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The Influence Premium of Social Rank: Monetary and Symbolic Hierarchies in Advice Taking

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Abstract

We study whether social rank shapes interpersonal influence when it conveys no information about merit or expertise. In a large experiment using a sample representative of the German population aged 18–69 with respect to age, gender, and geographical location, we compare a monetary treatment, in which low and high rank are represented by unequal budgets, with a symbolic treatment, in which low and high rank are represented by one or two stars. Before receiving the advice, participants are explicitly informed that the advisor's rank is assigned at random. We find that participants choose investments closer to a recommendation when it comes from a higher-ranked advisor, though the monetary arm misses significance in separate analyses. High rank also improves exact recall of the recommendation. Together, these findings show that even a minimal rank distinction can shape how people use and remember advice when its random origin is common knowledge.

JEL codes: C91, D81, D91, Z13.
Keywords: social rank, advice taking, hierarchy, social influence, attention.

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1 Introduction

Individuals rarely make decisions in isolation from the behaviours and opinions of others. They observe what others do, seek advice, and use social information to guide their choices (Bardsley and Sausgruber, 2005; Bicchieri and Xiao, 2009; Herbst and Mas, 2015; Fershtman and Segal, 2018). The weight attached to such information, however, need not depend on its content alone. Advice from a senior colleague, a wealthy investor, or a visibly high-ranked peer may be more persuasive than the same recommendation offered by somebody lower in the hierarchy. When rank reflects expertise or past success, following it may be optimal. However, accumulated evidence in cognitive science, psychology, and neurobiology suggests that individuals may exhibit behavioural responses when interacting in hierarchical social

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environments which originate in cognitive and neurological automatisms (Koski et al., 2015; Mattan et al., 2017). In other words, people may make choices reflecting how the human brain processes and reacts to information about hierarchical social environments, without even being aware of it (Camerer et al., 2005), rather than their intrinsic or rational preferences.

This study investigates whether a specific and narrowly defined form of minimal social hierarchy triggers behavioural patterns which cannot be explained by recourse to rational individual choices, but is consistent with neurocognitive and psychological accounts of behaviours under hierarchy. Specifically, we follow-up on Martinangeli and Meiske (2022), who show that participants follow investment advice more closely when the advisor has been randomly assigned a high rather than a low monetary endowment. We reproduce their monetary-rank design and add an experimental arm in which rank is symbolic rather than monetary. Low and high rank are represented by unequal budgets in the monetary arm and by one or two stars, with equal monetary resources, in the symbolic arm. The participants are explicitly informed that rank is assigned at random. The comparison tests whether the influence premium documented by Martinangeli and Meiske (2022) depends on unequal monetary resources or extends to a symbolic rank.

The economic literature on social learning shows both why following others can be valuable and why it can draw choices away from privately available information. Individuals condition on predecessors' actions, form information cascades, and selectively acquire information about what others have done (Anderson and Holt, 1997; Çelen and Hyndman, 2012; Mobius and Rosenblat, 2014). Advice is a particularly important form of social information because it is directed at a decision maker and may communicate helping intentions, expertise, or confidence in addition to its literal content. Research using judge–advisor systems shows that advice following varies with the advisor, the recipient, and the decision environment (Sniezek and Buckley, 1995; Harvey and Fischer, 1997; Bonaccio and Dalal, 2006). Information suggesting advisor quality is especially influential (Bailey et al., 2023), while framing information as advice can itself increase the weight placed on it (Milyavsky and Gvili, 2024). A systematic review nevertheless finds the social and organisational context of advice less well understood (Kämmer et al., 2023), and recent experimental evidence distinguishes a general willingness to comply from learning about an advisor's past accuracy (Pereg et al., 2024). This evidence raises a distinct question: can a source cue change advice utilisation when its origin is known to be arbitrary?

Social rank is an ambiguous signal of the quality of an individuals' advice. Rank is often correlated with knowledge, authority, and performance in many settings, but may also arise from inherited resources, organisational conventions, or arbitrary assignments. Advice from powerful or high-status sources is followed more readily, with perceived competence accounting for part of this association (Duan et al., 2024). In a dot-estimation task, Wang et al. (2025) show that expressed confidence increases advice taking at both status levels and more strongly for high-status advisors. Because status in these studies rests on occupation, prior accuracy, or performance, recipients may interpret it as a cue to competence. Our design instead isolates whether hierarchical position matters independent of its correlates (skill, knowledge, or other signals of advice quality). In order to do so, rank is assigned randomly.

Research in social and evolutionary psychology provides reasons why it might. Individuals direct greater attention towards high-status targets, remember them more readily, and are more likely to observe or imitate them (Maner et al., 2008; Ratcliff et al., 2011; Dalmaso et al., 2012). Hierarchies are perceived and learned with unusual fluency, while status shapes person perception even when direct information is limited (Zitek and Tiedens, 2012; Mattan et al., 2017). Prestige can guide people towards valuable sources of information without requiring them to evaluate everybody's competence independently, and recent evidence shows that people rely more strongly on prestigious models when direct information about accuracy is poor (Henrich and Gil-White, 2001; Cheng et al., 2013; Jiménez and Mesoudi, 2019; Morgan et al.,

2026). These responses need not involve a deliberate inference that the higher-ranked source is better informed. Rank can instead make a source more salient or a more natural model for social learning, increasing the weight placed on otherwise identical advice.

The distinction between monetary and symbolic rank is important because monetary inequality changes beliefs and behaviour beyond advice taking. Relative resources shape fairness judgments, expectations about contribution, and reactions to rich and poor group members (Martinangeli, 2021; Rockenbach et al., 2021). Visible wealth can also affect perceived prestige, dominance, competence, and warmth (Cheng and Tracy, 2013; Fiske et al., 2002; Gächter, 2015). Monetary rank therefore combines an ordinal position with material opportunities and a familiar basis for social comparison. Symbolic rank preserves the low–high ordering while removing monetary inequality. If the earlier influence premium reflects the distinctive meaning of money, it should weaken under symbolic rank; if relative position itself matters, symbolic rank should also shape whose advice is followed.

We test these alternatives in a controlled and non-deceptive experiment that holds constant the decision problem, recommendation content, and advisor's informational position. An online sample representative of the German population aged 18–69 with respect to age, gender, and geographical location chooses what proportion of an endowment to invest in a lottery that either triples or eliminates the amount invested. Before choosing, participants receive an actual recommendation from an earlier participant to invest either 30 or 70 percent. Recommendation content is assigned independently of the advisor's rank. The resulting 2×2 between-subjects design crosses monetary or symbolic rank with a low- or high-ranked advisor.

The results reveal an influence premium of high rank. Pooling the monetary and symbolic conditions, participants choose investments significantly closer to recommendations from high-ranked advisors. The controlled estimate reduces distance by 1.45 percentage points, approximately 6 percent of the mean under low advisor rank, or 0.07 standard deviations. The treatment-specific estimates have similar magnitudes and directions, and the symbolic-rank effect is statistically significant. The interaction coefficient is not statistically different from zero. The result extends Martinangeli and Meiske (2022) by showing that an influence premium also arises when monetary resources are held equal and rank is represented symbolically. The cognitive measures complement this result: high rank improves exact recall of the recommendation, with the strongest effect in the monetary hierarchy, where it also raises perceived advice quality.

