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Honesty pays

van Beest, I.; Steinel, W.; Murnighan, J.K.

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Honesty pays: On the benefits of having and disclosing information in coalition bargaining ☆

Ilja van Beest [a,*], Wolfgang Steinel [b], J. Keith Murnighan [c]

[a] Tilburg University, The Netherlands
[b] Leiden University, The Netherlands
[c] Kellogg School of Management, Northwestern University, USA

ABSTRACT

People typically think of negotiations as competitive, which often leads them to engage in secrecy and even deception. In three experiments we show that this approach can backfire in coalition bargaining. Results show that, even though bargainers with an outcome advantage only obtain favorable outcomes when this information is public, they rarely choose to reveal this information. Fairness motivations fueled decisions to reveal this information and make attractive offers whereas self-interest fueled decisions not to reveal and make unattractive offers. Finally, perspective taking increased proselfs' inclinations to keep their advantage private whereas it increased prosocials' inclinations to reveal. These findings suggest that many people are not naturally inclined to reveal private information when they have an outcome advantage, but that fairness motives encourage revelation and, ironically, increase revealers' outcomes in coalition bargaining. Thus, in this context, honesty pays.

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In many negotiations, bargainers have private information: what one party knows, the others don't, and the distribution of information can seriously affect both the bargaining process and its outcomes (De Dreu, Beersma, Steinel, & Van Kleef, 2007). Information about who gets what when a specific deal is closed may be common knowledge, but often is only known to the specific individuals who benefit. Typical car buyers, for instance, are aware of their own outcomes and whether they have paid more or less than they wanted. Almost never, however, do they discover the sellers' or the car manufacturers' profits from their transaction. In the current research we investigate the effects of having and revealing private information about the payoffs in multiparty negotiations. We show that the popular belief that people should guard their private information and use it to maximize their own outcomes can backfire in this context. Thus, unlike the general stereotype that depicts negotiations as competitive, strategic, and stealthy, we identify competitive interactions in which honesty pays.

Information and bargaining

Bargainers who have private information must decide how to use this information. In particular, they must choose whether they will share their private information truthfully. Although revealing private information may help to create positive outcomes because it helps negotiators to discover creative outcomes that maximize their joint benefit, in more competitive interactions or purely distributive negotiations, revealing information risks non-reciprocity and exploitation. These dynamics are embodied in the "information dilemma" (Murnighan, Babcock, Thompson, & Pillutla, 1999): revealing information facilitates the achievement of joint outcomes but simultaneously increases personal vulnerability.

Economic theories generally assume that bargainers aim to maximize their individual outcomes and that they will use their private information self-interestedly. Kagel, Kim, and Moser (1996), for example, studied the impact of private information in a competitive negotiation in which the currency (chips) was worth more to one party than to the other. Results showed that bargainers who had an exchange-rate advantage offered their counterparts more than half of the chips only when they knew that their counterparts were aware of the exchange rates. When they knew that their counterparts were uninformed, they tended to offer an equal split—which looked fair on the surface but which gave them much better outcomes than their counterparts because of their exchange-rate advantage.

Moreover, when bargainers have the option to reveal that their outcome advantage, the central notion of self interest, which is common to many bargaining models, suggests that they will keep this information to themselves (Gneezy, 2005; Thompson, 1991). The allure of higher outcomes can lead negotiators to not only protect but to actively misrepresent their payoffs (e.g. Lewicki, 1983; Roth & Murnighan, 1982; Strudler, 1995; Tenbrunsel, 1998). Research has shown that deception increases when: negotiators know that their

counterparts lack information (Croson, Boles, & Murnighan, 2003), stakes are high (Tenbrunsel, 1998), they have task experience (Murnighan et al., 1999), they expect competition rather than cooperation (Steinel & De Dreu, 2004), they aim to maximize personal rather than joint gains (O'Connor & Carnevale, 1997), or they face a stranger rather than a friend (Schweitzer & Croson, 1999) or an angry rather than a happy opponent (Van Dijk, Van Kleef, Steinel, & Van Beest, 2008).

In short, theories predict and empirical research indicates that bargainers typically use private information to maximize their own outcomes: they make self-serving offers when information is private and they often misrepresent the value of their payoffs when they can reveal their private information. Thus, bargainers are not only reluctant to reveal their outcome advantages—they often use this information to increase their own outcomes.

Private information in coalition formation

These conclusions are all based on theories and observations of dyadic negotiations, settings where the strategic use of information can provide outcome benefits.[1] Indeed, when dyadic bargainers can exchange information, truth-tellers often do worse than liars (e.g., Boles, Croson, & Murnighan, 2000). In fact, bargainers who reveal that they have an outcome advantage, e.g., a superior exchange rate, give their disadvantaged counterparts an opportunity to argue for egalitarian outcomes (Komorita & Chertkoff, 1973; Roth & Murnighan, 1982). By restricting information exchange, advantaged players can obtain higher outcomes by making self-serving offers (e.g., Kagel et al., 1996; Pillutla & Murnighan, 1995; Van Dijk, De Cremer, & Handgraaf, 2004; Van Dijk & Vermunt, 2000). In sharp contrast, however, we suggest that these effects need not generalize to distributive *multiparty* settings in which coalitions must form to secure favorable outcomes (for reviews of coalition formation, see e.g., Kahan & Rapoport, 1984; Komorita, 1984; Komorita & Parks, 1995; Murnighan, 1978; Van Beest & Van Dijk, 2007).

Coalition formation has been defined as a process in which two or more parties negotiate about the decision to allocate payoffs to the parties who are included in the coalition (Kahan & Rapoport, 1984; Polzer, Mannix, & Neale, 1998), leaving excluded parties with zero outcomes as well as emotional losses (e.g., Swaab, Kern, Medvec, & Diermeier, 2009; Van Beest & Williams, 2006; Williams, 2007). Examples of coalitions can be found at every level of human organization: romantic couples are social coalitions; trade unions are coalitions of workers who have joined forces to obtain better working conditions; mergers are coalitions of companies that hope to create economic synergies and increase their market share; and political parties are coalitions of individuals who hope to influence a nation's politics. Some coalitions form with exclusion as their primary purpose, e.g., groups based on class distinctions that alienate, restrict, and restrain the under-privileged; others push people into exclusion as a result of the negotiation outcome.

An important aspect of the coalition formation process is that individuals must not only consider the possible payoffs that they can obtain from different coalitions—they must also be concerned about being included in the winning coalition. In fact, this latter concern must be satisfied to succeed in the former. The need to be included requires a different set of strategies than the goal of maximizing one's outcomes. Individuals who come across as attractive increase their chances of being included in the final, winning coalition; individuals who come across as unattractive, e.g., by making strong demands or

by appearing hard-to-get, reduce their chances of inclusion and may even provide an impetus for others to coalesce against them. The harsh reality that accompanies coalition formation is that some people will be completely excluded, both from membership in the coalition and from the payoffs that comes with inclusion. Unlike dyadic negotiations in which both parties are either included or excluded from an agreement, the fact that coalition negotiations exclude some people means that bargainers must first attend to securing a position within the coalition before considering its payoffs (Van Beest & Van Dijk, 2007).

