Flattering Advice: Avoiding Disappointment as a Driver of Gender Discrimination

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Author Note

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Abstract

The purpose of advice is to help recipients make better decisions and solve their problems. However, in this paper, we propose that advisors may also take recipients' responses into account and attempt to avoid disappointing them, leading to what we call "flattering advice." In two pre-registered experiments involving real interactions between advisors and advisees (n = 2,700), we show that individuals consider others' expectations when giving advice, even when such expectations do not provide informative insights for the underlying decision-making problem. As a result, men receive more aspirational advice than women, given their higher confidence, when expectations (but not gender) are shown to advisors. However, incorporating expectations leads to worse outcomes (Study 1). Individuals inflate their advice due to interpersonal considerations: people who are concerned about advisees' likability inflate their advice to a great extent. Advisees reward such flattering advice, finding the advisers more likable and no less trustworthy than those who provide more accurate advice (Study 2). We discuss practical and theoretical contributions and future research directions.

Keywords: Gender difference, Advice, Interpresonal relationship

Word count: 4,362

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Introduction

Seeking and giving advice can present conversational challenges that are difficult to navigate. Advice seekers may be embarrassed to ask for help (Bénabou, Jaroszewicz, & Loewenstein, 2022), and they may fail to do so if the information they receive could lead to disappointment (Gill & Prowse, 2012). Indeed, people prefer advisers who withhold unpleasant information (Shalvi, Soraperra, Weele, & Villeval, 2019) and punish those who tell them things they do not want to hear (John, Jeong, Gino, & Huang, 2019). People appear to engage in strategic selection of advice to avoid unpleasant information and protect the utility they get from positive beliefs about themselves and the future they anticipate (Loewenstein, 1987; Loewenstein & Molnar, 2018). But do advice givers anticipate and consider the hedonic cost of honest information to the recipient? While previous work has emphasized the instrumental value of advice (e.g., satisfaction with a decision or accuracy of a prediction), we focus on the motivations of the person providing advice.

Research on advice has largely focused on settings that do not tackle belief utility. For example, participants may have been asked to estimate the number of balls in an urn or choose from pairs of lotteries (Benjamin & Budescu, 2015). Advisers have been shown to be motivated to give accurate advice (Jonas & Frey, 2003), and engage in perspective-taking to meet the preferences of the advisee (L. J. Kray, 2000; L. Kray & Gonzalez, 1999). When they are uncertain, they even prefer that advisees do not rely (extensively) on their recommendations (Ache, Rader, & Hütter, 2020). Thus, it seems that people are concerned about providing good advice even when they are not incentivized for the recipient's decision quality.

In many real settings, however, advice incorporates beliefs about the recipient.

Someone recommending an expensive restaurant conveys that they think the advisee is

wealthy enough to afford an expensive meal, and someone recommending a student pursue a PhD in economics assumes that they are intellectually capable. Conversely, telling a poorly performing student to switch to a less-demanding major conveys a belief that the student is not capable of improving. Thus, while the painful truth may prevent someone from making a bad decision, it may come at a hedonic cost to the recipient and damage the relationship between the adviser and advisee. We propose that advisers take these costs into account, even when the interactions are entirely anonymous and they are incentivized for the quality of the advisee's decision.

Specifically, we focus on the signaling value of advice: what does the advice imply about the adviser's perception of the advisee? We propose that advisees have expectations about the advice they receive and treat this as a reference point (Kőszegi & Rabin, 2006). Advice that falls short of these expectations creates disappointment, while advice that exceeds them is flattering and creates positive interpersonal benefits because it creates a perception that the adviser holds the advisee in high esteem. Such interpersonal considerations may be as important, if not more important, to the adviser than the instrumental value of the advice: the adviser directly experiences a souring relationship, but may suffer little and only much delayed consequences if an advisee makes a poor life decision.

