

Never Show Off Before an Expert? Underestimating the Benefits of Demonstrating Competence in Evaluators' Areas of Expertise

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Abstract

Individuals must demonstrate their capabilities to distinguish themselves, yet they often predict that showcasing their abilities in a domain where the evaluator possesses expertise will expose their weaknesses and result in negative assessments, leading them to avoid displaying their skills before experts. However, is this prediction accurate? Eight studies ($N = 1,888$) required candidates to choose whether to demonstrate their abilities in an evaluator's area of expertise or non-expertise, and required evaluators to select one candidate from either those who displayed ability before an expert or those who did not. The findings revealed that candidates underestimated the evaluations received by those who displayed ability before an expert. The cause of this prediction bias is that evaluators base their decisions on the pride they experience when their domain of expertise is referenced, consequently providing positive evaluations to those who display ability before them, whereas candidates select domains based on whether their abilities can be easily discerned, fearing that displaying ability before an expert will expose their weaknesses.

Full Text

Undervaluing the Advantages of Displaying Competence Before an Expert

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Abstract

Individuals must showcase their abilities to stand out, yet they often predict that displaying competence in an evaluator's area of expertise will expose their weaknesses and lead to negative evaluations, causing them to avoid "showing off before an expert." But is this prediction accurate? Eight studies ($N = 1,888$) asked candidates to choose whether to demonstrate their abilities in an evaluator's area of expertise or non-expertise, and asked evaluators to select one candidate for admission from those who did or did not display competence before an expert. The results revealed that candidates undervalued the evaluations they would receive from showing off before an expert. This prediction bias arose because evaluators based their decisions on the pride they felt when their expertise was referenced, leading them to favor candidates who displayed competence in their domain, whereas candidates selected domains based on whether their abilities would be easily discerned, fearing that showing off before an expert would reveal their flaws.

Keywords: prediction bias, egocentrism, competence, pride, judgment and decision making

1. Introduction

Everyone desires to showcase themselves and receive positive evaluations. In evaluative contexts such as interviews and competitions, how can individuals effectively highlight their strengths and avoid their weaknesses? People deliberate extensively on this question. Imagine applying to a renovation company and being required to complete a woodworking or masonry project on the spot. You know both trades but are only moderately skilled in each. You learn that the interviewer is Lu Xiaoban, a master carpenter renowned for his exceptional woodworking skills. Which project would you choose? Many believe that "showing off before an expert" —displaying one's abilities in an evaluator's area of expertise—demonstrates overconfidence and invites criticism by exposing one's flaws. Since the interviewer excels at woodworking, to increase your chances of being hired, you should avoid showing off before an expert and choose the masonry project instead. This approach seems to be common wisdom: students seeking high grades generally avoid challenging their instructors' areas of expertise when choosing assignment topics, and competitors eager to advance typically steer clear of judges' specialties when selecting competition events. But does this strategy of avoiding an evaluator's domain of expertise actually help people succeed in interviews and competitions, as they expect?

Previous research has examined how individuals select external environments to package themselves favorably [?, ?, ?, ?]. For example, individuals strategically choose which teams to join, with women preferring all-male teams and Black individuals preferring all-White teams, thereby altering their environment to increase their chances of standing out among team members [?, ?]. People also select transportation environments, choosing luxury cars over ordinary vehicles

when attending social gatherings to impress friends [?, ?]. Similarly, individuals choose communication contexts, preferring face-to-face interactions over online media when they want to communicate candidly with friends [?, ?]. Through careful selection of external environments, people hope to present themselves favorably.

However, when showcasing themselves, individuals must not only utilize external environments but also demonstrate their intrinsic qualities such as competence, and showing off before an expert represents one such strategy for displaying ability. Unlike previous research, the present study shifts its focus to how individuals present their intrinsic qualities, examining whether people anticipate that showing off before an expert will elicit negative evaluations and consequently avoid this approach, and whether this prediction is accurate.

We propose that people will undervalue the evaluations they receive from showing off before an expert. In the opening example, you might predict that choosing the woodworking project would result in rejection by Lu Xiaoban, when in fact Lu Xiaoban would be inclined to hire candidates who choose the wood-working task. Why do candidates and evaluators disagree? This may be closely related to people's self-centeredness and their difficulty in considering others' feelings.

1.1 Egocentrism and Difficulty Anticipating Others' Feelings

According to role theory and situated social cognition theory, people's social cognition and behavior are profoundly influenced by their situations and roles [?, ?, ?, ?, ?]. Following these perspectives, previous research has found in various contexts that due to egocentrism, people focus on their own thoughts and feelings during social interactions [?, ?, ?, ?] and struggle to consider others' feelings, resulting in empathy gaps [?, ?, ?, ?]. For example, when choosing friends, people worry that others' high social status will make them appear inferior and trigger jealousy, yet those seeking to attract friends overlook this concern about appearing inferior and instead focus on how to display their own superior social status [?, ?]. Gratitude recipients care about the surprise and joy they feel when receiving thanks, whereas gratitude expressers worry about whether their expression is appropriate [?, ?]. Praise recipients view praise as a warm interpersonal interaction and focus on the pleasant feeling of being praised, whereas praise givers concern themselves with whether their wording is appropriate and their expression is clear [?, ?].

It is understandable that different roles involve different concerns. Unfortunately, empathy gaps cause people to neglect others' feelings, leading to prediction biases and maladaptive decisions. For instance, those seeking to attract friends overlook others' feelings and use luxury goods rather than ordinary products to highlight their superior social status, which actually makes it harder to make friends [?, ?]. When considering whether to express gratitude, people overthink their wording and neglect the joy recipients feel when receiving thanks,

making them reluctant to express gratitude and hindering interpersonal communication [?, ?]. When considering whether to praise others, people worry about inappropriate wording or unclear expression and neglect the positive feelings recipients experience, causing them to miss opportunities to enhance both parties' well-being [?, ?]. In summary, people's egocentrism creates empathy gaps that prevent them from accurately predicting others' feelings, leading to negative consequences.

1.2 Misprediction in Showing Off Before an Expert

When choosing which ability domain to showcase, people are also likely to encounter empathy gaps and develop prediction biases. Evaluators' decisions depend not only on candidates' abilities but also on their own feelings during the evaluation process. Candidates (i.e., predictors) aim to stand out and therefore focus on which approach best showcases their abilities and highlights their strengths while concealing their weaknesses. Egocentrism makes it difficult for candidates to recognize that evaluators' judgments of those who show off before an expert are influenced by their feelings.

First, although evaluators must assess candidates' abilities, research on the affect infusion model and feelings-as-information theory demonstrates that emotions influence evaluations [?, ?, ?]. For example, [?, ?] found that participants in positive moods rated judgment targets more positively on personality traits than those in negative moods. [?, ?] discovered that participants experiencing positive rather than negative emotions reported greater life satisfaction. [?, ?] found that in performance evaluations, the stronger the positive emotions evaluators experienced toward a target, the higher the performance rating they assigned and the more willing they were to allocate resources to that target. These studies all indicate that feelings can determine evaluations and decisions.

Evaluators' assessments of those who show off before an expert may be influenced by pride. Pride refers to the pleasant feelings individuals experience due to their own achievements and values [?, ?]. Based on previous definitions of pride and the characteristics of the ability-displaying contexts examined in this research, we define evaluators' pride as the positive feelings arising from being proficient in a particular domain and having achieved success in that domain. According to this definition, when candidates show off before an expert, they can remind evaluators of their area of expertise, which in turn triggers associations with their achievements and recognition in that domain, making them feel a sense of self-realization and awakening their pride [?, ?]. This drives evaluators to maintain a positive attitude and make favorable evaluations of such candidates [?, ?]. Therefore, evaluators' pride likely leads them to evaluate those who show off before an expert positively. It is worth noting that evaluators' pride is not equivalent to their simple liking of their area of expertise; pride and liking can be independent. For example, a student with strong mathematical thinking skills who can solve difficult math problems may feel proud of their mathematical achievements without necessarily liking mathematics. Thus, evaluators may

not favor candidates who show off before an expert simply because they like their area of expertise.