The need for inclusion means that appearing attractive to potential coalition partners can be critical. A particularly useful and obvious strategy to achieve this goal is to make attractive offers, i.e., offers that are larger than the offers that other players make. Some authors have argued that it is exactly this aspect of coalition strategizing that many bargainers fail to appreciate (e.g., Kelley & Arrowood, 1960; Van Beest & Van Dijk, 2007; Vinacke & Arkoff, 1957), primarily because people have a natural tendency to approach multiparty interactions as they do dyadic interactions. Basic routines for managing social exchange first evolve in dyads and only transfer to multi-party interactions later (Binder & Diehl, 2008; Tooby, Cosmides, & Price, 2006). Thus, coalition bargainers may approach potential coalition partners with a dyadically appropriate, self-focused strategy, not realizing that an other-focused, "what can I do for you?" strategy can help them look more attractive and set them up for positive coalition outcomes.

Previous research has provided many examples of this unfortunate tendency (Van Beest & Van Dijk, 2007). A classic example is the often observed "strength-is-weakness effect" (Caplow, 1956; Chertkoff, 1967; Kelley & Arrowood, 1960; Murnighan, 1991; Vinacke & Arkoff, 1957). Equity theory suggests that those who bring more resources should also get more outcomes (Walster, Walster, & Berscheid, 1978), and many bargainers naturally expect that having more resources will help them obtain greater relative outcomes. In multiparty interactions, however, 'strong' parties who have more resources are often excluded when parties with fewer resources still have enough resources, collectively, to form a winning coalition. In this instance, "strength" leads to exclusion ("weakness") when the lower-resource parties can obtain the coalition's benefits for less cost. Another example concerns anger expressions: in two-party bargaining, people who express anger often obtain superior outcomes (e.g., Sinaceur & Tiedens, 2006; Van Kleef, De Dreu, & Manstead, 2004a,b). Communicating anger in coalition bargaining, however, can backfire when anger alienates a person's potential coalition partners (Van Beest, Van Kleef, & Van Dijk, 2008). Thus, although appearing strong and demanding can be beneficial in dyadic settings, it can be particularly detrimental when being included is of primary importance.

This suggests that coalition bargainers may underestimate the importance of inclusion, particularly when they have a payoff advantage.[2] In these situations, well-endowed bargainers can actually do well by revealing their outcome advantages. Why? Because their outcome advantage raises the joint outcome of any coalition that includes them, which allows them to make particularly attractive offers that potential rivals may not be able to match. We predict, however, that well-endowed players will not make use their advantage effectively. Instead, we expect that they will keep their payoff information private and fail to make attractive offers, all in the false hope of maximizing outcomes that will never materialize.

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[1] This is especially true for competitive, zero-sum interactions. When there is room for integrative bargaining, revealing private information can lead to better individual payoffs. Even then, however, bargainers are often reluctant to share information about their individual payoffs (Steinel, Abele, & De Dreu, 2007; Thompson, 1991).

[2] Having private information about an outcome advantage is only detrimental when the a priori odds of inclusion in the winning coalition are less than the a priori odds of one's rivals. For example, in veto games, veto players must be included in the final coalition; for them, having an outcome advantage and not revealing it can be profitable because inclusion is no longer their first strategic concern.

Fairness

This discussion has been based on the implicit assumption that coalition bargainers are motivated to maximize their payoffs. An alternative motivation that drives many bargainers is the desire to be fair (Kelley & Thibaut, 1978; Loewenstein, Thompson, & Bazerman, 1989; Rusbult & Van Lange, 2003; Van Beest & Van Dijk, 2007). People who are motivated by fairness are likely to have a natural inclination to disclose private information and to avoid taking advantage of unearned outcome advantages. Thus, we predict that fair-minded bargainers will reveal their private information and use their outcome advantages to increase their counterparts' outcomes (as well as their own) more than bargainers who are more motivated by self-interest. We also expect that this will result in their being included in more final coalitions and, ironically, obtaining better payoffs. In contrast, we expect that bargainers who are more motivated by self-interest will be less likely to reveal their private information and less likely to make attractive offers, hoping to maximize their individual outcomes, and that this will lead them to achieve the exact opposite of what they hope for.

Research overview

We tested these predictions in three studies that incorporated information asymmetries within a classic coalition setting. In each study the participants negotiated a prize of 10 (Study 1) or 20 valuable chips (Studies 2 and 3) in a 4(3–2–2) simple weighted majority game. In this game, the number outside the parentheses, 4, denotes the minimum number of resources required to form a winning coalition and obtain 10 chips. The numbers inside the parentheses, 3–2–2, denote the number of resources each player possesses: player A controls 3 resources; players B and C each control 2. This particular distribution of resources has a long history in coalition research (Caplow, 1968; Chertkoff, 1967; Kelley & Arrowood, 1960; Murnighan, 1991; Vinacke & Arkoff, 1957). The most frequently formed coalition in the 4(3–2–2) game is the BC-coalition, with B and C sharing the payoff equally. Thus, just on the basis of their resources, player As face a strength-is-weakness challenge: their additional resource sets them up to be excluded from the winning coalition. To counteract this, we provided them with two strategic benefits: an additional outcome advantage and private information that they had this outcome advantage. These two benefits give them an opportunity to overcome the disadvantage that their extra resource has created. We predict, however, that they will not use this opportunity: they will not reveal their outcome advantage and this will result in frequent exclusions from the winning coalitions (and zero payoffs).

Thus, we investigated player As who had a resource advantage, private information, and an outcome advantage (in the form of a favorable exchange rate; e.g., Kagel et al., 1996). This allowed them to make more attractive offers than player Bs and Cs could make to each other, even as they obtained outcomes that were larger than their coalition partner. Here is how: because players B and C have equal resources, sharing the 10 chips equally (giving each of them 5 Euro) is an obvious outcome. Player As, in contrast, can offer either B or C 6 chips and demand only 4, increasing B or C's outcome and, as due to their exchange rate advantage each chip is worth 2 Euro to them, still yielding them 8 Euro. This strategy makes player As attractive in terms of the outcomes that they can provide to their partners. (Offering 7 and retaining 3 makes player As even more attractive and still garners them 6 Euro—far better than the zero outcome that comes with exclusion.)