Our account therefore predicts that people give and receive advice that is more flattering and suggestive of inflated ability and optimistic outcomes than would advice in the absence of such interpersonal considerations. However, we propose that this is not true for all advisees equally. Presenting flattering advice requires the formation of beliefs about the advisee's expectations (reference point). Exley and Nielsen (2022) show that men are more overconfident than women, conditional on equal performance, and that people anticipate this difference. An adviser who seeks to avoid disappointment and incorporates expectations into their advice would then present more favorable advice to male advisees than to female advisees (see Figure 1 for an illustration). This provides a novel account for

a well-known finding that men receive more aspirational advice than do women (Kanze, Huang, Conley, & Higgins, 2018). Notably, when it pays to have accurate beliefs, such flattering advice would come at a cost: while men would be more likely to aim higher, they would also suffer greater costs from aiming too high and failing to meet the objective.

In a large, preregistered experiment (n = 2,000), we show that advisers consider the expectations of advisees, even when such expectations do not provide informative insights for the underlying decision-making problem. We find that as a result, showing expectations (but not gender) to advisers leads men to receive more aspirational advice than women. Incorporating expectations leads to worse advice, even when advisers are incentivized based on the outcome of the advisee's decision. In a second preregistered experiment (n = 700), we show that advisers respond to incentives for interpersonal considerations. They tell people that they are more attractive than they believe them to be, and inflate to a greater extent when incentivized for likability rather than accuracy. Notably, they inflate even when only incentivized for accuracy. Advisees indeed reward such flattering advice, rating the advisers more likeable and no less trustworthy than those who provide more accurate advice.

Open Science Statement

We report all sample sizes, data exclusions, manipulations, and measures in the studies. Screen captures of the experimental materials are available in the Supplemental Information. The complete data, code to reproduce all statistical analyses and figures in the manuscript, as well as the preregistration reports are available via OSF. All our studies were preregistered on AsPredicted.org.¹

 $^{^{1}}$ https://osf.io/8r3d4/?view only=5ad7bafcd16b4d4ba08bb28b0e2bd02d

Study 1

We begin by examining whether advisers take the expectations of advisees into account, even when those expectations are not relevant to the decision the advisee has to make. In a three-stage experiment, we first recruit a sample of advises and ask them to complete a mathematics quiz. After answering ten multiple-choice questions, participants are anchored to low or high performance expectations and asked to guess how many questions they answered correctly. Next, we recruit advisers and show them either only the true performance of the advisee, or the true performance and how many questions they guessed they answered correctly. Advisers are tasked with recommending whether the advisee should compete against a group of high-performers or a group of low-performers on the mathematics quiz, where a potential bonus depends on outperforming the competitor and which group was chosen. Finally, we invite the advisees back and show them the advice they have received. Advisees then pick whether to compete against high or low performers, with the outcome determined by their past performance on the quiz. Our key hypotheses are that (1) advises who were anchored to high expectations would be more likely to receive advice to compete against the high performer group, and (2) that men are more likely than women to be advised to compete against the high-performer group when expectations are shown.

Methods

As part of our main experiment, participants choose to compete against a group of previous participants and have their expectations anchored based on their performance. Thus, we begin by first recruiting a sample of 50 participants from Prolific to complete a 10-question multiple choice mathematics quiz. The questions were taken from a paper-version of the ASVAB standardized exam, such that answers were not available online. Participants had five minutes to answer the quiz and were paid 10 cents for each

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correctly answered question. We define the top 20 scorers as the "High Performers" and the bottom 20 scorers as the "Low Performers." On average, participants answered 4.42 questions correctly, High Performers scored between 5 and 10, and Low Performers scored between 0 and 3. In order to anchor the expectations of participants in our main experiment, we simulated 1,000 pairings of groups of five participants, with the 5th percentile of groups scoring an average of 2.60 and the 95 th percentile scoring an average of 6.40. We report these averages to participants in the Low Expectations and High Expectations treatment, respectively.

