

Supplemental Materials:

Supplemental Studies and Analyses:

- Study S1: Shared Plates Increase Cooperation in a Negotiation
- Study S2: Shared Plates Increase Coordination and Reduce Competition in a Bidding War
- Study S3: Shared Plates Increase Cooperation by Improving Coordination
- Study S4: Shared Plates Do Not Increase Cooperation By Improving Coordination in a Sample of Hong Kong Participants
- Study S5: Shared Plates Improve Cooperation Within the Dyad
- Additional analyses from Studies 1-3
- Table S2 summarizing results across all studies

Supplemental Study Materials

- Study 2 Materials
- Study S1 Materials
- Study S2 Materials
- Study S3 Materials

Study S1: Shared Plates Increase Cooperation in a Negotiation

This supplemental study was an earlier version of (the pre-registered) Study 1 in the main paper and followed a similar procedure. Participants who shared food from the same bowl versus used individual bowls took part in a wage negotiation simulation, in which negotiators needed to agree on an hourly wage (management wanted a low wage, union wanted a high one) through the exchange of bids and without talking. They further needed to reach an agreement with a minimal number of rounds, as each round represented a costly day of strike.

Method

Participants. Participants were run in pairs of strangers. A total of 96 undergraduate and graduate students participated (57 females; $M_{\text{age}} = 19.65$, $SD = 1.99$) for compensation based on their performance in the study (between \$4 and \$7; $M = \$5.49$, $SD = \$0.85$). Sample size was pre-determined based on a medium to large effect.

Procedure. The study employed a 2 (consumption: shared vs. separate) \times 2 (negotiation role: union vs. management) between-subjects design. A research assistant weighed out food ahead of time into two separate bowls or one shared bowl, depending on condition. In the separate-consumption condition, there were two 20g chip bowls and two 25g salsa bowls. In the shared-consumption condition, there was one 40g chip bowl and one 50g salsa bowl. For the separate-consumption condition, bowls were placed across from each other on a square table with individual salsa bowls next to them. For the shared-consumption condition, a chips bowl and a salsa bowl were placed in the center of the table.

The research assistant brought pairs into the lab and seated them across the table from each other. As part of our cover story, participants learned we were studying how hunger impacts decisions and that they would be eating a snack before completing a decision-making game. Participants received instructions to eat the entire snack before starting the game (which all participants did). Participants next received informational packets about their specific role detailing the negotiation procedure (see Supplemental Materials - Study 1 for packets). They learned they would be negotiating an hourly wage rate during a strike period and that their payment for the session would be based on their performance in the game, although they did not know the exact pay calculation (see Table S1).

Table S1. Performance based payment in Study S1 (participants were not provided with this table).

Payment	Management Performance	Union Performance
\$7.00	- \$.5 to -\$.99 million	+ \$3.01 to \$4 million
\$6.50	- \$1 to -\$1.99 million	+ \$2.01 to \$3 million
\$6.00	- \$2 to -\$2.99 million	+ \$1.51 to \$2 million
\$5.50	- \$3 to -\$3.99 million	+ \$1.01 to \$1.5 million
\$5.00	- \$4 to -\$4.99 million	+ \$0.51 to \$1 million
\$4.50	- \$5 to -\$5.99 million	+ \$0.01 to \$.5 million
\$4.00	- \$6 million or worse	incurs costs

As in Study 1, both the union and management roles learned their goal was to settle on an hourly wage between \$10 and \$11 within 22 rounds, with a strike set to initiate if a deal were not reached by round 2. Participants were instructed not to talk during the negotiation, but to silently exchange bids over the wage rate until they reached a round in which management's offer was equal to or higher than union's offer. After reading the instructions, viewing the strike cost table, and reading two negotiation examples, participants filled out true/false comprehension checks

(see Study S1 Materials). If they answered a question incorrectly, the research assistant verbally explained the details of the negotiation until they understood completely.

We calculated the performance score for management and union as in Study 1.

Once participants reached an agreement on a wage (or after 20 strike days), the negotiation ended. Lastly, we measured how close participants felt to their partner: (1) “How close do you feel to the person you worked with?” (2) “How likable was the person you were paired with?” (0 = *not at all*, 6 = *extremely*) (3) “Agree or disagree: I would like to spend more time with the person I was paired with,” and (4) “Agree or disagree: I do not see myself being friends with that person,” reverse-coded (-3 = *disagree*, 3 = *agree*).

Results

As our main measure of cooperation, we analyzed strike days at the pair level as a function of consumption condition. As predicted, pairs sharing food from the same bowl went into fewer days of strike (i.e., rounds of negotiating) ($M = 4.92$, 95% CI = [3.71, 6.12]) than pairs eating from separate bowls ($M = 8.13$, 95% CI = [5.52, 10.73]), $t(46) = 2.31$, $p = .026$, $d = .67$, 95% CI_{effect size} = [.08, 1.25], $BF_{10} = 2.38$.

