

Research Article



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Abstract

In light of popular accounts in the United States of "mansplaining," we investigated the effects on women when others give them "unresponsive" advice (i.e., unsolicited, generic, and prescriptive recommendations). We show using both vignettes (Study 1) and live interactions (Study 2) that unresponsive advice (vs. responsive questions) from men negatively affected women's self-perceptions, leaving them feeling less respected, powerful, and trusting and having a smaller size of self. The advice giver's gender did not moderate these self-perception outcomes (Study 3), although women anticipated greater stereotype threat only when men, and not when women, gave them unresponsive advice. Similar effects were found using responsive advice instead of questions as the comparison condition (Study 4). Overall, these findings (N = 4,394 U.S. adult women) suggest that it is the unresponsive nature of advice—and for certain outcomes the advice giver's gender—that explain its effects on women. They point to the value of a responsive suggestion or question during conversations, particularly during cross-gender ones.

Keywords

status, stereotype threat, gender, culture, inclusion, open data, open materials, preregistered

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In the United States, some women report that during "troubles talk" when discussing their problems, men often "mansplain" (Solnit, 2012), that is, "explain (something) needlessly, overbearingly, or condescendingly, esp. (typically when addressing a woman) in a manner thought to reveal a patronizing or chauvinistic attitude" (Oxford University Press, n.d.). In current popular culture, "mansplaining" is a label that is used by women to characterize a variety of their social interactions with men. In these initial empirical investigations, we focused on mansplaining that comes in the form of advice-giving, in which some women report that men provide them with unsolicited (Larson, 2019) and straightforward commands (Enthoven, 2018)—or what we refer to here as "unresponsive advice" (Reis & Clark, 2013).

Building on literature from linguistics (Tannen, 1990), communication (MacGeorge et al., 2016), organizational behavior (Harari et al., 2022), sociology (Ridgeway, 2011), and social psychology (Cheryan & Markus, 2021; Huang et al., 2017; Itzchakov et al., 2021; Rudman & Glick, 2021; Santoro & Markus, 2023), we investigated the effects on women when receiving unresponsive advice from both men and from women. Seeking to identify which aspects might be accurately labeled "mansplaining" and which derive primarily from the content of the advice itself, we reasoned that it would be the characteristics of the advice—and, for certain outcomes, the advice giver's gender-that would influence how unresponsive advice affects women.

What Is Unresponsive Advice?

What does it mean for advice to be "unresponsive"? Being a responsive interlocutor is to understand, validate, and care for another's needs and interests (Reis & Clark, 2013). Unresponsive advice, then, is to provide

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advice—or a recommendation of a possible action to take (MacGeorge, Feng, et al., 2004)—in a manner that fails to communicate that the advice giver is understanding and validating of the recipient's specific concerns. Although there are a variety of behaviors that might lead advice—and, in turn, the advice giver—to be perceived as unresponsive, we isolate three that are built from popular accounts of mansplaining during advice (Enthoven, 2018; Larson, 2019): recommendations that are *unsolicited* (not asked for), *generic* (well-known or obvious), and *prescriptive* (or telling a person what they should do in the form of a command rather than as a suggestion).

There are multiple ways a person can be relatively more responsive to another person's presentation of their problem. These include high-quality listening (Itzchakov et al., 2021), such as asking questions (Huang et al., 2017), as well as tailoring one's advice to the specifics of the problem. These types of responses can be more understanding and validating in that they convey the other is taking into account a person's experience and point of view and is tuned to their needs. Thus, to evaluate the effects on women of receiving advice, we compared unresponsive advice first with responsive questions and then with advice that is relatively responsive.

The Effects on Women of Receiving Unresponsive Advice

Unresponsive advice should negatively impact how women perceive themselves during the interaction, which we refer to as their self-perceptions. In the words of linguist Deborah Tannen (1990), "Giving advice is asymmetrical . . . it frames the advice giver as more knowledgeable, more reasonable, more in control—in a word, one-up" (p. 53). Indeed, giving advice has been shown to increase the advice giver's sense of power (Schaerer et al., 2018), and unresponsive advice in particular, by failing to tune into the receiver's concerns, may be likely to reduce the receiver's sense of respect and power as well as their feelings of trust and belonging.

The literature on advice giving suggests that the negative effects of unresponsive advice on self-perceptions should not be influenced by the advice giver's gender. Unresponsive advice, being unsolicited and commanding, may convey impoliteness and in turn threaten face (Goldsmith, 2000). This should occur whether a man or woman is giving this advice, which would be consistent with past literature showing that the characteristics of advice (including the message content and the politeness of the delivery) matter just as much as, if not more than, the characteristics of the advisor (MacGeorge et al., 2016). Indeed, other work has shown that gender does

Statement of Relevance

Many women in the United States note that men "mansplain" or explain things needlessly or overbearingly. In the domain of advice-giving, this often looks like "unresponsive" advice (i.e., unsolicited, generic, and prescriptive recommendations). We found that in both hypothetical and live conversations, women felt less respected, powerful, trusting, and listened to and as having a smaller size of self when receiving unresponsive advice. Importantly, these negative effects occurred regardless of the gender of the advice giver. Notably, however, women anticipated greater stereotype threat only when men, and not when women, gave them unresponsive advice, which reveals how certain cross-gender interactions can foster a concern about gender. Together these findings point to the need to further investigate how mansplaining is gendered and its downstream consequences. What is clear is that instead of immediately responding with prescriptive and generic advice, asking a question or giving tailored, solicited advice can confer respect and reduce women's stereotype threat.

not explain much variance in the effects of advice (MacGeorge, Graves, et al., 2004).

That said, the gender identity of the advice giver may matter when it comes to a different type of outcome, namely the salience of one's gender during the interaction. The characteristics of unresponsive advice (i.e., unsolicited, generic, and prescriptive) are congruent with common masculine stereotypes of self-orientation and independence (Ellemers, 2018; Markus & Conner, 2014). As a consequence, unresponsive advice from men (but not from women) might remind women receivers of societally normative gender roles (Cheryan & Markus, 2020; Eagly & Wood, 2012) and, in doing so, may induce in women the experience of stereotype threat, or the perception that one is being seen through the lens of a pervasive group stereotype (e.g., those associated with gender, race, and age; Schmader et al., 2015; Steele, 2011).

Overview of Studies

Across five studies, we aimed to isolate which factors may accompany a claim of mansplaining in the domain of advice-giving, which we operationalized as unresponsive advice (i.e., unsolicited, generic, and prescriptive recommendations). In a pilot study, to motivate our

examination of this phenomenon, we tested whether women perceive that men more often give them unresponsive advice than women do. We next used imagined (Study 1) and real (Study 2) conversations between men and women to examine how unresponsive advicegiving (vs. more responsive question-asking) from men affects women's self-perceptions, such as their sense of respect, power, size of self, trust, and being listened to. Next, in light of the gendered nature of the term "mansplaining," we carried out a vignette study (Study 3) to investigate the moderating influence of the advice giver's gender not only on self-perceptions (e.g., respect, power, size of self, trust) but also on gender salience during the interaction (i.e., anticipated stereotype threat) as well as other attitudes. We used a final vignette study (Study 4) to determine whether our effects held when comparing unresponsive advice to more responsive advice rather than to responsive questions.

Open Practices Statement

All studies except the pilot were preregistered. All data, code, materials, and preregistrations can be found at https://researchbox.org/643.

Pilot Study: Women's Perceptions of How Often Men and Women Give Them Unresponsive Advice

Method

We first sought to verify that, as suggested by popular press articles (Enthoven, 2018; Larson, 2019), women perceive that men often give unresponsive advice. To accomplish this, we asked a sample of U.S.-based women how often men and women give them advice that is prescriptive, generic, and unsolicited. This research received approval by the institutional review boards at Stanford University and/or Columbia University.

Participants. We sought 100 participants after exclusions for this unregistered pilot. To accomplish this, we launched a Prolific study in 2023 recruiting 110 U.S.-based women participants. We stopped data collection once the 110 responses had been collected. We excluded participants who did not identify as women, who did not indicate that they were located in the United States, who started the survey multiple times, or who were not approved on Prolific, in line with later preregistrations. Of the 112 responses beginning the study, we excluded seven responses; there was not a difference by order (i.e., evaluating men or women first), b = 0.05, SE = 0.05, t(110) = 1.17, p = .245, $p_{adj} = .368$. This resulted in a final

sample size of 105 women participants (72% White; 49% four-year college or more). For the complete demographics for this pilot and for the preregistered studies, see Table 1.

Procedure. Participants were asked to reflect about how, when talking about their personal or professional problems, men and women (order counterbalanced: 54 evaluated men as a target first and 51 evaluated women as a target first) asked questions, gave advice, and gave unresponsive advice.

Specifically, participants were asked about (a) the frequency they talk about their personal and professional problems with men and women (1 = less thanonce a year, 2 = once a year, 3 = once a month, 4 =once a week, 5 = more than once a week); (b) the frequency they are asked questions and given advice (1 = never, 2 = rarely, 3 = sometimes, 4 = very often, 5 = very oftenalways); and, when given advice, (c) the frequency that they are given unsolicited, generic, and prescriptive advice (e.g., "Give you unsolicited advice that you don't ask for," "Tell you something that you already know," or "Tell you what to do or what you should do rather than suggest what you could do or might do"; (seven items in total; items about men, $\alpha = .92$; items about women, $\alpha = .87$; 1 = never, 2 = rarely, 3 = sometimes, 4 = very often, 5 = always).