We then recruited 1,002 participants for the role of advisees in Stage 1 of our main experiment. To arrive at a gender-balanced sample, we dropped the last two male participants to complete the survey, ending up with a sample of 500 men and 500 women $(M_{\rm Age}=42.16)$. Participants completed the same 10-item mathematics quiz as the earlier participants and were informed that their performance would affect their bonus earnings in a follow-up stage to be conducted a few days later. After completing the quiz, we informed them of the average score of a group of five participants from the preliminary survey. We randomly assigned them to learn about the 5th percentile of groups, which scored 2.60. ("Low Expectations" treatment) or the 95th percentile of groups, which scored 6.40 ("High Expectations" treatment). Participants then made a guess (unincentivized) about how many questions they think they answered correctly. The survey concluded with basic demographic questions.

We began by informing them of the mathematics quiz that participants in the preliminary study and Stage 1 had completed, and informed them of the average score of all participants in the preliminary study. Advisers had to recommend whether an advisee should compete against the Low Performers or the High Performers (we used these terms in the survey). We anticipated that being told to compete against High Performers is more flattering and hence being told to compete against the Low Performers would be

disappointing if one had expected to do well. Advisees would earn 30 cents if their score was equal to or higher than a randomly selected member of the Low Performer group and they chose to compete against this group, or 50 cents if they performed as well or better than a randomly selected member of the High Performer group and they chose to compete against that group. If they scored lower, they would not receive any bonus.

Advisers were randomly assigned to one of two treatments. In the "Baseline" treatment, they only observed the score of the advisee on the mathematics quiz. In the "Expectation" treatment, they observed the score as well as the advisee's guess for how many questions they answered correctly. Note that since the outcome is determined only by the past score on the quiz, the advisee's guess is immaterial to which group they should compete against. Moreover, in neither treatment did they receive any demographic information about their advisee. Participants gave recommendations to 10 advisees, which unbeknownst to them were five men and five women matched to have identical performance on the test.² They were informed that if their advice was shown to a participant who returned for the follow-up survey, they would receive the identical bonus as that participant. The survey then concluded with basic demographic questions.

Finally, we invited participants from Stage 1 back for the follow-up survey. Following our preregistration, we kept the survey open for 7 days. In total, 951 participants (481 men, 470 women) returned. The brief survey reminded them of the task they completed in Stage 1, informed them that other participants from Prolific had observed their real score and given them advice against which group to compete against, and finally were reminded them of how many questions they guessed they had answered correctly. Importantly, they were not informed of their true score or the score of the groups they could compete against. Participants then observed the advice from a randomly selected adviser and made their decision.

² We made this decision to account for the possibility of gender differences in performance.

Results

We begin by examining the performance of the Stage 1 participants. Because our treatment takes place after participants completed the mathematics quiz, we would not expect a difference in performance across the Low and High Expectations treatments. Indeed, the two groups scored no different from one another (4.79 and 4.55 for the Low Expectations and High Expectations treatments, respectively, t(998) = -1.64, p = .102). The expectations treatment did, however, affect how well they thought they performed. Participants in the "Low Expectations" treatment guessed a score of 4.79 vs. 4.42 in the High Expectations treatment (t(998) = 3.78, p < .001), showing that the manipulation was successful, albeit small. Contrary to our expectations, we did find a gender difference in performance: men scored 5.02 on average, while women scored 4.33 (t(998) = -4.73, p < .001). Consistent with this difference, men thought they answered more questions correctly than did women (4.75 vs 3.56, t(998) = -8.60, p < .001). This difference, however, does not affect the interpretation of our findings, which will rely on an interaction of gender with an experimental treatment for Stage 2 participants.

We define a measure of "overconfidence" as (Performance - Estimate). We observe that women underestimate their performance by 0.76 points, while men do so by only 0.27 points $\Delta M = -0.49$, 95% CI [-0.73, -0.25], t(997.87) = -4.03, p < .001. Although neither gender is overconfident, men on average are more confident in their performance than are women, as we had expected.