Although this logic seems obvious, we expected that player As would try to use their information advantage to maximize their own outcomes rather than to maximize their offer's attractiveness. That is, we expected them to make offers that, if accepted, would increase their outcomes [e.g., offering 4 or 5 chips so that they could get 5 or 6 chips (to obtain 10 or 12 Euros)], even though these offers would not be more attractive than B's and C's offers to each other (i.e., 5 chips). Thus, we expected that player As would *not* do well when they alone had information about their exchange advantage. This outcome would replicate the classic strength-is-weakness effect in a markedly different context, one in which the strong player has both payoff and information advantages.

Ironically, we also expected that player As would do better when their strategic benefits were reduced, i.e., when their exchange rate advantage was common information. Knowing that A had a better exchange rate signals that any coalition with A will yield more joint payoffs than any coalition without player A. This should result in players As getting more offers and increase the likelihood of their being included in the winning coalition (and thus earning better payoffs). We also expected that this might also lead them to make more attractive offers themselves, which would also increase their likelihood of inclusion.

The irony is that this condition imposes on player As exactly what they might *not* choose if they had the choice to reveal their private, exchange rate information. Thus, Studies 2 and 3 gave them this choice and assessed whether they revealed their exchange advantage; both studies also investigated a variety of mechanisms that might affect this choice, including fairness motivations, social value orientations, and perspective taking. Study 2 tested our underlying prediction that fairness motivations will increase information disclosure as well as the likelihood of player As making more attractive offers. Study 3 draws attention to the fact that fairness concerns go hand in hand with a focus on other's outcomes that can provide strategic insights that are less available for people who are less concerned with others' payoff. Thus, Study 3 induced perspective taking to determine whether this would lead bargainers to make more attractive offers. Study 3 also measured individuals' social value orientations to determine whether this augmenting effect generalized for self and other-oriented individuals or whether, in contrast, perspective taking might actually exacerbate individuals' original orientations.

Study 1

Study 1 tested our prediction that coalition bargainers who have private information about an exchange-rate advantage will not use their information effectively to increase their outcomes. Instead, we expected that most of them would fail to make attractive offers, which would lead them to be excluded from the winning coalition and yield them zero payoffs.

Method

Participants and design

Participants were 102 undergraduates at a Dutch university (74 females and 28 males; Mean age = 20.16, $SD = 2.56$); they were randomly assigned to one of the 3–2–2 positions and to either the informed or the uninformed condition,[3] resulting in 17 three-player groups in each condition. Participants were told that their monetary payoff would be based on their bargaining performance; after the experiment, however, everyone was paid 6 Euro (about 8 US$ at the time of the experiment).

Procedure

Participants were seated at computers in separate cubicles and informed that they were participating in a study of coalition formation. Their task was based on the landowner paradigm (for a more detailed

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description see e.g., Van Beest, Wilke, & Van Dijk, 2003). Participants played the role of landowners who could only obtain payoffs if they sold their parcel of land. After a (bogus) quiz to determine the relative size of each parcel, one participant (player A) 'earned' a parcel of 3 ha and the other two participants (players B and C) each earned parcels of 2 ha. They learned that a project developer wanted to buy at least 4 ha of land for a fixed price of 10 valuable chips. It was explicitly stated that no single landowner had enough land to satisfy the developer's demands; they therefore needed to form a coalition with one other landowner. It was also made clear that people could only sell their entire parcel and that money could only be earned if they managed to sell their parcel. Like previous coalition research (e.g., Kelley & Arrowood, 1960; Murnighan, 1991), we did not allow participants to form a grand coalition that included everyone; in addition, they were not allowed to allocate payoffs to landowners who were excluded from the winning coalition.

The players then learned the value of each of their chips. This information included the manipulation of the independent variable, i.e., whether player Bs and Cs knew of player As' exchange advantage. Either all three participants or just player A learned that player As could exchange each of their chips for 2 Euro and that players B and C could exchange each of their chips for 1 Euro. In the informed condition all players were thus aware of player A's exchange-rate advantage; in the uninformed condition only player As were aware.

The instructions then described the logistics of their negotiation (Komorita & Meek, 1978; Van Beest, Van Dijk, & Wilke, 2004). Negotiations took place in rounds and continued until a coalition was formed. In each round all three participants made one offer that identified the coalition's partners and how they wanted to allocate the chips if this coalition formed. No other communication was possible. All three received the others' offers and all three were instructed that they could only select one. A coalition formed when both members of a potential coalition selected the same offer. If a coalition did not form, e.g., if A selected B's offer, B selected C's, and C selected A's, they made a new set of offers. No other communications were allowed.

After the negotiations, participants completed a questionnaire that checked whether participants could identify their exchange rates and the coalitions that would include them.

Results

Manipulation checks

All of the participants accurately recalled their own exchange rates and, in the informed condition, player A's higher rate. All players B and C in the uninformed conditions assumed that everyone had the same exchange rates, and everyone recalled their potential coalition memberships. Thus, the manipulations were successful.

Proposed coalitions

We hypothesized that players A would be included in more proposals in the informed condition than in the uninformed condition. To test this prediction, we analyzed the coalition proposals made by players B and C. (Players As' proposals are less relevant here, as players A are necessarily included in all coalitions that they propose; see Table 1 for a complete overview of all frequencies and means).[4]

We conducted a 2 (condition: informed vs. uninformed) × 2 (player: B vs. C) × 2 (coalition type: including player A vs. excluding player A) loglinear analysis. Results revealed a main effect of coalition

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[4] A high loglinear analysis indicated that player As were more likely to propose an AB-coalition in the uninformed condition (15 AB-coalition proposals versus 2 AC-coalition proposals) than in the informed condition (10 AB-coalition proposals versus 7 AC-coalition proposals), χ^2 (1, $N = 34$) = 3.78, $p = .05$. This is somewhat surprising given that there are no a priori reasons to assume a preference for one partner over the other. We speculate that perhaps player As were more heuristic in the uninformed condition as they seemed to prefer forming a coalition with the letter that comes first in the alphabet.

Table 1
The players' offers to each other in the two information conditions; Study 1.

	Uninformed condition						Informed condition					
Offers from	To player B			To player C			To player B			To player C		
Player A	n	M	SD	n	M	SD	n	M	SD	n	M	SD
	15	4.8	.94	2	5.0	.00	10	5.5	1.2	7	5.4	.98
Offers from	To player A			To player C			To player A			To player C		
Player B	n	M	SD	n	M	SD	n	M	SD	n	M	SD
	0	–	–	17	5.0	.00	9	4.2	.83	8	5.0	.00
Offers from	To player A			To player B			To player A			To player B		
Player C	n	M	SD	n	M	SD	n	M	SD	n	M	SD
	1	4.0	–	16	5.0	.52	6	5.0	1.1	11	4.72	.65

type, $\chi^2(1, N = 68) = 20.06$, $p < .001$, indicating that player As were frequently excluded from player Bs' and Cs' proposals. Furthermore, a condition by coalition type interaction, $\chi^2(1, N = 68) = 18.62$, $p < .001$ showed that player As received more offers when payoff information was public: player As received only 1 of 34 offers in the uninformed condition but 15 of 34 offers in the informed condition.