We then assessed a variety of demographics and several additional exploratory measures. To assess participants' gender in this pilot study (as well as in Studies 3 and 4), participants were asked "What is your gender identity?" and to select all that applied (i.e., woman, man, agender, genderqueer, genderfluid, nonbinary, questioning or unsure, two-spirit, additional gender category/identity not listed). We excluded participants who did not check "woman" or who checked multiple categories, consistent with the preregistrations for Studies 3 and 4.

Results

For each measure, we ran a multilevel linear model that predicted the outcome frequency as a function of the gender of the target (i.e., men or women), with a random intercept for participant; we collapsed by the order (i.e., evaluating men first or women first) because the results were not moderated by the order in which participants evaluated men vs. women targets ($p_{\rm adj} > .091$). For this and all studies, using the core R software (R Core Team, 2024; R version 4.4.1), we report both unadjusted and post-hoc adjusted p values, the latter obtained using the Benjamini-Hochberg procedure.

Women participants perceived Speaking About Their Personal and Professional Problems more frequently with women (M = 4.12, SD = 0.91) than with men (M = 3.40, SD = 1.32), b = 0.72, SD = 0.14, t(104.00) = 5.23,

Table 1. Sample Characteristics

	Pilot	Study 1	Study 2	Study 3	Study 4
Sample source	Prolific	Mechanical Turk	Mechanical Turk	Prolific	Prolific
Year data collected	2023	2020	2020	2023	2023
Preregistration link	(exploratory)	osf.io/q6a4x	osf.io/8cq5x	bit.ly/455Bm7n	bit.ly/3VqOL6G
Sample size, n	105	404	431	1,835	1,619
U.Sbased women, %	100	100	100	100	100
Age, mean years (SD)	N/A	39.2 (13.2)	37.8 (12.7)	N/A	39.6 (14.0)
Highest educational level, %					
Four-year college or more	48.6	51.7	62.6	55.1	55.3
Two-year college or less	51.4	48.3	37.4	44.9	44.7
Political ideology, %					
Liberal	61.0	51.7	N/A	61.0	57.9
Moderate	23.8	18.1	N/A	22.4	26.3
Conservative	15.2	30.2	N/A	16.6	15.7
Race/ethnicity, %					
Asian or Asian American	8.6	6.9	11.6	5.6	5.9
Black or African American	7.6	9.2	7.2	9.9	11.4
Hispanic or Latino/a	4.8	4.0	2.6	5.6	6.3
Middle Eastern or North African	0	0.5	0	0.4	0.2
Native American or Alaska Native	1.0	0.5	0.5	0.5	0.4
Pacific Islander or Native Hawaiian	0	0	0	0.1	0.1
White or Caucasian	72.4	73.0	71.9	73.8	70.9
Multiracial or biracial	5.7	5.4	5.6	3.9	4.6
Other/not listed	0	0.5	0.7	0.3	0.2

Note: In Study 1, we assessed political orientation by asking participants the extent to which they identified as socially as well as economically liberal or conservative. We used the average of the two scores to determine political ideology. In the other studies, we used a one-item measure. In Studies 1 and 2, we used slightly different race/ethnicity categories in which the terms "North African" and "Alaska Native" did not appear and "Latino" not "Latino/a" appeared. Additionally, we counted someone as multiracial if they selected multiple race/ethnicity categories; in the rest of the studies, the race/ethnicity question was forced choice and "multiracial or biracial" was an option. N/A = data not collected (we did not ask for political ideology in Study 2 and we did not ask for age in the pilot study or in Study 3).

 $p < .001, p_{\rm adj} < .001, d = 0.64, 95\%$ confidence interval (CI) = [0.36, 0.92]. Women participants also perceived that women more frequently Ask Them Questions (M = 3.87, SD = 0.83) than men do (M = 2.89, SD = 0.92), $b = 0.98, SE = 0.12, t(104.00) = 8.16, p < .001, p_{\rm adj} < .001, d = 1.12, 95\%$ CI = [0.82, 1.41], and that women more frequently Give Them Advice (M = 3.68, SD = 0.78) than men do (M = 3.23, SD = 0.97), $b = 0.45, SE = 0.12, t(104.00) = 3.77, p < .001, p_{\rm adj} < .001, d = 0.51, 95\%$ CI = [0.23, 0.78]. However, when it came to the way that others give advice, women perceived that men more frequently Give Them Generic, Unsolicited, and Prescriptive Advice (M = 2.99, SD = 0.94) than women do (M = 2.42, SD = 0.68), $b = 0.57, SE = 0.10, t(104.00) = 5.47, p < .001, p_{\rm adj} < .001, d = 0.69, 95\%$ CI = [0.41, 0.97].

In this study, confirming common everyday accounts from women in the United States (Enthoven, 2018; Larson, 2019) as well as past literature suggesting that men tend to talk more and make more suggestions in interaction (Karpowitz & Mendelberg, 2014; Ridgeway, 2011), we found that women perceive that men more

frequently give unsolicited, generic, and prescriptive advice than women do. Women's perception of the relative frequency of unresponsive advice motivates the following four studies in which we investigated the effects of unresponsive advice on women.

Study 1: The Effects of Men Giving Women Unresponsive Advice

Method

For this study, we provided a first test of the effects on women when they receive unresponsive advice from men. Women imagined discussing a personal problem (i.e., a relationship breakup) with a man friend who either provided unsolicited, generic, and prescriptive advice or asked responsive questions that were openended (Huang et al., 2017). Women then rated various self-perception measures, including feeling respected, their state status, feeling powerful, their size of self, feeling trusting, and feeling listened to.

Table 2. Vignettes Used in Study 1—Imagined Interaction With Man Friend

Responsive-questions condition

Now imagine that a few days after the breakup, you meet up at a coffee shop with Ryan, a new friend of yours. After the two of you chat for a bit, you mention to Ryan that your partner recently broke up with you. Ryan says he's sorry and asks what happened.

You tell your story. As you describe what happened, Ryan doesn't interrupt and nods his head. Afew times when you pause, Ryan asks a few questions (Q). Mostly, though, he waits for you to continue talking.

When you finish telling your story, Ryan tells you what he thinks he understood, and then asks if you could tell him more about the relationship (Q).

Later in the conversation, Ryan asks about how you've been doing since the breakup (Q). Ryan says that while he can't really know how you're feeling, it seems really hard. After you describe how you've been doing, Ryan asks what, if anything, you've been doing to cope and feel better (Q). Ryan doesn't talk about his own problems, and never checks his phone.

At the end of the conversation, Ryan says he will check in on you in a few days, and asks what else he can do to help. Unresponsive-advice condition

Now imagine that a few days after the breakup, you meet up at a coffee shop with Ryan, a new friend of yours. After the two of you chat for a bit, you mention to Ryan that your partner recently broke up with you.

You tell a bit of your story. Ryan says he gets how you're feeling. He describes his own breakup and how he was really upset and felt so bad. He says breakups are really tough on everybody but that he has found that eventually things get better.

When you finish telling your story, you talk about how you have been feeling since the breakup. Ryan makes a joke, and it seems like he's trying to cheer you up. He suggests that you look on the bright side of things (U) because there might be a silver lining (G).

Later in the conversation, Ryan tells you what he says he thinks was at the heart of the breakup (P). He also offers some advice (U) on how to cope with the situation (P).

At the end of the conversation, Ryan says he has to leave but that he is going to get some mutual friends together soon and to let him know if you need some help.

Note: Q = question; U = unsolicited advice; G = generic advice; P = prescriptive advice.

Participants. To detect a medium effect size (d = 0.28)at 80% power as preregistered (https://osf.io/q6a4x), our goal was to achieve 400 participants. To accomplish this, we launched a human intelligence task (HIT) in 2020 recruiting 415 U.S.-based women participants from Amazon Mechanical Turk through Cloud Research. We stopped data collection once the 415 responses had been completed. As preregistered, we excluded participants who did not identify as women, who did not complete the study, who had already responded to this study once, who had completed previous related studies, or whose worker ID was not captured. Of the 473 responses that were collected at the beginning of the study, we excluded 69. Exclusions did not differ by condition (responsive questions vs. unresponsive advice), b = -0.04, SE = 0.03, t(471) = -1.20, p = -1.20.231, p_{adi} = .273. After these preregistered exclusions, we achieved 404 women participants (73% White; 52% fouryear college or more; mean age = 39 years).

Procedure. Women participants were asked to imagine and write about experiencing a specific personal problem—that their romantic partner had just broken up with them. They then read a vignette in which their friend Ryan either gave unresponsive advice (n = 205) or, consistent with literature showing that questions increase perceived partner responsiveness (Huang et al., 2017), asked responsive questions (n = 199); see Table 2).

Importantly, both vignettes were crafted to be positive in overall tone as one would expect from a conversation with a friend. Participants were then asked to write how they would feel after meeting with Ryan.

After imagining this interaction, participants were asked to rate their agreement from 1 (strongly disagree) to 7 (strongly agree) with various measures capturing their self-perceptions, including sense of respect (e.g., "Ryan respected me"; four items: $\alpha = .89$); "state status," or participants' perceptions of their status in the moment (participants chose where on a ladder they stood relative to their friends from a lowest standing of 1 to a highest standing of 10; adapted from the MacArthur community ladder; Adler et al., 2000); sense of power (e.g., "I felt powerful in the conversation"; seven items: $\alpha = .85$; adapted from Anderson et al., 2012; Anderson & Galinsky, 2006); "size of self," or how participants felt relative to Ryan on a scale from 1 (small self) to 5 (large self; adapted from Aron et al., 1992); trust (e.g., "I trust Ryan"; four items: $\alpha = .90$); and feeling listened to (e.g., "I feel listened to"; three items: $\alpha = .93$).