On the other hand, in contexts such as interviews and competitions where abilities must be demonstrated, candidates aim to showcase their abilities effectively, hoping to highlight strengths and avoid weaknesses to receive positive evaluations. Due to normal distributions, the vast majority of candidates are not exceptional, and their abilities are often inferior to those of judges. Consequently, candidates focus on “avoiding weaknesses” and hiding competence deficits. For example, those with mediocre abilities tend to avoid difficult tasks [?, ?] because they worry that difficult tasks will expose their inadequacies. Similarly, candidates predict that demonstrating abilities in an evaluator’s domain will make their limited skills immediately apparent, revealing their flaws and resulting in negative evaluations, making them reluctant to show off before an expert. Meanwhile, egocentrism leads candidates to select domains based on their own need to display competence while neglecting that evaluators will consider the pride they feel when their expertise is referenced. Therefore, candidates may underestimate the benefits of displaying abilities in an evaluator’s domain of expertise. Based on this reasoning, we propose the following hypotheses:

Hypothesis 1: Candidates will undervalue the evaluations they receive from displaying competence in an evaluator’s area of expertise, thereby missing opportunities to impress judges by showing off before an expert.

Hypothesis 2: The cause of this prediction bias is that evaluators base their decisions partly on the pride they feel when their area of expertise is mentioned, leading them to favor those who show off before an expert, whereas candidates base their decisions on whether their competence will be easily discerned, believing that flaws are more likely to be exposed in the evaluator’s domain of expertise.

1.3 Competing Hypotheses

In addition to “mentioning one’s area of expertise elicits pride,” other factors that candidates neglect may also contribute to prediction bias.

First, evaluators may be more familiar with their area of expertise, leading to fluent processing during evaluation and generating positive feelings [?, ?], resulting in higher evaluations for those who show off before an expert. Familiarity and expertise are two independent dimensions; familiarity can be defined by duration of exposure, whereas expertise is demonstrated through achievement. Therefore, people may not be skilled in familiar domains—for example, some students frequently work on math problems but still perform poorly. In all experiments except Study 1, we ensured that evaluators had equal exposure duration and familiarity with their expert and non-expert domains. If evaluators still preferred candidates who showed off before an expert, this would demonstrate that positive feelings from familiarity alone do not determine their preference.

Second, evaluators may perceive subjective similarity with those who show off before an expert, believing they share an interest in the same domain. According to similarity-attraction theory, people prefer those who are similar to themselves [?, ?], leading evaluators to give higher ratings to those who show off before an expert. However, only when candidates actively choose the evaluator's domain of expertise can this reflect shared interests; if candidates are assigned to the evaluator's domain, the domain does not reflect their interests. Therefore, we examined whether the prediction bias remains stable when candidates actively choose versus when they are passively assigned to domains, thereby ruling out this competing hypothesis.

1.4 Overview of Studies

We conducted eight studies to test whether candidates undervalue the evaluations they receive from displaying competence in an evaluator's area of expertise and to reveal the mechanism and consequences of this prediction bias (Figure 1 [Figure 1: see original paper]). Studies 1 through 3 tested the basic effect. Study 1 compared candidates' choices with evaluators' judgments, revealing the prediction bias and its consequences in a choice involving personal stakes. Study 2 examined whether the prediction bias remained stable under promotion and elimination tournament formats while controlling for evaluators' familiarity with their expert and non-expert domains, ruling out the competing hypothesis related to familiarity. In Study 3, candidates were required to demonstrate competence in a specific domain, allowing us to rule out the competing hypothesis related to subjective similarity. Studies 4 through 8 tested the mechanism underlying the effect. Studies 4 and 5 manipulated candidates' promotion motivation and competence level, respectively, to test the candidate pathway leading to prediction bias—namely, that candidates select demonstration domains based on whether their competence will be easily discerned. Study 6 prompted candidates to consider evaluators' feelings, testing the evaluator pathway leading to prediction bias—namely, that evaluators base decisions on pride from their expertise but candidates neglect evaluators' feelings. Study 7 manipulated evaluators' achievement to alter their pride, providing a more direct test of the evaluator pathway. Study 8 compared candidates' and evaluators' thoughts during prediction and evaluation, providing a comprehensive test of both candidate and evaluator pathways.

Based on G*power calculations, for a medium effect size (Cohen's $d = 0.5$ or $\phi = 0.3$) and statistical power of 0.8, at least 64 participants per condition were required. Therefore, we recruited at least 65 participants per condition in all experiments to ensure adequate statistical power. All study materials are available at <https://osf.io/xhmja/>.

[Figure 1: see original paper] Theoretical framework of the research

2. Study 1: Real Choices

Study 1 recruited participants who were genuinely skilled in either Chinese language or mathematics as evaluators and had them evaluate candidates' essays on Chinese or mathematics learning, examining whether candidates could accurately predict evaluators' admission decisions.

2.1 Participants and Design

We recruited 130 adult participants through the Credamo survey platform, including 41 males and 89 females, with a mean age of 27.56 years ($SD = 6.95$ years). A single-factor between-subjects design was employed, with role (candidate vs. evaluator) as the independent variable. In the evaluator condition, we asked participants to report their actual area of expertise, distinguishing between those skilled in Chinese language and those skilled in mathematics.

2.2 Procedure

Candidates were told they were contestants in an academic essay competition and needed to submit an essay on either Chinese or mathematics learning. Their submission would be presented to competition judges alongside another contestant's essay on the other subject, and the judges would select one winner. Candidates then read two essays on Chinese and mathematics learning, learning that these were previous competition entries. To save time, they could choose one directly without writing it themselves. Additionally, a third-party school teacher considered both essays somewhat superficial and of average quality. Candidates were informed that the judges considered themselves skilled in Chinese language but not mathematics (or skilled in mathematics but not Chinese language) and felt competent in Chinese language (or mathematics) in daily life. Candidates then answered, "Which subject's essay do you predict is more likely to win?" (1 = mathematics, 2 = Chinese language). To incentivize accurate predictions, we told candidates they would receive additional payment if their prediction matched the evaluators' preference in this experiment. Under this monetary incentive, candidates' choices were incentive-compatible and had real consequences.

Evaluators first indicated which subject they were skilled in (Chinese language or mathematics) and recalled and wrote about moments when they felt competent in Chinese language or mathematics. This allowed us to distinguish evaluators with different areas of expertise. Next, evaluators served as public judges in the essay competition and selected a winner from two contestants who submitted essays on different subjects. Contestant Zhao submitted an essay on Chinese learning, while contestant Li submitted an essay on mathematics learning. A third-party school teacher considered both essays somewhat superficial and of average quality. After reading both essays, evaluators answered, "Who would you choose as the winner?" (1 = Zhao, 2 = Li).

Finally, all participants completed demographic questions on gender and age.

2.3 Results and Discussion

A chi-square analysis with role as the independent variable and choice as the dependent variable revealed that only 44.60% of candidates chose to submit an essay in the evaluator's area of expertise, whereas 63.10% of evaluators admitted candidates who chose their area of expertise, $\chi^2(1, N = 130) = 4.46, p = 0.035, \phi = 0.19$.