Our findings contribute first to research on advice taking and social learning. Existing work shows that advice use responds to cues such as expertise, confidence, cost, and helping intentions, which may contain information about a recommendation's value (Bailey et al., 2023; Milyavsky and Gvili, 2024; Wang et al., 2025). We show that randomly assigned rank nonetheless changes the behavioural impact of otherwise identical advice. This result complements the distinction between learning about an advisor and a broader willingness to follow advice (Pereg et al., 2024): a source characteristic can alter advice use even when it is not earned through performance.

Second, we contribute to the study of social hierarchy by showing that an influence premium does not require unequal monetary resources. In the symbolic treatment, advice from a two-star advisor carries more weight than advice from a one-star advisor even though monetary resources and incentives are identical. This result extends Martinangeli and Meiske (2022) from monetary rank to a minimal symbolic ordering. The recall, quality, trust, confidence, and decision-time measures broaden the analysis beyond investment choice. In particular, improved recall of the recommendation links the behavioural response to stronger retention of the advice itself.

These findings matter for organisations and markets, where hierarchies allocate not only formal authority but also attention and persuasive weight. Leadership can coordinate beliefs and actions, and its effectiveness depends on the willingness of others to follow (Alston et al., 2021; Antonakis et al., 2022). Yet visible markers such as salary, title, office size, and formal grade may affect whose proposal shapes a decision even when they are not earned through task-specific performance. By separating rank from expertise, merit, authority, and differential

incentives, our design shows that a minimal ordering can influence how otherwise comparable contributions are received. This distinction matters wherever formal position is visible before the quality of a contribution can be assessed directly.

2 Experimental design

2.1 Investment task and advice

We run our experiment on a sample of 4,451 participants representative of the German population aged 18–69 with respect to age, gender, and geographical location. Appendix Table A.1 shows that predetermined characteristics do not jointly predict assignment to the four treatment cells (omnibus $p = .357$).

The experiment uses the individual investment task introduced by Gneezy and Potters (1997). Participant i chooses a share $s_i \in [0, 100]$ of an endowment to invest in a lottery. With equal probability, the amount invested is tripled or lost, while the remainder is retained with certainty. The task is deliberately individual and has no externalities. It also has no uniquely correct investment share: the choice that best serves a participant depends on their risk preferences. Advice can consequently move behaviour without being objectively right or wrong for the recipient.

Before making the investment, each participant receives one recommendation, $\hat{s}_i \in \{30, 70\}$. The recommendation originates from an advisor who participated in the same task at an earlier point in time. This procedure preserves non-deception: every recommendation shown to a participant was in fact left by someone facing the same lottery. For the purpose of implementing the experimental conditions, we use only recommendations to invest either 30 or 70 percent. The two values are selected with equal probability and independently of the advisor's rank. They are symmetric around the focal allocation of one half of the endowment and sufficiently far apart to be meaningful to both relatively cautious and relatively risk-tolerant participants.

Holding the recommendation distribution fixed separates the influence of the source from the influence of content. In naturally occurring interactions, rank may affect not only how a message is received but also which message is sent. High- and low-ranked advisors could offer systematically different recommendations, making the two channels impossible to distinguish. Here the distribution of recommendations is identical across rank conditions. The comparison therefore asks whether the same recommendation carries different behavioural weight solely because of the position attributed to its source.

We measure the influence of advice through the proximity between the recommendation and the investment that follows it. The primary outcome is

$$y_i = |s_i - \hat{s}_i| \,, \tag{1}$$

which ranges from 0 to 70. A lower value indicates that the participant's choice lies closer to the recommendation and hence that the advice exerts greater influence. This measure follows Martinangeli and Meiske (2022) and accommodates recommendations on both sides of the investment distribution.

2.2 Monetary and symbolic rank treatments

The experiment implements a between-subjects 2×2 design crossing the form of rank (monetary or symbolic) with the advisor's rank (low or high). To the monetary-rank treatment in Martinangeli and Meiske (2022) we add a symbolic-rank treatment that holds monetary resources constant. In the monetary treatment, the software assigns the advisor a budget of either 50 or 100 points (EUR 0.50 or EUR 1.00), representing low and high rank, respectively.

In the symbolic treatment, advisors and participants all have the same 75-point budget (EUR 0.75), while the software assigns the advisor either one or two stars. The stars have no consequences for payoffs and, as for ranks in the monetary arm, are not earned through performance.

In both arms, the advisor's rank is allocated at random, a fact made explicit to the participants. The participant's own rank, of the same type as that of the advisors, is assigned independently, with the same probability distribution, and disclosed only after the investment decision. The hierarchy is thus relevant for them. Because the participants have the same chances at obtaining a high or a low rank as the advisors, envy or procedural fairness cannot play a role. Crucially, recommendation content is also assigned independently of rank. Therefore, systematic differences in the final investment can be attributed to the advisor's rank rather than to the content of the advice.

Table 1. The 2×2 experimental design

	Monetary rank	**Symbolic rank**
High rank	Advisor budget: 100 points (EUR 1.00)	Advisor: two stars; all budgets: 75 points (EUR 0.75)
Low rank	Advisor budget: 50 points (EUR 0.50)	Advisor: one star; all budgets: 75 points (EUR 0.75)

2.3 Post-decision measures

After the investment decision, we collect a series of measures designed to characterise the response to rank. Participants assess how much they trust the advice, how confident they believe the advisor to have been, and the overall quality of the recommendation, each on a ten-point scale. They are then asked to recall the recommended investment, the date on which the advisor participated, and, in the monetary condition, the advisor's budget. Exact recall of the recommendation captures memory for the behaviourally relevant message; date and budget recall provide comparison measures for information about the source and the experimental setting. The time elapsed between display and submission of the investment page provides a measure of decision time.

The survey further elicits age, gender, education, household income, and region of residence, together with an eight-item Social Dominance Orientation scale (Pratto et al., 1994) and measures of material values (Richins and Dawson, 1992; Richins, 2004) and need for cognition (Cacioppo and Petty, 1982; Lins de Holanda Coelho et al., 2020). These psychological measures help us study the processes underlying responses to rank by examining whether the influence premium varies with attitudes towards hierarchy, material wealth, and deliberative thinking. The demographic variables enter the controlled specifications described below.

Appendix B reproduces the participant-facing instructions and survey instrument.

3 Hypotheses

We formulate two hypotheses concerning advice following, and two concerning recall and perceptions of the advice and its source. These predictions connect two strands of research. The advice-taking literature shows that decision makers do not evaluate a recommendation solely on the basis of its content: characteristics attributed to the source, including expertise, confidence, and trustworthiness, affect the weight placed on advice (Bonaccio and Dalal, 2006; Bailey et al., 2023). The literature on social rank, in turn, treats deference and influence as central features of hierarchy. Prestige-based accounts propose that people preferentially

attend to and imitate individuals believed to possess valuable knowledge or skill (Henrich and Gil-White, 2001), while evidence from naturally occurring groups shows that both prestige and dominance can translate rank into influence over others' behaviour (Cheng et al., 2013).

Because in this setup rank provides no information about the advisor's ability or the quality of the advice, our experiment tests whether rank retains behavioural force as a cue to source quality even when its arbitrary origin is common knowledge. We distinguish between the monetary ranking studied by Martinangeli and Meiske (2022) and the symbolic (non-monetary) ranking we introduce as an extension to the original framework.