In both this study and in Study 2, we assessed a confirmatory moderator: benevolent sexism (Glick & Fiske, 1996). Because these moderation analyses were not the focus of the current article, we leave them for the Supplemental Material available online.

At the end of the survey, we asked participants for additional information, including on demographics. To assess participants' gender in both this study and in Study 2 (but unlike in the pilot study and in Studies 3 and 4 as mentioned above), we asked participants to indicate their gender identity (female, male, nonbinary/third gender, or prefer to self-describe). We included only participants who indicated that they identified as female.

Results

Women anticipated that they would feel less Respected when given unresponsive advice (M = 6.09, SD = 0.88)compared with when asked responsive questions (M =6.42, SD = 0.87), b = -0.33, SE = 0.09, t(402) = -3.81, $p < .001, p_{\text{adj}} < .001, d = -0.38, 95\% \text{ CI} = [-0.58, -0.18];$ have a lower State Status when given unresponsive advice (M = 6.17, SD = 1.91) than when asked responsive questions (M = 6.98, SD = 1.91), b = -0.81, SE =0.18, t(402) = -4.48, p < .001, $p_{adj} < .001$, d = -0.45, 95% CI = [-0.64, -0.25]; feel less Powerful when given unresponsive advice (M = 5.28, SD = 0.90) than when asked responsive questions (M = 5.65, SD = 0.98), b = -0.37, SE = 0.09, t(402) = -4.01, p < .001, $p_{adi} < .001$, d = -0.40, 95% CI = [-0.60, -0.20]; have a smaller Size of Self when given unresponsive advice (M = 2.78, SD = 0.72) than when asked responsive questions (M = 3.59, SD = 1.02), b = -0.81, SE = 0.09, t(402) = -9.19, p < .001, $p_{adj} < .001$, d = -0.91, 95% CI = [-1.12, -0.71]; feel less Trust when given unresponsive advice (M = 5.89, SD = 1.04) than when asked responsive questions (M = 6.14, SD = 1.06), b = -0.25, SE = 0.10, t(402) = -2.38, p = .018, $p_{adj} = .038$, d = -0.24, 95% CI = [-0.43, -0.04]; and feel less Listened To when given unresponsive advice (M = 6.12, SD =0.88) than when asked responsive questions (M = 6.41, SD = 0.90), b = -0.29, SE = 0.09, t(402) = -3.33, p < .001, $p_{\text{adj}} = .002, d = -0.33, 95\% \text{ CI} = [-0.53, -0.13]. \text{ See Figure}$ 1 for all Study 1 results.

In Study 1, women anticipated feeling less respected, having a lower state status, feeling less powerful, having a smaller size of self, feeling less trusting, and feeling less listened to when they imagined receiving unresponsive advice compared with when they imagined being asked responsive questions. To see whether these effects would replicate in a live interaction, we turn to Study 2.

Study 2: Effects of Men Giving Women Unresponsive Advice During Live Conversations

Method

To test the effects of men giving women unresponsive advice, U.S.-based women were recruited to have

synchronous text-based conversations about COVID-19 with a man who was unknown to them. Building on the design of Study 1, we instructed men partners to either give advice that was unsolicited, prescriptive, and generic ("unresponsive-advice" condition; e.g., "To feel less stressed, my advice is to definitely make some time to unwind and do the things at home you usually enjoy doing") or to ask open-ended questions ("responsivequestions" condition; e.g., "What's stressing you out most these days?"). In both conditions, men were given a script of suggestions of what to say (see Table 3). In this way, we were able to reduce the variability of the man partner's behavior and eliminate possible confounds from Study 1 while still investigating how women felt in a real interaction rather than an imagined one. Afterward, women rated various self-perception outcome measures as in Study 1.

Participants. To be in line with previous studies, as preregistered (https://osf.io/8cq5x), we sought a final sample size (after exclusions) of 400 women participants from Mechanical Turk (through CloudResearch). Because we anticipated that many participants would not have a conversational partner because they were matched on a first-come, first-serve basis, in May 2020 we posted HITs across three successive days totaling 1,000 U.S.-based women (and an accompanying 1,000 U.S.-based men). As preregistered, we stopped data collection after those 3 days because we reached our goal of at least 200 participants per condition.

As preregistered, we excluded any participant who did not identify as a woman, who did not have a conversation partner, who had multiple conversation partners, whose conversation partner did not identify as a man, whose conversation partner had multiple partners, who had already responded to this study once, who had completed previous related studies, who did not complete this study, who did not have a worker identification number, who provided bot-like responses, who did not correctly indicate that they were speaking with a man, or who did not have a sufficiently long conversation (i.e., defined as each partner writing at least three lines on ChatPlat).¹

Of the 985 participants who were assigned a condition, we excluded 554 responses that did not differ by condition (unresponsive advice vs. responsive questions): b = 0.04, SE = 0.03, t(983) = 1.25, p = .212, $p_{\rm adj} = .283$. After exclusions, we achieved 431 women who had conversations with men (72% White; 63% four-year college or more; mean age = 38 years).

Procedure. We recruited both men and women in May 2020. Participants were told that they would "have a short conversation with a fellow Mechanical Turk worker on an instant message platform" about COVID-19.

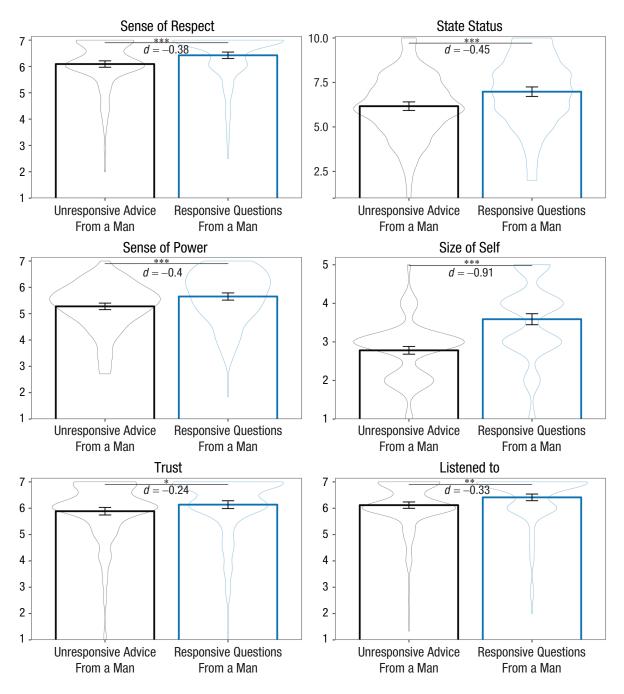


Fig. 1. Study 1: Unresponsive advice from men negatively influences women's anticipated self-perceptions. Women participants imagined having a conversation with a man friend who either gave unresponsive advice or asked responsive questions. Women participants then rated a variety of self-perception measures (i.e., sense of respect, state status, sense of power, size of self, trust, and listened to). All measures used an agreement scale from 1 (*strongly disagree*) to 7 (*strongly agree*) except state status (scale from 1, *lowest state status*, to 10, *bighest state status*) and size of self (scale from 1, *smallest self*, to 5, *largest self*); full axes are plotted. Women reported overall more negative self-perceptions when imagining receiving unresponsive advice versus receiving responsive questions. On this chart, error bars represent 95% confidence intervals. Significance values reflect the adjusted *p* values. Cohen's *d* values are displayed below the significance values. The distribution of raw data is plotted in background.

Table 3. Study 2 Instructions for Men Participants in Live Interactions

Asked-questions condition

Start of conversation: When you sign on, we would like you to say "hi" and to introduce yourself by first name (if you feel comfortable doing so). Please say: *Hi, my name is* _____.

Question 1: We've asked your partner to say how she's feeling. After she does, we'd like you to ask her what she's stressed out about. Please say: I'm sorry you're feeling stressed. I'm interested in knowing more about what's going on. What's stressing you out most these days? (Q)

Question 2: After your partner responds to this question, we would like you to ask her how she's dealing with everything. Please say: *Yeah, that makes sense. I can see why you're feeling stressed. How have you been dealing with everything?* (Q)

Question 3: After your partner responds to this question, we would like you to ask her what she thinks the next few weeks look like. Please say: *Thanks for sharing. What do you think the next few weeks will look like for you?* (Q)

End of conversation: You can leave the conversation after you ask these three questions. To signal to your partner that you can both leave, please say: *I was told that we're supposed to stop the conversation after we've each written a few lines, so I think I have to get off now. Goodbye.*

Unresponsive-advice condition

Start of conversation: When you sign on, we would like you to say "hi" and to introduce yourself by first name (if you feel comfortable doing so). Please say: *Hi, my name is* _____.

Piece of advice 1: We've asked your partner to say how she's feeling. After she shares how she is feeling, we'd like you to give her advice to take breaks from the news. Please say: *You're probably feeling stressed because of the news and social media. You should take breaks from watching or listening to news stories.* (P, U, G)

Piece of advice 2: After your partner responds to this piece of advice, we'd like you to give her advice about unwinding. Please say: *To feel less stressed, my advice is to definitely make*^p *some time to unwind and do the things at home you usually enjoy doing.* (P, G)

Piece of advice 3: After your partner responds to this piece of advice, we'd like you to give her advice to social distance. Please say: *I would also suggest that you practice social distancing as much as you can to keep safe and reduce the spread of the virus.* (G)

End of conversation: You can leave the conversation after you give her these three pieces of advice. To signal to your partner that you can both leave, please say: *I was told that we're supposed to stop the conversation after we've each written a few lines, so I think I have to get off now. Goodbye.*

Note: Participants were asked to say the text in italics, and they were asked to not say all their lines at once. Q = question; U = unsolicited advice; G = generic advice; P = prescriptive advice.

