

Supplemental Material

Additional Methods and Materials

Procedure

Participants were given instructions for downloading an application on their phones to record their heart rate data; if a participant did not come with his or her own phone, the experimenter allowed the participant to use her phone. People in the high- or low-status conditions who were successful at convincing their group to select the firm for which they were advocating were given five dollars at the end of the study. We include a figure (Figure S1) of the layout and dimensions for the room in which participants completed the group task.

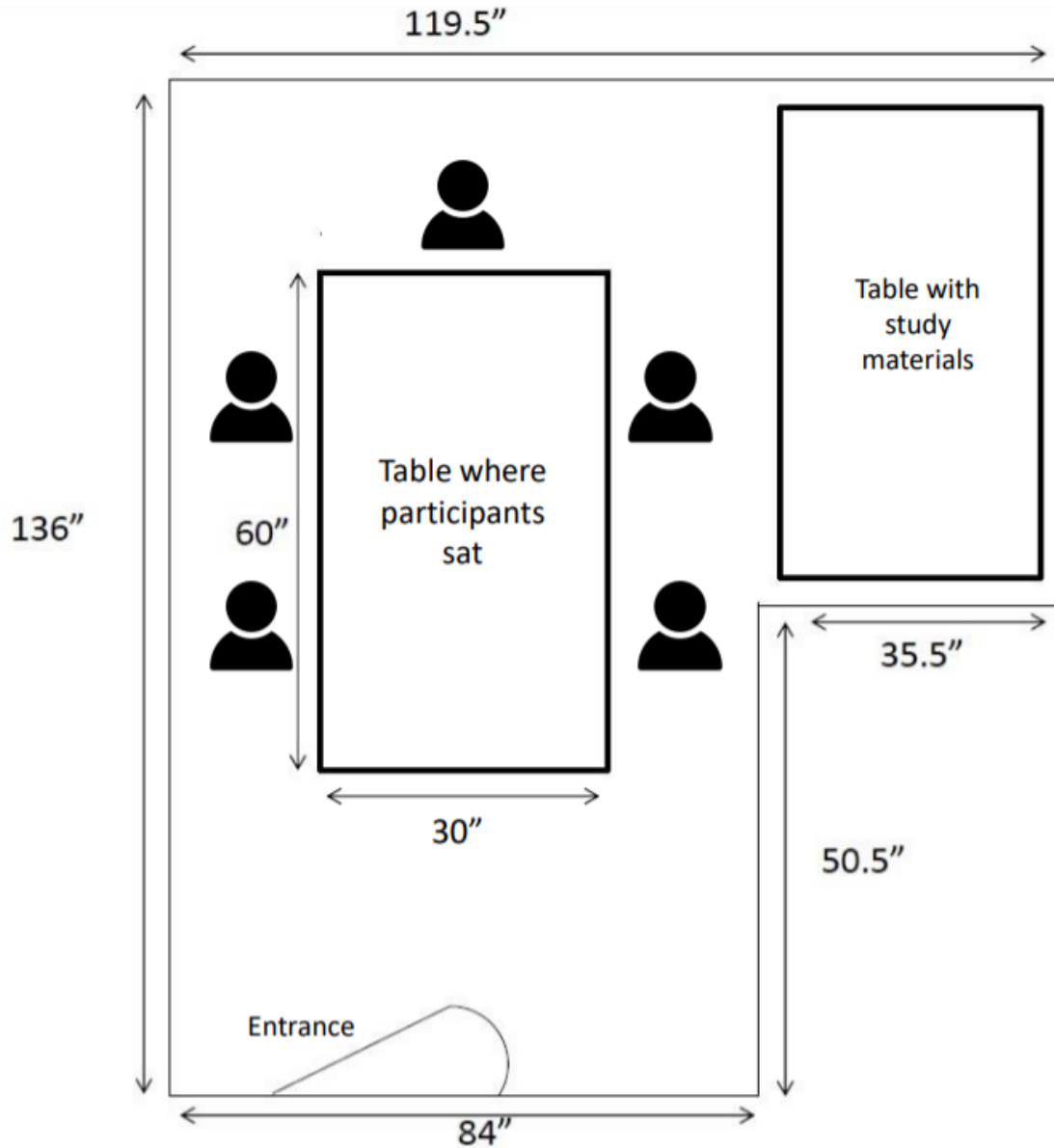


Figure S1. Layout and dimensions of the room in which participants completed the group task.

