

# 1 | INTRODUCTION

In a society, promise-related communication is critical for fostering trust between individuals of different social status, whether it be a professor deciding to trust a student promising to get an assignment written or that professor deciding to trust the department chair promising to give him a bigger lab space before a certain time. In fact, virtually all formal social hierarchies involve some sort of promise or pledge by its new members and by its newly elected leaders in

individuals involved in the interaction (Hong & Bohnet, 2007; Lount & Pettit, 2012). Social status refers to the amount of respect, competence, prestige, or resources that an individual has along a meaningful dimension in a social hierarchy (Adler, Epel, Castellazzo, & Ickovics, 2000; Fiske, 2010; Kraus, Piff, & Keltner, 2011). There are two main types of social status: prestige-based social status (i.e., one's respect, competence, or prestige in a relevant area (Henrich & Gil-White, 2001)) and socioeconomic status (i.e., SES).

Here we focus on prestige-based status, as it is particularly advantageous for both experimental manipulation and controlling for potential confounds related to social status like power, which are hard to control for when measuring SES (Mills, 1956). In this type of manipulation, researchers give participants a ranking on a certain competence-related task (e.g., quiz: Albrecht, von Essen, Fliessbach, Falk, & Brown, 2013; math competition: Hu et al., 2015; time estimation task: Hu, Cao, Blue, & Zhou, 2014), which is usually indicated with stars (Ball, Eckel, Grossman, & Zame, 2001; Zink et al., 2008), before measuring the effect of rank-induced social status on a wide array of dependent measures including fairness perception (Hu et al., 2014, 2015), responses to resource allocation (Albrecht et al., 2013; Ball et al., 2001), performance outcomes (Zink et al., 2008), and trust (Blue, Hu, & Zhou, 2018). Past research has shown that rank-induced social status and social status found in natural social hierarchies have very similar effects on economic behavior (D'Exelle, Lecoutere, & Van Campenhout, 2009; Hu et al., 2014, 2015).

Existing research regarding the effects of social status on trust generally suggests that low status individuals are trusted more than their high status counterparts. One particularly relevant study finds that in TG, participants are more trusting of low status partners than high status partners (Lount & Pettit, 2012, Exp. 3). In this study, participants were paired with an anonymous partner from a university that was ranked either higher (i.e., high status) or lower (i.e., low status) than their own, and were asked how much they were willing to invest in their partner, who was presumably playing TG with them via the internet at their respective university. Participants invested more in low status partners than in high status partners, and this difference was mediated by perceptions of benevolence, such that low status partners were perceived as being more benevolent and thus more trustworthy. This finding is in line with research on social comparison, which finds that downward comparisons elicit increased

feelings of affective trust (Dunn, RuedyDr8 (c)-2 (, R)1.9 -2.9 (e)-16.2 (r)-12 (n)-1.9.5 (h r.2 (ez)2. (r)5. (, w)-16.7 (21.9.5 (0112 (.921.(.9))TJ\vec{0}. (h)-16.8 (o w)5.

given by low status individuals (e.g., hospital receptionists; Kilpatrick, Manktelow, & Over, 2007). Social psychology research has also found that people tend to believe that "experts are right", as the social status of a communicator can affect the believability and influence of an utterance (i.e., assertion or constative). In one study, participants read about the recommended amount of sleep for maximal health. with the recommendation being given by either a Nobel prize winning physiologist (i.e., high status) or a YMCA director (i.e., low status). The authors found that when participants read that one hour of sleep per night was good for one's health, people were more affected by high status than low status recommendations (Bochner & Insko. 1966). At a more general level, psychology of reasoning research provides potential reasons for why people may be more likely to trust assertions given by high status than low status others. For example, when participants are given a conditional statement along with possible outcomes and asked to indicate whether the outcome supports, contradicts, or tells nothing about the conditional statement, participants are more likely to draw inferences from conditional statements that include someone who is in control over the outcome from the conditional statement than someone who is not in control over the outcome (Evans & Twyman-Musgrove, 1998). Levels of expertise (e.g., professor of medicine vs. first-year medical student) also affect performance on deductive reasoning tasks, as assertions issued by experts are perceived as more likely to occur/be true than assertions issued by novices (Stevenson & Over, 2001). One notable aspect of this body of research is that social status was in the same dimension as (i.e., relevant to) the communication in question.