Conducting the study only several months after the COVID-19 pandemic began, we asked participants to discuss "stress around COVID-19." Women participants were told that they would be partnered with a man. Women participants were told that the conversation would be about their stress related to COVID-19. To prevent shifting the conversation to the men's problems, women participants were asked not to ask their partner questions.

Men participants were asked to have a conversation with a woman about her stresses around COVID-19. Men participants were asked to either give three pieces of advice or ask three open-ended questions (for scripted responses and questions, see Table 3) and then to end the conversation. In total, 225 women had a conversation with a man instructed to ask responsive questions and 206 had a conversation with a man instructed to provide unresponsive advice.

In the unresponsive-advice condition, men were asked to immediately give advice (i.e., unsolicited) that was arguably well-known at the time (i.e., generic) and was given in a fairly commanding way (i.e., prescriptive). For instance, we asked men to say "definitely

make some time to unwind and do the things at home you usually enjoy doing." Although the advice we asked men to give was backed by evidence—we borrowed in part from recommendations from the Centers for Disease Control and Prevention (n.d.) on how to cope with stress related to COVID-19—it was necessarily not tailored to what their woman conversation partner said and so was inherently less responsive to the women's particular concerns about COVID-19 stress.

In the responsive-questions condition, we carefully constructed three questions for men to ask that attempted to match the length and content of the three pieces of scripted advice. For instance, instead of telling women that they were "probably feeling stressed because of the news and social media," men were asked to ask, "What's stressing you out most these days?" We also attempted to sequence the questions in a way that made sense (e.g., asking the counterpart why she was stressed before asking what she was planning to do about it).

After these instructions, all participants were directed to an embedded page containing the ChatPlat conversation platform, a tool that enables online text-based conversations (Huang et al., 2017). Participants were asked to wait for 3 minutes for a match. Participants then had a conversation. The first author coded whether participants complied (for an update to the preregistration in which we describe the coding manual, see https://osf.io/gtq3b), and we found that 78% of coded conversations were similar to the script we suggested.

Participants were then asked to answer questions about their "thoughts and feelings during your conversation with your partner." We used modified versions of the same measures as Study 1 except we did not administer state status (we instead used the MacArthur community ladder to estimate participants' subjective socioeconomic status; Adler et al., 2000). Specifically, we assessed participants' sense of respect (e.g., "My partner respected me"; α = .89), sense of power (e.g., "I felt powerful in the conversation"; α = .89), size of self (we modified the labels to read "partner"), feeling trusting (e.g., "I trust my partner"; α = .87); and feeling listened to (e.g., "Listened to"; α = .98).

We also assessed a confirmatory moderator, benevolent sexism (Glick & Fiske, 1996), that we leave for the Supplemental Material because it was not the focus of this article, as well as a measure asking the participant to indicate the gender identity of their partner, several exploratory moderators, exploratory dependent measures, and demographics.

Results

Women reported that they felt less Respected when given unresponsive advice (M = 5.57, SD = 1.33) than when asked responsive questions (M = 6.10, SD = 0.86), b = -0.53, SE = 0.11, t(429) = -4.91, p < .001, $p_{adj} < .001$, d = -0.47, 95% CI = [-0.67, -0.28]; felt less Powerful when given unresponsive advice (M = 4.60, SD = 1.45)than when asked responsive questions (M = 4.95, SD =1.12), b = -0.35, SE = 0.12, t(429) = -2.81, p = .005, $p_{\text{adj}} = .008, d = -0.27, 95\% \text{ CI} = [-0.46, -0.08]; \text{ had a}$ smaller Size of Self when given unresponsive advice (M = 2.72, SD = 0.92) than when asked responsive questions (M = 3.07, SD = 0.94), b = -0.35, SE = 0.09, t(429) =-3.88, p < .001, $p_{\text{adj}} < .001$, d = -0.37, 95% CI = [-0.57, -0.18]; felt less Trusting when given unresponsive advice (M = 4.59, SD = 1.61) than when asked responsive questions (M = 5.09, SD = 1.25), b = -0.50, SE =0.14, t(429) = -3.58, p < .001, $p_{\text{adj}} = .001$, d = -0.35, 95% CI = [-0.54, -0.16]; and felt less Listened To when given unresponsive advice (M = 5.07, SD = 1.84) than when asked responsive questions (M = 5.70, SD = 1.27), b =-0.63, SE = 0.15, t(429) = -4.17, p < .001, $p_{adj} < .001$, d = -4.17-0.40, 95% CI = [-0.59, -0.21]. See Figure 2 for all Study 2 results.

Replicating the results from Study 1 using a live interaction study, in this study we found that in text-based conversations between men and women, women reported feeling less respected, less powerful, having a smaller size of self, less trusting, and less listened to when speaking with a man instructed to give unresponsive advice than when speaking with a man instructed to ask responsive questions. This suggests that a behavior associated with mansplaining in the context of advice, namely unresponsive advice, may negatively impact women's self-perceptions.

Study 3: Examining the Influence of the Advice Giver's Gender

Method

In this study, we focused on the "man" part of mansplaining. In this study, we investigated whether the gender of the advice giver moderates the effects of unresponsive advice on women. To test this, in this study we used a vignette experiment that was similar to but more tightly controlled than the one used in Study 1, in which U.S.-based women participants were asked to imagine receiving unresponsive advice or responsive questions from either a man coworker or a woman coworker. In addition to general self-perception measures, we added several new measures, including a measure of gender salience during the interaction (i.e., anticipated stereotype threat), as well as anticipated perceptions of gender equality, including stereotypes of women's competence, perceptions of women's current status, and perceptions of women's future status.

Participants. To be powered to detect an interaction as preregistered (https://aspredicted.org/367ue.pdf), we sought 500 participants per condition, or 2,000 participants in total. Because of budget constraints, we did not overrecruit to account for preregistered exclusions, unlike in past studies. We launched a study on Prolific in 2023 to recruit 2,000 U.S.-based women participants. We stopped data collection once the 2,000 responses had been collected. As preregistered, we excluded participants who started the survey more than once, who did not identify as a woman, who were not based in the United States, or who could not be compensated. We excluded 400 responses of the 2,235 who began the study. Exclusions did not differ either by the gender of the hypothetical coworker (man vs. woman), b = -0.01, SE = 0.02, t(2229) = 0.02-0.77, p = .444, $p_{adj} = .548$, or by the response style (unresponsive advice vs. responsive questions), b = -0.03, SE =0.02, t(2229) = -1.78, p = .075, $p_{\text{adj}} = .116$. After exclusions, this resulted in a final sample size of 1,835 women (74% White; 55% four-year college or more).

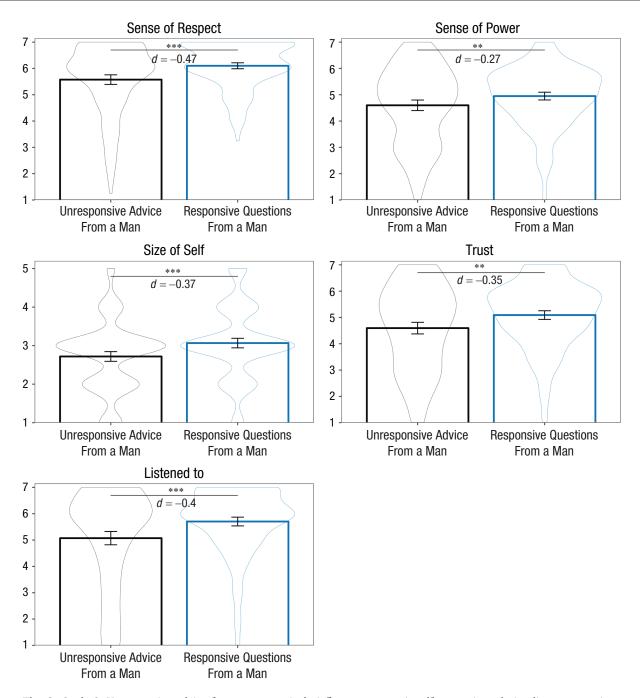


Fig. 2. Study 2: Unresponsive advice from men negatively influences women's self-perceptions during live conversations. Women participants had a conversation about stress related to COVID-19 with a man stranger who was instructed to either give unsolicited, generic, and prescriptive advice ("unresponsive advice") or to ask open-ended questions ("responsive questions"). Women participants then rated a variety of self-perception measures (i.e., sense of respect, sense of power, size of self, trust, and listened to). All measures used an agreement scale from 1 (*strongly disagree*) to 7 (*strongly agree*) except size of self (scale from 1, *smallest self*, to 5, *largest self*); full axes are plotted. Women reported overall more negative perceptions when receiving unresponsive advice versus receiving responsive questions. On this chart, error bars represent 95% confidence intervals. Significance values reflect the adjusted *p* values. Cohen's *d* values are displayed below the significance values. The distribution of raw data is plotted in background.

Procedure. Women participants were asked to imagine experiencing a professional problem: that they have been working at a job for 6 months and that that they

feel like it is going well but that one day their supervisor tells them that they are underperforming and not on track to being promoted. Participants were then asked to

Table 4. Vignettes Used in Study 3—Imagined Interaction With Coworker

Asked-questions condition

Now imagine that a few days after receiving this evaluation, you are at the office, and while getting coffee, you run into [Ryan/Sarah], a colleague who works on a different team but at the same level as you in the company.