Hypothesis 1 (Influence premium). *Advice from a high-ranked advisor is followed more closely than advice from a low-ranked advisor in both the monetary and symbolic treatments.* The prediction is that a randomly assigned rank cue changes the weight placed on otherwise comparable advice. Finding an influence premium in the symbolic treatment would show that unequal resources are not necessary for rank to affect advice use.

Next, although both treatments establish the same high–low ordering, the two rank cues need not be equally consequential. Monetary rank combines relative position with unequal control over a valued resource. Resources can shape both prestige- and dominance-based rank relationships (Cheng and Tracy, 2013), and status is commonly associated with competence (Fiske et al., 2002; Mattan et al., 2017). Such learned associations may make a monetary difference a particularly salient rank cue even when the allocation is explicitly random. Stars, by contrast, communicate ordinal position without creating a difference in resources. Comparing the treatments therefore reveals both whether a purely symbolic hierarchy is sufficient to generate an influence premium and whether removing the monetary dimension attenuates it.

Hypothesis 2 (Form of rank). *The magnitude of the high-rank influence premium differs across rank dimensions; specifically, it is larger under monetary rank than under symbolic rank.*

Further, our predictions extend beyond the investment choice to the processing of information about the advisor and the recommendation. Broadly defined social status guides selective attention: high-status individuals attract more visual attention (Maner et al., 2008; Dalmaso et al., 2012), and faces associated with high status are recognised more accurately and encoded more strongly in memory (Ratcliff et al., 2011). Hierarchical relations are also identified, learned, and remembered more fluently than egalitarian relations (Zitek and Tiedens, 2012). If a high-rank cue increases the attention devoted to an advisor, participants should form a stronger representation of both the behaviourally relevant message (the recommended investment) and the contextual information attached to its source.

Hypothesis 3 (Recall). *Information provided by and about high-ranked advisors is recalled more accurately than the same information associated with low-ranked advisors.*

Finally, rank may also alter how an otherwise identical recommendation is interpreted. Because status is associated with competence (Fiske et al., 2002), participants may perceive a high-ranked advisor as more capable or more certain even when rank was assigned independently of performance, and when no possibility to convey certainty or confidence exists (the message space is constrained to a number and controlled by the experimental interface). These inferences are particularly relevant in advice taking, where perceived advisor expertise and confidence increase the weight placed on a recommendation (Sniezek and Buckley, 1995; Bonaccio and Dalal, 2006). Evidence that status and expressed confidence jointly shape responses to advice further supports treating evaluations of the recommendation and its source as potential correlates of the influence premium (Wang et al., 2025).

Hypothesis 4 (Perceptions). *Advice from high-ranked advisors is evaluated more favourably, high-ranked advisors are perceived as more confident about their recommendations, and participants report greater confidence in the advice received.*

Finally, if hierarchical cues are processed fluently and make a high-ranked source's recommendation easier to accept, participants may require less deliberation before choosing. We therefore predict that high rank shortens decision time, with a larger reduction under monetary than under symbolic rank.

4 Empirical strategy and results

4.1 Estimation strategy

The dependent variable, $y_i = |s_i - \hat{s}_i|$, is the absolute distance between participant i's investment and the recommendation received, measured in percentage points. It ranges from 0, when the recommendation is followed exactly, to 70, the largest possible deviation in the realised design. Lower values therefore indicate greater influence of the advice. To estimate the average effect of high advisor rank across the experiment, we use

$$y_i = \alpha + \beta\, High_i + \gamma\, Monetary_i + \delta\, Rec70_i + \varepsilon_i, \tag{2}$$

where $High_i$ indicates that participant i received advice from a high-ranked advisor. The remaining indicators identify the monetary hierarchy and a recommendation to invest 70 percent, respectively. The coefficient β estimates the average high-rank effect across the two independently randomised hierarchy conditions while holding recommendation content fixed. A negative coefficient indicates that high rank draws choices closer to the recommendation.

Our full specification allows the influence premium to differ between the two forms of hierarchy:

$$y_i = \alpha + \beta_s High_i + \gamma Monetary_i + \beta_d(High_i \times Monetary_i) + \delta Rec70_i + X_i'\theta + \varepsilon_i. \tag{3}$$

Here β_s measures the high-rank effect when hierarchy is symbolic, while $\beta_s + \beta_d$ gives the corresponding effect when hierarchy is monetary. The interaction coefficient β_d provides the direct test of whether monetary rank generates a larger influence premium than symbolic rank. In all specifications, standard errors are clustered by region of residence.

The outcome cannot fall below 0, and observations at this lower bound represent choices that coincide with the recommendation. It cannot exceed 70 because recommendations are restricted to 30 or 70 percent and investments range from 0 to 100 percent. We therefore estimate equations (2) and (3) using a double-bounded Tobit model, which incorporates both limits of the observed outcome. We report average marginal effects on expected observed distance rather than coefficients on the latent Tobit index. The estimates can consequently be read as percentage-point changes in distance from the advice. Ordinary least squares provides a robustness check.

The baseline specification contains only the randomised treatment indicators and the recommendation received. A second specification adds age, gender, education, household income, and federal state of residence. Because advisor rank is randomly assigned, the treatment effect is identified without covariate adjustment. Adding predetermined characteristics can reduce unexplained variation and shows whether the estimates change after accounting for chance differences in observable characteristics. Recall and evaluation measures enter the analysis as outcomes rather than controls.

The primary behavioural outcome captures advice following in participants' investment choices and is measured as the absolute distance between each participant's choice and the recommendation received. Recall, evaluations, and decision time provide complementary evidence on participants' responses to rank.

4.2 Effect of rank on advice following

Table 2 reports average marginal effects from the double-bounded Tobit models. Panel A provides the average influence premium of high advisor rank pooling the monetary and symbolic conditions. Advice from a high-ranked advisor reduces expected distance from the recommendation by 1.41 percentage points (SE = 0.59, $p = .017$). Adding age, gender, education, household income, and federal-state controls changes the estimate only slightly, to 1.45 points (SE = 0.58, $p = .013$). Panel B then separates the two forms of hierarchy to test whether the premium differs across hierarchy type. While we continue to detect a significant effect of the symbolic hierarchy, with a marginal effect of 1.16 percentage points reduction in the distance from advice, the effect of a monetary hierarchy does not reach significance.

Table 2. Effect of high advisor rank on distance from the recommendation

Specification	Estimate	SE	p-value	95% CI
Panel A. Pooled effect				
High rank, baseline specification	−1.412	0.591	.017	[−2.57, −0.25]
High rank, pre-specified controls	−1.447	0.583	.013	[−2.59, −0.31]
Panel B. Treatment-specific effects				
High rank, symbolic treatment	−1.611	0.803	.045	[−3.18, −0.04]
High rank, monetary treatment	−1.280	0.831	.124	[−2.91, 0.35]
Difference: monetary minus symbolic	0.331	1.145	.773	[−1.91, 2.58]

Notes: Average marginal effects on expected observed distance from double-bounded Tobit models. Negative estimates indicate greater advice following. Standard errors are clustered by region. The baseline includes the form of hierarchy and recommendation value. Pre-specified controls add age, gender, education, income, and federal state. Panel A reports the baseline and controlled versions of equation (2); Panel B reports the controlled interacted specification in equation (3). $N = 4{,}451$.