We next analyzed our secondary measure of cooperation, negotiation performance outcome scores using a mixed model analysis with condition and role as fixed factors and pair as a random factor. As predicted, we found a main effect of consumption condition on negotiation performance outcome scores, suggesting that on average, participants in the shared-consumption condition performed better than those in the separate-consumption condition, $F(1, 46) = 6.02$, $p = .018$, $\eta_p^2 = .12$, 95% CI_{effect size} = [.003, .29]. We also found a main effect of role: union leaders received higher scores than managers. This was a feature of this exercise, $F(1, 46) = 562.53$, $p < .001$, $\eta_p^2 = .92$, 95% CI_{effect size} = [.88, .95], and no significant interaction, $F(1, 46) = 2.05$, $p = .159$, $\eta_p^2 = .04$, 95% CI_{effect size} = [.00, .19].

Because participants were paid based on performance, those who consumed from a shared bowl earned more ($M = \$5.68$, 95% CI = [\$5.47, \$5.89]) than those assigned to consume from separate bowls ($M = \$5.31$, 95% CI = [\$5.04, \$5.58]), $F(1, 46) = 5.30$, $p = .026$, $\eta_p^2 = .10$, 95% CI_{effect size} = [.00, .28]. There was also a main effect of role, with union receiving higher payment, $F(1, 46) = 31.75$, $p < .001$, $\eta_p^2 = .41$, 95% CI_{effect size} = [.19, .56], and no significant interaction, $F(1, 46) = .13$, $p = .716$, $\eta_p^2 = .003$, 95% CI_{effect size} = [.00, .10].

Lastly, we collapsed the four items measuring closeness ($\alpha = .69$), and as we expected, found a nonsignificant effect of condition on closeness, $F(1, 46) = .81$, $p = .373$, $\eta_p^2 = .02$, 95% CI_{effect size} = [.00, .15], with no significant main effect of role, $F(1, 46) = 3.01$, $p = .089$, $\eta_p^2 = .06$, 95% CI_{effect size} = [.00, .22], or interaction, $F(1, 46) = .10$, $p = .754$, $\eta_p^2 = .002$, 95% CI_{effect size} = [.00, .08], $BF_{10} = 0.37$, $BF_{01} = 2.71$. This provides anecdotal evidence that consumption condition had a nonsignificant effect on closeness.

Study S2: Shared Plates Increase Coordination and Reduce Competition in a Bidding War

Our theory predicts that shared food consumption increases coordination, which in turn increases cooperation. We tested this in Study S2 using an online auction where participants were bidding against an (allegedly) eager counterpart (Norton, Lamberton, & Naylor, 2013). We expected they would feel more coordinated and, in turn quit earlier, if they previously shared a plate with their counterpart.

Method

Participants. We pre-registered the study and collected data from 120 MTurk workers, using a heuristic of $N = 50$ and aiming for 50 participants per cell (preregistration available at

https://osf.io/cbu9d/?view_only=49a2232bdae14041b9c854a08b55026d). In advance, we decided to exclude participants who bid \$0 in the auction as this suggests they had no interest in purchasing the product ($n = 14$) and participants who reported not watching the video clip ($n = 2$), leaving a total of 104 participants (40 females; $M_{\text{age}} = 35.93$, $SD = 11.92$; 1 participant from the separate condition dropped the survey after random assignment) in exchange for \$0.50. We note that the results remain significant in the predicted direction when nonbidders are retained, and nonbidders were distributed evenly across conditions. Post-hoc power analyses reveal this sample achieved 86% power with $\alpha = .05$.

Procedure. The study employed a 2 (consumption: shared vs. separate) between-subjects design. Participants first learned they would be paired with another participant and spent 5 seconds on a loading screen presumably waiting to be paired with a partner (in reality, participants were not paired with another person). Participants then received instructions that they and their partner would watch a video of two people interacting and to imagine that they were interacting with their partner in the video. The video was filmed from a first-person perspective to make it easier for participants to place themselves in the interaction. The only part of this person visible during the video clip was the person's hand reaching for the chips and salsa to give participants the impression that they were viewing the food being consumed from this person's perspective. This person was labeled "You" and the other person in the video was labeled "Other Person." Participants received instructions to "try your best to put yourself in the video and assume the role of the person assigned to you." In the video, two individuals ate chips and salsa from either a shared plate (shared-consumption condition) or from individual plates (separate-consumption condition). The food set up was identical to Study 1 in the main paper and the video clips were 1-minute-long (links to videos: Shared: <https://youtu.be/z-g6Zm5bDpY>; Separate: <https://youtu.be/3424GL4V5HM>).

After watching the video, participants learned that they and their partner would be participating in an auction (see Norton et al., 2013). Participants viewed a photo of the item they would be bidding on, a bottle of Five-Hour Energy Drink. Participants received instructions to bid on the energy drink by entering any dollar amount they chose and that after they bid, their partner would be allowed to bid. Each time participants bid, the survey responded by reporting that the other bidder provided a bid 25 cents more than their previous bid (e.g., if participants made an opening bid of 25 cents, the competing bidder made a subsequent bid of 50 cents). The program was designed so that participants would win after 10 bids. However, no participant bid 10 times ($M_{\text{number of bids}} = 1.47$, 95% CI = [1.27, 1.68]) and thus no participant won the energy drink.