As a result, the addition of promises between individuals of varying social status in TG, which were absent from Lount and Pettit's (2012, Exp. 3) study, opens up the possibility for a different pattern of results to emerge. In particular, two hypotheses emerge regarding the potential effects of promises on the perceived trustworthiness of prestige-based low and high status others in TG: (a) The "low status benevolence" hypothesis would predict that participants would trust low status individuals more than high status individuals, regardless of whether promises have been found to be trustworthy, given that when interacting with individuals of lower status, people have increased trust and expectations of benevolence than when interacting with individuals of higher status (Lount & Pettit, 2012), (b) The "high status credible" hypothesis would predict that participants would trust high status individuals' promises more than promises given by their low status counterparts, given that high status communication is often perceived as more likely to be accurate or reliable (Kilpatrick et al., 2007).

We conducted four experiments to address these two hypotheses. In these experiments we simultaneously manipulated the social status and promise information given by Trustees in TG to participants acting as Investors, which allowed us to measure the potential interaction between these two factors on trust. We focused on the amount of money invested in the Trustee in each trial of TG (i.e., trust amount). In Experiment 1, we analyzed the effect of lab-manipulated social status on the perceived trustworthiness of promises. To rule out alternative explanations for the pattern

of effects found in Experiment 1 (i.e., that participants simply preferred high status over low status others), in Experiment 2 we tested an independent group of participants, measuring participants' behavior as Dictator in the Dictator Game with partners of different social status. Given that the original finding in Lount and Pettit's (2012) study did not mention promises, in Experiment 3 we looked to replicate the effects of Experiment 1, but we adjusted the TG instructions in the "unknown" condition such that no promise opportunity was given. In Experiment 4 we looked to replicate the effects of Experiments 1 and 3 in a pre existing social hierarchy and analyzed whether differences in investment reflected increased honesty expectations.

# 2 | EXPERIMENT 1

# 2.1 | Participants

To determine the sample size, we used G\*Power 3 software (Faul, Erdfelder, Lang, & Buchner, 2007), which showed that we needed a sample size of at least 26 for this study to have adequate power (1 - > 0.95) to detect a medium-size effect ( = 0.30). Among the 33 undergraduate and graduate students who participated in the experiment, five participants failed the post-experiment check for understanding the task. These participants were excluded from the data analysis. The remaining 28 participants (20 females) were between 18 and 25 years of age ( = 21.214 years, = 2.500). Each participant was informed that the basic payment for participation would be 30 Chinese yuan (about 5 USD) and that a bonus of 0–20 yuan would be added based on performance in TG.

Informed consent from each participant was obtained prior to the experiment (and all the following experiments). The study was in accordance with the Declaration of Helsinki and was approved by the Ethics Committee of the School of Psychological and Cognitive Sciences, Peking University.

#### 2.2 | The Trust Game

In the current experiment, the primary dependent variables were based on behavior in TG. In TG, the Investor is endowed with a certain amount of money and is allowed to invest any amount of this money (including zero, which means not investing at all) to the Trustee, after which the money is multiplied by a certain amount (in most instances, × 3 or 4). The Trustee can then either keep the multiplied sum or send an amount of the multiplied sum back to the Investor. In TG, trust is defined as the amount of money sent from the Investor to the Trustee (Camerer, 2003). Predictions derived from the Subgame Perfect equilibrium (i.e., selfish interest) are that the Investor, as a rational and self-interested agent, would transfer no money to the Trustee, given that a rational Investor should assume that the Trustee would act in a self-interested way (i.e., return none of the multiplied sum to the Investor). However, on average, the Investor sends around 50% of the multiplied money to the Trustee (Berg et al., 1995; Johnson & Mislin, 2011).



the Trustee's promise decision was not revealed to the participant. Social status was manipulated before TG using a rank-inducing task (i.e., math competition; Hu et al., 2015; Figure 1a). In

speed of their response 6 (se2lc)9.9-.m5 (h6)1.8 (h6)1aree t th7eh6s ofh

. .



was concealed ("unknown" condition), participants invested more in high status Trustees (3.473  $\pm$  0.308) than middle status Trustees (3.123  $\pm$  0.286), = 0.022, but there was no difference in investment amounts for high status and low status Trustees (3.147  $\pm$  0.291), = 0.333; there was also no difference in investment amounts for low and middle status Trustees. = 1.

## 2.5 | Discussion

Findings from Experiment 1 showed that participants in a prestige-based social hierarchy invested more in partners who promised to return than those who did not promise or whose promise decision was concealed. When promise information was concealed ("unknown" condition), there was no difference in investment levels for low and high status partners; this finding is in contrast with predictions made by the "low status benevolence" hypothesis (Lount &

Pettit, 2012). Importantly, in line with the "high status credible" hypothesis, participants invested more in promises given by high status partners than in promises given by low status partners.