Study 1 provided support for Hypothesis 1 by comparing candidates' and evaluators' real choices: candidates undervalued the evaluations they would receive from displaying competence in an evaluator's area of expertise, thereby missing opportunities to impress judges by showing off before an expert. Even when we incentivized candidates to accurately predict evaluators' preferences, they still exhibited prediction bias. However, because Study 1 recruited evaluators who self-reported expertise in different domains, it was difficult to strictly control and differentiate evaluators' level of expertise (i.e., achievement in the domain) from their familiarity (i.e., duration of exposure to the domain). Therefore, evaluators might have been more familiar with their area of expertise, which could have led them to favor those who showed off before an expert. In subsequent studies, we ensured equal exposure duration and familiarity with expert and non-expert domains to rule out familiarity as a competing explanation. Additionally, in Study 1, evaluators self-reported their areas of expertise, which may not have been accurate. Therefore, subsequent studies used imagined scenarios with textual descriptions to control evaluators' expertise levels across domains. Furthermore, evaluators' areas of expertise were not randomly assigned, making this a quasi-experimental design that cannot strictly establish causality. To address this issue, subsequent studies randomly assigned participants to conditions.

3. Study 2: Promotion and Elimination Tournaments

To address the limitations of Study 1, Study 2 employed a rigorous experimental method, randomly assigning participants to conditions to more rigorously test whether the prediction bias regarding showing off before an expert exists. Additionally, we ensured equal exposure duration and familiarity with expert and non-expert domains, ruling out the competing hypothesis that evaluators favor those who show off before an expert simply because they are more familiar with their area of expertise.

Furthermore, promotion and elimination tournaments represent two common competition formats, corresponding to two psychological processes: selecting the best versus eliminating the worst [?, ?]. However, regardless of format, according to our reasoning, candidates will consider which choice best showcases their abilities while neglecting evaluators' feelings. Therefore, we propose that the prediction bias regarding showing off before an expert exists in both tournament formats.

Study 2 used a painting competition scenario to test whether the prediction bias

remained stable under promotion and elimination tournament formats. This study was preregistered on the OSF platform (<https://osf.io/xhmja/>).

3.1 Participants and Design

We recruited 260 adult participants through the Credamo survey platform, including 82 males and 178 females, with a mean age of 29.86 years ($SD = 6.82$ years). A 2 (role: candidate vs. evaluator) $\times 2$ (tournament format: promotion vs. elimination) between-subjects design was employed.

3.2 Procedure

Candidates read a scenario imagining they had entered a Chinese painting competition and reached the semifinals. The semifinals used a group-stage promotion (or elimination) format, pairing contestants of similar ability based on preliminary round scores. Each contestant needed to choose between two painting techniques—freehand brushwork (xieyi) and meticulous brushwork (gongbi)—for their submission, and judges would select one contestant to advance (or eliminate). Participants learned that based on their preliminary scores, their mastery of both techniques was average, placing them at the medium level among all contestants. The semifinal judges were invited professional Chinese painting masters with equivalent familiarity with both freehand and meticulous brushwork, having ten years of experience with each. Moreover, the judges excelled at freehand brushwork, with over a hundred award-winning works; although also familiar with meticulous brushwork, they were not skilled in it, with only ten award-winning works to date. Candidates then predicted, “Which painting technique would you choose to submit in the semifinals to be more likely to advance (or be eliminated)?” (1 = freehand brushwork, 2 = meticulous brushwork).

Evaluators read the corresponding scenario from the judges’ perspective and needed to select one contestant, Zhao or Li, to advance (or eliminate). Zhao and Li were similarly skilled, both at the medium level among all contestants, with average mastery of both techniques. In the semifinals, Zhao chose to paint in the judge’s area of expertise (freehand brushwork), while Li chose to paint in the judge’s non-expert area (meticulous brushwork). Evaluators then answered, “Who would you choose to advance (or eliminate)?” (1 = Zhao, 2 = Li).

Finally, participants completed demographic questions on gender and age.

3.3 Results and Discussion

As shown in Figure 2 [Figure 2: see original paper], binary logistic regression results indicated that the main effect of role was not significant ($B = -0.12$, $SE = 0.25$, $Wald \chi^2 = 0.23$, $p = 0.630$, $Exp(B) = 0.89$). The main effect of tournament format was not significant ($B = -0.34$, $SE = 0.25$, $Wald \chi^2 = 1.82$, $p = 0.178$, $Exp(B) = 0.71$).

Importantly, the interaction between role and tournament format was significant

($B = 3.45$, $SE = 0.55$, $Wald \chi^2 = 39.67$, $p < 0.001$, $Exp(B) = 31.62$, 95% $CI = [10.80, 92.63]$). In promotion tournaments, only 26.56% of candidates believed that choosing the evaluator's area of expertise would increase their chances of advancement, whereas 70.31% of evaluators advanced contestants who chose their area of expertise, $\chi^2(1, N = 128) = 24.52$, $p < 0.001$, $\phi = 0.44$. In elimination tournaments, 75.38% of candidates believed that choosing the evaluator's area of expertise would increase their likelihood of elimination, whereas only 38.81% of evaluators eliminated contestants who chose their area of expertise, $\chi^2(1, N = 132) = 17.99$, $p < 0.001$, $\phi = 0.37$.

Study 2 demonstrated that candidates undervalued the evaluations they would receive from showing off before an expert in both promotion and elimination tournaments: candidates underestimated the likelihood of advancing by choosing the evaluator's area of expertise and overestimated the likelihood of being eliminated by doing so. Moreover, the prediction bias remained stable even after controlling for judges' familiarity with different domains, indicating that the bias is not solely attributable to evaluators' greater familiarity with the domain in which candidates show off.

4. Study 3: Forced to Show Off Before an Expert

Study 3 used an admissions interview scenario to further test the robustness of the effect. If evaluators favor those who show off before an expert simply because they perceive subjective similarity in interests, this preference should disappear when candidates are forced to show off before an expert. If evaluators continue to favor those who show off before an expert and candidates still exhibit prediction bias even when forced to do so, this would rule out the competing hypothesis related to subjective similarity.

4.1 Participants and Design

We recruited 260 adult participants through the Credamo survey platform, including 83 males and 177 females, with a mean age of 28.59 years ($SD = 8.32$ years). A 2 (role: candidate vs. evaluator) \times 2 (assigned domain: evaluator's area of expertise vs. non-expertise) between-subjects design was employed.

4.2 Procedure

Candidates read a scenario imagining they (as Zhao) and Li were undergraduate students in the foreign language department at the same university, applying for admission to a Semitic languages program. The interview required candidates to deliver a research presentation on one of two languages in the program—Arabic or Hebrew—based on a lottery draw. Participants learned that both they and Li had average proficiency in both languages and limited extracurricular knowledge. According to the target university's website, the interviewer was an invited external expert from the Semitic Languages Research Association,

equally familiar with both Arabic and Hebrew, with ten years of research experience in each. The interviewer was highly skilled at researching Arabic, having published over ten papers on Arabic; although also familiar with Hebrew research, he was not skilled in it, having published only four papers on Hebrew to date.

In the condition where the assigned domain was the evaluator's area of expertise, participants (as Zhao) were required to present on Arabic (the judge's expertise), while Li was required to present on Hebrew (the judge's non-expertise). In the condition where the assigned domain was the evaluator's non-expertise, the assignments were reversed. Candidates then predicted, "Who do you think the interviewer will admit?" (1 = you [Zhao], 2 = Li).

Evaluators read the corresponding scenario from the judges' perspective, learning that interviewees Zhao and Li were from the same university and major, with similar ability levels and average proficiency in both languages, along with limited extracurricular knowledge. In the assigned expertise domain condition, Zhao was required to present on Arabic (the judge's expertise) and Li on Hebrew (the judge's non-expertise); in the assigned non-expertise domain condition, the assignments were reversed. After reading the scenario, evaluators answered, "Who would you admit?" (1 = Zhao, 2 = Li).