Measures

Behavioral measures. Behavioral measures were only coded for groups that reached a decision; the videos for three groups were missing.

Talk time. Six research assistants were trained in coding the amount of time that participants talked during the group decision-making task from videos of the task. After training,

one master coder overlapped with each additional coder for 15% of the participants. Interrater reliability was assessed using a one-way random effects single-measures ICC (Hallgren, 2012). The resulting ICCs were all in the “excellent” range (ICCs ranged from 0.83 to 0.98; Cicchetti, 2001) indicating that talk time was coded similarly across coders.

Behavioral attempts at influence. Two research assistants were trained in coding the number of times that people advocated for a specific search firm. For example, a participant might say “I think we should choose search firm 2 because it has international offices which would help expand our search” or “I vote for search firm 4 because we have used them in the past.” After training, both coders overlapped with each other for 25% of the videos. Interrater reliability for the number of times people advocated for a specific search firm was assessed using a two-way random effects single-measures, absolute agreement ICC (Hallgren, 2012). The resulting ICC was in the “good” range ($ICC = .74$; Cicchetti, 2001) indicating that behavioral attempts at influence were coded similarly across coders. Coders also indicated the specific firm for which participants were advocating. We found that when low- and high-status group members made pitches for a particular firm, 76.6% of the time, they advocated for their assigned search firms, indicating that these group members were indeed trying to influence the group in the manner they were assigned.

Of the times that group members advocated for unassigned search firms, almost all of them (91.9%) were made when group members had also made one or arguments in favor of their assigned firm at some point during the decision-making task. For example, a participant might be assigned to argue for search firm 5 and say, “We should pick Firm 5 because they know specifically about our industry, although Firm 1 also seems good because they specialize in

mergers and acquisitions executives.” This would count as one pitch for firm 5 and one pitch for firm 1.

Round robin ratings.

Perceptions of attempted influence. Participants individually rated the extent to which they thought each group member (1) wanted to influence the final decision and (2) wanted a particular decision over others on scales of 1 (*not at all*) to 7 (*very much*; for the exact items, see <https://osf.io/axfrb/>). These two items were averaged to form an attempted influence composite ($r = .83, p < .001$).

Perceptions of persuasiveness. On a scale of 1 (*not at all*) to 7 (*extremely*), participants individually rated the persuasiveness exhibited by each group member (“How persuasive was group member X during the task?”). Perceptions of attempted influence and perceptions of persuasiveness were significantly correlated, $r = .51, p < .001$.

Additional Analytic Details

Physiological Linkage

Because linkage scores are round robin (i.e., each person in the group has a dyadic score with each other member of the group), we were able to test whether there was significant variance due to respondent (e.g., some people show linkage to their partners in general, and others do not), variance due to partner (e.g., some people are always linked to, and others are not), and variance due to group (i.e., in some groups, linkage is stronger than in other groups), but we did not find significant variance for respondent, partner, or group, and so we trimmed them from the model to achieve convergence. Thus, in the models we present, we ran models that treated the dyad as the unit of analysis. The intraclass correlation allowed us to model the non-independence between dyad members’ levels of linkage with each other. A negative ICC

was found ($ICC = -0.24$, $SE = 0.07$, Wald $Z = -3.24$, $p = .001$), indicating that the more influenced one participant was by another member of the group, the less that group member was influenced by him or her.

Additional Results

Unless otherwise noted (e.g., for longitudinal outcomes), we ran two sets of models for each outcome measure. In the first, we examined the effect of status on each measure (comparing high-, middle-, and low-status participants); in the second, we examined associations between each outcome measure and successful persuasion of the group (which we measured as the group making a final choice that matched the choice the high- or low-status member was arguing for).

Talk Time

We modeled the amount of time people talked per 30-second interval of the task; we included a main effect of status, a linear effect of time in the models and a Status \times Time interaction term (see Fitzmaurice, Laird, & Ware, 2011). Group members were nested within groups, and group members were treated as indistinguishable by forcing equality constraints on their variances and covariances (see West, 2013). We specified a random intercept and slope for time, as well as the within-person covariance between them. We found a main effect of status, $F(2, 200) = 6.37$, $p = .002$, such that high-status participants talked significantly more than both low-status and middle-status participants ($ps < .026$; see Table S1). Low- and middle-status participants did not differ in talk time, $p = .38$. There was no main effect of time, $F(1, 143) = 0.16$, $p = .69$, nor an interaction between time and status, $F(2, 179) = 1.57$, $p = .21$. Lastly, we found that, regardless of status, successful persuaders did not talk more than others in the group overall nor did they show different trajectories in talking over time ($ps > .65$; see Table S2).