### 3 | EXPERIMENT 2

To rule out the potential that behavior in TG represented a preference for a certain social status, instead of trust per se, we conducted Experiment 2 with a new group of participants who played DG instead of TG. In Experiment 2, participants acted as Dictator and decided how much money to split between themselves and a low or high status partner; the partner had no option but to accept the proposal. The more money allocated to the partner, the greater the



expect that participants also send more money to high status partners than low status partners in DG.

# 3.1 | Participants

We determined the sample size using G\*Power 3 software (Faul et al., 2007), which showed that we needed a sample size of at least 50 for this study to have adequate power (1 - > 0.95) to detect a small-to-medium-size effect ( = 0.20). Among the 54 undergraduate and graduate students who participated in the experiment, one participant's DG behavior was classified as an outlier (>3 above/below group mean) and hence this participant was excluded from data analysis, although including this participant in the data analysis does not change the pattern of results detailed below. The remaining 53 participants (28 females) were between 18 and 26 years of age (mean 21.415 years, = 2.222). Each participant was informed that the basic payment for participation would be 45 Chinese yuan (about 7 USD) and that a bonus of 0-20 yuan would be added based on performance in the game.

This experiment had a one-factor (partner social status: low vs. high) within-participants design. Status was assigned using a star system (Zink et al., 2008) in the same way as in Experiment 1. Participants arrived alone to the laboratory for each experimental session, where they were told that six same-sex participants (confederates) were waiting in another laboratory. Before the experiment, participants gave permission to the experimenter to take their photo, which would later be used during the math quiz ranking screen, along with the photos of the six confederates (D (lbbt)fed

( I Ks

TABLE 1 Full table of DG trial options

	Option A		Option B	
Trial type	Own	Other	Own	Other
G = C	5	20	20	5
G = C	15	5	5	15
G = C	5	10	10	5
G = C	12	10	10	12
G = C	5	6	6	5
G = C	19	6	6	19
G = C	5	12	12	5
G = C	7	4	4	7
G < C	10	5	5	20
G < C	5	15	6	5
G < C	6	5	5	10
G < C	6	15	8	6
G < C	8	2	2	13
G < C	4	14	13	3
G > C	4	5	10	4.99
G > C	10	4.99	6	5
G > C	6	7	9	6.5
G > C	14	6.1	5	7
G > C	4	2	5	1.8
G > C	14	4.4	3	5
Filler	10	5	10	6
Filler	10	12	8	10

G = participant's gain if picking the self-interested option over the option that is better for the DG partner. C = cost of the DG partner if the participant picks the self-interested option over the option that is better for the DG partner.

no difference for low status and high status DG partners, < 1, = 0.857. Regarding the average amount given to the DG partner, a one-factor repeated-measures ANOVA showed no difference for low status and high status DG partners either, < 1, = 0.649.

### 3.3 | Discussion

Taken together, results from Experiment 2 help rule out the possibility that participants' increased investment in high status promises in Experiment 1 was due to increased preference for high status over low status individuals. In other words, increased trust in high status promises was unlikely to be due simply to liking high status partners more than their low status counterparts, given that there was no difference in DG behavior towards low or high status partners.

# 4 | EXPERIMENT 3

The results from the "unknown" condition in Experiment 1 did not replicate Lount and Pettit (2012). One potential reason for not

finding increased trust in low status Trustees could lie in the differences in experimental instructions. Lount and Pettit (2012) made no reference to promises at any point. As a result, in Experiment 3, we adjusted the instructions to the participants in the "unknown" condition in TG, making them closer to the instructions given to participants in the Lount and Pettit study (2012). Participants were told that the low and high status Trustees in the "unknown" condition did not have the opportunity to make a promise decision. In Experiment 3, we refer to the "unknown" condition as the "unknown/no opportunity" condition. Another reason for this clarification of the "unknown" condition is that there may be a different interpretation of expectation in the "unknown" condition.

# 4.1 | Participants

The participants in this sample were part of a larger study that included playing one block of TG as Investor and one block as Trustee, the order of which was counterbalanced across participants. Importantly, participants did not know that they were going to switch roles in TG until after they completed their first block of TG. This step was taken so as to avoid the possible confounding effect of knowing one will play both roles in TG (Burks, Carpenter, & Verhoogen, 2003), and to rule out any possibility of reciprocity or order effects on our findings reported below. Among the 117 undergraduate and graduate students who participated in the experiment, 62 participants first acted as Investor before acting as Trustee, and we report their data here. One participant's data as Investor was defined as an outlier (>3 above/below group mean). This participant was excluded from the data analysis, although including this participant does not affect the results presented below. Also, including the data from all 117 participants in the data analysis does not affect the results presented below. The remaining 61 participants (33 females) were between 18 and 26 years of age (mean 20.410 years,

= 1.892). Each participant was informed that the basic payment for participation would be 35 Chinese yuan (about 6 USD) and that a bonus of 0–15 yuan would be added based on performance in TG. Before the experiment, informed consent from each participant was obtained. This study was conducted at Zhengzhou University (Zhengzhou, China).