Finally, participants completed demographic questions on gender and age.

4.3 Results and Discussion

As shown in Figure 3 [Figure 3: see original paper], binary logistic regression results indicated that role (0 = candidate, 1 = evaluator) significantly predicted admission choice (0 = one who shows off before an expert, 1 = one who does not) ($B = -1.50$, $SE = 0.30$, $Wald \chi^2 = 25.43$, $p < 0.001$, $\text{Exp}(B) = 0.22$, 95% $CI = [0.13, 0.40]$). Regardless of whether Zhao was assigned to the evaluator's area of expertise or non-expertise, candidates underestimated the likelihood of being admitted after discussing the evaluator's area of expertise (Zhao assigned to evaluator's expertise: $\chi^2(1, N = 130) = 9.52$, $p = 0.002$, $\phi = 0.27$; Zhao assigned to evaluator's non-expertise: $\chi^2(1, N = 130) = 18.38$, $p < 0.001$, $\phi = 0.38$).

The main effect of assigned domain was not significant ($B = -0.20$, $SE = 0.28$, $Wald \chi^2 = 0.50$, $p = 0.479$, $\text{Exp}(B) = 1.22$). The interaction between role and assigned domain was not significant ($B = -0.49$, $SE = 0.59$, $Wald \chi^2 = 0.67$, $p = 0.413$, $\text{Exp}(B) = 0.62$).

Study 3 tested the robustness of the basic effect in a new scenario, demonstrating that even when candidates were required to demonstrate competence in a specific domain, evaluators still preferred to admit candidates who discussed their area of expertise. To further examine whether the prediction bias regarding showing off before an expert remained stable when candidates actively chose versus were assigned to a domain, we conducted a supplementary study

(<https://osf.io/xhmja/>). The results showed that prediction bias occurred under both active choice and passive assignment conditions. These findings rule out the competing hypothesis that evaluators favor those who show off before an expert simply because they perceive subjective similarity.

In summary, Studies 1 through 3 revealed the prediction bias regarding showing off before an expert across multiple contexts—choosing essay subjects, competition painting techniques, and language presentations. The prediction bias remained stable across promotion and elimination tournament formats and across choice and assignment conditions, while ruling out competing hypotheses related to familiarity and similarity. Moreover, by comparing candidates' predictions with evaluators' choices, these studies revealed the potential costs of this prediction bias—missing opportunities to advance or be admitted.

5. Study 4: Manipulating Promotion Motivation

Beginning with Study 4, we investigated the mechanism underlying the prediction bias, testing whether the misprediction regarding showing off before an expert stems from different decision criteria between predictors and evaluators. Study 4 used a painting competition scenario similar to Study 2, manipulating candidates' promotion motivation to alter their concern about whether their competence would be clearly discerned, thereby testing the candidate pathway leading to prediction bias—namely, that candidates choose demonstration domains based on whether their competence will be easily evaluated. According to our hypothesis, when candidates have strong promotion motivation, they will be more concerned about whether their competence can be easily discerned, believing that evaluators can quickly see through their abilities in their area of expertise, and will therefore be more inclined to avoid the evaluator's domain, resulting in greater prediction bias. When candidates have weak promotion motivation, they will be less concerned about whether their competence can be easily discerned, and prediction bias should be reduced.

5.1 Participants and Design

We recruited 204 adult participants through the Wenjuanxing survey platform, including 79 males and 125 females, with a mean age of 30.52 years (SD = 6.91 years). A single-factor between-subjects design was employed, with role as the independent variable (candidate-high motivation, candidate-low motivation, evaluator).

5.2 Procedure

Study 4 used a scenario similar to Study 2 but manipulated the intensity of candidates' promotion motivation. In the high motivation condition, participants learned that the competition outcome was very important to them, concerning future job opportunities, and they very much wanted to stand out in the competition. In the low motivation condition, participants learned they were

merely accompanying a friend to the competition, the outcome was completely unimportant, and they just wanted to observe and join the excitement.

After reading the scenario, participants answered manipulation check questions: “According to the scenario, how important is the competition outcome to you?” (1 = not at all important, 7 = very important); “How much do you desire to stand out in the competition?” (1 = not at all, 7 = very much); and “When deciding which painting technique to submit, to what extent did you consider which technique would make it easier for judges to see your competence clearly?” (1 = did not consider at all, 7 = considered very much). Candidates then answered, “Which painting technique would you choose to submit in the semifinals?” (1 = freehand brushwork, 2 = meticulous brushwork).

The materials for the evaluator condition were identical to the promotion condition in Study 2. Evaluators answered, “Who would you choose to advance?” (1 = Zhao, 2 = Li).

Finally, participants completed demographic questions on gender and age.

5.3 Results and Discussion

Regarding perceived importance of the competition, participants in the candidate-high motivation group ($M = 6.17$, $SD = 1.05$) rated the competition as more important than those in the candidate-low motivation group ($M = 3.19$, $SD = 2.10$), $t(97.25) = 10.53$, $p < 0.001$, Cohen's $d = 1.80$, 95% CI = [1.38, 2.21]. For promotion motivation, participants in the candidate-high motivation group ($M = 6.32$, $SD = 1.00$) desired more strongly to stand out than those in the candidate-low motivation group ($M = 3.84$, $SD = 2.13$), $t(94.25) = 8.74$, $p < 0.001$, Cohen's $d = 1.49$, 95% CI = [1.10, 1.88]. For concern about whether competence would be easily discerned, participants in the candidate-high motivation group ($M = 5.64$, $SD = 1.09$) were more concerned than those in the candidate-low motivation group ($M = 4.62$, $SD = 1.40$), $t(126.45) = 4.79$, $p < 0.001$, Cohen's $d = 0.81$, 95% CI = [0.46, 1.16]. These manipulation checks confirmed that altering candidates' promotion motivation successfully changed their concern about whether their competence would be easily discerned.

Next, we analyzed how motivation influenced candidates' domain choices. As shown in Figure 4 [Figure 4: see original paper], candidates with strong promotion motivation (44.44%) were less likely to show off before an expert than those with weak promotion motivation (64.71%), $\chi^2(1, N = 140) = 5.79$, $p = 0.016$, $\phi = 0.20$. Moreover, candidates with strong promotion motivation (44.44%) significantly underestimated the likelihood of advancing by choosing the evaluator's area of expertise (84.38%), $\chi^2(1, N = 136) = 23.24$, $p < 0.001$, $\phi = 0.41$. While candidates with weak promotion motivation (64.71%) still underestimated the likelihood of advancing by showing off before an expert (84.38%), $\chi^2(1, N = 132) = 6.67$, $p = 0.010$, $\phi = 0.23$, the prediction bias was reduced.

Study 4 manipulated candidates' promotion motivation to alter their concern

about whether their competence would be easily discerned, thereby changing the magnitude of prediction bias. Specifically, candidates who strongly desired positive evaluations were more concerned about whether their competence would be easily discerned, believing that evaluators could quickly see through their abilities in their area of expertise, and thus showed greater prediction bias. Candidates who were less eager for positive evaluations were less concerned about whether their competence would be easily discerned, and their prediction bias was reduced. These results support the candidate pathway of “concern about whether competence will be easily discerned.”

6. Study 5: Manipulating Competence Level

Study 5 tested the candidate pathway leading to prediction bias—candidates’ concern about whether their competence will be easily discerned—using a different approach. According to our theory, the vast majority of candidates are not outstanding, and their abilities are often inferior to judges’. Because they believe evaluators can more easily see through their competence in their area of expertise, they are reluctant to show off before an expert. However, highly competent candidates are more interested in “highlighting strengths” [?, ?], and because they believe evaluators can more easily recognize their strengths in their area of expertise, they are willing to show off before an expert and more likely to choose the evaluator’s domain to receive positive evaluations, thereby reducing or eliminating prediction bias. Following this logic, we manipulated candidates’ competence level to test the candidate pathway.