Behavioral Attempts at Influence

We used Generalized Estimating Equations (GEE), with a Poisson distribution and a log function, to account for the non-independence between group members. We found a main effect of status on behavioral attempts at influence, Wald $\chi^2(2) = 16.73$, $p < .001$, such that high-status individuals advocated for a particular firm more times than middle-status individuals ($p < .001$) and more than low-status individuals ($p = .005$; see Table S1). Low- and middle-status individuals did not differ from one another ($p = .27$). Lastly, we found that, regardless of status, successful persuaders did not advocate for firms more times than others in the group, Wald $\chi^2(1) = 0.99$, $p = .32$ (see Table S2).

Perceptions of Attempted Influence

We examined round-robin ratings of attempted influence, using the Social Relations Model (Kenny, Kashy, & Cook, 2006), with a two-way random effects model of variance in which perceiver and target were treated as random (there was no variance due to group and so this random effect was trimmed from the model).

We found a main effect of status, $F(2, 188.47) = 17.04$, $p < .001$, such that high-status individuals were perceived as trying to influence the group more than middle-status individuals ($p < .001$) and more than low-status individuals ($p = .015$; see Table S1). Low-status individuals were perceived as trying to influence the group more than middle-status individuals ($p = .008$). Thus, high- and low-status participants—who were both directed to convince the group to choose a particular firm—were rated as attempting more influence than middle-status participants. Furthermore, high-status people were seen as trying to influence the group even more than low-status people. Lastly, we found that, regardless of status, successful persuaders were not rated as trying to influence the group more than others in the group overall, $F(1, 76.80) = 2.27$, $p = .14$ 2b (see Table S2).

Perceptions of Persuasiveness

We examined whether perceptions of persuasiveness differed as a function of the status of the person being judged. Status did not have an effect on perceptions of persuasiveness, $F(2, 200.27) = 1.25, p = .29$. We next tested whether people who were perceived as persuasive would be more likely to successfully persuade others. Although success was measured at the end of the group task, we treat it as a “predictor” in these models to account for the non-independence among participants in the same group. We used Generalized Estimating Equations (GEE) with a binomial distribution and a logit function. The main effect of partner success was significant, $F(1, 73.25) = 21.29, p < .001$: not surprisingly, judging people as persuasive was more likely to be associated with successful persuasion than not.

Table S1

Means for Outcome Variables as a Function of Status

	High-Status	Middle-Status	Low-Status	<i>p</i> -value for effect of status
Talk time	8.57 (8.91) [7.88, 9.26]	4.85 (6.65) [4.55, 5.15]	5.96 (7.61) [5.36, 6.55]	.002
Behavioral attempts at influence	2.44 (1.68) [1.89, 2.98]	1.40 (1.26) [1.17, 1.63]	1.61 (1.18) [1.23, 2.00]	.001
Perceptions of attempted influence	5.30 (1.38) [5.09, 5.51]	4.22 (1.54) [4.09, 4.36]	4.73 (1.66) [4.47, 4.98]	.001
Perceptions of persuasiveness	4.33 (1.52) [4.09, 4.56]	4.06 (1.48) [3.93, 4.20]	4.29 (1.61) [4.05, 4.54]	.29

Note: Standard deviations are in parentheses. 95% confidence intervals are in brackets. Talk time is presented in seconds per 30-second interval.

Table S2

Means for Outcome Variables as a Function of Successful Persuasion

	When Followed by Successful Persuasion	When Followed by Unsuccessful Persuasion	<i>p</i> -value for effect of persuasion
Talk time	7.86 (8.37) [7.07, 8.65]	7.09 (8.42) [6.51, 7.67]	.63
Behavioral attempts at influence	1.82 (1.49) [1.24, 2.40]	2.16 (1.52) [1.73, 2.60]	.32
Perceptions of attempted influence	5.24 (1.30) [5.01, 5.49]	4.88 (1.67) [4.66, 5.11]	.14
Perceptions of persuasiveness	4.92 (1.31) [4.68, 5.16]	3.98 (1.60) [3.76, 4.19]	< .001

Note: Standard deviations are in parentheses. 95% confidence intervals are in brackets. Talk time is presented in seconds per 30-second interval.