### 4.2 | Design and procedure

The experiment had a  $2\times3$  within participants factorial design, with the first factor referring to Trustee partner social status (low vs. high), and the second factor referring to the opportunity for the Trustee to promise to return at least half of the multiplied sum in TG ("promise" vs. "unknown/no opportunity" vs. "no promise"). The two conditions were randomized across trials within participants (96 trials in total; 16 trials/condition).

Groups of same-sex participants ranging from 2 to 5 individuals arrived at the laboratory for each experimental session, although the vast majority of the groups were composed of four individuals. Due to certain scheduling constraints, occasionally groups were

composed of both males and females; this should not have affected behavior given that participants were told that they were playing TG with same-sex, anonymous participants who had ostensibly participated in previous experiment sessions. Moreover, participants had no chance of interacting with one another once the experiment began. Before the experiment, participants gave permission to the experimenter to take their photo, which would later be used during the math quiz ranking screen to personalize the ranking; at no other time was the picture used. As in Experiment 1, the experiment consisted of two tasks: the math competition and TG. The setups of the two tasks, including experimental procedures and trial numbers for conditions, were exactly the same as in Experiment 1. Importantly, participants were given the following instructions regarding the meaning of the promise decisions in TG (translated from Chinese):

During each round of the game, the screen will notify you whether or not Player B has promised to return at least 50% of the multiplied sum. There are two symbols to indicate Player B's decision: (1) ('!') indicates that the partner promises to return at least 50% of the multiplied sum; and (2) ('--') indicates that the partner does not promise to return at least 50% of the multiplied sum.



current study are unlikely to be due to differences in experimental instructions.

## 5 | EXPERIMENT 4

In Experiments 1 and 3, we used a math based status inducing task, which is different from the university-based manipulation used by Lount and Pettit (2012). Moreover, we did not directly measure perceived benevolence of low and high status partners, which limits our ability to address the "low status benevolence" hypothesis. In Experiment 4, we adopted the university based rank inducing manipulation and benevolence measures from Lount and Pettit (2012). The inclusion of this manipulation allows us to test the robustness of the effect of social status on the perceived trustworthiness of promises in a setting more directly related to the participants' natural social hierarchy (i.e., pre-existing social hierarchy based on university rankings; Lount & Pettit, 2012). All participants were from middlestatus universities and played TG with partners from elite universities (i.e., high-status) and community colleges (i.e., low-status). To more directly test whether participants' investment behavior in the "promise" condition represented increased honesty expectations, we also measured participants' predictions of low and high status Trustee return behavior in the "promise" condition along with their self-reported amount of trust in low and high status TG promises.

# 5.1 | Participants

Among the 35 participants, four participants failed the post experiment check for understanding, and one participant chose to invest 7 out of 10 on every TG trial because 7 was her favorite number. These five participants were excluded from the data analysis. The remaining 30 participants (20 females) were between 18 and 25 years of age ( = 22.200 years, = 2.188). Each participant was informed that the basic payment for participation would be 30 Chinese yuan (about 5 USD) and that a bonus of 0-20 yuan would be added based on performance in TG. Before the experiment began, informed consent from each participant was obtained. The experiment was in accordance with the Declaration of Helsinki and was approved by the Ethics Committee of the School of P-20 yu0 (n)-6.2 (t w)-1vM17.5 (. T)-20. (

(2, 120) = 5.204, = 0.012,  $\eta^2_{\rm partial}$  = 0.080. Tests for simple effects showed that participants invested more in high status partners than low status partners regardless of the promise condition; however, this effect was stronger in the "promise" condition (low status: 6.537  $\pm$  0.338; high status: 7.305  $\pm$  0.293,  $\eta^2_{\rm partial}$  = 0.180) than in the "unknown/no opportunity" condition (low status: 3.380  $\pm$  0.251; high status: 3.800  $\pm$  0.247,  $\eta^2_{\rm partial}$  = 0.156) and the "no promise" condition (low status: 2.301  $\pm$  0.230; high status: 2.707  $\pm$  0.242,  $\eta^2_{\rm partial}$  = 0.112).