6.1 Participants and Design

We recruited 420 adult participants through the Wenjuanxing survey platform, including 152 males and 268 females, with a mean age of 29.94 years ($SD = 7.44$ years). A 2 (role: candidate vs. evaluator) \times 3 (competence: low/average/high) between-subjects design was employed.

6.2 Procedure

Study 5 used a scenario similar to Study 2 but manipulated candidates’ competence level. In the low competence condition, participants learned that “their mastery of both painting techniques was poor, placing them in the lower tier among all contestants, with limited experience.” In the average competence condition, participants learned that “their mastery of both techniques was average, placing them at the medium level among all contestants, with insufficient experience.” In the high competence condition, participants learned that “their mastery of both techniques was good, placing them in the upper tier among all contestants, with rich experience.” Evaluators read corresponding scenarios; for example, in the low competence condition, they learned that “contestants Zhao and Li were similarly skilled, both in the lower tier among all contestants, with poor mastery of both techniques and limited experience.”

After reading the scenario, candidates predicted which domain would help them advance, and evaluators chose who would advance. Finally, participants completed demographic questions on gender and age.

6.3 Results and Discussion

As shown in Figure 5 [Figure 5: see original paper], binary logistic regression results revealed a significant main effect of role ($B = -1.38$, $SE = 0.23$, $Wald \chi^2 = 35.77$, $p < 0.001$, $Exp(B) = 0.25$, $95\% \text{ CI} = [0.16, 0.40]$), a significant main effect of competence ($Wald \chi^2 = 28.66$, $p < 0.001$), and a significant interaction between role and competence ($Wald \chi^2 = 8.21$, $p = 0.016$).

Further simple effects analysis indicated that when competence was high, candidates (77.14%) accurately predicted evaluators' preference for those who showed off before an expert (82.86%), $\chi^2(1, N = 140) = 0.71$, $p = 0.398$. When competence was average (candidates: 50.00%; evaluators: 81.43%; $\chi^2(1, N = 140) = 15.34$, $p < 0.001$, $\phi = 0.33$) or low (candidates: 27.14%; evaluators: 72.86%; $\chi^2(1, N = 140) = 29.26$, $p < 0.001$, $\phi = 0.46$), candidates exhibited prediction bias, and the lower the candidates' competence, the more they underestimated the likelihood of advancing by choosing the evaluator's area of expertise.

Study 5 manipulated candidates' competence and found that prediction bias gradually decreased as candidates' competence increased. When candidates had low competence, prediction bias was most pronounced; when competence was average, prediction bias still existed; when competence was high, prediction bias disappeared. These results provide evidence for the candidate mechanism of "concern about whether competence will be easily discerned": when competence is low, candidates worry that showing off before an expert will expose their weaknesses, making them reluctant to do so; when competence is high, candidates believe that choosing the evaluator's area of expertise helps others see their strengths clearly, making them willing to show off before an expert. Of course, highly competent individuals may also care less about whether their competence is easily discerned. Under this interpretation, highly competent candidates should be indifferent about showing off before an expert and show no clear preference for it. However, the current results show that highly competent candidates prefer to show off before an expert, supporting the interpretation that "highly competent candidates tend to highlight their strengths." On the other hand, evaluators were not sensitive to candidates' competence level (percentage of evaluators advancing those who showed off before an expert: 72.86% for low competence, 81.43% for average competence, 82.86% for high competence), indicating that evaluators' decisions were less concerned with whether they could clearly discern candidates' abilities and were likely influenced by other factors. Beginning with Study 6, we explore the factors influencing evaluators' decisions.

7. Study 6: Reminding About Feelings

Studies 4 and 5 tested the candidate pathway leading to prediction bias—candidates’ concern about whether their competence will be easily discerned. Beginning with Study 6, we test the evaluator pathway—evaluators give positive evaluations to those who show off before an expert due to pride, which predictors naturally fail to anticipate. According to our hypothesis, candidates experience an empathy gap due to egocentrism and fail to consider the pride evaluators feel when their expertise is referenced. However, empathy—having people experience others’ emotions from their perspective [?, ?]—can effectively address this issue. In Study 6, we prompted candidates to consider their own feelings when others referenced their area of expertise to elicit empathy. If reminded candidates thought about evaluators’ pride and their prediction bias decreased or disappeared, this would demonstrate that evaluators’ pride indeed influences their decisions and that candidates’ failure to consider evaluators’ pride when not prompted leads to prediction bias.

7.1 Participants and Design

We recruited 210 students from a university participant pool, including 104 males and 106 females, with a mean age of 21.63 years ($SD = 2.31$ years). A single-factor between-subjects design was employed, with role as the independent variable (candidate-control, candidate-reminded, evaluator).

7.2 Procedure

The candidate-control and evaluator conditions used scenarios and procedures similar to Study 2. Participants in the candidate-reminded condition, after reading the scenario, were asked to “think about how you usually feel when others mention your area of expertise” and provide a response.

Subsequently, participants in the candidate-control and candidate-reminded conditions predicted which domain would help them advance, and evaluators chose who would advance. Finally, participants completed demographic questions on gender and age.

7.3 Results and Discussion

As shown in Figure 6 [Figure 6: see original paper], chi-square tests revealed that candidates in the control condition significantly underestimated the benefits of showing off before an expert: only 40.00% predicted that choosing the judge’s area of expertise would increase their chances of advancement, whereas 72.86% of judges advanced candidates who chose their area of expertise, $\chi^2(1, N = 140) = 15.37, p < 0.001, \phi = 0.33$. More importantly, there was a significant difference between the candidate-control and candidate-reminded conditions, $\chi^2(1, N = 140) = 4.83, p = 0.028, \phi = 0.19$. After thinking about evaluators’ experiences, more candidates chose to show off before an expert (58.57%). Furthermore,

there was no significant difference between the candidate-reminded and evaluator conditions, $\chi^2(1, N = 140) = 3.17, p = 0.075$, indicating that prediction bias disappeared when candidates considered evaluators' experiences.

Analysis of candidates' written responses in the reminded condition revealed that pride-related feelings were mentioned 64 times (91.43% of the reminded group), including words like "proud," "pride," and "sense of achievement." Non-pride feelings were mentioned 6 times (8.57%), such as "self-reflection" and "wanting to correct others' mistakes." This indicates that candidates in the reminded condition thought about evaluators' pride, and this consideration eliminated their prediction bias.

Study 6 found that prompting candidates to think about how evaluators feel when their expertise is mentioned caused them to consider positive feelings related to pride, thereby eliminating prediction bias. These results demonstrate that evaluators make selections based on the pride generated by referencing their area of expertise, whereas candidates in the control condition failed to consider evaluators' pride, leading to prediction bias and excessive avoidance of showing off before an expert. However, this study has limitations: when imagining their area of expertise, participants might have elicited general positive emotions such as confidence, thereby reducing concerns about their competence being easily discerned and making them less likely to avoid showing off before an expert. To more directly test the evaluator-side pride pathway, we conducted Study 7, which manipulated evaluators' achievement to change their pride.

8. Study 7: Manipulating Evaluator Achievement

Study 7 more directly tested the evaluator pathway leading to prediction bias—evaluators give positive evaluations to those who show off before an expert due to pride—by manipulating evaluators' achievement levels in their area of expertise to alter their pride. By definition, pride stems from individuals' mastery of a domain and their high achievement in that domain. Therefore, manipulating evaluators' achievement in their area of expertise can change the intensity of pride they experience. According to our hypothesis, the higher evaluators' achievement in their area of expertise, the more pride they feel, and the more they favor those who show off before an expert. Because predictors neglect evaluators' feelings, greater prediction bias will emerge.