While chatting with [Ryan/Sarah], you mention to [him/her] that you were told by your supervisor that you're not on track to being promoted.

[Ryan/Sarah] asks you a few questions.

Responsive question 1: [Ryan/Sarah] asks if you're planning on following up with your supervisor to get more context about your performance evaluation. (Q)

Responsive question 2: Afterward, [Ryan/Sarah] asks what you could do to get back on track to being promoted. (Q)

Responsive question 3: [Ryan/Sarah] also asks what are some activities that you could do to take your mind off things. (Q)

The conversation continues for a little while, and then both of you say goodbye.

Unresponsive-advice condition

Now imagine that a few days after receiving this evaluation, you are at the office, and while getting coffee, you run into [Ryan/Sarah], a colleague who works on a different team but at the same level as you in the company.

While chatting with [Ryan/Sarah], you mention to [him/her] that you were told by your supervisor that you're not on track to being promoted.

Even though you didn't ask for advice, [Ryan/Sarah] then gives you a few pieces of advice; you find much of it to be fairly obvious. (U, G)

Unresponsive advice 1: [He/She] says that you really should follow up with your supervisor to get more context about your performance evaluation. (P)

Unresponsive advice 2: Afterward, [Ryan/Sarah] tells you what you should do to get back on track to being promoted. (P)

Unresponsive advice 3: [Ryan/Sarah] also tells you about some activities that you should do to take your mind off things. (P)

The conversation continues for a little while, then both of you say goodbye.

Note: Questions and pieces of advice are labeled for ease of interpretation, but participants did not see the labels. Q = question; U = unsolicited advice; G = generic advice; G =

imagine speaking with an equal-rank coworker from a different team who either gave unresponsive advice (man coworkers: n = 470; woman coworkers: n = 464) or, as in the previous two studies, who asked responsive questions (man coworkers: n = 454; woman coworkers: n = 447). See Table 4. Participants were then asked to write a few sentences describing how they would feel if they experienced this interaction. We labeled Ryan with "he/him" pronouns and Sarah with "she/her" pronouns.

Participants then completed a series of outcome measures as outlined in the subsections that follow.

Manipulation checks. Participants were asked three manipulation check questions about the advice giver's gender and about the advice giver's behavior (i.e., that Ryan/Sarah asked questions and that Ryan/Sarah gave "unsolicited, obvious, and telling" advice; the term "telling" was what we used to characterize prescriptive advice). We also administered a measure that we are post hoc calling a manipulation check: responsiveness. Participants were asked to rate how much they perceived that their partner was responsive (e.g., "Ryan/Sarah understood"; $\alpha = .94$; adapted from Maisel & Gable, 2009).

Self-perceptions. As in previous studies, we assessed a variety of measures related to general self-perceptions, including participants' sense of respect ($\alpha = .94$), state status, sense of power ($\alpha = .92$), and size of self, adapting the measure to read "Sarah" for the relevant conditions.

Gender salience during the interaction. We reasoned that unresponsive advice from a man specifically might increase the salience of gender during the interaction and, thereby increase participants' anticipation of stereotype threat. For this measure, we had participants rate their agreement with the following two items adapted from Hall et al. (2015): "During the conversation, I felt very aware of my gender," and "During the conversation, I was concerned that my gender influenced the way that Ryan/Sarah spoke to me." Each item was scored on a scale from 1 (strongly disagree) to 7 (strongly agree; $\alpha = .71$). Although we preregistered moderated mediation models, we examine stereotype threat only as an outcome variable. We did this because we did not find that the advice giver's gender moderated the effect of condition for any outcome measure other than anticipated stereotype threat.

Perceptions of gender equality. We reasoned that receiving unresponsive advice might also influence women's perceptions of gender equality. As Ridgeway and Smith-Lovin (1999) explained, gender hierarchies are "sustained in the context of constant interaction, often on familiar terms, between those advantaged and those disadvantaged by the system" (p. 192). We measured three outcomes related to perceptions of gender equality.

We assessed participants' *perceptions of women's current status*. Participants rated their agreement with four items that we developed (e.g., "Although a few men

respond to women as equals, most men still don't"; all items reverse-scored; $\alpha = .88$).

We also assessed participants' perceptions of women's future status. Participants rated how much "economic power (i.e., access to and control over resources)" and "relational power (i.e., have control in their relationships with men)" women would have in the future on a scale from 0 (a lot less) to 50 (the same) to 100 (a lot more; α = .76; items adapted from Diekman et al., 2004). Although we preregistered that we would look at each item separately, here we averaged them.

Finally, we assessed participants' stereotypes about women's competence. Participants were asked to rate the extent to which society views women as being competent, skilled, confident, assertive, and high-status ($\alpha = .87$; Nicolas et al., 2022).

Exploratory outcome. We administered an exploratory outcome about how typical the conversation was (an average of how "normal," "realistic," and "typical" the conversation was; α = .91). For this analysis, see the Supplemental Material.

Results

Manipulation checks.

Speaker gender. Participants did not differ across our manipulation checks in the extent to which that they agreed that Ryan was a man (M = 5.87, SD = 1.06) and that Sarah was a woman (M = 5.91, SD = 0.99), b = -0.05, SE = 0.05, t(1833) = -0.99, p = .323, $p_{\rm adj} = .424$, d = -0.05, 95% CI = [-0.14, 0.05]. See Figure 3 for all Study 3 results.

Speaker behavior. Participants perceived the speaker (i.e., Ryan or Sarah) engaging in the condition-relevant behaviors (i.e., unresponsive advice or responsive questions). Participants more strongly agreed that the speaker Asked Questions in the responsive-questions condition (M=6.13, SD=0.99) than in the unresponsive-advice condition $(M=3.74, SD=1.65), b=2.39, SE=0.06, t(1833)=37.44, p<.001, <math>p_{\rm adj}<.001, d=1.75, 95\%$ CI = [1.64, 1.86]. Participants also more strongly agreed that the speaker Gave Unsolicited, Generic, and Prescriptive Advice in the unresponsive-advice condition (M=5.63, SD=1.41) than in the responsive-questions condition $(M=3.74, SD=1.77), b=1.89, SE=0.07, t(1833)=25.35, p<.001, <math>p_{\rm adj}<.001, d=1.18, 95\%$ CI = [1.08, 1.28].

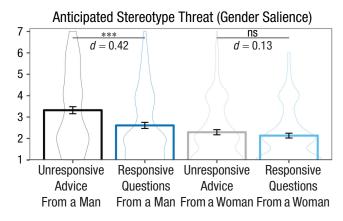
Responsiveness. Participants perceived that the speaker was less responsive in the unresponsive-advice condition (M = 4.51, SD = 1.58) than in the responsive-questions condition (M = 5.70, SD = 1.16), b = -1.19, SE = 0.06,

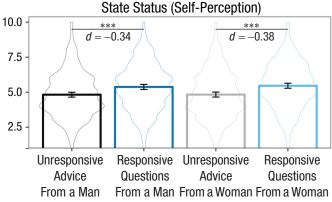
t(1833) = -18.40, p < .001, $p_{\rm adj} < .001$, d = -0.86, 95% CI = [-0.96, -0.76], consistent with our expectation that unresponsive advice would indeed be perceived as less responsive.

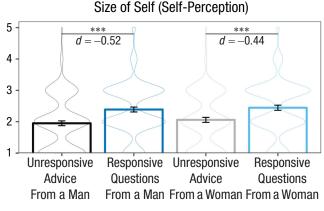
Self-perceptions. We did not observe an interaction of speaker gender (man vs. woman) and response style (unresponsive advice vs. responsive questions) on participants' Sense of Respect, b = 0.02, SE = 0.11, t(1831) = 0.15, p = .878, $p_{\rm adj} = .899$; State Status, b = 0.08, SE = 0.18, t(1327) = 0.43, p = .666, $p_{\rm adj} = .701$; Sense of Power, b = -0.05, SE = 0.11, t(1831) = -0.43, p = .668, $p_{\rm adj} = .701$; or Size of Self, b = -0.05, SE = 0.08, t(1831) = -0.65, p = .518, $p_{\rm adj} = .572$.