We ran additional analyses to check for the potential unique effect of Subjective SES. While there was no evidence that Subjective SES directly affected trust in the analyses of correlations between SES and the amount of investment in different conditions (data not shown here), when we included SES as a covariate in the above ANOVA analysis, we found that the interaction between social status and promise was no longer significant (participant's own SES as a covariate: (2,118) = 2.048, = 0.145,  $\eta_{partial}^2 = 0.034$ ; perceived SES (high status-low status) as a covariate: (2,116) = 2.301, = 0.128,  $\eta_{\text{partial}}^2 = 0.037$ ), suggesting that the effect of prestige based status on trust may also have been influenced by perception of SES. There was also no interaction between SES and promise and prestige-based social status (participants' own Subjective SES as a covariate: (2, 118) = 0.862, = 0.402,  $\eta_{\text{partial}}^2$  = 0.014; perceived SES (high statuslow status) as a covariate: (2,116) = 0.138, = 0.819,  $\eta_{partial}^2 = 0.002$ ), suggesting that SES may explain part of the variance, but the direction of the effect is unclear. The potential unique effects of SES and its influence on the effect of prestige-based status on trust are addressed in General Discussion.

## 4.4 | Discussion

Experiment 3 replicated the main findings in Experiment 1. As a result, we can conclude that the differences in the findings between those of Lount and Pettit (2012) and Experiments 1 and 3 in the

middle-ranking universities also located in Beijing (China Agriculture University, China Forestry University, University of Science and Technology Beijing, Beihang University, and Beijing Institute of Technology) whose entrance exam scores were between those required for the two community colleges and the two elite universities. The average entrance exam scores of the participants' schools were closer to the elite university scores than the community colleges, but this was to be expected as the test score differences are not linear (i.e., a one-point increase for a high score is much more influential than a one-point increase for a low score). Unlike Experiment 1, we did not include middle-ranking universities to avoid potential in-group/out-group effects.

Groups of same sex participants ranging from 1 to 3 individuals arrived at the laboratory for each experimental session. Upon arrival, the participants were informed that the experiment was composed of two roles: one role entailed acting as Investor in TG, and the other as Trustee. The experimental procedures and instructions for TG were identical to Experiment 1, with the exception that, in place of a star ranking, the name of the university and the university emblem/ logo (black and white) were placed beneath the blurred photo of the Trustee (Figure 1c, Bottom). Only two schools (one low status and one high status) were used for each participant, resulting in 96 trials in total (16 trials/condition). The pairing of the low and high status schools was counterbalanced across participants. All conditions were randomly mixed across trials during TG. After the experiment, participants completed the same social status manipulation checks as those in Experiment 2.

After the experiment, we measured participants' perceptions of benevolence for low and high status TG partners. In addition, we also measured participants' perceptions of ability and integrity of low and high status TG partners, as benevolence, ability, and integrity are three fundamental components underlying perceived trustworthiness (Mayer, Davis, & Schoorman, 1995). The perceived trustworthiness measures were the same measures as those used in Lount and Pettit (2012), which were drawn from previous work in organizational psychology on trustworthiness perception (Mayer & Davis, 1999). The questions are aimed at addressing employees' feelings towards employers ("top management"); we adjusted the questions to be less work-oriented and more suitable for students. Participants received instructions to imagine that they were randomly paired with one student from the inferior and superior ranked university, and to rate each student on each of the three dimensions. Benevolence was composed of five items (e.g., "This individual is concerned about my welfare") (

Similar to Experiment 3, neither participants' own SES nor their ratings of low and high status partner SES affected TG behavior in any condition. When we included SES as a covariate in the ANOVA analysis, the interaction between promise condition and prestige-based social status was no longer significant (own SES: (2,56) = 0.592 = 0.556,  $\eta_{\text{partial}}^2 = 0.556$ ; SES (high status-low status partner): (2,56) = 0.774, = 0.466,  $\eta_{\text{partial}}^2 = 0.027$ . Also similar to Experiment 3, when we included SES in the analysis, the interaction between SES, promise, and prestige-based status failed to reach significance: own SES: (2,56) = 0.230, = 0.795,  $\eta_{\text{partial}}^2 = 0.008$ ; SES (high-low status partner): (2,56) = 1.463, = 0.240,  $\eta_{\text{partial}}^2 = 0.050$ . Potential implications of these findings are addressed in General Discussion.

Results regarding the post-experiment measurements of ability, benevolence, and integrity were as follows. Participants rated low status partners (3.856  $\pm$  0.148) as having less ability than high status partners (5.100  $\pm$  0.177), (29) = -7.239, < 0.001. There was no difference in ratings of benevolence in low status (3.687  $\pm$  0.191) and high status partners (3.813  $\pm$  0.162), = 0.384. Participants rated low status partners (4.450  $\pm$  0.154) as having lower integrity than high status partners (4.917  $\pm$  0.138), (29) = -3.558, = 0.001).