Bidding on the same product as another person can lead people to compete and bid aggressively, or can lead to cooperation and less aggressive bidding that requires compliance and self-sacrificing behavior. To measure the aggressiveness with which participants were bidding, we captured the final selling price for the item ($M = \$1.98$, 95% CI = [\\$1.55, \\$2.42]). After participants finished the auction, they answered questions assessing coordination: (1) "In the video, how coordinated did you feel you were with your partner?" (0 = *not at all coordinated*, 6 = *very coordinated*) (2) "How well do you expect to coordinate with your partner if you worked together in the future?" (0 = *not at all*, 6 = *very much*), (3) "How easy do you expect it will be to work with your partner?" (0 = *not easy*, 6 = *very easy*) and (4) "How well do you think you would work with your partner in the future?" (0 = *not well*, 6 = *very well*).

Results

Consistent with our hypothesis, we observed a lower selling price when participants bid against someone they had imagined sharing plates with ($M = \$1.33$, 95% CI = [$\0.95, $\$1.72$]) than someone they imagined eating off of separate plates with ($M = \$2.63$, 95% CI = [$\1.87, $\$3.39$]), $t(102) = 3.06$, $p = .003$, $d = .60$, 95% CI_{effect size} = [.21, .99], $BF_{10} = 12.22$. We added a constant (1) and log transformed the data to account for right skew and found a similar pattern of results ($M_{\text{shared}} = .30$, 95% CI = [.24, .37]; $M_{\text{separate}} = .46$, 95% CI = [.38, .54]), $t(102) = 3.08$, $p = .003$, $d = .60$, 95% CI_{effect size} = [.21, 1.00], $BF_{10} = 12.86$.

Analyzing our measure of coordination ($\alpha = .93$) as a function of consumption condition yielded the predicted effect. Participants reported feeling more coordinated in the shared-consumption condition than the separate-consumption condition ($M_{\text{shared}} = 4.35$, 95% CI = [3.97, 4.73]; $M_{\text{separate}} = 3.63$, 95% CI = [3.26, 4.00]), $t(102) = 2.72$, $p = .008$, $d = .53$, 95% CI_{effect size} = [.14, .92], $BF_{10} = 5.31$. The increase in coordination mediated the effect of food consumption on reduced competition in the auction ($\beta = .28$, $SE = .16$, 95% CI = [.06, .75]; based on 10,000 bootstrap samples, Preacher & Hayes, 2004). Overall then, we found evidence suggesting that sharing plates reduced competition by improving coordination.

Study S3: Shared Plates Increase Cooperation by Improving Coordination

This study tested whether improved coordination mediates the effect of sharing plates on cooperation. Participants watched a video of two people eating from either a shared bowl or separate bowls and mentally simulating themselves as one of the people in the interaction. All participants then took part in a cooperation game. We predicted that when participants imagined eating with a partner from a shared bowl, they would feel more coordinated, and would cooperate more as a result.

Method

Participants. We pre-registered the study and predetermined a sample size of 100 participants, collecting data from 99 Mturk workers (31 females; $M_{\text{age}} = 35.94$, $SD = 12.36$; no participants dropped the survey after random assignment) in exchange for \$0.50 (registration: https://osf.io/4t4tm/?view_only=49a2232bdae14041b9c854a08b55026d).

Procedure. The study employed a 2 (consumption: shared vs. separate) between-subjects design. Participants watched the video used in Study S2. Participants received instructions to “try your best to put yourself in the video and assume the role of the person assigned to you.” In the video, two individuals ate chips and salsa from either a shared plate (shared-consumption condition) or from individual plates (separate-consumption condition).

After participants finished watching the video clip, they answered four items assessing coordination with their partner in the video (1) “In the video, how coordinated did you feel you were with the other person?” (0 = *not at all coordinated*, 6 = *very coordinated*) (2) “How well do you expect to coordinate with the other person if you worked together in the future?” (0 = *not at all*, 6 = *very much*), (3) “How easy do you expect it would be to work with the other person?” (0 = *not easy*, 6 = *very easy*) and (4) “How well do you think you would work with the other person in the future?” (0 = *not well*, 6 = *very well*).

As a measure of cooperation, we used a coordination game with risk (Stag Hunt; Reddish, Fischer, & Bulbulia, 2013; Skyrms, 2004; Thomas, DeScioli, Haque, & Pinker, 2014). In this task, participants imagined they had an opportunity to earn money depending on their decision and their counterpart’s decision (the other person eating chips in the video). They imagined both they and their counterpart would see the following two options, but that they would not know their partner’s decision until after participants had made their own decision.

Participants read the following two options and selected the option they preferred: Option X: “Entry into a lottery that pays \$7 no matter what the other person decides” and Option Y: “Entry into a lottery that pays \$12 if the other person also chooses Y; \$0 payout if the other person chooses X.” In this game, participants must decide whether to take a smaller, but certain payout (Option X), or work with their partner, which offers the potential to make more money but only if the other person makes the same choice as them (Option Y). We used the proportion of participants choosing Option Y as our measure of cooperation. In this set up, unlike in a Prisoner’s Dilemma game, all participants had an incentive to cooperate, as there was no individual benefit from defecting when others cooperated. However, if participants cooperated and their partners failed to do so, they were at risk of earning nothing. Thus, participants should only decide to work with their partner if they expect their partner to make the same choice that they do. Therefore, the logic of the stag hunt is that one should do what one expects one’s partner to do. Partners who are well coordinated are more likely to cooperate because they expect their counterpart to cooperate as well.