Next, we examine whether advisers took the advisee's expectations into account. Column 1 of Table 1 reports a linear probability model on advising to compete against the High Performer group for advisers in the "Expectations" treatment, controlling for the true performance of the advisee. Because each adviser made ten recommendations, we cluster standard errors at the adviser level. However, contrary to our expectations, we do not see a significant effect of the expectations treatment. This may be because the induced difference

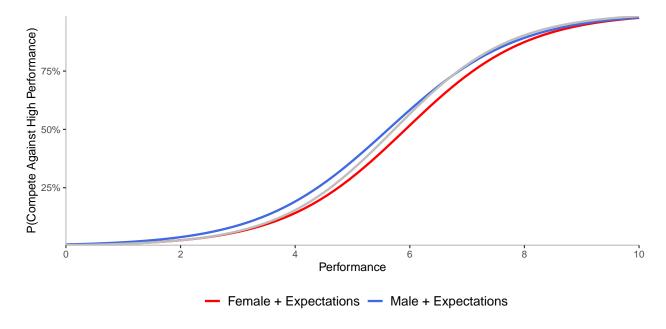


Figure 1. Advisers observed real performance and the participants' estimated performance, but not their gender. As a result of their higher expectations, men (blue) were advised to compete against the high performance group more often than women (red). The grey line shows advice absent expectations, which did not differ by gender.

in expectations was too small.

However, recall that men were more confident in their performance than were women. Our theory thus predicts that showing expectations should lead to more flattering advice (i.e., a recommendation to compete against the High Performer group) for men than for women. We report a linear probability model with advice to compete against the high group as the outcome measure, and the advisee's gender, whether expectations were shown to the adviser, and the interaction of the two in Column 2 of Table 1. As predicted, we find a significant interaction effect: men are more likely to be advised to compete against the High Performers when expectations are shown than when they are hidden (p < 0.001). We show this result graphically in Figure 1).

To examine the quality of advice, we computed the expected bonus earnings for someone who followed the recommendations. For example, if an adviser suggested competing against the High Performer group, we matched the advisee against all 20

members of that group and determined how often their score matched or exceeded that of the member. We then multiplied this number by the respective bonus earnings (50 cents and 30 cents for the High and Low Performer group, respectively). To see if including expectations leads to worse advise for men, we report a linear probability model with the experimental treatment of the adviser, the gender of the advisee, and their interaction in Column 3 of Table 1. Displaying expectations led men to be advised to compete against the High Performer group more often, and this advise turned out to be bad: men receive worse advise than do women when expectations are displayed, but not in their absence.³

To determine whether flattering advice is truly costly, however, we need to examine the outcome of the advisees. In particular, they could ignore flattering advice, recognizing it as such and thus failing to adhere to it.

Discussion

When the quality of a decision is not dependent on someone's expectations, advice should not be moved by whether an adviser is aware of the advisees expectations. However, consistent with our account that advisers consider the belief utility of the advisee and want to flatter, rather than disappoint them, we find that displaying expectations to advisers does matter. Specifically, we found that men underestimate their score on a mathematics test less than do women. When these expectations are displayed to advisers, they are more likely to tell men to compete against the High Performer group. Notably, this is bad advice: men's expected earnings decreases if their expectations are shown to advisers.

³ This analysis was not preregistered, and we note here that the reduction in expected earnings is small. However, it is interesting that expectations have a negative effect for men who underestimate their performance on average. One possibility is that advisers suggest the High Performer group more often than is optimal. We return to the possibility that advice is overall biased to be flattering in Study 2.