To test the "low status benevolence" and "high status credibility" hypotheses, we examined the relationship between status differences in perceived ability, benevolence, and integrity and status differences in investment behavior in each of the promise conditions. No correlation reached significance, s > 0.110, suggesting that the current study does not provide evidence for the role of perceived ability, benevolence, or integrity in predicting behavior differences in either condition of the TG.

We were also interested in the relationship between ratings of ability, benevolence, and integrity on investment behavior in the low and high status Trustees, regardless of promise condition. For low status, we found that overall investment in low status Trustees (i.e., investment behavior in the low status Trustees averaged over "unknown" and "promise" conditions) correlated positively with low status ability ratings (= 0.419, = 0.021) and low status benevolence ratings ( = 0.382, = 0.037), but did not correlate with low status integrity ratings ( = 0.305). We also found that overall investment in high status Trustees (i.e., investment behavior in the high status averaged over "unknown" and "promise" conditions) correlated positively with high status benevolence ratings ( = 0.362, = 0.049), but did not correlate with high status ability ( = 0.267) or high status integrity ( = 0.147) ratings. Taken together, we found that, similar to Lount and Pettit (2012), benevolence ratings helped predict investment behavior for both low and high status Trustees, suggesting that participants' investment was affected by how much they believed their partner cared about them. However, these general tendencies are unable to explain the increased investment in high status Trustee promises over low status Trustee promises.

To more directly test the "high status credibility" hypothesis, we analyzed expected honesty ratings of low and high status partners. One participant failed to respond, leaving 29 participants in the analysis. After the experiment, participants indicated that they trusted

promises given by high status partners (5.310 ± 0.141) more than promises given by low status partners (4.517 ± 0.196), (28) = 4.075, < 0.001). As an additional measure of expected honesty (i.e., predicted honesty), participants also indicated how much of the multiplied sum they expected low status and high status partners to return after promising to return at least half of the multiplied sum in TG. Participants indicated that they expected high status partners

return after promising to return at least half of the multiplied sum in TG. Participants indicated that they expected high status partners to return a higher percentage of the multiplied sum (49.276  $\pm$  2.717) than low status partners (45.656  $\pm$  2.588) in the "promise" condition, (28) = -2.254, = 0.032. Neither of these measures evidenced significant correlations with investment differences in high and low status Trustees in the "promise" condition (i.e., average investment amount: high status "promise"-low status "promise"), s > 0.160.

## 5.4 | Discussion

Experiment 4 successfully manipulated feelings of social status by using a pre-existing social hierarchy (i.e., university-based status). Importantly, the findings from Experiment 4 replicated the findings from Experiments 1 and 3, thus providing further support for the "high status credible" hypothesis. Participants invested more in high status partner promises than in low status partner promises. There was no difference in perceived benevolence between low and high status partners, nor did the difference in benevolence predict investment differences in TG, providing evidence against the "low status benevolence" hypothesis. Interestingly, there was a difference in perceived integrity between low and high status partners, as participants perceived partners from an elite university as having higher integrity than participants in low status, suggesting that social status may have influenced expectations of honesty. There was no correlation between perceived differences in integrity between low and high status Trustees and investment behavior in low and high status Trustees, indicating that future studies are needed to more directly address the effect of social status on expectations of honesty. In particular, future studies could orthogonalize partner ability, integrity, benevolence, and prestige-based status to tease apart their unique effects on trust. Finally, in further support of the tendency for increased honesty expectations for high status over low status others, after the experiment participants reported that in TG they trusted promises given by high status partners more than promises given by low status partners and predicted that, after promising to return at least half of the multiplied sum, high status partners would return a greater percentage of the multiplied sum than their low status counterparts. Potential explanations and implications of these findings, in combination with those from Experiments 1, 2, and 3, are addressed in detail below.

### 6 | GENERAL DISCUSSION

In the current study, we used a modified version of TG to investigate how promises affect trust in partners of different social status.

Results showed that participants invested more in partners who promised than those who did not or whose promise information was concealed. Interestingly, participants invested more in promises given by high status than by low status TG partners. These effects were found in both manipulated and pre-existing forms of social status, demonstrating the robustness of the findings. Moreover, post-experiment measures showed that, in comparison with low status partners, high status partners were perceived as having greater levels of integrity and were predicted to return more of the multiplied sum after promising. Moreover, participants rated high status promises as being more trustworthy than low status promises. Taken together, these findings provide strong support for the "high status credible" hypothesis, which predicts that when given the opportunity to promise, high status partners are trusted more than low status partners (Kilpatrick et al., 2007).