Proposed payoff allocations

As expected, player As made more attractive offers to potential partners in the informed condition than in the uninformed condition ($M = 5.47$ chips, $SD = 0.88$ versus $M = 4.82$ chips, $SD = 1.07$) $t(32) = 1.93$, $p < .05$. Moreover, subsequent analysis that categorized offers as attractive (more than 5 chips), unattractive (less than 5 chips), or equal (5 chips) showed that this effect resulted primarily because they made 3 times as many attractive offers (12 of 17) in the informed than in the uninformed conditions (4 of 17), $\chi^2(2, N = 34) = 8.90$, $p < .005$.

Analyses of the value of Bs' and Cs' offers suggest that they tried to capitalize on player As' exchange rate in the informed condition. Player Bs used this strategy more than player Cs did: a 2(coalition type) × 2(player) analysis of variance (ANOVA) yielded one significant effect, the interaction: $F(1, 30) = 4.26$, $p < .05$. Although player Cs made fairly similar offers to player As ($M = 5.00$, $SD = 1.10$) and to Bs ($M = 4.72$, $SD = 0.64$), $t(15) = -0.6$, ns, player Bs offered player As significantly less ($M = 4.22$, $SD = 0.83$) than they offered player Cs ($M = 5.00$, $SD = 0.00$), $t(15) = 2.63$, $p < .05$.

Coalitions and final payoffs

The information conditions also influenced the composition of the winning coalitions (see Table 2) and the players' payoffs (see Table 3). As predicted, player As were included in the winning coalition less often in the uninformed (18%) than in the informed condition (65%), $\chi^2(1, N = 34) = 7.78$, $p < .005$. This had a tremendous negative impact on their final payoffs: a 2 (condition) × 3 (players) repeated measures ANOVA with players as a within factor yielded main effects for information, $F(1, 32) = 9.32$, $p < .005$, players, $F(1, 32) = 4.16$, $p < .03$, and their interaction, $F(2, 31) = 4.71$, $p < .02$.

The information main effect shows that the players obtained higher overall payoffs in the informed ($M = 12.88$, $SD = 2.28$) compared to the uninformed conditions ($M = 10.76$, $SD = 1.70$). The

Table 2
Frequencies of coalitions formed in the information conditions; Study 1.

	AB-coalition	AC-coalition	BC-coalition
Uninformed condition	3	0	14
Informed condition	8	3	6
Total	11	3	20

Table 3
The players' payoffs (in €) as a function of the information conditions; Study 1.

	Player A		Player B		Player C	
	M	SD	M	SD	M	SD
Uninformed condition	1.53	3.36	5.12	.33	4.12	1.93
Informed condition	5.76	4.48	4.47	2.17	2.65	2.57

players main effect shows that player Bs' payoffs ($M = 4.79$, $SD = 1.59$) were marginally higher than player As' ($M = 3.64$, $SD = 4.52$, $t(33) = 1.33$, $p = .10$) and significantly higher than player Cs' ($M = 3.38$, $SD = 2.39$; $t(33) = 2.43$, $p = .01$); player As' and Cs' did not differ significantly ($t(33) = .23$, ns).

The more important finding was the interaction, which showed that player As benefited from complete information, $t(32) = -3.05$, $p = .001$, and that player Cs benefited from incomplete information, $t(32) = 1.85$, $p = .05$. Player Bs outcomes were relatively unaffected by conditions, $t(32) = 1.19$, ns. As shown in Table 3, player As' average payoffs increased almost four-fold when everyone knew about their exchange rate advantage.

Opening offers and final payoffs

Player As made fewer attractive offers in the uninformed condition than the informed condition; they also did less well in the uninformed condition. A logistic regression analysis showed that lower opening offers to either player B ($\beta = 2.45$, $SE = .84$, $p < .004$) or player C ($\beta = 2.47$, $SE = .84$, $p < .004$) were associated with being included in fewer winning coalitions. A linear regression analysis showed that they were also associated with lower payoffs for player As, with either player Bs ($\beta = 2.91$, $SE = .61$, $p < .001$) or player Cs ($\beta = 2.78$, $SE = .63$, $p < .001$), $F(2, 31) = 11.13$, $p < .001$. This shows that the detrimental effect of having private information about an exchange rate advantage is already apparent in opening offers.

Discussion

The results supported all of our predictions. Player As were included in fewer coalitions and received lower overall payoffs when they had important information that no one else had. Ironically, when the other players knew about As' exchange-rate advantage, player As did considerably better. This resulted from changes in player As' own behavior and the behavior of the other players, as player As made more attractive offers and the other players made player As more offers and chose player A more often. These findings clearly indicate that individuals who had an advantageous position were hurt rather than helped by having more information. Although we predicted this result, it also contradicts an old maxim that information is power. In this case, it was more like a curse.

Study 2

Study 1 showed that player As' outcome advantage helped them obtain superior coalition outcomes only when other negotiators were informed about their advantage. Study 2 assessed whether people voluntarily revealed their private information, truthfully deceptively, or not at all, and if they did, whether their offers were more attractive than player As' who did not reveal their information.

Dana, Cain, and Dawes (2006) observed that, in a dictator game, in which one person could keep $10, share some of it with an anonymous other person, or 'opt out' for $9, one third of their participants took less money than they could have kept and opted out. By doing so, they avoided the tough choice of whether and how much to share. We expected that our participants might have similar feelings: by choosing to send no information, they could avoid the risks of revealing (either truthfully or deceptively). Thus, we expected

that many people would send no information. More importantly, we expected that non-revealers and liars would compound their already poor strategies by making less attractive offers than bargainers who would disclose their outcome advantage.

Finally, we wanted to directly test our assumption that the reluctance to reveal one's advantage and associated unattractive offers are fueled by self-interest. Therefore, we assessed what motivated the decision to disclose information and whether this decision did indeed mediate the attractiveness of an offer. We assumed that more self-oriented motives would thus facilitate deception and withholding information whereas more other-oriented motives would facilitate honest revelations.

Methods

Participants

Participants were 91 students (74 females) from a Dutch university (Mean age = 19.73, $SD = 2.39$); all had the role of player A in a 4(3–2–2) landowner game. They were told that whatever they obtained from the bargaining would be their experimental pay. After the negotiations ended, they learned that they had negotiated with a preprogrammed strategy; all were paid 3.50 Euro.