Study 2

We then conduct a three-stage experiment to determine why advisers give flattering advice. First, we ask a group of advisees to upload selfies and predict their rank in a group of ten people of the same gender based on physical attractiveness. Next, we recruit and ask advisers to rank selfies of the opposite gender and recommend which rank the participant ranked 7th should bet on, with the bonus being contingent on whether the participant guessed accurately or found the adviser likable. Finally, we show the advisees the advice they have received and ask them to make their final prediction about their rank and evaluate the advice giver in terms of likability, warmth, and trustworthiness. Our main hypothesis is that advisers who want to be liked by advisees would recommend a higher rank.

Methods

We recruited 300 participants and invited them to upload photos of themselves (selfies) to be rated by other participants on attractiveness. We ended up with a sample of 100 men and 107 women who agreed to do so and uploaded usable pictures. We selected the first 100 photos from women to arrive at a gender-balanced sample ($M_{\rm Age}=39.37$ years; 50.0% Female). We informed them that their selfies will be randomly grouped into nine others from the same gender and ranked by people of the opposite gender and asked them to predict their rank, with 1st rank represents the most attractive and 10th rank represents the least attractive. We assigned each participant to a group of 10 participants of their own gender.

Next, we recruited 472new participants and asked them to rank the attractiveness of one such group of 10 participants of the opposite gender ($M_{\text{Age}} = 41.03 \text{ years}$; 49.79% Female). After they did so, we showed them the photo of the participant they ranked as the 7th most attractive (that is, the 4th least attractive) and reminded them that they had

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ranked this person at 7th attractive. We (truthfully) informed them that this participant would have a chance to earn a bonus if they accurately guessed their rank based on the aggregated ratings of all participants who had ranked this group. Participants were then randomly assigned to an "accuracy" or a "likeability" treatment. In the accuracy treatment, they were told that they would receive a bonus (\$1) identical to that of the advisee. While in the "likeability" treatment, the amount their bonus depended on how the advisee rated them in terms of likeability, after observing only the rank that they had advised the advisee to guess. Advisees would rate to what extent they think the adviser is likable on a 5-point scale, and each point they earn increases their bonus by 20 cents.

Finally, we invited participants from Stage 1 and were ranked as the 7th attractive by at least one adviser (so that they received advice) back for the follow-up survey. Following our preregistration, we kept the survey open for 7 days. In total, 146 participants (77 men, 69 women) returned. They were reminded of the selfie they uploaded in Stage 1 and informed that a group of 10 selfies, including theirs, had been rated by other participants from Prolific. They were also introduced to the opportunity to earn a \$1 bonus if they guessed their rank accurately. Participants were then shown the advice from a randomly selected adviser and made their predictions. After deciding which rank to bet on, advisees were reminded of the advice they received and asked to rate the advice giver's likability, warmth, friendliness, good-naturedness, trustworthiness, and sincerity on a 5-point scale. The last 6 items were adopted from Fiske, Cuddy, and Glick (2007).

Results

Again, we found supportive evidence that males are more confident about themselves, giving higher initial rank prediction (more attractive) than female participants (5.76 vs. 6.37, t(205) = 2.15, p = .033).

Examining advice from Stage 2 participants, we found that participants advised a

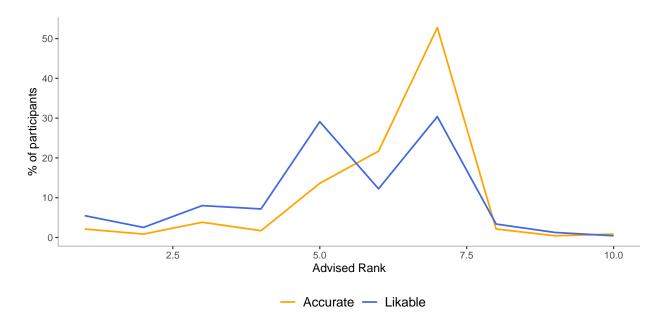


Figure 2. Advice for 7th most attractive participants

lower rank (that is, more attractive) in the likeability treatment than the accuracy treatment (5.38 vs 6.19, t(470) = 5.44, p < .001). As seen in Figure 2, notably, however, even in the accuracy treatment, participants advised a lower rank than they themselves had provided (t(234) = -8.82, p < .001). This suggests that advisers inferred that advising someone that they were more attractive would make the adviser appear more likeable and therefore provided advice that communicated a more favorable impression of the participants' attractiveness.