The effect of social status on trust decisions was either diminished (Exp. 1) or non existent (Exp. 4) when the partner did not choose to promise ("no promise" condition) or when promise information was unknown to the participant ("unknown" condition), suggesting that the findings in the "promise" condition largely drove the effect of social status on trust. Here we offer three possible but not necessarily mutually exclusive explanations for why the effect of social status was more pronounced in the "promise" condition.

One explanation is that participants simply liked high status partners more than low status partners and that this effect was mostly manifested in the "promise" condition. This would suggest that behavior in TG did not represent trust per se, but rather represented participants' other regarding preferences (Cox, 2004). However, data from Experiment 2 ruled out this other-regarding preferences account. A second possible explanation is that promises elicited feelings of cooperation. When an individual makes a promise to another individual, the promise acts as a signal to the promisee that the promisor desires some level of cooperation with the promisor (Friedrich & Southwood, 2011). This desire for cooperation, in itself, may have been more rewarding to the participant when the promise was given by high status than by low status partners in TG.

suggests that the goal of any individual in a hierarchy is to gain access to resources and increase one's rank (Cummins, 1996, 1999, 2006). However, in order to do so, one must be able to engage in co-

and construction of social hierarchies (Dong, Weisfeld, Boardway, & Shen, 1996) as the social hierarchies in the United States and China are fundamentally different (Fei, 1985/2015). Taken in this light, the difference in the findings from the current study and those of Lount and Pettit (2012) may be driven by differing beliefs in the perceived moral character of high status individuals. As this is a topic of great interest in management research (Pellegrini & Scandura, 2008), future research could analyze whether cultural differences in social hierarchy influence trust-related behavior with individuals of different social status.

A third possible reason for a lack of replication of Lount and Pettit (2012) is that Trustee communication in the current study may have acted to individuate high status partners. For example, past research suggests that certain high status people are perceived as less warm and benevolent than their high status counterparts (Fiske, Cuddy, & Glick, 2002; Lount & Pettit, 2012); however, in those studies, participants had no opportunity to interact with (i.e., receive communication from) the people they were perceiving. Introducing promises may have initiated an individuation process, leading the participants to perceive high status partners in a less abstract/stereotyped, and more human fashion. In the current study, participants did not show any difference in their perceived benevolence ratings of low and high status partners. Instead, we found that participants perceived high status others as having greater levels of integrity than low status others. Communication may make an individual more personable and may have acted to counteract the tendency to perceive high status others as less benevolent (Fiske, 2009). It would be interesting for future research to test whether individuation of others modulates the perceived differences between low and high status others.

Four additional points are worth mentioning. First, given that participants in the current study did not receive feedback related to their partners' choices, it is not possible to speculate how trust in promises given by high and low status others differentiates with regard to social learning. Participants did not receive feedback because past research using TG has shown that prior trustworthiness behavior by the Trustee is the most critical factor in the decision-making process for the Investor (King-Casas et al., 2005), as people tend to trust those who have been trustworthy and not to trust those who have been untrustworthy. Given the tendency for participants to learn the trustworthiness of their partners in TG, and given the effects of learning on other factors related to trustworthiness, such as social distance (Fareri, Chang, & Delgado, 2015), perceived moral character (Delgado, Frank, & Phelps, 2005), and perceived facial trustworthiness (Chang, Doll, van't Wout, Frank, & Sanfey, 2010; Van't Wout & Sanfey, 2008), not providing participants with feedback allowed us to better analyze the unique effect of social status and promises on trust, which was the primary aim of the current study. Moreover, this type of design also resembles many trust decisions made in real life, where immediate feedback is not present regarding the subsequent trustworthiness of a particular individual (e.g., voting in a political election or lending money to a stranger). Nevertheless, it would be helpful for future studies to investigate how promises modulate the effect

of status on trustworthiness learning in repeated interactions when feedback is given regarding the trustworthiness of partner promises and behavior in TG. Also, it is worth noting that when trustees communicate in TG, half promise and half do not promise. Participants could infer that this 50–50 probability will also hold in the "unknown" conditions, which is not necessarily the case in other studies or in real life. Future studies may wish to evaluate whether the likelihood of promising in the "promise" condition affects investment behavior in the "unknown" condition.

Second, the rank of the participants in the current study was restricted to middle status so as to maximize statistical power and control for potential emotional differences experienced after achieving low or high ranking (Steckler & Tracy, 2014). Future studies would benefit from evaluating whether the effect of promises on trust for partners of different social status exists when the participant (i.e., Investor) occupies either high or low status. In addition, given that social status is relative and ever-changing, it would be worthwhile to investigate the robustness of the effects of promises on social status as social status changes between situations (e.g., Hu et al., 2014, 2015).