Results

We first examined the effect of consumption style on perceptions of coordination, collapsing the four items measuring coordination ($\alpha = .93$). As predicted, participants felt more coordinated with their partner in the shared consumption condition than in the separate condition ($M_{\text{shared}} = 4.45$, 95% CI = [4.09, 4.81]; $M_{\text{separate}} = 3.56$, 95% CI = [3.14, 3.97]), $t(97) = 3.30$, $p = .001$, $d = .66$, 95% CI_{effect size} = [.26, 1.07], $BF_{10} = 23.09$.

Analyzing our measure of cooperation as a function of consumption condition yielded the predicted effect of shared consumption. Participants were more likely to choose the cooperative option when they imagined eating from a shared plate with their partner (34.69%) than when they imagined eating off of separate plates (16.00%), $\chi^2(1, N = 99) = 4.58$, $p = .032$, $\phi = .22$, 95% CI_{effect size} = [.00, .41], $BF_{10} = 3.04$. As predicted, the increase in coordination mediated the effect of consumption style (shared vs. separate) on cooperation ($\beta = .30$, $SE = .21$, 95% CI [.01, .85]; based on 10,000 bootstrap samples, Preacher & Hayes, 2004). These results suggest that coordinating when eating from a shared plate could increase cooperation by increasing the expectation for successful future coordination.

Study S4: Shared Plates Do Not Increase Cooperation By Improving Coordination in a Sample of Hong Kong Participants

In this supplemental study, we aimed to directly replicate Study S3 with a new sample of online participants from Hong Kong. This study was conducted as part of a larger agenda to examine the replicability of MTurk findings in this online pool.

Method

Participants. We opened the survey on a platform recruiting Hong Kong participants. Over half of participants were university students; most students were recruited from large part-time job websites in Hong Kong; all could speak an intermediate level of English (the survey was posted in English). Due to platform limitations, we were unable to specify the number of participants we wanted to recruit, but estimated 200-300 would respond (2000 available participants with an expected 10-15% response rate). A total of 526 participants completed the survey (414 females; $M_{\text{age}} = 22.38$, $SD = 5.57$; 33 participants dropped the survey after random assignment: 17 from shared-condition and 16 from separate-condition).

Procedure. The study was identical to Study S3. Because we were unfamiliar with this sample, we included additional measures to examine whether participants paid attention in our

survey. We asked “To what extent did you try and put yourself in this scenario, imagining that you were eating chips in this interaction?” (0 = *did not try at all*; 6 = *tried very hard*) and “Did you watch the entire video clip?” (yes/no).

Results

Analyzing our attention check questions, participants were above the midpoint (3) in trying to put themselves in the scenario ($M = 3.94$, 95% CI = [3.83, 4.06]), $t(525) = 16.42$, $p < .001$, $d = .72$, 95% CI = [.62, .81]. A total of 96.8% ($n = 509$) of participants reported that they watched the entire video clip.

We first examined the effect of consumption style on perceptions of coordination (4-item scale; $\alpha = .85$). Participants felt more coordinated with their partner in the shared (vs. separate) consumption condition ($M_{\text{shared}} = 3.68$, 95% CI = [3.56, 3.80]; $M_{\text{separate}} = 2.80$, 95% CI = [2.68, 2.92]), $t(524) = 10.21$, $p < .001$, $d = .89$, 95% CI_{effect size} = [.71, 1.07], $\text{BF}_{10} > 100$.

Analyzing our measure of cooperation as a function of consumption condition yielded a nonsignificant effect of shared consumption (shared plates: 37.93% cooperated; separate plates: 35.09% cooperated), $\chi^2(1, N = 526) = .486$, $p = .499$, $\phi = -.03$, 95% CI_{effect size} = [.00, .11], $\text{BF}_{10} = 0.20$.

Overall, we found a non-significant effect of shared (vs. separate) consumption on cooperation. One potential reason for this null effect is that this study was conducted on a different sample of participants than the other studies we ran.

Study S5: Shared Plates Improve Cooperation Within the Dyad

In this supplemental study, we tested a follow-up hypothesis. We predicted that coordinating food consumption increases cooperation specific to consumption pairs, rather than increasing cooperative behavior more generally. This study accordingly tested the moderating effect of interaction partner. Participants first consumed food from shared or separate containers with a consumption partner before taking part in an iterated Prisoner’s Dilemma game, either with their original partner or with a new partner.

Method

Participants. Participants were run in pairs of strangers. We predetermined a sample size of 100 participants for the study, and ran the study up to the end of the quarter, collecting data from 107 undergraduate and graduate students outside a campus café (58 female; $M_{\text{age}} = 21.17$, $SD = 5.37$; 3 participants failed to complete demographic questions).¹ Participants were paid \$4 and had a chance to earn a \$50 Amazon Gift Card based on their study performance.

Procedure. The study employed a 2 (consumption: shared vs. separate) \times 2 (partner: same vs. different) between-subjects design. A research assistant approached participants outside a campus café to take part in a study supposedly on how hunger impacts decisions. Participants received goldfish crackers to eat before they completed a 20-round version of the 2-person Prisoner’s Dilemma game (identical to Study 2 in the main paper). In the shared-consumption condition, pairs received one Ziploc bag to share (24g of crackers) and in the separate-consumption condition, each person received their own Ziploc bag (12g of crackers).