Procedure

Participants were seated at computers in individual cubicles. As in Study 1, participants first completed a (bogus) quiz to determine their resources in the game. After being designated player A, they learned everyone's exchange rate for the chips that they might obtain: 1.5 Euro for them but only 1 Euro for the other players. They were also told that the other players were not aware of this difference and that the other players typically assumed that everyone's exchange rates were identical (i.e., 1 Euro). The instructions then indicated that, prior to the start of negotiation, each participant could send a message about the payoff value of their chips to the other participants if they wished. They could either reveal their outcome advantage, indicate that their exchange rate was the same as the other players' (a lie), or send no information.

Participants were led to believe that the computer would randomly determine who would make the first offer; in fact, the participants always made the first offer. As before, their offers identified their desired partner and how they wanted to allocate the 20 chips; offers to excluded players and the three-player grand coalition were not allowed. The participants' offers were always accepted; this ended the negotiation. We then assessed participants' understanding of the instructions by asking them to identify their exchange rates, the possible coalitions, and the value of the payoffs. As in Study 1, all of the participants provided correct answers to all of these questions.

Finally, we asked the participants whether they were motivated to maximize their own outcomes, maximize the difference in their outcomes, minimize the difference in their outcomes, maximize joint outcomes, and obtain equal outcomes. We recoded the first two questions and averaged their responses to form an index of their concern for others ($\alpha = .77$).

Results

Manipulation check

All participants correctly indicated their exchange rate, size of their parcel, and number of coalition they could form.

Information and offers

Over half of the participants ($n = 50$; 54.9%) chose to send no information about their exchange rate; a small minority revealed truthfully ($n = 18$; 19.8%); and a slightly larger minority lied ($n = 23$; 25.3%; $\chi^2(1, N = 91) = 19.54$, $p = .001$). In addition, revealers made significantly larger offers ($M = 10.00$, $SD = 1.81$) than liars ($M = 8.86$,

$SD = 1.51$) or non-revealers ($M = 8.20$, $SD = 1.59$; $F(1, 90) = 8.31$, $p < .001$, $\eta^2 = .24$); the latter two means did not differ from each other.

A loglinear analysis of the frequencies of attractive (more than 10 chips), unattractive (less than 10 chips), and equal offers (10 chips) yielded effects for revealers/liars/non-revealers, $\chi^2(2, N = 91) = 18.45$, $p = .001$, for offer type, $\chi^2(2, N = 91) = 36.08$, $p = .001$, and for their interaction, $\chi^2(4, N = 91) = 32.39$, $p = .001$. Revealers made more attractive (8), fewer unattractive (7), and fewer equal offers (3) than liars (0 attractive vs. 11 unattractive vs. 12 equal offers) or non-revealers (0 attractive vs. 34 unattractive vs. 16 equal offers). Thus, not sending information when the choice to do so was available was associated with the same detrimental strategy as deception (cf., Malhotra & Murnighan, 2002). These effects support our predictions.

Motivation and mediation[5,6]

A regression analysis revealed a positive association between player As' concerns for others and the attractiveness of their offer, $\beta = .87$, $SE = .13$, $p < .001$. A logistic regression also revealed a positive association between player As' concerns for others and the likelihood that they would reveal their exchange rate truthfully, $\beta = 5.47$, $SE = 1.26$, $p < .001$. A third regression revealed a positive association between revelations and attractive offers, $\beta = .79$, $SE = .14$, $p < .001$. Controlling for revelations completely reduced the association between concerns for others and attractive offers to non-significance, $\beta = .33$, $SE = .27$, *ns*. Thus, these analyses indicate that truthfully revealing one's exchange advantage fully mediated the relationship between concern for others and the attractiveness of player As' offers. Further analyses showed that this was not the case for deception or not revealing one's exchange rate advantage, as concern for others was not significantly associated with either of these decisions, B = .44, $SE = .79$, *ns*. Sobel = 3.44, $p < .001$.

Discussion

Study 2 investigated the coalition strategies of negotiators, who had many resources, private information, and an exchange-rate advantage. Not only did a minority of them choose to reveal their exchange-rate advantage information, most participants chose not to send any information at all. In addition, non-revealers tended to send the same kinds of unattractive offers as negotiators who lied. Indeed, the only people who made frequent attractive offers were the negotiators who revealed their exchange-rate advantage. What do these findings mean for the behavior of player As in Experiment 1? Remember that in Experiment 1, player As could not communicate about their exchange rate advantage—this was private or public information by instructions. Player As benefitted from the experimental instructions that revealed their exchange rate advantage to their fellow players. The findings of Study 2 thus suggest that many of the Study 1 player As in the informed condition may have benefitted inadvertently because, if given the choice to honestly reveal their exchange rate advantage, they would not have used this option

effectively. In addition, many of Study 1's player As in the uninformed condition who did relatively poorly would probably not have benefitted from having the choice to reveal their private information, as so many did not use that option.

The combination of the findings from these two studies is ironic: rather than taking advantage of additional information, powerful negotiators in these situations misused it, repeatedly, by not revealing their information and by trying to take too much advantage of it. Thus, these results suggest the old saying that "pigs get fed but hogs get slaughtered." They also indicate that, unlike the implications from dyadic bargaining, both honesty *and* fairness pay in coalition bargaining.

Because concerns for others were assessed at the end of the experiment rather than being independently manipulated, however, we can only make associative rather than causal conclusions about their impact. Thus, to provide further evidence for our reasoning and the underlying processes, Study 3 measured a stable disposition, social value orientations, before the coalition formation interaction, and it manipulated perspective taking. Moreover, instead of giving bargainers also the option to tell nothing we now only gave bargainers the option to either tell the truth or to tell a lie about their outcome advantage.[7] These changes were instituted to increase our ability to draw causal conclusions.

Study 3

Social value orientations are stable dispositions that reflect the central assumption of interdependence theory (Kelley & Thibaut, 1978; Rusbult & Van Lange, 2003), i.e., that social interactions are not only shaped by concerns about one's own payoff but also by broader social or interpersonal concerns, such as concern with others' outcomes, with joint outcomes, and with equality (Messick & McClintock, 1968; Van Lange, Otten, De Bruin, & Joireman, 1997). The literature on negotiations typically identifies two social value types: proselfs, who are predisposed to enhance their own payoffs, either absolutely or relatively, and prosocials, who are predisposed toward equal payoffs and maximizing joint payoffs. We predicted that prosocials would be more likely to reveal their exchange-rate advantage and make more attractive offers than proselfs.