8.1 Participants and Design

We recruited 264 adult participants through the Credamo survey platform, including 83 males and 181 females, with a mean age of 27.33 years ($SD = 8.50$ years). A 2 (role: candidate vs. evaluator) \times 2 (evaluator achievement: high vs. low) between-subjects design was employed.

8.2 Procedure

Study 7 used a scenario similar to Study 2 but manipulated evaluators' achievement levels in their area of expertise. In the candidate condition, participants in the high evaluator achievement condition learned that the judge excelled at freehand brushwork, with over a hundred award-winning works, and was not skilled at meticulous brushwork, with only ten award-winning works to date. Participants in the low evaluator achievement condition learned that the judge excelled at freehand brushwork and had over a hundred award-winning works but had recently experienced repeated setbacks, with no award-winning works in the past month. Participants then predicted, "Which painting technique would you choose to submit in the semifinals to be more likely to advance?" (1 = freehand brushwork, 2 = meticulous brushwork).

Evaluators read corresponding scenarios. They then answered manipulation check questions: "How would you rate your achievement in freehand brushwork?" (1 = very low achievement, 7 = very high achievement); "How would you rate your achievement in meticulous brushwork?" (1 = very low achievement, 7 = very high achievement); "To what extent do you feel proud when freehand brushwork is mentioned?" (1 = not at all, 7 = very much); and "To what extent do you feel proud when meticulous brushwork is mentioned?" (1 = not at all, 7 = very much). Evaluators then answered, "Who would you choose to advance?" (1 = Zhao, 2 = Li).

Finally, participants completed demographic questions on gender and age.

8.3 Results and Discussion

Regarding achievement perception, evaluators in the high achievement group ($M = 6.30$, $SD = 0.62$) rated themselves as having higher achievement in their area of expertise (freehand brushwork) than those in the low achievement group ($M = 5.70$, $SD = 1.14$), $t(127) = 3.66$, $p < 0.001$, Cohen's $d = 0.65$, 95% CI = [0.28, 0.93]. For the non-expert area (meticulous brushwork), there was no difference in achievement perception between the high achievement group ($M = 3.67$, $SD = 1.16$) and the low achievement group ($M = 3.59$, $SD = 1.24$), $t(127) = 0.34$, $p = 0.734$. Thus, the manipulation of evaluator achievement was effective.

Regarding pride, evaluators in the high achievement group ($M = 6.40$, $SD = 0.72$) felt more pride in their area of expertise (freehand brushwork) than those in the low achievement group ($M = 5.83$, $SD = 1.04$), $t(127) = 3.59$, $p < 0.001$, Cohen's $d = 0.63$, 95% CI = [0.26, 0.89]. For the non-expert area (meticulous brushwork), there was no difference in pride between the high achievement group ($M = 3.83$, $SD = 1.26$) and the low achievement group ($M = 4.03$, $SD = 1.24$), $t(127) = -0.89$, $p = 0.377$. These results demonstrate that manipulating evaluators' achievement successfully changed their pride.

Next, we analyzed how achievement in the expert domain influenced evaluators'

choices. As shown in Figure 7 [Figure 7: see original paper], binary logistic regression results revealed a significant main effect of role ($B = -1.75$, $SE = 0.27$, $Wald \chi^2 = 41.60$, $p < 0.001$, $\text{Exp}(B) = 0.17$, $95\% \text{ CI} = [0.10, 0.30]$). Regardless of evaluator achievement level, candidates consistently underestimated the likelihood of advancing by showing off before an expert (high evaluator achievement: $\chi^2(1, N = 128) = 43.11$, $p < 0.001$, $\phi = 0.58$; low evaluator achievement: $\chi^2(1, N = 136) = 8.48$, $p = 0.004$, $\phi = 0.25$). The main effect of evaluator achievement was not significant ($B = 0.04$, $SE = 0.27$, $Wald \chi^2 = 0.03$, $p = 0.874$, $\text{Exp}(B) = 1.04$).

Importantly, the interaction between role and evaluator achievement was significant ($B = 1.65$, $SE = 0.56$, $Wald \chi^2 = 8.56$, $p = 0.003$, $\text{Exp}(B) = 5.52$, $95\% \text{ CI} = [1.73, 15.77]$). High-achievement evaluators (81.67%) favored those who showed off before an expert more than low-achievement evaluators (63.77%), $\chi^2(1, N = 129) = 5.11$, $p = 0.024$, $\phi = 0.20$. However, candidates' predictions did not differ between the high achievement (23.53% chose to show off before an expert) and low achievement (38.81% chose to show off before an expert) conditions, $\chi^2(1, N = 135) = 3.68$, $p = 0.055$.

Study 7 manipulated evaluators' achievement to change their pride and found that the magnitude of prediction bias changed accordingly. Specifically, higher evaluator achievement led to stronger pride and greater preference for those who showed off before an expert, whereas candidates were insensitive to evaluators' pride. Consequently, when evaluators had higher achievement and felt more pride, predictors showed greater prediction bias; when evaluators had lower achievement and felt less pride, predictors' bias was reduced. These results support the mechanism that evaluators favor those who show off before an expert due to pride, which candidates neglect.

9. Study 8: Reasons for Choice

We have investigated the causes of prediction bias by manipulating candidates' promotion motivation and competence, prompting candidates to consider evaluators' feelings, and manipulating evaluators' achievement to alter their pride. Study 8 simultaneously considered both candidates and evaluators, recording and analyzing both parties' actual thoughts during decision-making to test why candidates undervalue evaluators' preference for those who show off before an expert.

9.1 Participants and Design

We recruited 140 adult participants through the Credamo platform, including 57 males and 83 females, with a mean age of 27.47 years ($SD = 6.43$ years). A single-factor between-subjects design was employed, with role as the independent variable (candidate vs. evaluator).

9.2 Procedure

The procedure was similar to Study 2. Participants read the painting competition scenario; candidates predicted which domain would help them advance, and evaluators chose who would advance. Both groups then provided reasons for their choices by answering, “What was your reason for making this choice?”

Finally, participants completed demographic questions on gender and age.

9.3 Results and Discussion

First, we replicated the basic effect: only 17.65% of candidates chose the evaluator’s area of expertise, whereas 76.39% of evaluators advanced candidates who chose their area of expertise, $\chi^2(1, N = 140) = 48.36, p < 0.001, \phi = 0.59$.

Next, two coders blind to the experimental hypotheses categorized participants’ written reasons into one of six categories: (1) whether competence is easily (to be) discerned; (2) having pride; (3) similarity with each other; (4) whether competence is easily evaluated; (5) failure to explain reasons as requested; and (6) other (ideas that could not be categorized into the above). Examples are shown in Table 1. The two coders agreed on the categorization for 77.86% of the reasons, with Cohen’s kappa = 0.62 (95% CI = [0.52, 0.73]), $p < 0.001$, indicating strong agreement. Coding results are presented in Table 2. To facilitate further quantitative analysis, we coded participants’ thoughts as 0 or 1 for each category, where 0 represented not considering the factor and 1 represented considering it. For example, in the “having pride” category, thoughts categorized as “having pride” were coded as 1, while thoughts categorized in the other five categories were coded as 0.

Table 1
Examples of Participants’ Thoughts

Category	Example
Whether competence is easily (to be) discerned	“Judges cannot see flaws in non-expert domains.” “Easier to spot defects in expert domains.”
Having pride	“Feel proud when my expertise is mentioned.” “Feel a sense of achievement.”
Similarity with each other	“Have similar tastes as the judge, easier to get high scores.” “Share common interests with contestants.”
Whether competence is easily evaluated	“Expert domains are easy to evaluate.”