Table 3 reports the corresponding outcome means in the four experimental cells. In both forms of hierarchy, investments are on average closer to the recommendation when the advisor occupies the higher position. Under symbolic rank, mean distance falls from 24.59 percentage points for advice from one-star advisors to 23.06 points for advice from two-star advisors. Under monetary rank, it falls from 25.43 points for advice from an advisor with a 50-point budget to 24.13 points for advice from an advisor with a 100-point budget.

Table 3. Outcome means by form of hierarchy and advisor rank

Form of hierarchy	Advisor rank	N	Mean distance	SD
Symbolic (stars)	Low	1,124	24.59	20.12
Symbolic (stars)	High	1,110	23.06	20.03
Monetary	Low	1,099	25.43	20.01
Monetary	High	1,118	24.13	20.07

Notes: Distance is the absolute difference between the investment choice and the recommendation received, measured in percentage points.

The controlled pooled estimate means that participants assigned a high-ranked advisor choose an investment 1.45 percentage points closer to the recommendation received. This change is almost 6 percent of the mean distance among participants assigned a low-ranked advisor and approximately 0.07 standard deviations in the analysis sample. Because advisor rank is random and recommendation content has the same distribution across rank conditions,

the estimate captures the change in the weight placed on advice when only the advisor's position differs.

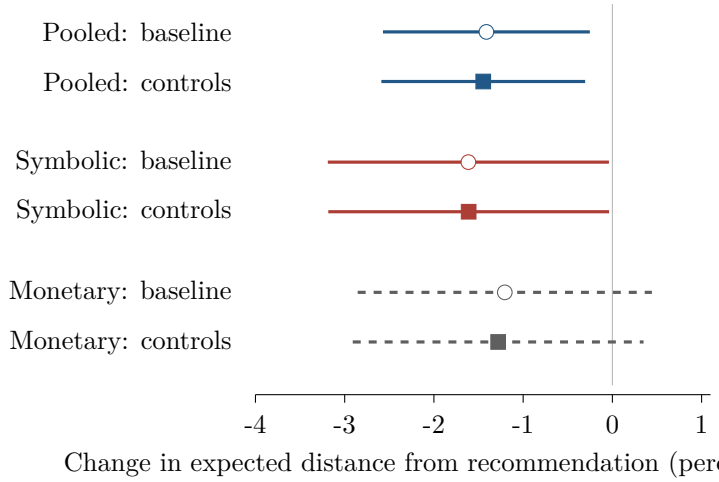
Result 1. *Across the monetary and symbolic hierarchies, advice from a randomly assigned high-ranked advisor draws choices closer to the recommendation received.*

Panel B of Table 2 compares the two forms of hierarchy. When rank is represented by stars, advice from the high-ranked advisor reduces expected distance by 1.61 percentage points ($p = .045$). Under monetary rank, the estimated reduction is 1.28 points ($p = .124$). The estimated difference between the two effects is 0.33 points ($p = .773$), with the symbolic-rank estimate being slightly larger. The data therefore do not support the prediction that monetary rank generates a larger influence premium than symbolic rank.

Result 2. *A symbolic rank distinction is sufficient to generate an influence premium; the estimates do not support a larger premium when rank is monetary.*

Figure 1 reports baseline and controlled estimates for the pooled sample and separately for the symbolic and monetary treatments. Within each of the three groups, adding the pre-specified controls leaves the point estimate and its confidence interval almost unchanged. The direct comparison in Table 2 addresses whether the premium is larger under monetary rank and yields an estimated difference close to zero. Taken together, the pooled effect and the symbolic-rank estimates show that unequal monetary resources are not necessary for high rank to increase the weight placed on advice.

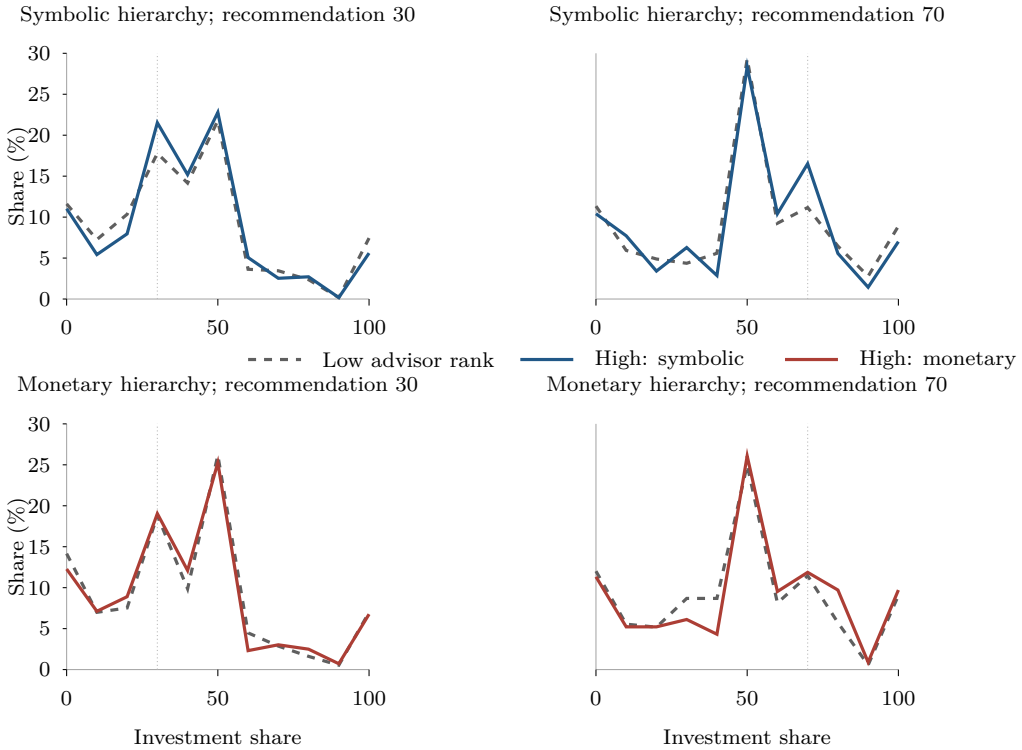
Figure 1. Estimated effect of high advisor rank on distance from the recommendation



Notes: The figure reports average marginal effects of high advisor rank on expected observed distance from the recommendation. Horizontal lines are 95-percent confidence intervals based on standard errors clustered by region. Open circles show baseline specifications and filled squares show specifications with the pre-specified controls. Blue solid lines denote pooled estimates, red solid lines denote symbolic-rank estimates, and dark-gray dashed lines denote monetary-rank estimates. The pooled estimates use the baseline and controlled versions of equation (2); the treatment-specific estimates use the corresponding versions of equation (3). Baseline models include recommendation value, and the pooled model also includes the form of hierarchy. Controlled models add age, gender, education, household income, and federal state. Negative estimates indicate closer advice following. $N = 4{,}451$.