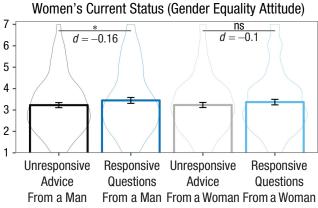
Instead, we observed a consistent main effect of unresponsive advice: Participants anticipated having a lower Sense of Respect when they were given unresponsive advice (M = 5.94, SD = 1.00) compared with when they were asked responsive questions (M = 4.93, SD = 1.41), b = -1.01, SE = 0.06, t(1833) = -17.75, p < 0.06.001, $p_{\text{adj}} < .001$, d = -0.83, 95% CI = [-0.92, -0.73]; having lower State Status when receiving unresponsive advice (M = 4.83, SD = 1.66) compared with being asked responsive questions (M = 5.42, SD = 1.64), b = -0.59, SE = 0.09, t(1329) = -6.54, p < .001, $p_{adj} < .001$, d = -0.36, 95% CI = [-0.47, -0.25]; having a lower Sense of Power when receiving unresponsive advice (M = 3.88, SD =1.33) compared with being asked responsive questions (M = 4.94, SD = 1.10), b = -1.06, SE = 0.06, t(1833) =-18.65, p < .001, $p_{adi} < .001$, d = -0.87, 95% CI = [-0.97, -0.77]; and having a smaller Size of Self when receiving unresponsive advice (M = 2.00, SD = 0.86) compared with being asked responsive questions (M = 2.42, SD =0.86), b = -0.41, SE = 0.04, t(1833) = -10.32, p < .001, $p_{\text{adj}} < .001, d = -0.48, 95\% \text{ CI} = [-0.57, -0.39].$

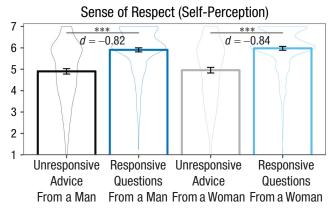
Gender salience during the interaction. As expected, we observed an overall interaction of speaker gender (man vs. woman) and response style (unresponsive advice vs. questions) on anticipated stereotype threat, b =0.55, SE = 0.14, t(1831) = 3.96, p < .001, $p_{adj} < .001$. Decomposing this interaction to simple effects, when looking at those participants who imagined having a conversation with a man coworker (Ryan), we found evidence that participants anticipated greater stereotype threat when receiving unresponsive advice (M = 3.32,SD = 1.81) compared with when being asked responsive questions (M = 2.61, SD = 1.55), b = 0.71, SE = 0.10, $t(1831) = 7.23, p < .001, p_{adj} < .001, d = 0.42, 95\% \text{ CI} =$ [0.29, 0.55]. However, among participants who imagined having a conversation with a woman (Sarah), we did not find evidence for a difference in anticipated stereotype threat between those who received unresponsive advice

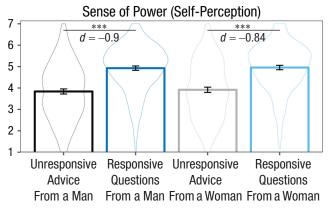


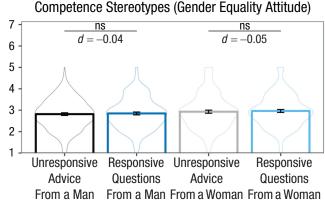












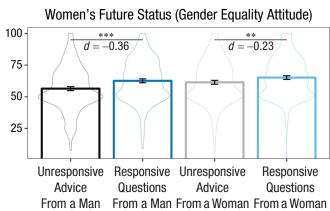


Fig. 3. (continued on next page)

Fig. 3. Study 3: Gender of advice giver does not influence women's self-perceptions or perceptions of gender equality but does influence their anticipated stereotype threat. Women participants imagined having a conversation with a coworker who was either a man or a woman and who either gave unresponsive advice or asked responsive questions. Women participants answered three types of outcome questions, including measures assessing self-perceptions (i.e., sense of respect, state status, sense of power, size of self), gender salience during the interaction (i.e., anticipated stereotype threat), and perceptions of gender equality (i.e., perceptions of women's current and future status and competency stereotypes about women). All measures used an agreement scale from 1 (*strongly disagree*) to 7 (*strongly agree*) except state status (scale from 1, *lowest state status*, to 10, *highest state status*), size of self (scale from 1, *smallest self*, to 5, *largest self*), and future status (scale from 0, *least status*, to 100, *most status*); full axes are plotted. The advice giver's gender moderated the effects of unresponsive advice only on anticipated stereotype threat (p_{adj} < .001). On this chart, error bars represent 95% confidence intervals. Significance values reflect the adjusted p values. Cohen's q values are displayed below the significance values. The distribution of raw data is plotted in background.

(M=2.29, SD=1.31) and those who were asked responsive questions (M=2.13, SD=1.21), b=0.16, SE=0.10, t(1831)=1.60, p=.111, $p_{\rm adj}=.166$, d=0.13, 95% CI=[-0.01, 0.26]. This pattern of results suggests that unresponsive advice, relative to responsive questions, increases women's anticipated stereotype threat only when given by a man and not when given by a woman.

Perceptions of gender equality.

Perceptions of women's current and future status. We did not observe an interaction of speaker gender (man vs. woman) and response style (unresponsive advice vs. questions) on Perceptions of Women's Current Status, b = -0.09, SE = 0.13, t(1831) = -0.67, p = .506, $p_{adj} = .572$, or Future Status, b = -2.44, SE = 1.56, t(1830) = -1.57, $p = .118, p_{adj} = .170$. Instead, we observed a main effect of unresponsive advice: Participants anticipated perceiving that women would have less Status Currently when receiving unresponsive advice (M = 3.23, SD = 1.30) than when receiving responsive questions (M = 3.41, SD = 1.44), b = -0.18, SE = 0.06, t(1833) = -2.79, p = .005, $p_{adi} = .009$, d = -0.13, 95% CI = [-0.22, -0.03], as well as less Status in the Future when receiving unresponsive advice (M =58.94, SD = 17.24) compared with when asked responsive questions (M = 63.89, SD = 16.23), b = -4.95, SE = 0.78, $t(1832) = -6.32, p < .001, p_{\text{adj}} < .001, d = -0.30, 95\% \text{ CI} = -0.30$ [-0.39, -0.20].

Stereotypes of women's competence. We did not observe an interaction of speaker gender (man vs. woman) and response style (unresponsive advice vs. questions) on Stereotypes of Women's Competence, b=0.003, SE=0.07, t(1831)=0.05, p=.960, $p_{\rm adj}=.960$. We also did not observe a difference between unresponsive advice (M=2.87, SD=0.76) and responsive questions (M=2.91, SD=0.74), b=-0.03, SE=0.03, t(1833)=-0.96, p=.337, $p_{\rm adj}=.429$, d=-0.04, 95% CI = [-0.14, 0.05].

Synthesis. Although we did not initially predict this, we found that the gender of the advice giver did not moderate the negative effects of unresponsive advice (vs. responsive questions) on self-perceptions or on perceptions of gender equality. The advice giver's gender, however, did

moderate the effects of unresponsive advice (vs. responsive questions) on anticipated stereotype threat, in which women participants anticipated feeling greater stereotype threat only when given unresponsive advice from a man and not from a woman.

Study 4: Not All Advice Is Created Equal— Unresponsive Versus Responsive Advice

Method

We have shown that compared to responsive questions, unresponsive advice negatively affects women's self-perceptions regardless of the gender of the advice giver, but that unresponsive advice increases women's anticipated stereotype threat only when given by men and not by women. In the first three studies, our comparison condition for unresponsive advice was responsive questions. One limitation is that this treatment confounds the behavior (advice vs. questions) with the response style (responsiveness vs. unresponsiveness). To more cleanly test our theoretical model—that it is the unresponsive nature of the advice that drives our effect—in this study our comparison condition was responsive advice, which we operationalized as advice that is solicited, specific, and in the form of a suggestion.

Participants. As preregistered (https://aspredicted.org/qd2uk.pdf), to be powered to detect an interaction but also because of a more limited budget, we targeted recruiting 1,750 U.S.-based women participants from Prolific in 2023 to achieve approximately 1,600 participants after exclusions. We stopped data collection once the 1,750 responses had been collected. Applying the same exclusion criteria as used in Study 3, of the 1,943 responses beginning the study, we excluded 324, which did not differ between advice conditions, b = 0.02, SE = .02, t(1940) = 0.914, p = .361, $p_{\rm adj} = .451$, or between the advice giver's gender, b = 0.01, SE = 0.02, t(1940) = 0.45, p = .655, $p_{\rm adj} = .728$. After exclusions, we achieved 1,619 women participants (71% White; 55% four-year college or more; mean age = 40 years).

Table 5. Vignettes Used in Study 4—Imagined Interaction With Coworker

Responsive-advice condition

After chatting for a little bit about upcoming projects, you sigh, glancing at your mug. "You know, my supervisor said that I might not be on track for that promotion."

Responsive advice 1: [Ryan/Sarah] asks if you want to hear some advice [he/she] has. You nod. Some of [his/her] advice is about things you hadn't thought about before. (S, N)

Responsive advice 2: [Ryan/Sarah] offers, "It might help to have a discussion with your supervisor. Maybe you could get a clearer picture about your supervisor's feedback." [He/She] continues, "And once you have that, it would probably be "easier to think about next steps." (T)

Responsive advice 3: [Ryan/Sarah] adds, "If I feel overwhelmed by work issues, it helps me to do something like exercise to take my mind off things. That could be helpful." (T)

You continue to talk for a little while. When the conversation ends, you say goodbye and part ways.

Unresponsive-advice condition

After chatting for a little bit about upcoming projects, you sigh, glancing at your mug. "You know, my supervisor said that I might not be on track for that promotion."

Unresponsive advice 1: Without you asking for advice, [Ryan/Sarah] chimes in. Most of [his/her] advice feels kind of obvious and is stuff that everyone knows about. (U, G)

Unresponsive advice 2: [Ryan/Sarah] emphasizes, "You really ought to have a discussion with your supervisor, you know. Get a clearer picture about your supervisor's feedback." [He/She] continues, "And once you have that, plan your next steps." (P)

Unresponsive advice 3: [Ryan/Sarah] adds, "Also, if you feel overwhelmed by work issues, you should do something like exercise to take your mind off things." (P)

You continue to talk for a little while. When the conversation ends, you say goodbye and part ways.