Category	Example
Failure to explain reasons as requested [†]	“Choosing the judge’ s non-expert domain is more likely to lead to advancement.” “Expert domains add more points.” “Personal preference.” “Eliminating Li would raise questions about my qualifications as a judge.”
Other	“I like it.” “The judge is professional.”

[†] This category refers to participants who failed to explain their reasons for choosing a domain or candidate as requested. For example, responses like “expert domains add more points” merely reflect the dependent variable itself (i.e., “I prefer expert domains”) without explaining “why I prefer expert domains.”

Table 2
Choice Reasons Considered by Different Roles

Reason Category	Candidate (n = 68)	Evaluator (n = 72)
	Chose Expertise (n = 12)	Chose Non-Expertise (n = 56)
Whether competence is easily (to be) discerned	5 (41.67%)	42 (75.00%)
Having pride	0 (0.00%)	0 (0.00%)
Similarity with each other	0 (0.00%)	4 (7.14%)
Whether competence is easily evaluated	3 (25.00%)	0 (0.00%)
Failure to explain reasons as requested	3 (25.00%)	7 (12.50%)
Other	1 (8.33%)	3 (5.36%)

Comparing choice reasons across roles, we found that candidates (69.12%) focused more on “whether competence is easily (to be) discerned” than evaluators (30.56%), $\chi^2(1, N = 140) = 20.81, p < 0.001, \phi = 0.39$. Additionally, candidates (0.00%) considered “evaluators having pride” less than evaluators (23.61%), $\chi^2(1, N = 140) = 18.28, p < 0.001, \phi = 0.36$. No significant differences between roles were found for “similarity with each other” ($\chi^2(1, N = 140) = 0.42, p = 0.519$), “whether competence is easily evaluated” ($\chi^2(1, N = 140) = 2.90, p = 0.089$), “failure to explain reasons as requested” ($\chi^2(1, N = 140) = 0.15, p = 0.696$), or “other” ($\chi^2(1, N = 140) = 1.89, p = 0.170$).

We then analyzed how participants' thoughts influenced their choices. First, compared to candidates who did not consider whether competence would be easily discerned (14 of 21 avoided showing off before an expert, 66.67%), those who considered this factor were more likely to avoid showing off before an expert (42 of 47 avoided it, 89.36%), $\chi^2(1, N = 68) = 5.14, p = 0.023, \phi = 0.28$. Compared to evaluators who did not consider whether competence would be easily discerned (46 of 50 advanced those who showed off before an expert, 92.00%), those who considered this factor were less likely to advance those who showed off before an expert (9 of 22 advanced them, 40.91%), $\chi^2(1, N = 72) = 22.11, p < 0.001, \phi = 0.55$. These results suggest that both candidates and evaluators who considered whether competence is easily (to be) discerned were less likely to favor showing off before an expert.

Second, compared to evaluators who did not consider pride (38 of 55 advanced those who showed off before an expert, 69.09%), evaluators who considered pride were more likely to advance those who showed off before an expert (17 of 17 advanced them, 100%), $\chi^2(1, N = 72) = 6.88, p = 0.009, \phi = 0.31$. This indicates that evaluators who considered their pride were more likely to favor those who showed off before an expert. No candidates considered evaluators' focus on pride, so we could not analyze how this consideration would affect candidates' choices.

We also analyzed the mediating role of considering whether competence is easily (to be) discerned. Role (0 = candidate, 1 = evaluator) negatively predicted consideration of whether competence is easily (to be) discerned (0 = did not consider, 1 = considered), $B = -1.63, SE = 0.37, Wald \chi^2 = 19.69, p < 0.001, Exp(B) = 0.20, 95\% CI = [0.10, 0.40]$. Considering whether competence is easily (to be) discerned (0 = did not consider, 1 = considered) positively predicted choice of domain (0 = evaluator's area of expertise, 1 = evaluator's non-expertise), $B = 2.16, SE = 0.47, Wald \chi^2 = 21.30, p < 0.001, Exp(B) = 8.68, 95\% CI = [3.47, 21.74]$. A Sobel test showed that consideration of whether competence is easily (to be) discerned mediated the effect, $z = -3.20, p = 0.001$. This indicates that candidates considered whether competence is easily (to be) discerned more than evaluators, leading them to mistakenly avoid showing off before an expert. Since no candidates considered evaluators' reliance on pride for decision-making, the conditions for mediation analysis were not met, and we did not conduct an analysis with pride consideration as the mediator.

Study 8 examined differences in thoughts between candidates and evaluators, finding that evaluators based their decisions not only on competence information but also on the pride elicited by referencing their area of expertise, leading them to favor contestants who showed off before an expert. In contrast, candidates were more concerned than evaluators about whether their competence would be easily discerned and failed to consider evaluators' pride, leading them to prefer the evaluator's non-expert domain and avoid showing off before an expert. It should be noted that participants' self-reported reasons for their choices have some ambiguity, and evaluators' claimed "good feelings from expertise" might stem from their liking of their expert domain. Nevertheless, given that two

coders blind to the experimental purpose showed high agreement in categorizing evaluators' thoughts as reflecting pride, the coding results remain credible. Additionally, combined with the results of Studies 7 and 8, evaluators' choices were indeed influenced by pride.

10. General Discussion

The present research found that in contexts such as interviews and competitions where individuals must choose ability domains to showcase themselves, candidates with average or lower competence undervalue the evaluations they receive from judges when displaying competence in the judges' area of expertise. Consequently, they mistakenly avoid showing off before an expert. This prediction bias remains stable regardless of whether the tournament format is promotion or elimination, and whether showing off before an expert is based on active choice or passive assignment. Furthermore, this prediction bias occurs because candidates are concerned about whether their competence will be easily discerned and neglect the pride evaluators feel when their expertise is mentioned. Therefore, prediction bias is greater when candidates have stronger promotion motivation and lower competence, as they worry more about being seen through when showing off before an expert. Reminding candidates to consider evaluators' feelings can eliminate this prediction bias. Additionally, by ensuring equal exposure duration to expert and non-expert domains, this research ruled out the competing hypothesis that positive feelings from familiarity drive the effect. By varying domain assignment, promotion motivation, and competence level, we also ruled out competing hypotheses related to similarity. It should be noted that besides familiarity and similarity, other competing hypotheses may exist—for example, candidates might fail to anticipate that evaluators appreciate the courage of those who show off before an expert. However, studies manipulating promotion motivation, competence level, and prompting candidates to consider evaluators' feelings provide evidence for our proposed mechanism.

10.1 Empathy Gap and Prediction Bias

People's decisions are often based on predictions, yet they struggle to accurately predict others' thoughts and reactions, leading to inappropriate decisions and losses [?, ?, ?, ?, ?, ?]. The present research reveals how empathy gaps lead to prediction bias and negative consequences in ability-displaying contexts. First, this study shows that empathy gaps affect social evaluation. In addition to [?, ?]'s finding that people fail to anticipate that displaying luxury goods hinders friendship formation, previous research on empathy gaps has primarily focused on how they lead individuals to act in ways that harm others—for example, doctors neglecting patients' suffering and providing inadequate treatment plans [?, ?], or individuals neglecting the positive feelings that gratitude [?, ?] and praise [?, ?] bring to others, resulting in insufficient expression of gratitude and praise. Only a few studies in domains such as helping have found that empathy gaps may disadvantage individuals themselves, showing that people

are reluctant to seek help because they fear appearing vulnerable [?, ?, ?, ?]. For example, help-seekers fail to consider that potential helpers would feel guilty about refusing assistance, leading them to underestimate others' willingness to help and making them reluctant to ask for help [?, ?]. The present research focuses on the domain of self-presentation, further enriching research on the self-disadvantaging consequences of empathy gaps by revealing another type of self-harming behavior—reluctance to display strength. Specifically, candidates neglect the impact of evaluators' pride on their decisions, thereby avoiding the strength-displaying strategy of showing off before an expert. This prevents candidates from gaining evaluators' favor and causes them to miss opportunities for advancement or admission. Such selections concern education, employment, and promotion, where prediction errors can cause individuals to miss valuable opportunities and suffer significant consequences. Therefore, researchers should further examine how empathy gaps affect individuals themselves.