Figure 2 looks beyond mean distance and displays the distribution of investment choices in each hierarchy-by-recommendation cell. Choices cluster at the focal 50-percent allocation and at the displayed recommendation, but the rank comparison is not confined to either point. The most visible change occurs under symbolic rank, where the higher-ranked advisor increases the mass at the recommended allocation for both recommendation values. Under monetary rank, changes are more dispersed across the distribution. This descriptive evidence is consistent with the treatment estimates and shows how rank shifts choices across the investment distribution.

Figure 2. Distribution of investment choices by recommendation and advisor rank



Notes: The figure reports the percentage of observations in eleven bins centred at 0, 10, . . . , 100. Dotted vertical lines mark the recommendation shown to the participant. Low-rank distributions are dashed; solid lines show the corresponding high-rank distribution.

4.3 Cognitive responses

The recall and evaluation measures are designed to gain an insight into the processes underlying the behavioural impact of rank. Recall outcomes show whether rank changes how participants retain the recommendation and information about its source. We estimate treatment effects on these binary recall indicators using linear probability models. The evaluation outcomes show whether rank changes perceived advice quality, trust in the advice, and the confidence attributed to the advisor. Table 4 reports the effects of high advisor rank on these measures.

Panel A shows that participants are 3.14 percentage points more likely to recall the recommendation exactly after receiving it from a high-ranked advisor ($p = .010$). Under monetary rank, high advisor rank raises correct recommendation recall by 5.46 percentage points ($p = .004$); under symbolic rank, the estimated increase is 0.84 points ($p = .644$). The estimated difference between the two treatments is 4.63 points ($p = .101$). The improvement in recommendation recall is therefore most pronounced in the monetary condition. Recall of the advisor's participation date remains unchanged.

Recall of the advisor's budget follows a different pattern. Within the monetary condition, participants exposed to a high-ranked advisor are 8.51 percentage points less likely to report the budget correctly. If high rank simply made the entire task screen more memorable, recommendation, date, and budget recall should improve together. They do not. The concentration of the positive recall effect on the recommendation therefore points to stronger retention of the advice itself and is more informative than the pooled recall estimate alone.

Result 3. *High advisor rank improves exact recall of the recommendation. The increase is largest in the monetary hierarchy, highlighting stronger retention of the behaviourally relevant advice.*

Panel B examines whether rank changes how participants evaluate the recommendation and

its source. In the pooled sample, advice from high-ranked advisors receives a 0.12-point higher quality rating on the ten-point scale ($p = .087$). The increase is 0.21 points under monetary rank ($p = .025$) and 0.03 points under symbolic rank ($p = .778$); the estimated difference between the treatments is 0.18 points ($p = .172$). The corresponding pooled changes in trust and attributed advisor confidence are 0.04 and 0.06 points. If participants simply evaluated every aspect of a high-ranked source more favourably, advice quality, trust, and attributed confidence should move together. They do not. Monetary rank instead changes the judgment most closely connected to the decision problem: whether the recommendation is of sufficient quality to guide the investment. Taken together, this pattern points to a selective shift in perceived advice quality rather than a uniformly more favourable evaluation of the high-ranked advisor.

Result 4. *High advisor rank improves the perceived quality of the recommendation. The increase is largest in the monetary hierarchy, highlighting stronger perception shift for the behaviourally relevant advice.*

Table 4. Effects of high advisor rank on recall and evaluations

Outcome and sample	Estimate	SE	p-value	95% CI
Panel A. Recall outcomes (percentage points)				
Correct advice recall, pooled	3.14	1.21	.010	[0.77,5.51]
Correct advice recall, symbolic	0.84	1.81	.644	$[-2.71, 4.38]$
Correct advice recall, monetary	5.46	1.91	.004	[1.71,9.21]
Difference: monetary minus symbolic	4.63	2.82	.101	$[-0.91, 10.16]$
Budget recall, monetary	-8.51	1.55	$< .001$	$[-11.54, -5.47]$
Correct date recall, pooled	-0.20	1.48	.891	$[-3.09, 2.69]$
Panel B. Evaluations (ten-point scales)				
Trust in advice, pooled	0.04	0.07	.553	$[-0.10, 0.18]$
Perceived advisor confidence, pooled	0.06	0.06	.362	$[-0.07, 0.19]$
Perceived advice quality, pooled	0.12	0.07	.087	$[-0.02, 0.26]$
Perceived advice quality, symbolic	0.03	0.10	.778	$[-0.17, 0.22]$
Perceived advice quality, monetary	0.21	0.09	.025	[0.03,0.40]
Difference: monetary minus symbolic	0.18	0.13	.172	$[-0.08, 0.45]$

Notes: Recall estimates are percentage-point changes from linear probability models. Evaluation estimates are changes on ten-point scales. Models include the form of hierarchy, recommendation value, and planned pre-treatment controls; standard errors are clustered by region. Budget recall is elicited only in the monetary treatment.

Finally, we predicted that advice from a high-ranked advisor is followed more intuitively and therefore more quickly. The estimated high-rank effect under symbolic rank is -2.03 seconds (SE = 1.31, $p = .120$). The monetary-minus-symbolic difference is 3.44 seconds (SE = 1.77, $p = .052$), which is positive rather than negative and therefore runs counter to our predictions. Under monetary rank, the estimated effect is 1.40 seconds (SE = 1.28, $p = .272$). The pooled estimate is -0.32 seconds (SE = 0.94, $p = .731$). The data therefore do not support either a common reduction in decision time under high rank. The influence premium in investment choices arises without a corresponding overall increase in decision speed.

Excluding the fastest and slowest five percent of survey completion times yields a pooled high-rank effect on distance from the recommendation of -1.40 points ($p = .026$), close to the controlled Tobit estimate of -1.45 points reported in Panel A of Table 2. Ordinary least squares yields a coefficient of -1.45 ($p = .013$), closely matching the Tobit average marginal effect. Taken together, the estimated pooled high-rank effect remains similar when we use OLS rather than Tobit and when we exclude unusually short or long survey sessions.

4.4 Heterogeneity in the influence premium

We test whether the pooled high-rank effect varies with five individual-level moderators: social dominance orientation (Pratto et al., 1994), material values (Richins, 2004), need for cognition (Cacioppo and Petty, 1982), education, and household income. For each moderator, we estimate a separate model that adds the moderator and its interaction with the high-rank indicator to the controlled pooled specification. SDO, MVS, and NFC are standardized. Education is coded using the ordered low, medium, and high groups defined in Table A.1, while income retains the survey's eight ordered categories; both are also standardized. The interaction estimate measures how the average marginal effect of high rank changes with a one-standard-deviation increase in the moderator. The models include the form of hierarchy, the assigned recommendation, and the remaining controls, with standard errors clustered by region.

Appendix Table A.3 reports the interaction estimates. The point estimates are negative for all five moderators, ranging from -0.26 points for SDO to -0.94 points for income, but none is statistically distinguishable from zero. We therefore find no evidence that the pooled influence premium varies systematically with these individual characteristics.

5 Discussion and conclusion

Individuals follow advice more closely when it comes from a high-ranked advisor. This result aligns with psychological, cognitive and neurobiological accounts of individuals being predisposed to imitating and attending more, and giving greater weight, to high ranked sources of information. This study removes confounding effects of, and especially of beliefs about, skill or effort, and of the many correlates to rank in naturally occurring hierarchies. We achieve this result by randomly assigning rank, therefore making it uninformative about the advisor's characteristics. Importantly, this influence premium also emerges under symbolic rank.