Study 3 also manipulated perspective taking, a cognitive capacity to consider the world from others' points of view (e.g., Batson, Early, & Salvarani, 1997; Davis, 1983; Van Beest et al., 2005). According to Davis (1983), perspective taking allows people to anticipate the behavior and reactions of others. Recent research on dyadic negotiations found that negotiators who took the perspective of others created *and* claimed more payoffs (Galinsky, Maddux, Gilin, & White, 2008). In essence, while interacting positively and creatively with their counterparts, perspective takers also set the stage so that they would benefit most.

In the context of coalition formation, we expected that perspective taking might also have either of two inconsistent effects for prosocials and proselfs. On the one hand, encouraging participants to take their counterparts' perspectives might reduce the impact of social value

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[5] MacKinnon (2008) and MacKinnon, Fairchild, and Fritz (2007) describe a number of methods to establish mediation. Most of these methods, with the bootstrap method of Preacher and Hayes as one example, require that both the mediator and the dependent variable are continuous variables. These methods cannot be performed in our case, because the mediator is dichotomous, which require logistic or probit regressions. We used the 'joint test method' (MacKinnon, Fairchild, & Fritz, 2007, p. 601), which has high statistical power (MacKinnon, 2008; 98–100) and can deal with both logistic and normal regression analyses. With this technique, mediation results when there is a statistically significant effect of the independent variable on the mediator and a statistically significant effect of the mediator on the dependent variable (controlling for the effect of the independent variable; MacKinnon, 2008; 394–395).

[6] We also analyzed all 5 motivations separately. These separate analyses showed that each separate motivation had its expected effect on offer and whether or not they disclosed their exchange advantage. Hence, all motivations contributed to the reported mediation analysis.

[7] We also conducted a similar experiment in which participants could either disclose their exchange rate or deceive their counterparts by misrepresenting it. Results showed that most participants provided false rather than true information (66% vs. 34%), $\chi^2(1, N = 50) = 5.12$, p = .024. Participants who revealed truthfully also made larger offers ($M = 10.35$, $SD = 1.41$ versus $M = 8.06$, $SD = 2.19$), $F(1, 48) = 15.23$, $p < .001$, $\eta^2 = .24$. Finally, fairness motivations ($\alpha = .82$) continued to be positively related to the size of individuals' offers, and this effect was again mediated by whether a person revealed their exchange rate advantage. The regression of fairness on offers was significant, $\beta = .23$ $SE = .08$, $p < .01$. The logistic regression of fairness on information demission was also significant, $\beta = 5.21$, $SE = 1.45$, $p < .001$. Finally, the regression of information on offers was significant, $\beta = -1.93$, $SE = .71$, $p < .001$, when controlled for fairness, $\beta = .08$, $SE = .09$, ns. Sobel = -2.11, $p < .05$. Thus, these findings replicated Study 2's effects and indicate that similar results emerge when the option to reveal the truth was one of only two choice options.

orientations by encouraging everyone to disclose their exchange rates and decrease their demands. In so doing, it might induce proselfs to discover the strategic benefits of being more attractive then potential rivals. On the other hand, however, perspective taking might amplify the effects of social value orientations by alerting people to how they might best negotiate if they were negotiating with themselves (i.e., the false consensus effect, Ross, Greene, & House, 1977). This would lead proselfs to negotiate as if they were negotiating with other proselfs and prosocials to negotiate as if they were negotiating with other prosocials. Steinel and De Dreu (2004), for instance, found that bargainers used deception more when they expected that their opponent had a proself rather than a prosocial orientation. Thus, proselfs might be even *less* likely to disclose information than prosocials when they take the perspective of their potential coalition partners.

Method

Participants and design

Participants were 108 students (90 females and 18 males) from a Dutch university (Mean age = 20.69, SD = 2.30); all were assigned the role of player A in the 4(3–2–2) landowner game.[8] They were told that their outcomes from the bargaining would be their experimental pay. After the negotiations, they learned that their counterpart was a preprogrammed strategy; all were paid 4.50 Euro. The design was a 2 (perspective taking vs. control) × 2 (social value orientation: prosocial, and proself) between-participants factorial.

Procedure

The procedure was identical to Study 2 with the exception that we now manipulated perspective taking and assessed social value orientations before participants made any decisions, and participants were required to either reveal their exchange rate advantage or, if they chose, lie about it. We used Van Lange and Kuhlman's (1994) standard, nine-item measure to assess social value orientations. It has excellent psychometric qualities: it is internally consistent (e.g. Parks, 1994), reliable over substantial time periods (Eisenberger, Kuhlman, & Cotterell, 1992; Van Beest, Andeweg, Koning, Van lange, 2008), and is not related to measures of social desirability (e.g., Platow, 1994). It classifies individuals who value equality and maximum joint gain as prosocials and individuals who value their own maximum gain, absolutely or relatively, as proselfs. Fourteen unclassifiable participants were excluded from the analyses.

The perspective taking manipulation was introduced after participants had read the instructions, but before they sent their message about their exchange rate. Participants in the perspective taking condition read this information (translated from Dutch): "Effective negotiators know how to take the perspective of other negotiators. They think about how others will behave and how they will react. With whom would you (and for what reason) form a coalition if you were either player B or player C?" Participants in the control condition did not receive this information.

The experiment then proceeded as it had in Study 2. Following their messages and choice of coalition partners, and the automatic acceptance of their offers, participants completed a post-experiment questionnaire that asked them to recall the exchange rates, the number of chips that the winning coalition would receive, the size of their parcel, and the coalitions that they could form. We also asked participants to rate how much they had considered the viewpoint of the other players when they made their offers, on a 7-point scale. Finally, at the end of the questionnaire, we assessed whether their behavior was motivated by fairness and/or by self-interest.

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[8] Analyses of participants' gender led to no significant effects. However, as before, the results should be interpreted cautiously, because so many participants were women.

Results

Manipulation checks

All of the participants gave correct answers to all of the questions on the experimental procedures. A series of 2 × 2 ANOVAs, on their perspective taking, their motivation to obtain fair outcomes and to maximize their own outcomes assessed and confirmed the effectiveness of the manipulations. Participants in the perspective taking condition (M = 5.65, SD = 1.04) indicated that they had taken others' perspectives more than participants in the control condition did (M = 4.46, SD = 1.68), F(1, 90) = 16.31, p<.001. Prosocials were more motivated to obtain fair outcomes (M = 5.00, SD = 1.61) than proselfs (M = 4.24, SD = 1.80), F(1, 90) = 4.62, p<.034, and proselfs (M = 5.71, SD = 1.17) were more motivated to maximize their own outcomes than prosocials (M = 4.53, SD = 1.62), F(1, 90) = 15.67, p<.001. No other effects in these analyses were significant.