Note: Questions and pieces of advice are labeled for ease of interpretation, but participants did not see the labels. S = solicited advice; N = novel advice; U = unsolicited advice; $U = \text{unsolicited ad$

Procedure. As in Study 3, participants imagined experiencing a problem at work (e.g., they were told by their boss that they were not on track to being promoted), and then they spoke with an equal-rank coworker on a different team (Ryan or Sarah) who responded in one of two ways. Unlike in previous studies, the speaker always gave advice, either unresponsive advice (man coworker: n = 391; woman coworker: n = 411), as in Study 3, or, and new to this study, responsive advice (man coworker: n = 414; woman coworker: n = 403).

We operationalized unresponsive advice in the same way as in previous studies (i.e., advice that was unsolicited, generic, and prescriptive). We operationalized responsive advice in the opposite way (i.e., advice that was solicited, novel, and in the form of a suggestion). To make the conversations more realistic, we provided actual quotes attributed to Ryan/Sarah rather than describing what they said as in the previous studies. See Table 5. After reading this vignette, participants were asked to write about how they would feel after this interaction. We used the same measures as in previous studies with a few exceptions, as described in the subsections that follow.

Manipulation checks. To confirm that our manipulation worked as intended, participants were asked to rate on a scale from 1 (*strongly agree*) to 7 (*strongly disagree*) how much they agreed that the target had the gender identity as labeled in the vignette and that the target provided prescriptive, unsolicited, and obvious (i.e., generic)

advice. We also asked participants to rate the responsiveness of the advice giver (α = .96), which we post hoc determined was a manipulation check.

Self-perceptions. As in Study 3, we assessed sense of respect (α = .93), state status, and size of self. We assessed participants' anticipated sense of belonging, a new measure, with the item "I feel like I belong at this company" (scale from 1, strongly disagree, to 7, strongly agree; adapted from Muragishi et al., 2023).

Gender salience during the interaction. To assess the salience of gender during the interaction, particularly anticipated stereotype threat, we administered the two items used from Study 3 as well as an additional item, i.e., "During the conversation, my gender may have affected how Ryan/Sarah acted toward me"; (α = .83; adapted from Picho & Brown, 2011).

Other confirmatory measures. We asked participants how likely they would be to talk with men coworkers and women coworkers after their interaction (scale from 1, very unlikely, to 7, very likely).

Exploratory measures. As in Study 3, we administered two exploratory items asking how often men coworkers and women coworkers speak to them in the way that the speaker did (scale from 1, *never*, to 7, *always*). For the sake of space we leave these for the Supplemental Material.

Results

Manipulation checks. We found that our manipulations worked as intended.

Speaker gender. We successfully manipulated gender, and participants did not differ in the extent to which they agreed that the speaker was a man (if shown Ryan; M = 5.71, SD = 1.09) or a woman (if shown Sarah; M = 5.76, SD = 1.07), b = -0.05, SE = 0.05, t(1617) = -0.95, p = .342, $p_{\rm adj} = .441$, t = -0.05, 95% CI = [-0.14, 0.05]. See Figure 4 for all Study 4 results.

Speaker behavior. Participants more strongly agreed that the speaker Gave Unsolicited Advice in the unresponsiveadvice condition (M = 4.91, SD = 1.80) compared with the responsive-advice condition (M = 2.83, SD = 1.66), b =2.08, SE = 0.09, t(1617) = 24.23, p < .001, $p_{adi} < .001$, d = 0.001.20, 95% CI = [1.10, 1.31]; that the speaker Gave Obvious Advice in the unresponsive-advice condition (M = 5.56,SD = 1.41) compared with the responsive-advice condition (M = 4.51, SD = 1.50), b = 1.04, SE = 0.07, $t(1617) = 14.41, p < .001, p_{adj} < .001, d = 0.72, 95\%$ CI = [0.62, 0.82]; and that the speaker Gave Prescriptive Advice in the unresponsive-advice condition (M =4.95, SD = 1.54) compared with the responsive-advice condition (M = 4.69, SD = 1.47), b = 0.26, SE = 0.07, $t(1617) = 3.48, p < .001, p_{adi} = .001, d = 0.17, 95\%$ CI = [0.08, 0.27].

Responsiveness. Participants perceived that the speaker was less responsive in the unresponsive-advice condition (M=4.27, SD=1.75) compared with the speaker in the responsive-advice condition $(M=5.52, SD=1.20), b=-1.24, SE=0.07, t(1617)=-16.67, p<.001, <math>p_{\rm adj}<.001, d=-0.83, 95\%$ CI = [-0.93, -0.73], consistent with our expectation that unresponsive advice would indeed be perceived as less responsive.

Self-perceptions. We did not observe an interaction of speaker gender (man vs. woman) and response style (unresponsive advice vs. responsive advice) on any of the measures related to self-perceptions, including Sense of Respect, b=0.10, SE=0.13, t(1615)=0.82, p=.412, $p_{\rm adj}=.499$; State Status, b=0.20, SE=0.20, t(1132)=0.99, p=.323, $p_{\rm adj}=.430$; Size of Self, b=0.04, SE=0.09, t(1615)=0.45, p=.650, $p_{\rm adj}=.728$; or Sense of Belonging, b=-0.009, SE=0.14, t(1615)=-0.06, p=.950, $p_{\rm adj}=.950$.

Instead, we observed a consistent main effect of unresponsive advice: Participants anticipated a lower Sense of Respect when they were given unresponsive advice (M = 4.83, SD = 1.52) compared with when they were given responsive advice (M = 5.87, SD = 0.99), b = -1.03, SE = 0.06, t(1617) = -16.20, p < .001, $p_{adi} < .001$,

d = -0.81, 95% CI = [-0.91, -0.70]; having lower State Status when they were given unresponsive advice (M =5.07, SD = 1.76) compared with when they were given responsive advice (M = 5.38, SD = 1.63), b = -0.31, SE =0.10, t(1134) = -3.06, p = .002, $p_{adi} = .004$, d = -0.18, 95% CI = [-0.30, -0.06]; having a smaller Size of Self when they were given unresponsive advice (M = 2.22, SD = 0.96) compared with when they were given responsive advice (M = 2.45, SD = 0.78), b = -0.22, SE = -0.220.04, t(1617) = -5.17, p < .001, $p_{adj} < .001$, d = -0.26, 95% CI = [-0.35, -0.16]; and having a lower Sense of Belonging at work when they were given unresponsive advice (M = 3.98, SD = 1.47) compared with when they were given responsive advice (M = 4.71, SD = 1.26), b =-0.73, SE = 0.07, t(1617) = -10.73, p < .001, $p_{adi} < .001$, d = -0.53, 95% CI = [-0.63, -0.43].

Gender salience during the interaction. We observed an interaction of speaker gender (man—Ryan vs. woman— Sarah) and advice type (unresponsive vs. responsive) for women's anticipated stereotype threat, b = 0.71, SE = 0.15, t(1615) = 4.74, p < .001, $p_{adj} < .001$, consistent with the results of Study 3. When imagining interacting with Ryan, an equal-rank man coworker from a different team, women anticipated feeling greater stereotype threat when Rvan gave unresponsive advice (M = 3.37, SD = 1.79) than when Ryan gave responsive advice (M = 2.68, SD = 1.48), b = 0.69, SE = 0.11, t(1615) = -6.54, p < .001, $p_{adj} < .001$, d = 0.42, 95% CI = [0.28, 0.56]. On the contrary, when imagining interacting with Sarah, an equal-rank woman coworker from a different team, there was no difference in women's anticipated stereotype threat when Sarah gave unresponsive advice (M = 2.43, SD = 1.34) than when Sarah gave responsive advice (M = 2.45, SD = 1.39), b = -0.02, SE = 0.11, t(1615) = -0.15, p = .879, $p_{\text{adj}} = .925$, d = -0.01, 95% CI = [-0.15, 0.13]. This replicates our findings from Study 3, suggesting that unresponsive advice from men increases women's anticipated stereotype threat due to the unresponsive nature of the advice.

Other confirmatory measures.

Future interactions with men coworkers. We did not observe a significant interaction of speaker gender (man—Ryan vs. woman—Sarah) and advice type (unresponsive vs. responsive) for the likelihood of reaching out to men coworkers, b = -0.29, SE = 0.16, t(1615) = -1.86, p = .063, $p_{adj} = .094$. We did, however, observe a main effect of advice type for reaching out to men coworkers in the future such that women reported being less likely to reach out to men coworkers when receiving unresponsive advice (M = 3.60, SD = 1.58) compared with responsive advice (M = 3.78, SD = 1.59), b = -0.19, SE = 0.08, t(1617) = -2.36, p = .019, $p_{adj} = .031$, d = -0.12, 95% CI = [-0.21, -0.02].