To test whether flattering advice brings more positive evaluation of advisers, we create a single index for warmth and trustworthiness by taking average of ratings on warmth, friendliness, good-naturedness, trustworthiness for the former and ratings on trustworthiness, and sincerity for the later. As seen in Figure 3, we found that advisees who suggested that the advisee was more attractive (lower rank) were indeed rated as more likeable and warm (b = -0.109, p < .05; b = -0.133, p < .001; See Columns 1 and 2 of Table 2). Interestingly, these benefits are not at the cost of being hypocritical; advisers are also seen as more trustworthy, but the result is only directional (Column 3 of Table 2). Notably,

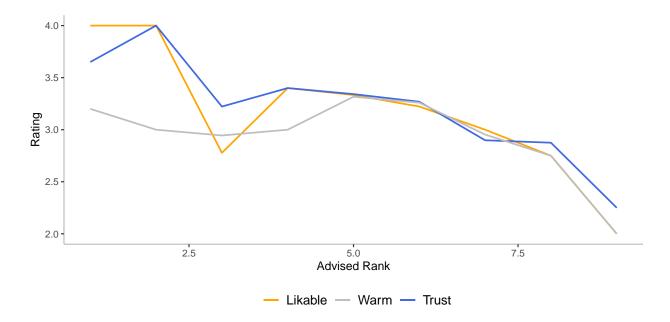


Figure 3. The evaluation of advice givers

however, we were not powered to do a comparison across the two experimental groups.

Discussion

dvice substantially shapes people's career and personal outcomes. Therefore, understanding advisers' motivations has far-reaching implications. We propose that advisers' focus on advisees' expectations and the desire to avoid disappointing them can induce gender differences in the advice given and ultimately in the outcomes achieved. Gender differences in career outcomes contribute significantly to the gender wage gap, with women often holding less senior positions and experiencing worse career outcomes, even with equal performance. Therefore, identifying a factor such as expectations that contributes to this gap has important implications for organizational practice.

In this paper, we examine a novel and unexplored factor of advice-giving: interpersonal considerations. Advisers who take into account the advisee's belief utility inflate their advice to convey a more favorable impression, leading to worse decisions and gender differences. Men have more inflated expectations than women, and taking

expectations into account can lead to gender differences, even without discrimination. We ruled out discrimination as a separate channel by withholding information about the gender of the advisee. Finally, we expect that advisers are aware of the tradeoff between giving accurate advice and avoiding disappointment and, thus, are less likely to inflate their advice when advisees can compensate them after observing the outcome of their choice.

The findings of this study suggest that organizations can promote gender equity by calibrating employees' expectations or shifting advisers' attention away from them. While these measures may not entirely solve the gender gap problem, they can make a meaningful difference when unconscious bias interventions have failed to show any effect (Chang et al., 2019; Paluck & Green, 2009). We believe our findings may be particularly relevant to societies that value signaling in interpersonal relationships, including Hong Kong and many Asian countries. Future work could also examine whether people in different cultures place more weight on expectations.