Revelations

A 2 (social value orientation) × 2 (perspective taking) × 2 (revelation) loglinear analysis assessed the effects of social value orientations and perspective taking on revelations (see Table 4). As predicted, prosocials revealed their exchange rate (60%) more than proselfs did (34%), $\chi^2(1, N = 94) = 6.61$, p = .010. In addition, a significant interaction, $\chi^2(1, N = 94) = 4.01$, p = .045, indicated that prosocials revealed their exchange rate more in the perspective taking (72%) than in the control condition (50%), $\chi^2(1, N = 53) = 2.67$, p = .05, but proselfs revealed less in the perspective taking (26%) than in the control condition (44%), $\chi^2(1, N = 41) = 1.51$, p = .10. Thus, perspective taking amplified rather than dampened the effects of social value orientations: it did not "help" proselfs discover the benefits of being more attractive then potential rivals.

Offers

As predicted, a 2 × 2 × 2 ANOVA showed that prosocials made more attractive offers than proselfs (M = 9.47, SD = 1.71 versus M = 8.41, SD = 2.08), F(1, 90) = 7.24, p<.009. Furthermore, it also led to a marginally significant effect for revelations: as in Study 2, truth-tellers made somewhat more attractive offers (M = 9.56, SD = 1.86) than deceivers did (M = 8.47, SD = 1.89), F(1, 90) = 3.11 p = .08.

A 2 × 2 × 2 × 3 (type of offer) loglinear analysis of the frequency of equal, attractive, and unattractive offers replicated the main effects of social value orientation and revelation, $\chi^2(1, N = 94) = 4.90$, p = .08 and $\chi^2(1, N = 94) = 6.24$, p = .04, respectively. In addition, perspective taking moderated the effect of social value orientations on types of offers, $\chi^2(1, N = 94) = 7.28$, p = .02: taking others' perspectives led prosocials to send fewer unattractive offers but led proselfs to send more (see Table 5).

Mediation

Finally, we assessed whether the effect of social value orientations on offers was mediated by revelations. A series of regression showed that this was the case. The regression of social value orientations on offers was significant, β = − 1.05, SE = .391, p<.001. The logistic regression of social value orientations on revelations was also significant, β = − 1.49, SE = .65, p<.001. Finally, the regression of revelations on offers was significant, β = −.87, SE = .39, p<.05, when

Table 4
The frequencies of revelations and lies about player As' exchange-rate advantage as a function of social value orientations and perspective taking; Study 3.

Message	Prosocials		Proselfs	
	Perspective taking	Control	Perspective taking	Control
Revelation	18	14	6	8
Lie	7	14	17	10

Table 5
Percentage of offer types as a function of social value orientations (prosocial vs. proself) and experimental conditions (perspective taking vs. control); Study 3.

	Prosocial		Proself	
	PT (%)	Control (%)	PT (%)	Control (%)
Attractive	22	21	8	5
Equal	56	32	22	50
Unattractive	22	47	70	45

controlled for the effect of social value orientations, $\beta = -.83$, $SE = .40$, $p < .05$. Sobel $= 1.60$, $p = .10$.

Discussion

These results replicate and expand the findings of Study 2: not revealing an advantageous exchange rate again went hand-in-hand with making less attractive offers, and this choice mediated the effect of fairness (in this case, social value orientation) on the attractiveness of an offer. These results also extended Study 2's findings by adding the effects of perspective taking. Ironically, the push to consider one's counterparts' perspectives accentuated rather than alleviated a proself social value orientation: it led proselfs to act more self-interestedly, which, given Study 1's findings, suggests that perspective taking might further erode their prospects of being included in winning coalitions and their ultimate monetary payoffs.

General discussion

Having a better exchange rate is a huge benefit for coalition bargainers: it allows them to obtain better payoffs and to make more attractive offers to their potential coalition partners. We assumed, however, that people would squander this opportunity by focusing more on the first benefit and less on the second benefit. Thus, we predicted that people who had an exchange advantage would not use it to signal how attractive they were as a coalition partner, unless they were motivated by fairness. All three studies reported here supported this logic.

Study 1 showed that people who had private information about an exchange advantage did not use their strategic opportunities effectively. The structure of their situation, facing two counterparts whose resources were equal, made player As less preferred coalition partners and they did not overcome these adverse preferences by making more attractive offers. Although they could not reveal their exchange rate advantage, they could have used it to make more attractive offers. Instead, they did the exact opposite, making less attractive offers than they did when their exchange rate advantage was known. Thus, the bargainers who had the greatest strategic options did extremely poorly. In contrast, when their exchange rate advantage was common knowledge, they attracted more offers, made more attractive offers, were included more often, and received excellent overall outcomes.

Studies 2 and 3 focused on the underlying mechanisms of these effects, with particular attention to fairness motivations, social value orientations, and perspective taking. Both of these studies again focused on whether advantaged coalition bargainers would reveal how attractive they were. As predicted, coalition bargainers who were motivated by self-interest rather than by fairness tended to actively conceal their exchange advantage, made less attractive, more selfish offers, and did less well for themselves as a result. In contrast, coalition bargainers who had stronger fairness concerns tended to reveal their exchange advantage, made better offers, and would thus do better for themselves.

Study 3 also showed that perspective taking accentuated the effects of individuals' social value orientations: taking their counterparts' points of view led proselfs to act more rather than less self-

interestedly, sending deceptive messages and making unattractive offers, but it led prosocials to act even more cooperatively. It appears that this manipulation led both prosocials and proselfs to literally "put themselves in the other person's shoes," with proselfs focusing on "themselves" and prosocials focusing on "the other person's shoes." Applying these results to the information dilemma (Murnighan et al., 1999) suggests that proselfs attended more to the potential exploitation that can follow information sharing while prosocials attended more to the potential benefits.

Our logic is thus supported in three experiments, in which either *no* communication was possible (Study 1; revelation vs. private information rather was a feature of the experiment), or player As had the choice between two options (Study 2; honestly revealing vs. actively misrepresenting their exchange advantage), or player As had the choice between three options (Study 3; honestly revealing, being silent about or actively misrepresenting their exchange advantage). Honest revelation helped player As in all experiments, and Study 2 further showed that lying by commission (i.e., active misrepresentation) was associated with the same coalition choices as lying by omission (i.e., being silent). Therefore, our main conclusion is *not* that deception hurts in coalition bargaining—even though this may probably be the case in real life coalition negotiations, when deception is revealed or detected. This, however, is an issue for future research. Instead, what our results consistently showed is that honesty pays.

Coalition formation

The current research is the first to investigate the impact of private information on coalition behavior. While research on dyadic negotiations suggests that keeping information about asymmetric payoffs private can be strategically beneficial (Kagel et al., 1996; Pillutla & Murnighan, 1995; Straub & Murnighan, 1995; Van Dijk & Vermunt, 2000; Van Dijk et al., 2004), the current research shows that a similar strategy in coalition bargaining can be particularly detrimental.