The study was designed as a direct follow-up to Martinangeli and Meiske (2022). We reproduce their randomly assigned monetary-rank treatment and add a symbolic treatment while holding the investment task, incentives, recommendation content, and random assignment procedure constant. Their experiment established that differences in randomly assigned monetary endowments can generate an influence premium. Our comparison shows that the influence premium also emerges under symbolic rank, where one or two stars indicate relative position while monetary resources remain equal.

The secondary outcomes provide a coherent account of what changes when advice comes from a high-ranked source. Participants are more likely to recall the recommendation exactly when it comes from a high-ranked advisor, with the increase in exact recommendation recall being largest under monetary rank. When rank is monetary, the participants also rate the quality of the recommendation more favourably. These changes do not extend uniformly to other information or judgments: recall of the participation date is unchanged, budget recall declines, and neither trust in the advice nor confidence attributed to the advisor increases. The pattern is therefore centred on the recommendation rather than on a general tendency to remember or evaluate every aspect of the high-ranked advisor more favourably. It also shows that the same behavioural influence premium can arise under symbolic rank without a corresponding change in every explicit evaluation of the source.

These findings broaden the interpretation of advice taking. Existing work shows that recipients respond to expertise, past accuracy, confidence, price, and helping intentions because these characteristics may contain information about the value of a recommendation (Bailey et al., 2023; Milyavsky and Gvili, 2024; Wang et al., 2025). Our experiment separates rank from those informative cues. The participants know that the advisor's position was randomly assigned. Moreover, the recommendation was independent of rank. Greater reliance on the high-ranked advisor therefore does not rest on rank being earned through performance. A

source's rank itself becomes a behaviourally relevant characteristic that affects the weight assigned to information, complementing evidence that advice use reflects both learning about advisors and a broader willingness to follow them (Pereg et al., 2024).

This distinction matters in organisations and markets. Formal hierarchy can coordinate decisions, allocate responsibility, and allow expertise to guide collective action (Alston et al., 2021; Antonakis et al., 2022). Our results identify an additional consequence: hierarchy also allocates persuasive weight. Titles, salary grades, offices, and other visible markers can affect which proposal shapes a decision before its task-specific merits have been established. This effect is observed both for purely monetary hierarchies and for symbolic ones. Policies intended to broaden participation may therefore need to address not only who can speak, but also how organisational rank affects the attention and weight given to otherwise comparable contributions. Economic accounts of advice and social learning should treat rank not only as a possible signal of expertise or authority, but also as an independent determinant of whose information shapes choice.

References

Alston, E., Alston, L. J., and Mueller, B. (2021). Leadership and organizations. Technical report, National Bureau of Economic Research.

Anderson, L. R. and Holt, C. A. (1997). Information cascades in the laboratory. *The American economic review*, pages 847–862.

Antonakis, J., d'Adda, G., Weber, R. A., and Zehnder, C. (2022). "Just Words? Just Speeches?" On the Economic Value of Charismatic Leadership. *Management Science*, 68(9):6355–6381. Publisher: INFORMS.

Bailey, P. E., Leon, T., Ebner, N. C., Moustafa, A. A., and Weidemann, G. (2023). A meta-analysis of the weight of advice in decision-making. *Current Psychology*, 42(28):24516–24541.

Bardsley, N. and Sausgruber, R. (2005). Conformity and reciprocity in public good provision. *Journal of Economic Psychology*, 26(5):664–681.

Bicchieri, C. and Xiao, E. (2009). Do the right thing: but only if others do so. *Journal of Behavioral Decision Making*, 22(2):191–208.

Bonaccio, S. and Dalal, R. S. (2006). Advice taking and decision-making: An integrative literature review, and implications for the organizational sciences. *Organizational behavior and human decision processes*, 101(2):127–151.

Cacioppo, J. T. and Petty, R. E. (1982). The Need for Cognition. *Journal of Personality and Social Psychology*, 42(1):116–131.

Camerer, C., Loewenstein, G., and Prelec, D. (2005). Neuroeconomics: How Neuroscience Can Inform Economics. *Journal of Economic Literature*, 43(1):9–64. Publisher: American Economic Association.

Çelen, B. and Hyndman, K. (2012). Social learning through endogenous information acquisition: an experiment. *Management Science*, 58(8):1525–1548.

Cheng, J. T. and Tracy, J. L. (2013). The Impact of Wealth on Prestige and Dominance Rank Relationships. *Psychological Inquiry*, 24(2):102–108. Publisher: Routledge _eprint: https://doi.org/10.1080/1047840X.2013.792576.

Cheng, J. T., Tracy, J. L., Foulsham, T., Kingstone, A., and Henrich, J. (2013). Two ways to the top: evidence that dominance and prestige are distinct yet viable avenues to social rank and influence. *Journal of personality and social psychology*, 104(1):103.

Dalmaso, M., Pavan, G., Castelli, L., and Galfano, G. (2012). Social status gates social attention in humans. *Biology letters*, 8(3):450–452.

Duan, J., Wu, J., Xu, T., and Liang, F. (2024). The influence of different types of power and status on advice-taking. *Journal of Psychological Science*, 47(4):910–917.

Fershtman, C. and Segal, U. (2018). Preferences and Social Influence. *American Economic Journal: Microeconomics*, 10(3):124–142.

Fiske, S. T., Cuddy, A. J. C., Glick, P., and Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6):878–902.

Gächter, S. (2015). Behavioural economics: Visible inequality breeds more inequality. *Nature*, 526(7573):333.

Gneezy, U. and Potters, J. (1997). An experiment on risk taking and evaluation periods. *The Quarterly Journal of Economics*, 112(2):631–645.

Harvey, N. and Fischer, I. (1997). Taking advice: Accepting help, improving judgment, and sharing responsibility. *Organizational behavior and human decision processes*, 70(2):117–133.

Henrich, J. and Gil-White, F. J. (2001). The evolution of prestige: freely conferred deference as a mechanism for enhancing the benefits of cultural transmission. *Evolution and Human Behavior*, 22(3):165–196.

Herbst, D. and Mas, A. (2015). Peer effects on worker output in the laboratory generalize to the field. *Science*, 350(6260):545–549.

Jiménez, V. and Mesoudi, A. (2019). Prestige-biased social learning: current evidence and outstanding questions. *Palgrave Communications*, 5(1):1–12. Number: 1 Publisher: Palgrave.

Kämmer, J. E., Choshen-Hillel, S., Müller-Trede, J., Black, S. L., and Weibler, J. (2023). A systematic review of empirical studies on advice-based decisions in behavioral and organizational research. *Decision*, 10(2):107–137.

Koski, J. E., Xie, H., and Olson, I. R. (2015). Understanding social hierarchies: The neural and psychological foundations of status perception. *Social Neuroscience*, 10(5):527–550.

Lins de Holanda Coelho, G., H. P. Hanel, P., and J. Wolf, L. (2020). The Very Efficient Assessment of Need for Cognition: Developing a Six-Item Version*. *Assessment*, 27(8):1870–1885.

Maner, J. K., DeWall, C. N., and Gailliot, M. T. (2008). Selective Attention to Signs of Success: Social Dominance and Early Stage Interpersonal Perception. *Personality and Social Psychology Bulletin*, 34(4):488–501.