After participants finished eating their food they learned that they would either be playing an airline game with the person they just ate with, or with a new partner. In the conditions in which participants interacted with the same partner, the study proceeded as in Study 2. When

¹ We recruited an additional 107 students to partner with the participants at various stages of the study (e.g., to eat and/or negotiate with participants), but did not include them in the final sample or the analyses because some ate food and negotiated whereas others only negotiated.

participants interacted with a new partner, another research assistant recruited another student to partner with the participant for an iterated Prisoner's Dilemma game. These participants did not receive food prior to taking the study. This new pair then completed the Prisoner's Dilemma game as in Study 2.

After the game ended, participants answered questions about attention to their partner to examine whether people are aware that sharing plates leads them to attend more to their consumption partner, (1) "When making your decisions for each week, to what extent did you pay attention to the other person's actions?" (2) "To what extent did you make your decisions based on what the other person did?" (3) "How much did you respond to what the other person did each week?" and (4) "To what extent did you act independently of what the other person did?" (reverse-coded) from 0 (*not at all*) to 6 (*very much*).

Results

An ANOVA of frequency with which pairs chose to cooperate yielded the predicted interaction between food consumption and interaction partner, $F(1, 103) = 4.91, p = .029, \eta_p^2 = .05, 95\% \text{ CI}_{\text{effect size}} = [.00, .14]$, with no significant main effect of food, $F(1, 103) = 1.67, p = .199, \eta_p^2 = .02, 95\% \text{ CI}_{\text{effect size}} = [.00, .09]$, or interaction partner, $F(1, 103) = .005, p = .945, \eta_p^2 < .001, 95\% \text{ CI}_{\text{effect size}} = [.00, .004]$. Those interacting with the same person they ate with cooperated more when they consumed food from a single bag ($M = 51.30\%, 95\% \text{ CI} = [38.54\%, 64.05\%]$) than separate bags ($M = 29.81\%, 95\% \text{ CI} = [19.62\%, 40.01\%]$), $F(1, 103) = 6.21, p = .014, \eta_p^2 = .06, 95\% \text{ CI}_{\text{effect size}} = [.002, .16], \text{BF}_{10} = 5.09$. However, there was no significant effect of consumption on cooperation when interacting with a new partner that participants did not eat with ($M_{\text{shared}} = 37.31\%, 95\% \text{ CI} = [24.39\%, 50.22\%]; M_{\text{separate}} = 42.96\%, 95\% \text{ CI} = [28.76\%, 57.17\%]$), $F(1, 103) = .42, p = .517, \eta_p^2 = .004, 95\% \text{ CI}_{\text{effect size}} = [.00, .06]$.

We collapsed the four items measuring attention to partner ($\alpha = .88$) and conducted an ANOVA of consumption \times negotiation partner on attention, revealing no significant effect of consumption condition, $F(1, 103) = .09, p = .765, \eta_p^2 = .00, 95\% \text{ CI}_{\text{effect size}} = [.00, .04]$, partner, $F(1, 103) = .41, p = .524, \eta_p^2 = .004, 95\% \text{ CI}_{\text{effect size}} = [.00, .06]$, or interaction, $F(1, 103) = .99, p = .321, \eta_p^2 = .01, 95\% \text{ CI}_{\text{effect size}} = [.00, .08]$. We further estimated a Bayes factor for the null effect of consumption condition on attention to partner, $\text{BF}_{10} = .21, \text{BF}_{01} = 4.69$, which provides moderate evidence that shared consumption did not significantly increase attention (Jeffreys, 1961).

Additional analyses from Studies 1-3

Study 1: Participants' starting bids at round one did not significantly differ, $t(198) = .18, p = .860, d = .04, 95\% \text{ CI}_{\text{effect size}} = [-.36, .43]$, suggesting that the pattern of cooperation emerged over time. We further found that pairs came to a similar agreement over wage, regardless of condition ($M_{\text{shared}} = \$10.54, 95\% \text{ CI} = [\$10.48, \$10.60]; M_{\text{separate}} = \$10.52, 95\% \text{ CI} = [\$10.45, \$10.59]$), $t(98) = .37, p = .711, d = .07, 95\% \text{ CI}_{\text{effect size}} = [-.32, .47]$, suggesting that participants tended to meet in the middle independent of the number of rounds they took, but that they came to an agreement much faster when they ate from a shared plate

Study 2: Cooperation appeared to emerge over time, as individuals eating from shared versus separate plates were not significantly more cooperative on round one, $\chi^2(1, N = 104) = .04, p = .836, \phi = .02, 95\% \text{ CI}_{\text{effect size}} = [.00, .19]$.

Study 3: Cooperation appeared to emerge over time, as individuals did not start at significantly closer bids on round one as a function of condition, $F(1, 238) = .14, p = .713, \eta_p^2 < .001, 95\% \text{ CI}_{\text{effect size}} = [.00, .02]$). As in Study 1, pairs came to a similar agreement over wage ($M_{\text{shared}} = \$10.50; M_{\text{separate}} = \10.48), with no significant effect of condition, $F(1, 116) = .59, p = .445, \eta_p^2 = .005, 95\% \text{ CI}_{\text{effect size}} = [.00, .06]$, relationship, $F(1, 116) = .20, p = .658, \eta_p^2 = .002, 95\% \text{ CI}_{\text{effect size}} = [.00, .05]$, or their interaction, $F(1, 116) = .38, p = .537, \eta_p^2 = .003, 95\% \text{ CI}_{\text{effect size}} = [.00, .05]$, suggesting that participants tended to meet in the middle independent of the number of rounds they took, but that they came to an agreement faster when sharing food.