How generalizable is the prediction bias found in this research? In our studies, evaluators were described as experts whose abilities far exceeded those of the candidates. Does prediction bias regarding evaluations from showing off before an expert still exist when the ability gap between evaluators and candidates is not pronounced? According to our theory, prediction bias stems from egocentrism. Regardless of the ability gap between evaluators and candidates, both parties suffer from the cognitive limitation of egocentrism, so prediction bias should remain unaffected. Future research could examine whether our findings generalize when evaluators are not experts.

Additionally, in our research scenarios, multiple candidates had similar ability levels, which is not always true in real life. Competitors' abilities may moderate the intensity of prediction bias. If competitors are more competent than oneself, candidates may worry more about exposing their own competence deficits and may therefore exhibit greater underestimation of the benefits of showing off before an expert and stronger avoidance of this strategy. Future research could investigate whether the magnitude of prediction bias regarding evaluations from showing off before an expert changes when competing against opponents of different ability levels.

This research eliminated subjective similarity in interests between evaluators and candidates by forcing candidates to show off before an expert, ruling out explanations based on subjective similarity. However, we did not measure perceived similarity, and candidates' assigned domains matched evaluators' expert domains, creating some objective similarity. This represents a limitation of our research. Nevertheless, given that evaluators' self-reported reasons for their choices rarely mentioned similarity in Study 8, subjective and objective similarity are at least not the primary reasons why evaluators favor those who show off before an expert.

Of course, there may be multiple reasons why candidates prefer those who show off before an expert. For example, candidates might “love me, love my domain”—favoring those who show off before an expert because they love their area of

expertise. However, in Study 7, we manipulated evaluators' achievement to manipulate pride and changed the magnitude of prediction bias, which helps distinguish pride from simple liking to some extent. According to the definition of pride as arising from achievement and value, when evaluators' recent achievement is low, their pride also decreases. Meanwhile, recent achievement should have less impact on evaluators' liking of their area of expertise. If evaluators favor those who show off before an expert simply because they love their area of expertise, manipulating their recent achievement should not affect their choices. Given that evaluators' preference for candidates who show off before an expert weakened when their recent achievement was low, our proposed pride mechanism is more plausible than the "love me, love my domain" explanation.

10.2 Debiasing Methods

In social life, people frequently interact with others, requiring them to predict others' thoughts as accurately as possible to understand and influence others' behavior and invest appropriate resources to achieve their goals. Research on prediction bias can help decision-makers recognize and correct biases, thereby improving decision quality [?, ?, ?]. To this end, researchers need to develop various debiasing methods. For example, previous research has found that people underestimate the benefits of social small talk and miss opportunities to build relationships through it, so researchers suggest informing people about the benefits of small talk to reduce prediction bias [?, ?]. People underestimate others' interest in deep conversation and are reluctant to engage in deep conversations that benefit relationships, so researchers remind people that others actually value deep conversation, thereby reducing prediction bias [?, ?].

The present research also provides a simple and effective debiasing method to help people overcome empathy gaps and make accurate predictions. In our studies, empathy gaps remained stable across interviews and competitions, promotion and elimination formats, and active choice versus assignment conditions, appearing difficult to eliminate. However, people need not be pessimistic. Simply reminding them to fully consider others' feelings during decision-making can help candidates think more about the positive feelings that showing off before an expert brings to evaluators, thereby reducing prediction bias and encouraging them to choose this strategy to gain evaluators' favor. This debiasing method of "empathizing with others' feelings" should be applicable to many contexts involving empathy gaps because it addresses the root cause of people's neglect of others' feelings—egocentrism. Future research could further explore other measures to help candidates correct their bias, such as training candidates' empathic abilities.

10.3 Naive Beliefs About Self-Presentation

This research examined individuals' understanding of showing off before an expert as a self-presentation strategy. Previous studies have found that people have naive beliefs about how to select external environments to showcase them-

selves [?, ?, ?, ?, ?]. For example, they believe that women joining all-male teams can stand out [?, ?] and that traveling in luxury rather than ordinary cars helps build friendships [?, ?]. However, previous research has rarely examined people' s beliefs about how selectively presenting intrinsic qualities such as competence aids self-presentation. The present research fills this gap, finding that from the candidate' s perspective, people naively believe that showing off before an expert leads to negative evaluations. Future research could continue to examine people' s predictions about how selectively presenting intrinsic qualities other than competence influences evaluations.

But are people' s naive beliefs about self-presentation strategies correct? This research finds that people do not always accurately understand the effectiveness of self-presentation strategies and may choose inappropriate ways to present themselves. This insight encourages us to examine whether naive beliefs about self-presentation strategies revealed in previous research might also be incorrect. For example, does a woman' s joining a predominantly male team make her appear more competent, as she might predict? Does traveling in a luxury car rather than an ordinary car actually help build friendships? Given the prevalence of egocentric bias, we expect that people are also likely to mispredict the effectiveness of their choices when selecting external environments for self-presentation.

Of course, this research has limitations. In Study 1, we recruited participants who were genuinely skilled in certain domains as evaluators and had them evaluate candidates' work before making judgments, which enhanced ecological validity to some extent. Nevertheless, we did not require candidates to create their own work but instead provided optional ready-made pieces, which differs from real life. It is possible that when candidates submit self-created work, they are more aware of its flaws and believe these flaws can be easily seen through by evaluators. Additionally, in all studies except Study 1, we asked participants to imagine choosing or evaluating those who show off before an expert, without having them actually implement their choice of strategy. We manipulated evaluators' expertise across domains through text rather than recruiting evaluators who were truly skilled in one domain and unskilled in another. While this approach controlled for evaluators' familiarity with different domains, it does not fully reflect real expert evaluation processes. When real experts face actual instances of showing off before an expert, do they still give high evaluations? We speculate that compared to hypothetical scenarios, real contexts may lead evaluators to examine candidates' actual work more carefully to judge their competence. On one hand, this might cause evaluators to genuinely encounter their area of expertise, eliciting stronger pride and increasing their preference for those who show off before an expert, thereby amplifying prediction bias. On the other hand, it might enable evaluators to more easily identify weaknesses in candidates' work through careful scrutiny, reducing their evaluations of those who show off before an expert and decreasing prediction bias. If candidates need to create their own work and actually demonstrate their competence for evaluation, they may worry more genuinely about exposing flaws by showing off

before an expert and may be more inclined to avoid this strategy, amplifying prediction bias. Therefore, future research could require candidates to actually demonstrate their competence (e.g., by creating work for evaluation) and have evaluators actually examine candidates' presentations in more realistic contexts, further enhancing ecological validity.

10.4 Conclusion

When choosing ability domains to showcase themselves, candidates with average or lower competence undervalue the evaluations they receive from displaying competence in an evaluator's area of expertise. This prediction bias occurs because a key factor determining evaluators' assessments is the pride elicited by referencing their own expertise, leading them to favor those who show off before an expert. However, due to egocentrism, candidates neglect evaluators' feelings and focus only on whether their competence will be easily discerned, believing that flaws are more likely to be exposed in the evaluator's area of expertise, making them reluctant to show off before an expert. This prediction bias prevents candidates from gaining evaluators' favor and causes them to miss opportunities for success.

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