Martinangeli, A. F. M. (2021). Do What (You Think) the Rich Will Do: Inequality and Belief Heterogeneity in Public Good Provision. *Journal of Economic Psychology*, 83:102364.

Martinangeli, A. F. M. and Meiske, B. (2022). The influence premium of monetary rank. Working Paper 2022-08, Max Planck Institute for Tax Law and Public Finance.

Mattan, B. D., Kubota, J. T., and Cloutier, J. (2017). How Social Status Shapes Person Perception and Evaluation: A Social Neuroscience Perspective. *Perspectives on Psychological Science*, 12(3):468–507. Publisher: SAGE Publications Inc.

Milyavsky, M. and Gvili, Y. (2024). Advice taking vs. combining opinions: Framing social information as advice increases source's perceived helping intentions, trust, and influence. *Organizational Behavior and Human Decision Processes*, 183:104328.

Mobius, M. and Rosenblat, T. (2014). Social learning in economics. *Annual Review of Economics*, 6:827–847. Publisher: Annual Reviews.

Morgan, T. J. H., Watson, R., Lenfesty, H. L., and Brand, C. O. (2026). Human prestige psychology can promote adaptive inequality in social influence. *Nature Communications*, 17(1):947.

Pereg, M., Hertz, U., Ben-Artzi, I., and Shahar, N. (2024). Disentangling the contribution of individual and social learning processes in human advice-taking behavior. *NPJ Science of Learning*, 9(1):4.

Pratto, F., Sidanius, J., Stallworth, L. M., and Malle, B. F. (1994). Social Dominance Orientation: A Personality Variable Predicting Social and Political Attitudes. *Journal of Personality and Social Psychology*, 67(4):741–763.

Ratcliff, N. J., Hugenberg, K., Shriver, E. R., and Bernstein, M. J. (2011). The allure of status: High-status targets are privileged in face processing and memory. *Personality and Social Psychology Bulletin*, 37(8):1003–1015.

Richins, M. L. (2004). The Material Values Scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31(1):209–219.

Richins, M. L. and Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3):303–316.

Rockenbach, B., Tonke, S., and Weiss, A. R. (2021). Self-serving behavior of the rich causes contagion effects among the poor. *Journal of Economic Behavior & Organization*, 183:289–300.

Sniezek, J. A. and Buckley, T. (1995). Cueing and cognitive conflict in judge-advisor decision making. *Organizational behavior and human decision processes*, 62(2):159–174.

Wang, X., Huang, X., and Zhang, E. (2025). How individuals evaluate the confidence of advice from advisors with high- and low-status: A behavioural and ERP study. *Biological Psychology*, 194:108978.

Zitek, E. M. and Tiedens, L. Z. (2012). The fluency of social hierarchy: The ease with which hierarchical relationships are seen, remembered, learned, and liked. *Journal of Personality and Social Psychology*, 102(1):98. Publisher: US: American Psychological Association.

Appendix

A Additional results

Table A.1. Balance across the four treatment cells

	Symbolic rank		Monetary rank		
Characteristic	**Low**	**High**	**Low**	**High**	**Joint p**
Female	0.52	0.52	0.51	0.48	0.161
Age 18–29	0.16	0.15	0.16	0.17	0.509
Age 30–39	0.15	0.16	0.17	0.15	0.506
Age 40–49	0.15	0.15	0.14	0.15	0.933
Age 50–59	0.19	0.20	0.17	0.20	0.326
Age 60 or older	0.35	0.35	0.36	0.33	0.742
Low education	0.23	0.25	0.22	0.22	0.437
Medium education	0.42	0.38	0.40	0.41	0.306
High education	0.35	0.37	0.38	0.37	0.542
Income category (1–8)	3.86	3.84	3.87	3.98	0.179

Notes: Entries are cell means. Except for income, variables are indicators. Education groups correspond to survey categories 1–4, 5–7, and 8–15. The final column reports a region-clustered Wald test of the high-rank indicator, the monetary-rank indicator, and their interaction in a regression that also conditions on the assigned recommendation. A multinomial omnibus test using gender, age, education, income, federal state, and recommendation content yields $p = .357$.

A.1 Additional outcomes and multiple-testing adjustment

We examine six additional outcomes, which are potentially highly correlated: correct recall of the budget, the advisor's participation date, and the advice; perceived advice quality; perceived advisor confidence; and trust in the advice. We therefore adjust for the six tests using the familywise-error-rate procedure of **?**, implemented in Stata with the user-written command `mhtreg`. The bootstrap resamples regional clusters and accounts for dependence across the six outcomes.

After adjustment, the effects on budget recall and advice recall remain statistically significant (Table A.2). High rank reduced the probability of correctly recalling the budget by 8.51 percentage points ($SE = 1.55$; FWER-adjusted $p < .001$). High rank also increased the probability of correctly recalling the advice by 3.14 percentage points ($SE = 1.21$; adjusted $p = .033$).

Table A.3 reports the coefficients and interaction effects of high rank with the individual level moderators SDO, MVS, NFC, education and income. None of these interactions is significant.

Table A.2. Additional outcomes and multiple-testing adjustment

Outcome	N	**Effect**	**SE**	**Raw** p	**FWER-adjusted** p
Correct budget recall	2,217	−8.51	1.55	$< .001$	$< .001$
Correct date recall	4,451	−0.20	1.48	.891	.888
Correct advice recall	4,451	3.14	1.21	.010	.033
Perceived advice quality	4,451	0.12	0.07	.087	.279
Perceived advisor confidence	4,451	0.06	0.06	.362	.724
Trust in advice	4,451	0.04	0.07	.553	.780

Notes: For the three recall outcomes, effects are reported in percentage points; for the three evaluation outcomes, effects are reported in points on the original ten-point scale. Estimates are pooled high-rank effects across the symbolic and monetary treatments, except for budget recall, which was elicited only in the monetary treatment. Adjusted p-values control the familywise error rate across the six outcomes and are calculated using the Stata command `mhtreg`, with 3,000 regional-cluster bootstrap replications. Standard errors are clustered by region.

Table A.3. Interactions between high rank and individual-level moderators

Moderator	N	**Interaction**	**SE**	**Raw** p
SDO	4,451	−0.26	0.64	.690
MVS	4,451	−0.32	0.64	.617
NFC	4,451	−0.70	0.58	.227
Education	4,451	−0.84	0.59	.156
Income	4,451	−0.94	0.59	.110

Notes: Interaction estimates give the change in the average marginal effect of high rank on expected observed distance associated with a one-standard-deviation increase in the moderator; negative values indicate that the influence premium becomes larger as the moderator increases. SDO, MVS, and NFC are standardized scales. Education uses the ordered low, medium, and high groups defined in Table A.1; income uses the eight ordered survey categories. Both are standardized before estimation. Models are double-bounded Tobit specifications that include the form of hierarchy, the assigned recommendation, and the remaining controls. Standard errors are clustered by region.

B Experimental instructions and survey instrument

B.1 Reader's note

This appendix reproduces the English-language version of the participant-facing material. Section headings, explanatory text in square brackets, and emphasis added for the reader were not displayed to participants. The online survey presented the material over multiple screens; page breaks are condensed here. Where the recommendation, rank, or date varied across participants, brackets indicate the value displayed by the survey. Consent and administrative text are omitted. In the symbolic-rank treatment, every participant received the same additional budget of 75 points, whose amount was disclosed only after the investment decision.