Table S2. *Results of Studies 1-3 and Studies S1-S5: Consuming food from shared plates increased cooperation compared with eating from separate plates.*

	Shared Plates	Separate Plates	<i>p</i> -value	BF ₁₀
Study 1– preregistered: Strike Days (fewer indicate greater cooperation)	8.72** (6.75, 10.69)	13.20 (11.24, 15.16)	.002	19.50
Study 2: Frequency of cooperation in iterative Prisoner’s Dilemma (PD) game	63.27%* (55.32%, 71.22%)	42.88% (33.00%, 52.77%)	.019	3.73
Study 3: Strike Days	6.37** (4.80, 7.93)	9.75 (8.15, 11.35)	.005	11.08
Study S1: Strike Days	4.92* (3.71, 6.12)	8.13 (5.52, 10.73)	.026	2.38
Study S2 – preregistered: Final selling price in a bidding war (lower price indicates reduced competition)	\$1.33** (\$0.95, \$1.72)	\$2.63 (\$1.87, \$3.39)	.003	12.22
Study S3 – preregistered: Proportion choosing to cooperate in a coordination game with risk	34.69%* <i>n</i> = 17/49	16.00% <i>n</i> = 8/50	.032	3.04
Study S4: Proportion choosing to cooperate in a coordination game with risk	37.93% <i>n</i> = 99/261	35.09% <i>n</i> = 93/265	.499	0.20
Study S5: Frequency of cooperation in PD game (with consumption partner)	51.30%* (38.54%, 64.05%)	29.81% (19.62%, 40.01%)	.014	5.09

Note. 95% CIs in parentheses. In each row, asterisk indicates a significant difference between shared and separate conditions (* *p* < .05, ** *p* < .01).

Study 2 Materials

Airline Pricing Game

Imagine you are an airline executive at **Air Chicago** [*Midwest Airways*], one of the country's major airlines. Your counterpart in this game is also an airline executive for another company, Midwest Airways [*Air Chicago*]. As part of your job at Air Chicago [*Midwest Airways*], you are in charge of setting the weekly routing prices that travelers will pay for flying Air Chicago [*Midwest Airways*]. Your counterpart at Midwest Airways [*Air Chicago*] will also be setting prices for their airline.

The outcome for your own airline depends on your decision in setting prices as well as your counterparts' decision. You have the option to choose a Standard Rate or a Discounted Rate when setting prices. The Standard Rate charges passengers typical prices for flights, while the Discounted Rate offers flights at much lower rates than other airlines.

Note your counterpart also has the option of setting their price at the Standard level or a Discounted level, and the payout to your company depends on what you both chose. For example, if you set your prices low and they set theirs at the normal rate, you can benefit a lot, as many customers will choose to fly with your company. However, if you both set prices low, you both take a hit as customers pay less and they are indifferent between Air Chicago [*Midwest Airways*] and Midwest Airways [*Air Chicago*].

See the chart below for all possible earnings your airline can make as a result of your decision:

	If your partner chooses "Standard Rate"	If your partner chooses "Discounted Rate"
If you choose "Standard Rate"	Your partner gets: \$5 MM You get: \$5 MM	Your partner gets: \$7 MM You get: \$2 MM
If you choose "Discounted Rate"	Your partner gets: \$2 MM You get: \$7 MM	Your partner gets: \$3 MM You get: \$3 MM

You will be making weekly decisions for your airline over the course of 5 months, so you will make 20 decisions total. After each decision, you will see what your counterpart at Midwest Airways [*Air Chicago*] decided to do for that week (and they will also see what you decided to do) before you make the decision for the subsequent week.

Note that your choices have real consequences; players with the best performance in this game will be entered into a lottery for \$50, so you should do your best to get a good score.

Air Chicago [*Midwest Airways*] – 5 Month Rate Plan

Check a box for **your decision for one week**, and then pass your paper.

	Standard Scheme	Discounted Scheme
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
Week 7		
Week 8		
Week 9		
Week 10		
Week 11		
Week 12		
Week 13		
Week 14		
Week 15		
Week 16		
Week 17		
Week 18		
Week 19		
Week 20		

Study S1 Materials

Management Packet Instructions:

General Instructions:

Please read the scenario below before entering the negotiation with your partner. Please act in the negotiation *as if you are the person in the story*.

Your pay for this study depends on how well you are able to negotiate with the union leader. You will receive anywhere from \$3-\$6 depending on how well you do. For example, you will receive \$6 for incurring less than \$.5 million in costs, while you will receive \$3 if you incur over \$6 million in costs.

The Scenario:

Imagine you've recently been appointed President of Leckenby Co., a small steel fabricating firm. Furthermore, imagine that as your first order of business, you've been negotiating a new contract with your union. Over the last several months, you and the union leader have been negotiating intensely. In what has been a lengthy and, at times, bitter process, the two of you have now heard each other's arguments and rationales many times over. **You have resolved all issues except the hourly wage.** The two of you agreed to have one final set of negotiations to settle the hourly wage.

You decided to start the wage negotiations **two days before** the union's official strike deadline. The strike is very costly and you wish to avoid it. Should you reach agreement on either of the first 2 days prior to the union's official strike deadline, a strike would be avoided. If not, a strike would automatically begin the 3rd day of negotiations, along with costs for both sides. The union has funds to strike for 20 days.