Third, to allow for a realistic one-shot manipulation of social status based on a previous pool of participants, we informed participants that their partners in TG made separate return decisions for each potential investment amount (i.e., strategy method). It is possible that there are differences in the effects of promises on behavior if behavior has already happened, in contrast to the more natural situation in which promises affect future actions. Future studies could address this issue by having participants play TG with each other at the same time.

Finally, while the current study found that the prestige-based status manipulation affected perceptions of Subjective SES, the study is limited in its ability to analyze the unique effects of SES on trust, given that there was no interaction between SES, promise, and prestige-based status, and given that we did not manipulate SES directly. This study was not designed to test the difference between SES and prestige-based status on trust: participants responded to questions related to SES — the experiment was completed and questions related to SES were general in nature (i.e., participants rated how they perceived SES of low and high status partners as a whole, not on a trial-by-trial or partner-by-partner basis). Future studies are needed to analyze the unique effects of SES and prestige-based status on trust.

### 7 | CONCLUSION

By manipulating the social status of Trustee partners in TG, the current study showed that participants were more likely to invest in promises given by high status partners than low status partners. This effect was found in both experimentally manipulated and preexisting social hierarchies, thus confirming the robustness of the "high status credible" hypothesis across different dimensions of social status. Moreover, in comparison with low status partners,



participants perceived high status partners as having greater in-

- de Kwaadsteniet, E. W., & van Dijk, E. (2010). Social status as a cue for tacit coordination. , , 515–524. https://doi.org/10.1016/j.jesp.2010.01.005
- de Waal, F. B. (1989). Food sharing and reciprocal obligations among chimpanzees. , , 433–459. https://doi.org/10.1016/0047 2484(89)90074 2
- Djawadi, B. M., & Fahr, R. (2015). "...and they are really lying": Clean evidence on the pervasiveness of cheating in professional contexts from a field experiment. , , 48–59. https://doi.org/10.1016/j.joep.2015.03.002
- Dong, Q., Weisfeld, G., Boardway, R. H., & Shen, J. (1996). Correlates of social status among Chinese adolescents.
  - , 476–493. https://doi.org/10.1177/0022022196
- Dunn, J., Ruedy, N. E., & Schweitzer, M. E. (2012). It hurts both ways: How social comparisons harm affective and cognitive trust.
  - , , 2–14. https://doi.
  - org/10.1016/j.obhdp.2011.08.001
- Eckel, C. C., & Wilson, R. K. (2007). Social learning in coordination games:

  Does status matter?

  doi.org/10.1007/s10683 007 9185 x
- Ellingsen, T., & Johannesson, M. (2004). Promises, threats and fairness. , , 397-420. https://doi.org/10.1111/j.1468 0297.2004.00214.x
- Evans, J. St. B. T., & Twyman-Musgrove, J. (1998). Conditional reasoning with inducements and advice. , , B11-B16. https://doi.org/10.1016/s0010-0277(98)00062-6
- Fabien, L. (1997). Making promises: The power of engagement.
  - , , 206-214. https://doi.org/10.1108/08876
  - 049710168690
- Fareri, D. S., Chang, L. J., & Delgado, M. R. (2015). Computational substrates of social value in interpersonal collaboration.
  - , , 8170-8180. https://doi.org/10.1523/jneurosci.4775 14.2015
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences.

  https://doi.org/10.3758/bf03193146
- Fei, X. T. (1985/2015). Beijing, China: The Commercial Press.
- FindLaw. (2016). When Will a Promise or Statement Be Considered a Binding Contract? Retrieved August 4, 2016, from http://smallbusin ess.findlaw.com/business-contracts-forms/when-will-a-promise-or-statement-be-considered-a-binding.html
- Fiske, S. T. (2009). From dehumanization and objectification to rehumanization: Neuroimaging studies on the building blocks of empathy. , , 31–34. https://doi.
  - org/10.1111/j.1749 6632.2009.04544.x
- Fiske, S. T. (2010). Interpersonal stratification: Status, power, and subordination. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), (pp. 941–982). Hoboken, NJ: John
  - Wiley & Sons Inc.
- Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition.
  - , , 878-902. https://doi.
  - org/10.1037//0022 3514.82.6.878
- Fiske, S. T., & Durante, F. (2014). Never trust a politician? Collective distrust, relational accountability, and voter response. In J. W. Van Prooijen & P. A. M. Van Lange (Eds.),
  - (pp. 91-105). Cambridge,
  - UK: Cambridge University Press.
- Fragale, A. R., Rosen, B., Xu, C., & Merideth, I. (2009). The higher they are, the harder they fall: The effects of wrongdoer status on observer punishment recommendations and intentionality attributions.