B.2 Screening and background questions

Before the experimental task, participants answered the following questions:

1. "Please select your gender." Response options: female, male, or other.
2. "How old are you?" Response options: 18–29, 30–39, 40–49, 50–59, or 60 years or older.
3. "Please select your federal state and your district/city/region."
4. "What is your marital status?" Response options: single (never married, widowed, separated, or divorced); or married, in a registered civil partnership, or living with a partner.
5. "How many people live in your household (including yourself)?" Participants separately entered the number of adults and children under 18.
6. "What was your household's monthly net income last year?" The survey defined this as total household income after taxes and social-security contributions. Response categories were less than EUR 1,000; EUR 1,000–1,999; EUR 2,000–2,999; EUR 3,000–3,999; EUR 4,000–4,999; EUR 5,000–5,999; EUR 6,000–6,999; and EUR 7,000 or more.

B.3 Task instructions

Monetary-rank treatment.

> In addition to the 70 points you receive for participating, you have been assigned an additional budget in this survey. You can use this later.
>
> You and the other participants in your study will each receive either 50 or 100 additional points. Whether you receive 50 or 100 points is determined randomly by the computer.
>
> The size of the additional budget assigned to you will be communicated to you only at the very end of the study. On the final page of the study, the size of the additional budget will be displayed clearly.

Symbolic-rank treatment.

> In addition to the 70 points you receive for participating, you have been assigned an additional budget in this survey. You can use this later. The size of the additional budget is the same for all participants in the same study you are participating in, but it remains unknown to you at this point.
>
> You and the other participants in your study will each receive either one or two stars. Whether you receive one or two stars is selected randomly by the computer.
>
> Whether you have been assigned one or two stars will be communicated to you only at the very end of the study. On the final page of the study, the stars (one or two) will be displayed clearly.

Lottery.

> You can use the additional points you received to participate in a lottery. You decide yourself what share of your additional budget you would like to invest.
>
> In the lottery, the points you invest can either be tripled or lost. The probability of each outcome is equal. So you have a 50–50 chance of tripling your investment or losing it.

In any case, you keep the points that you do not invest in the lottery. The result is determined randomly by the computer using a wheel of fortune.

Please note: At this point, the size of your additional budget has not yet been communicated to you. You will learn the size of the additional budget assigned to you after you have invested in the lottery.

B.4 Advice and investment screens

Participants assigned to receive advice saw one of the following treatment-specific screens. The recommendation was independently assigned to 30 or 70 percent, and the advisor's rank was independently assigned to low or high.

Monetary-rank treatment.

Before you decide what share to invest in the lottery, we would like to show you a piece of advice from a person who participated in the same lottery before you.

This person recommends that you invest [30/70] percent of your budget.

This person was assigned a [low additional budget of 50 points/high additional budget of 100 points].

Participated on: [date].

Symbolic-rank treatment.

Before you decide what share to invest in the lottery, we would like to show you a piece of advice from a person who participated in the same lottery before you.

This person recommends that you invest [30/70] percent of your budget.

This person was assigned [one star/two stars].

Participated on: [date].

On the decision screen, the survey repeated the recommendation, the advisor's rank, and the participation date, followed by:

Please now choose the amount you would like to invest in the lottery.

What share of your additional budget would you like to invest in the lottery?

Choose how much of your budget you would like to invest, from 0 percent (nothing at all) to 100 percent (everything).

The response scale ran from 0 to 100. The survey recorded the time elapsed between display and submission of this screen.

Advice generation by advisors. Participants whose recommendation was subsequently shown to another participant saw:

Before you decide what share to invest in the lottery, you may give advice to a person who will participate in the survey in the future. The future participant will take part in the same lottery as you.

What share of the additional budget would you advise a future participant to invest? (She or he will decide on their own investment on the next page.)

The response scale ran from 0 to 100 percent.

B.5 Post-decision questions

After the investment decision, participants answered the following questions on separate screens:

1. "How much do you trust the advice you received?" Response scale: 1 to 10.
2. "How confident do you think the person who gave the advice was?" Response scale: 1 (not confident at all) to 10 (fully confident).

3. "How would you judge the overall quality of the advice?" Response scale: 1 (very bad advice) to 10 (very good advice).
4. *Monetary-rank treatment only:* "What budget was assigned to the person who gave you the advice?" Response options: 50 points or 100 points.
5. "What percentage of your budget did the advice-giver advise you to invest in the lottery?" Response scale: 0 to 100.
6. "Can you remember the exact date on which the person who gave you the advice participated in the study?" Participants entered the month and day.

B.6 Individual measures

Social Dominance Orientation. Participants were asked: "Please indicate how positively or negatively you feel toward each statement." Responses used a seven-point scale from 1 (very negative) to 7 (very positive).

1. Some groups of people should have more power than others.
2. It is acceptable that certain groups have higher social standing than others.
3. Sometimes group inequality is necessary for society to function well.
4. We would probably have fewer problems if groups were more equal.
5. No group should dominate other groups.
6. We should do more to make groups equal in status.
7. It is wrong for some groups to have more influence simply because of who they are.
8. Greater equality between groups should be an important social goal.

Material Values Scale. Participants rated each statement from 1 (strongly disagree) to 7 (strongly agree).

1. The things I own say a lot about how successful I am.
2. Buying new things gives me a lot of pleasure.
3. I admire people who own expensive homes, cars, or clothes.
4. Having many nice possessions is important to me.
5. My life would be better if I could afford more of the things I want.
6. I enjoy spending money on things that improve my lifestyle.
7. I would be happier if I owned more things.
8. I do not place much importance on material possessions.
9. The things I own are not very central to my sense of who I am.

Need for Cognition. Participants rated each statement from 1 (strongly disagree) to 7 (strongly agree).

1. I would prefer complex to simple problems.
2. I like to have the responsibility of handling a situation that requires a lot of thinking.
3. I really enjoy a task that involves coming up with new solutions to problems.
4. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.
5. Thinking is not my idea of fun.
6. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities.

B.7 Lottery outcome and final background questions

Participants clicked a "SPIN" button to start the wheel of fortune. The possible outcomes were "Triple – Congratulations! Your investment has been tripled" and "Zero – Unfortunately, you lost your investment." The following screen displayed total earnings and their components: the randomly allocated additional budget, the investment choice, and the lottery outcome. Participants in the symbolic-rank treatment were also shown whether they had been assigned one or two stars.

Finally, participants answered the following background questions:

1. "What is your current employment status?" Response options: employed full-time; employed part-time; self-employed or business owner; unemployed and looking for work; pupil, student, trainee, apprentice, or retraining participant; retired; or not employed and not looking for work.
2. "What is your highest educational qualification (general or vocational)?" Response options: left school before the end of ninth grade or without a lower-secondary certificate; lower-secondary certificate; intermediate-secondary certificate; polytechnic-secondary certificate; entrance qualification for universities of applied sciences; general university entrance qualification or Abitur; apprenticeship or vocational training; advanced vocational-school certificate or master craftsperson qualification; vocational school in the former GDR; university-of-applied-sciences degree; university degree; Bachelor's degree; Master's degree; Diploma, Magister, State Examination, or comparable degree; or PhD.