You agreed on the following guidelines for the negotiation:

The hourly wage would be between \$10 and \$11, meaning that your first offer could not be less than \$10 and the union's first offer could not be more than \$11. Also, you cannot decrease your offers (e.g., offer \$10.25 on one day and \$10.21 the next), while the union cannot increase their offers.

To help you prepare, your finance person provided you with the following numbers:

Costs to your company of increasing wages above \$10:

- Increasing wages by \$1 (i.e., to \$11) will cost your company **\$5 million** (or \$50,000 for every penny over \$10).

Costs to both parties of a strike:

- Costs of a strike were calculated as follows (*see next page*):

<i>Cost of Strike</i>		
<i>Days on Strike (Starts on round 3)</i>	<i>Leckenby (You)</i>	<i>Ironworkers Union (Counterpart)</i>
0	0	0
0	0	0
1	115,000	55,000
2	260,000	120,000
3	435,000	195,000
4	640,000	280,000
5	875,000	375,000
6	1,140,000	480,000
7	1,435,000	595,000
8	1,760,000	720,000
9	2,115,000	855,000
10	2,500,000	1,000,000
11	2,915,000	1,155,000
12	3,360,000	1,320,000
13	3,835,000	1,495,000
14	4,340,000	1,680,000
15	4,875,000	1,875,000
16	5,440,000	2,080,000
17	6,035,000	2,295,000
18	6,660,000	2,520,000
19	7,315,000	2,755,000
20	8,000,000	3,000,000

As you can see, a strike costs both parties, although the costs to the management (you) escalate more rapidly.

Your Task:

Your objective is clear: minimize the overall costs to Leckenby from this negotiation, ideally by getting **both a low wage and a short strike**

At this point in the negotiation, both sides decided that only numbers – the amount each is willing to settle for – can be used in the negotiation process. To conduct the negotiation, both you and the union leader agreed to follow these rules:

1. Negotiations will be conducted through a daily exchange of bids written down on paper. The only information to be included on the paper is an hourly wage rate. Both individuals will write the bid for a given round before exchanging cards for that round.
2. Both parties are not allowed to talk during the negotiation.
3. You cannot decrease your bid in the following round and the company cannot increase their bid.
4. Daily bids will be disclosed to each party at the same time. If the union's bid is greater than yours, negotiations continue the next day. If the union's bid is less than yours, agreement is reached; the wage will be the midpoint of the two bids.
5. If agreement is reached before the strike (in the first or second round of bid exchanges) there will be no strike. The strike automatically begins on the third round of negotiations at which point the cost of the strike will kick in for both sides.
6. The union can strike for 20 days before their treasury runs out and they must accept your final offer. The full strike penalty will be imposed on both parties.

Negotiation Example 1:

Imagine a scenario where the union offers \$11 and the management offers \$10. They would move to the next round. Imagine the union then offered \$10.65 and the management offered \$10.30. They would move to a third round and the strike would begin. Imagine the union then offered \$10.60 and the management offered \$10.80. The negotiation over the hourly wage would then be the average of these (\$10.70). Because this was settled in three rounds, there would be a strike penalty.

The payoff/cost to each party is:

Union: \$2,800,000 (benefit to union worker) - \$55,000 (cost of 1 day strike) = \$2,745,000

Management: -\$3,500,000 (cost to management) - \$115,000 (cost of 1 day strike) = - \$3,615,000

Negotiation Example 2:

Imagine negotiations lasted for 17 rounds (15 days of strike) with the final negotiated hourly rate equaling \$10.40.

The payoff/cost to each party is:

Union: \$1,600,000 - \$1,875,000 (cost of 15 day strike) = - \$275,000

Management: -\$2,000,000 - \$4,875,000 (cost of 15 day strike) = - \$6,875,000

Before beginning negotiations, please answer the following:

- | | | |
|---|---|---|
| 1. Strikes are more costly to the management | T | F |
| 2. The union has funds to strike for 25 days | T | F |
| 3. If the union offers \$10.40, they <u>cannot</u> offer \$10.50 the next round | T | F |
| 4. If the management offers \$10.25, they <u>can</u> offer \$10.20 the next round | T | F |

If you have any final questions, ask the research assistant now. Otherwise you are ready to begin negotiating.

Union Leader packet instructions:

General Instructions:

Please read the scenario below before entering the negotiation with your partner. Please act in the negotiation *as if you are the person in the story*.

Your payment for this study will depend on how well you are able to negotiate with management. You will receive anywhere from \$3-\$6 depending on how well you do. For example, you will receive \$6 for incurring a benefit of more than \$4 million, while you will receive \$3 if you incur costs.

The Scenario:

Imagine you've recently been appointed union leader of the United Ironworks Union. The members of your union work at a small steel fabricating firm called Leckenby Co. Furthermore, imagine that as your first order of business, you've been negotiating a new contract with the President of Leckenby Co. Over the last several months, you and the president have been negotiating intensely. In what has been a lengthy and, at times, bitter process, the two of you have now heard each other's arguments and rationales many times over. **You have resolved all issues except the hourly wage.** The two of you agreed to have one final set of negotiations to settle the hourly wage.

