We promise to protect your data according to the new General Data Protection Regulation (GDPR) laws.

In case you have doubts on the experiment, do not hesitate to contact us at **capozza@ese.eur.nl**

Introduction Study 4

On top of your fixed earnings, you will earn a bonus payment which will depend on your decisions in the study. The bonus payment ranges from 0.00 \$ to 2.00 \$.

Today, we ask you to complete some tasks.

Important! At the end of the survey, some participants will receive a bonus payment. The bonus payment depends on the answers you will provide in specific questions. The precise rules will be specified in later screens.

Every participant could be selected to get the bonus. It is therefore in your best interest to answer carefully.

Introduction Study 4

In surveys like ours, some participants do not carefully read the questions. This means that there are a lot of random answers that can compromise the results of research studies. To show that you read our questions carefully, please choose "Extremely interested" below:

Extremely interested

Very interested

A little bit interested

Almost not interested

Not at all interested

Attention Check Study 4

We are going to show you four profiles of job candidates: two men and two women. These job candidates share the same background and characteristics (e.g. education, experience, skills). All candidates are applying to the same job.

We are interested in your opinions about how successful these job candidates will be in getting the job.

NEXT

Intermezzo Study 4

John is applying to the job and, during his interview with HR, is trying to negotiate his salary during the interview.

How likely is that John will get offered the job?

Extremely unlikely

Somewhat unlikely

Neither likely nor unlikely

Somewhat likely

Extremely likely

Profile John Study 4

How likely is that John will be successful in negotiating the salary?

Extremely unlikely

Somewhat unlikely

Neither likely nor unlikely

Somewhat likely

Extremely likely

Profile John Study 4

James is applying to the job and, during his interview with HR, is NOT trying to negotiate his salary during the interview.

How likely is that will get offered the job?

Extremely unlikely

Somewhat unlikely

Neither likely nor unlikely

Somewhat likely

Extremely likely

Profile James Study 4

Sarah is applying to the job and, during her interview with HR, is trying to negotiate her salary during the interview.

How likely is that Sarah will get offered the job?

Extremely unlikely

Somewhat unlikely

Neither likely nor unlikely

Somewhat likely

Extremely likely

Profile Sarah Study 4

How likely is that Sarah will be successful in negotiating the salary?

Extremely unlikely

Somewhat unlikely

Neither likely nor unlikely

Somewhat likely

Extremely likely

Profile Sarah Study 4

Elena is applying to the job and, during her interview with HR, is NOT trying to negotiate her salary during the interview.

How likely is that Elena will get offered the job?

Extremely unlikely

Somewhat unlikely

Neither likely nor unlikely

Somewhat likely

Extremely likely

Profile Elena Study 4