References

- Ache, F., Rader, C., & Hütter, M. (2020). Advisors want their advice to be used-but not too much: An interpersonal perspective on advice taking. *Journal of Experimental Social Psychology*, 89, 103979.
- Bénabou, R., Jaroszewicz, A., & Loewenstein, G. (2022). It Hurts to Ask. National Bureau of Economic Research.
- Benjamin, D., & Budescu, D. V. (2015). Advice from experience: Communicating incomplete information incompletely. *Journal of Behavioral Decision Making*, 28(1), 36–49.
- Chang, E. H., Milkman, K. L., Gromet, D. M., Rebele, R. W., Massey, C., Duckworth, A. L., & Grant, A. M. (2019). The mixed effects of online diversity training. *Proceedings of the National Academy of Sciences*, 116(16), 7778–7783.
- Exley, C., & Nielsen, K. (2022). The gender gap in confidence: Expected but not accounted for. Available at SSRN 4352381.
- Fiske, S. T., Cuddy, A. J., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11(2), 77–83.
- Gill, D., & Prowse, V. (2012). A structural analysis of disappointment aversion in a real effort competition. *American Economic Review*, 102(1), 469–503.

- John, L. K., Jeong, M., Gino, F., & Huang, L. (2019). The self-presentational consequences of upholding one's stance in spite of the evidence. *Organizational Behavior and Human Decision Processes*, 154, 1–14.
- Jonas, E., & Frey, D. (2003). Information search and presentation in advisor-client interactions. Organizational Behavior and Human Decision Processes, 91(2), 154–168.
- Kanze, D., Huang, L., Conley, M. A., & Higgins, E. T. (2018). We ask men to win and women not to lose: Closing the gender gap in startup funding. *Academy of Management Journal*, 61(2), 586–614.
- Kőszegi, B., & Rabin, M. (2006). A model of reference-dependent preferences. *The Quarterly Journal of Economics*, 121(4), 1133–1165.
- Kray, L. J. (2000). Contingent weighting in self-other decision making. Organizational Behavior and Human Decision Processes, 83(1), 82–106.
- Kray, L., & Gonzalez, R. (1999). Differential weighting in choice versus advice: I'll do this, you do that. *Journal of Behavioral Decision Making*, 12(3), 207–218.
- Loewenstein, G. (1987). Anticipation and the valuation of delayed consumption. *The Economic Journal*, 97(387), 666–684.
- Loewenstein, G., & Molnar, A. (2018). The renaissance of belief-based utility in economics. Nature Human Behaviour, 2(3), 166–167.
- Paluck, E. L., & Green, D. P. (2009). Prejudice reduction: What works? A review and assessment of research and practice. *Annual Review of Psychology*, 60, 339–367.
- Shalvi, S., Soraperra, I., Weele, J. J. van der, & Villeval, M. C. (2019). Shooting the messenger? Supply and demand in markets for willful ignorance.

Table 1
Column 1 displays the advice given to compete against a High Performance group based on whether the advisees were primed with low or high expectations and the expectation level shown to the advisor. Column 2 displays the advice given to compete against a High Performance group based on the gender of the targets and the expectation level shown to the advisor. Column 3 displays the expected bonus of the advice received based on the gender of the targets and the expectation level shown to the advisor. All standard errors clustered at the level of the advisor.

	(1)	(2)	(3)	
High Expectation	0.012			
	(0.011)			
Performance	0.128***			
	(0.003)			
Expectation Shown		-0.034*	0.000	
		(0.013)	(0.003)	
Advisee Male		0.002	0.000	
		(0.005)	(0.001)	
Expectation x Male		0.032***	-0.005**	
		(0.009)	(0.002)	
Constant	-0.263***	0.339***	0.258***	
	(0.015)	(0.010)	(0.002)	
N	5000	10 000	10 000	
+ p < 0.1 * p < 0.05 ** p < 0.01 *** p < 0.001				

$$+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001$$

Table 2
When individuals receive advice that implies a high level of attractiveness (lower rank), they tend to perceive the advice giver as more likable (Column 1), warm (Column 2). Column 3 shows that advisors are rated as more trustworthy when they advice lower ranks, but this relationship is only directional.

	(1)	(2)	(3)	
Advised Rank	-0.109*	-0.133**	-0.054	
	(0.046)	(0.044)	(0.042)	
Constant	3.777***	3.903***	3.397***	
	(0.279)	(0.266)	(0.257)	
N	146	146	146	
+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001				