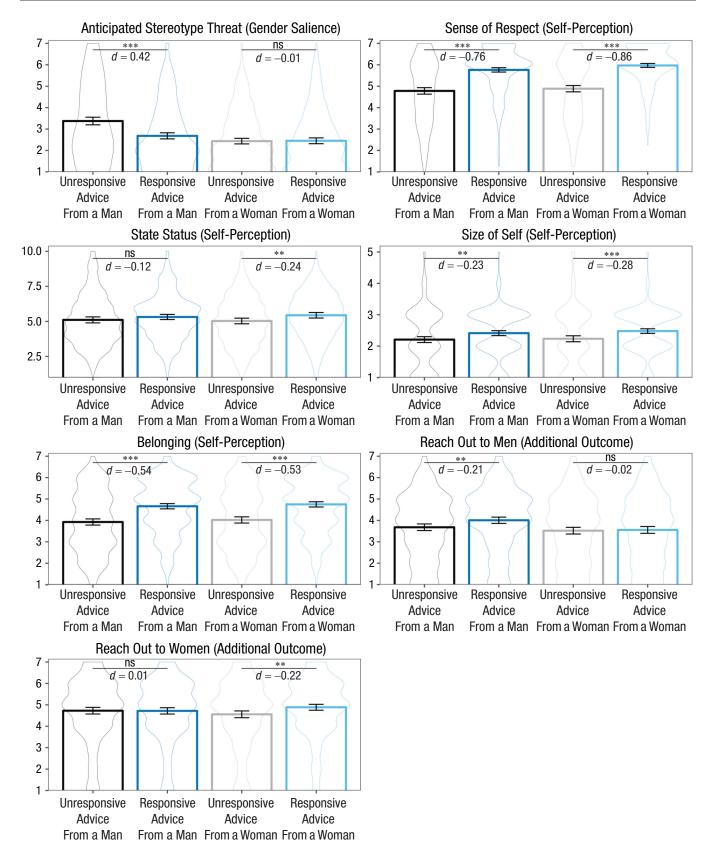


Fig. 4. (continued on next page)

Fig. 4. Study 4: Gender of advice giver does not influence women's self-perceptions but does influence their anticipated stereotype threat, replicating the findings of Study 3 with responsive advice as comparison condition. Women participants imagined having a conversation with a coworker who was either a man or a woman and who either gave unresponsive advice or gave responsive advice. Women participants were then asked a variety of measures about self-perceptions (i.e., sense of respect, state status, size of self, and belonging), gender salience during the interaction (i.e., anticipated stereotype threat), as well as other confirmatory measures (i.e., intentions to reach out to men and women coworkers). All measures used an agreement scale from 1 (strongly disagree) to 7 (strongly agree) except state status (scale from 1, lowest state status, to 10, highest state status) and size of self (scale from 1, smallest self, to 5, largest self); full axes are plotted. The advice giver's gender moderated the effects of unresponsive advice only on anticipated stereotype threat ($p_{adj} < .001$). On this chart, error bars represent 95% confidence intervals. Significance values reflect the adjusted p values. Cohen's d values are displayed below the significance values. The distribution of raw data is plotted in background.

Future interactions with women coworkers. We observed a significant interaction of speaker gender (man—Ryan vs. woman—Sarah) and advice type (unresponsive vs. responsive) for the likelihood of reaching out to women coworkers, b = 0.34, SE = 0.15, t(1615) = 2.22, p = .027, $p_{adj} = .043$. When imagining interacting with a woman coworker, women reported being less likely to reach out to women coworkers when receiving unresponsive advice (M = 4.56, SD = 1.63) compared with responsive advice (M = 4.89, SD = 1.41), b = -0.33, SE = 0.11, t(1615) =-3.06, p = .002, $p_{\text{adj}} = .004$, d = -0.22, 95% CI = [-0.35, -0.08]. However, when imagining interacting with a man coworker, we did not observe a difference in the likelihood of reaching out to women co-workers in the future (unresponsive advice: M = 4.73, SD = 1.56; responsive advice: M =4.72, SD = 1.52), b = 0.01, SE = 0.11, t(1615) = 0.08, p = .934, $p_{\text{adi}} = .950, d = 0.01, 95\% \text{ CI} = [-0.13, 0.14].$

Synthesis. Study 4 replicated the findings from Study 3, namely that women anticipated feeling less respected and having a lower state status and a smaller size of self when receiving unresponsive advice from both a man and a woman and greater anticipated stereotype threat only when receiving unresponsive advice from a man. Because we used a different comparison condition, namely responsive advice rather than responsive questions, this suggests that women's experience of unresponsive advice was driven at least in part by the unresponsive nature of advice and not an artifact of questions as the comparison condition.

General Discussion

What is it about certain cross-gender interactions that evoke the complaint of mansplaining? Five studies investigating mansplaining in the context of advice during "troubles talk" provide the initial empirical answer. Inspired by popular accounts by women (Enthoven, 2018; Larson, 2019; Solnit, 2012), we operationalized mansplaining in the domain of advice-giving as unsolicited, generic, and prescriptive recommendations—what we referred to as unresponsive advice. After first showing that U.S.-based women perceive that men give this type of advice more often than women (pilot study), we found that women

feel less respected, powerful, trusting, and listened to and have a smaller size of self when receiving unresponsive advice compared to being asked responsive questions from men in both real and hypothetical interactions (Studies 1 and 2). The negative effects of unresponsive advice on these self-perception outcomes were similar in magnitude regardless of the gender of the advice giver (Studies 3 and 4) and held when using responsive advice instead of responsive questions as a comparison condition (Study 4). What was influenced by the advice giver's gender, however, was that women anticipated greater stereotype threat—or being concerned that their gender influenced the interaction—only when men, but not when women, gave unresponsive advice.

This series of studies makes several important contributions. First, heeding calls by psychologists to study mansplaining (Johnson et al., 2021), we studied it in the context of advice and discussing problems (Tannen, 1990). Our manipulations drew not only on vignettes but also a live interaction study with scripted conversations to investigate how women feel when receiving unresponsive advice. However, given that the advice giver's gender did not influence the effects of unresponsive advice on the self-perceptions assessed here but did influence anticipated stereotype threat, the question of the precise ways in which mansplaining may be gendered remains open, as the article's title suggests, and points to the value of further investigation. Second, we advance the literature on responsiveness during interpersonal interactions. We showed that partner (un)responsiveness, as operationalized by how advice is given, affects interpersonal outcomes beyond liking (Huang et al., 2017) such as feeling respected and powerful. Third, we add to the literature on stereotype threat (Schmader et al., 2015; Steele, 2011) by showing that women anticipate feeling that they will be seen through the lens of gender in brief cross-gender advice-giving interactions. This complements recent findings suggesting women experience stereotype threat when receiving dependency-oriented help from men (Lee et al., 2023).

These initial studies of unresponsive advice are not without important limitations. First, on the basis of primary accounts made by women (Enthoven, 2018; Larson, 2019; Solnit, 2012), we strove to characterize

and study a constellation of behaviors that we believe capture women's experience of being given unresponsive advice. Future work might test which combination of these factors (or others not examined here, such as tone of voice) drove our effects. Second, we studied mansplaining only in the context of giving generic or obvious advice, and future work would benefit from studying mansplaining in other domains such as providing an obvious explanation (Solnit, 2012). Third, our only live-conversation study was over text between men and women, and in that study we did not measure women's actual experience of stereotype threat. Future work might look at cross- and same-gender face-to-face interactions and measure women's actual experience of stereotype threat. Fourth, our findings are limited to our sample: U.S.-based women recruited from convenience samples who are mostly White, college-educated and liberal. Studying men and those outside of the gender binary, as well as looking at advice interactions across other status or power divides (e.g., Harari et al., 2022), for example, would help broaden the theoretical implications of this work.

Our results show that many of the negative effects of unresponsive advice on self-perceptions seem to have been driven by the characteristics of the advice (i.e., being unresponsive) rather than by those of the advice giver (i.e., their gender). This is consistent with past research on advice (MacGeorge et al., 2016). Notably, however, unresponsive advice from men uniquely increased women's anticipated stereotype threat, thereby raising the possibility that women are seeing themselves as lesser and one-down. Although people operating under the threat of a stereotype typically do not believe or internalize the threat (Schmader et al., 2015; Steele, 2011)—which likely explains why the advice giver's gender did not influence the effects of unresponsive advice on immediate self-perceptions—they often are more distracted and perform less well (Wu & Cai, 2023). Future research should look at the related downstream consequences of unsolicited, generic, and prescriptive recommendations, including women's memory of their interactions, their motivation and performance on subsequent tasks. Future work should also probe the effects of unresponsive advice on women's perceptions of gender inequality now and in the future (see Study 3). While the advice giver's gender may not amplify the effects of unresponsive advice on women's self-perceptions, at least not immediately, it may influence their perspectives about the world and their place in it. In doing so, unresponsive advice, and mansplaining more broadly, may perpetuate a hierarchy in which men are accorded more status than women (Karpowitz & Mendelberg, 2014; Ridgeway, 2011).

Our studies add to the literature examining the effects of conversation on inclusion and societal divides (Muragishi et al., 2023; Santoro & Markus, 2023) by highlighting the understudied phenomenon of mansplaining in the context of advice-giving in the United States. This research suggests women will feel more respected, powerful, listened to, trusting and—when interacting with men in particular—less anticipated stereotype threat if, instead of receiving an immediate response replete with generic and prescriptive advice, they receive a responsive question or a tailored, solicited suggestion.

Transparency

Action Editor: Kate Ratliff Editor: Patricia J. Bauer Author Contributions

Erik Santoro: Conceptualization; Data curation; Formal analysis; Investigation; Methodology; Project administration; Resources; Visualization; Writing – original draft; Writing – review & editing.

Hazel Rose Markus: Conceptualization; Investigation; Methodology; Resources; Supervision; Writing – original draft; Writing – review & editing.

Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

Open Practices

This article has received the badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at http://www.psy chologicalscience.org/publications/badges.







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Supplemental Material

Additional supporting information can be found at http://journals.sagepub.com/doi/suppl/10.1177/09567976241268630

Note

1. Excluding women participants who did not know that they were speaking with a man or who did not have a sufficiently long conversation (i.e., each person shared three lines), although preregistered, more closely approximates a conditional average treatment effect analysis than an intent-to-treat analysis. To address this, in the Supplemental Material we analyzed the data of all women who started the conversation (rather than having a sufficiently long conversation) and even if they did not know they were speaking with a man. The significance and direction of the results were not affected by including these participants.

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