You decided to start the wage negotiations **two days before** your union's official strike deadline. The strike is costly and your union only has funds to strike for 20 days. Should you reach agreement on either of the first 2 days prior to the union's official strike deadline, a strike would be avoided. If not, a strike would automatically begin the 3rd day of negotiations, along with costs for both sides.

You agreed on the following guidelines for the negotiation:

The hourly wage would be between \$10 and \$11, meaning that your first offer cannot be more than \$11 and the management's first offer could not be less than \$10. Also, you cannot increase your offers (e.g., offer \$10.21 on one day and \$10.25 the next), while the management cannot decrease their offers.

To help you prepare, your finance person provided you with the following numbers:

Benefits to union workers of increasing wages above \$10:

- Increasing wages by \$1 (i.e., to \$11) will benefit union workers **\$4 million** (or \$40,000 for every penny over \$10).

Costs to both parties of a strike:

- Costs of a strike were calculated as follows (*see next page*):

<i>Cost of Strike</i>		
<i>Days on Strike (Starts on round 3)</i>	<i>Leckenby (Counterpart)</i>	<i>Ironworkers Union (You)</i>
0	0	0
0	0	0
1	115,000	55,000
2	260,000	120,000
3	435,000	195,000
4	640,000	280,000
5	875,000	375,000
6	1,140,000	480,000
7	1,435,000	595,000
8	1,760,000	720,000
9	2,115,000	855,000
10	2,500,000	1,000,000
11	2,915,000	1,155,000
12	3,360,000	1,320,000
13	3,835,000	1,495,000
14	4,340,000	1,680,000
15	4,875,000	1,875,000
16	5,440,000	2,080,000
17	6,035,000	2,295,000
18	6,660,000	2,520,000
19	7,315,000	2,755,000
20	8,000,000	3,000,000

As you can see, a strike costs both parties, although the costs to the management escalate more rapidly.

Your Task:

Your objective is clear: maximize the overall benefits to the union from this negotiation, ideally by getting **both a high wage and a short strike**.

At this point in the negotiation, both sides decided that only numbers – the amount each is willing to settle for – can be used in the negotiation process. To conduct the negotiation, both you and the company president agreed to follow these rules:

1. Negotiations will be conducted through a daily exchange of bids written down on paper. The only information to be included on the paper is an hourly wage rate. Both individuals will write the bid for a given round before exchanging cards for that round.

2. Both parties are not allowed to talk during the negotiation.
3. You cannot increase your bid in the following round and the management cannot decrease their bid.
4. Daily bids will be disclosed to each party at the same time. If your bid is greater than the management's, negotiations continue the next day. If your bid is less than the management's, agreement is reached; the wage will be the midpoint of the two bids.
5. If agreement is reached before the strike (in the first or second round of bid exchanges) there will be no strike. The strike automatically begins on the third round of negotiations at which point the cost of the strike will kick in for both sides.
6. Your union can strike for 20 days before your treasury runs out and you must accept the management's final offer. The full strike penalty will be imposed on both parties.

Negotiation Example 1:

Imagine a scenario where the union offers \$11 and the management offers \$10. They would move to the next round. Imagine the union then offered \$10.65 and the management offered \$10.30. They would move to a third round and the strike would begin. Imagine the union then offered \$10.60 and the management offered \$10.80. The negotiation over the hourly wage would then be the average of these (\$10.70). Because this was settled in three rounds, there would be a strike penalty.

The payoff/cost to each party is:

Union: \$2,800,000 (benefit to union worker) - \$55,000 (cost of 1 day strike) = \$2,745,000

Management: -\$3,500,000 (cost to management) - \$115,000 (cost of 1 day strike) = - \$3,615,000

Negotiation Example 2:

Imagine negotiations lasted for 17 rounds (15 days of strike) with the final negotiated hourly rate equaling \$10.40.

The payoff/cost to each party is:

Union: \$1,600,000 - \$1,875,000 (cost of 15 day strike) = - \$275,000

Management: -\$2,000,000 - \$4,875,000 (cost of 15 day strike) = - \$6,875,000

Before beginning negotiations, please answer the following:

- | | | |
|---|---|---|
| 1. Strikes are more costly to the management | T | F |
| 2. The union has funds to strike for 25 days | T | F |
| 3. If the union offers \$10.40, they <u>cannot</u> offer \$10.50 the next round | T | F |
| 4. If the management offers \$10.25, they <u>can</u> offer \$10.20 the next round | T | F |

If you have any final questions, ask the research assistant now. Otherwise you are ready to begin negotiating.

Study S2 Materials:

Screenshot of videos

Shared Plate Condition:

OTHER PERSON



YOU

Separate Plates Condition:

OTHER PERSON



YOU

Links to videos:

Shared:

<https://youtu.be/z-g6Zm5bDpY>

Separate

<https://youtu.be/3424GL4V5HM>

Study S3 Materials:

Imagine that you have the opportunity to be entered into a lottery where you could earn money depending on your decision and the other person in this study's decision (the other person eating chips in the video).

Both of you see the following information below, but you won't know your partner's decision until after you have made your decision:

Option X: Entry into a lottery that pays \$7 no matter what the other person decides.

Option Y: Entry into a lottery that pays \$12 if the other person also chooses Y; \$0 payout if the other person chooses X

Indicate what you would like to do:

Option X

Option Y