We tested our reasoning in a historically rich context, the 4(3–2–2) game (e.g., Caplow, 1956; Chertkoff, 1967; Kelley & Arrowood, 1960; Murnighan, 1991; Vinacke & Arkoff, 1957), in which coalition bargainers have often overestimated the impact of resource differentials when such resources are *not* critical (i.e., situations where having more resources is not associated with having more possibilities to form a coalition). This misunderstanding has led previous player As to demand more than is effective, increasing their chances of exclusion and zero payoffs. We replicated this classic finding in a setting in which player As had additional payoff and information advantages. Only when player As' hands were tied, and everyone knew about their outcome advantages, were they included in as many winning coalitions as their seemingly weaker counterparts.

Player As' exchange rate advantage was a real advantage—it set them up to obtain better payoffs than their counterparts; their resource advantage, in contrast, was only apparent. Thus, these results suggest that coalition bargainers not only overvalued their non-critical resources but they also failed to fully appreciate their critical resources. In essence, they did not realize that what made them attractive, in this case, was their ability to create larger outcomes for their potential partners. By viewing the situation socially rather than self-interestedly, perspective taking added to prosocials' already effective orientation. In stark contrast, perspective taking led proselfs to compound their initial, mistaken approach.

Future research should test the boundary conditions of these effects. We used a single context, the 4(3–2–2) game, that created a base rate in which player As would be likely to be excluded more than players B and C. Different games with different base rates could test the generality of player As' strategic miscalculations. Consider, for instance, the 2(1-1-1)-game, in which every player has an equal a priori chance to be included and all of the players are likely to demand an equal share of the rewards in every coalition. In this game, not

revealing an outcome advantage and not compensating for this difference in value, may actually be strategically effective. Even in this game, however, players are more likely to be included in winning coalitions when they make more attractive offers than their rivals. Thus, asking for less may again generally garner a coalition bargainer more.

Another potential avenue of further research would be to increase the number of times players participate in the coalition game. In our Study 1, participants played only one game. Relevant here is that early coalition research has demonstrated that coalition players adhere more to game theoretic predictions when they have played a coalition game several times (Kelley & Arrowood, 1960). Possibly, self-interested players may discover the strategic benefits of making attractive offers when they have played the game several times. In similar vein, it should be noticed that we used students in our experiments. It may be argued that they are perhaps not as skilled in negotiations as people who have had more experience in negotiations. That is, more skilled bargainers who are self-interested may use their advantages more effectively than the relative naive bargainers that were used in the current set of studies.

Social value orientations

Our findings also provide further insight into the effects of social values on coalition bargaining. Previous research suggests that prosocials are especially reluctant to exclude individuals from winning coalitions, even when counterparts contribute little or nothing (Van Beest et al., 2003). Similar effects have surfaced in group-versus-group negotiations (Van Beest et al., 2008). The present findings extend this literature by showing that prosocials are also more reluctant to deceive their potential partners than proselfs are, especially when they have taken their potential coalition partners' perspectives.

Research on dyadic negotiations has also shown that proselfs are more likely to provide incorrect information than prosocials, and bargainers were more deceptive when they knew that their opponents had a proself rather than a prosocial orientation (Steinel & De Dreu, 2004). Also unlike prosocials, proselfs have more often used an information advantage to maximize their own outcomes (Van Dijk et al., 2004). The current findings show that prosocials and proselfs do not alter their strategies in a coalition negotiation: proselfs remained more deceptive and made less attractive offers than prosocials. This fits with the proposition that humans have evolved and learned specific strategies in dyadic interactions and may be generalizing these strategies (Tooby et al., 2006) – even when they are inappropriate and ineffective – to multiparty settings.

Perspective taking

Previous research has also shown that perspective taking is more effective than empathy in dyadic negotiations (Galinsky et al., 2008): negotiators who considered their counterpart's position created and claimed more than negotiators who did not consider their counterpart's feelings. By combining perspective taking and social value orientations, we observed beneficial effects for prosocials but increasing costs for proselfs. Galinsky and colleagues did not assess social value orientations but, based on the current results, we might expect that, after taking others' perspectives, prosocials would be more focused toward creating value and proselfs would be more focused toward claiming value. This is consistent with Epley, Caruso, and Bazerman (2006), who showed that perspective taking can increase selfish behavior in competitively framed interactions.

Our perspective taking instructions were similar to those of Galinsky et al. (2008): participants were told to imagine how they would behave if they were in their counterpart's shoes. Research that focuses individuals' attention on empathy (e.g., Batson et al., 1997; Batson et al., 2003) may have decidedly different effects. In fact, Batson and his colleagues have distinguished between imagining how another person feels (other-perspective) and imagining how you would feel (self-perspective) when perceiving the other's situation. Their results indicate that taking the other-perspective is associated more with altruistic motivations and taking the self-perspective is associated more with egoistic motivations (Batson et al., 1997). The fact that we used a self-perspective instruction may thus be viewed as a conservative test of our reasoning. Indeed, a direct application of Batson's results to our paradigm might lead to a prediction of increased egoism, for both proselfs and prosocials. Yet, this is not what we observed. Instead, our perspective taking manipulation accentuated the initial inclinations of prosocials and proselfs. Further research might investigate the effects of asking people to consider their potential partners' feelings.

We argued that people who were motivated by fairness would be more likely to benefit than those who are motivated by self-interest. People who are motivated by fairness are more likely to disclose their outcome advantage and more likely to make attractive offers than people who are less motivated by fairness. We must stress here that we are not arguing that fair people have a better understanding of the situation and somehow see the strategic benefits of disclosing information. Instead, we are suggesting that they have a natural inclination to behave in a specific way and this specific inclination happens to be successful in this context. In fact, our findings even suggest that such inclinations are quite pervasive, given the fact that telling them to actively consider the position of their counterpart did not reduce their initial inclinations.

Conclusions

Economic theory and empirical research indicate that negotiators are particularly responsive to the down side of the information dilemma (Murnighan et al., 1999), leading them to keep their personal information private. Because so many of our experiences (and a considerable amount of research) involve dyadic negotiations, cautiousness may often be warranted. The results of the current experiments, however, show that generalizing these strategies to coalition bargaining can be particularly ineffective. In fact, the current research suggests that, contrary to the general wisdom of dyadic negotiations, honesty may actually be the best policy in coalition bargaining, both in the short and the long term. A concern for others' outcomes – fairness – also appears to be self-beneficial, in terms of both inclusion and outcomes for individuals who have a potential outcome advantage. Thus, rather than interfering with the opportunity to strike a good deal, honesty can facilitate the formation of valuable coalitions and, in conjunction with fairness motivations, contribute to better individual outcomes as well. Thus, in this case, honesty wins all around.

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