

RUNNING HEAD: Perspective-taking and Empathy in Strategic Interactions

Why it pays to get inside the head of your opponent:

The differential effects of perspective-taking and empathy in strategic interactions

Adam D. Galinsky

Northwestern University

William W. Maddux

INSEAD

Debra Gilin

Saint Mary's University

Judith B. White

Dartmouth College

IN PRESS, *PSYCHOLOGICAL SCIENCE*

Abstract

The current research explored whether two related yet distinct social competencies – perspective-taking (the cognitive capacity to consider the world from another’s viewpoint) and empathy (the ability to emotionally connect with another) – have differential effects in strategic, mixed-motive interactions. Across three studies, using both individual difference measures and experimental manipulations, we found that perspective-taking increased individuals’ ability to discover hidden agreements and to both create and claim resources at the bargaining table. However, empathy did not prove nearly as advantageous and at times proved detrimental to deal discovery and individual profit. These results held regardless of whether the interaction was a negotiation in which a prima facie solution was not possible or a multiple-issue negotiation that required discovering mutually beneficial trade-offs. Although empathy is an essential tool in many aspects of social life, perspective-taking appears to be a particularly critical ability in strategic interactions.

In October, 1962, the United States and the former Soviet Union came to the brink of nuclear war in the Cuban Missile Crisis. Yet in the middle of this harrowing conflict, President John F. Kennedy managed to devise a strategic plan to prevent potential annihilation, a plan that also did not sacrifice his country's long term interests. While publicly refusing to remove any of America's missiles placed near the Soviets (i.e., no quid pro quo on missile removal), Kennedy offered that if all nuclear weapons were removed from Cuba, the United States would pledge not to invade Cuba in the future. This deal allowed Soviet Premier Nikita Khrushchev to declare that he had saved Cuba from attack, and therefore satisfied his core interests of saving face and retaining power.

This example illustrates the powerful advantage of having a deep understanding of one's opponent – Kennedy's proposal was suggested by an advisor, Tommy Thompson, who had lived with Khrushchev and had intimate knowledge of his fundamental interests. In fact, in disparate domains such as chess, poker, politics, and business, knowing the motives and likely behaviors of an adversary can illuminate strategies to secure personal gain, the downfall of one's nemesis, and even long-term peace (Axelrod, 1987; Findler, 1990; Lopes, 1976; Thagard, 1992). Negotiators, for example, must often understand the other party's interests to obtain the best outcome for themselves (Thompson, 1990; Thompson & Hastie, 1990; Fisher, Ury & Patton, 1991).

Since understanding one's opponent is valuable for success in competitive interactions, it seems likely that individual characteristics associated with such understanding would prove advantageous. In this vein, two related but distinct social competences – perspective-taking and empathy – have been shown to motivate social understanding across a variety of contexts. Although the terms “perspective-taking” and “empathy” are often used interchangeably, there is

clear evidence of their differences (Coke, Batson, & McDavis, 1978; Davis, 1980; 1983; Deutch & Madle, 1975; Hoffman, 1977; Oswald, 1996). Perspective-taking is a cognitive capacity to consider the world from other viewpoints, which “allows an individual to anticipate the behavior and reactions of others” (Davis, 1983, p.115). Empathy, in contrast, is an other-focused emotional response that allows one person to affectively connect with another. Sometimes labeled sympathy or compassion, empathy is often considered to be an emotion of concern experienced when witnessing another person’s suffering (Batson, Fultz, & Schoenrade, 1987).

There is suggestive evidence that perspective-taking and empathy may not have the same effects in strategic interactions. Perspective-taking ability is associated with personality characteristics such as high self-esteem and low neuroticism, whereas empathy predicts higher levels of emotionality (Davis, 1980; 1983). Perspective-taking, but not empathy, predicts the tendency to mimic other’s non-verbal behaviors (Chartrand & Bargh, 1999), a behavioral tactic that can be helpful in negotiations (Maddux, Mullen, & Galinsky, in press). Perspective-takers are able to step outside the constraints of their own immediate, biased frames of reference (Moore, 2005) and reduce egocentric perceptions of fairness in competitive contexts (though not at the expense of their own self-interest) (Epley, Caruso, & Bazerman, 2006). Empathy, however, leads individuals to violate norms of equity and equality to provide preferential treatments (Batson et al., 1995). Whereas perspective-taking tendencies predict extracting concessions from one’s opponent (Neale & Bazerman, 1983) and considering an opponents’ alternatives can counter the anchoring effects of the opponent’s first offer (Galinsky & Mussweiler, 2001), empathizers tend to cooperate in prisoner’s dilemma games (Batson & Moran, 1999), even if they know that their opponent has previously defected and therefore cooperation is likely to be to their own detriment (Batson & Ahmad, 2001). Although this panoply of research suggests that

perspective-taking and empathy are distinct constructs, no research has systematically explored their unique influences in strategic, mixed-motive social interactions.

In the present studies, we both measured and manipulated perspective-taking and empathy to explore their influence in two negotiation tasks that represent common and challenging barriers to understanding: compatibility of underlying interests in the face of conflicting positions (Studies 1 and 2) and differing preferences and priorities (Study 3). We sought to answer the following question: For individuals involved in mixed-motive situations, is it more effective to empathize with an opponent (have them inside your heart) or understand their thoughts and perspective (get inside their head)?

We predict that perspective-taking will be a more valuable strategy than empathy in strategic interactions. First, we believe perspective-taking will help negotiators find the necessary balance between competition and cooperation, between self-interest and other-interest. When attention is focused only on self-interests, negotiators tend to be overly aggressive and obstinate, whereas focusing only on other-interests encourages excessive concession-making to the detriment of one's individual outcomes. Instead, a balance of attention to both self- and other-interests is critical for facilitating creative problem-solving in negotiations (Pruitt & Rubin, 1986). Second, we contend that cognitive appreciation of another's interests is more important than an emotional connection for securing economically efficient outcomes. Adam Smith (1759) suggested that looking at things from an outside perspective allows individuals to override passions, such as excessive sympathy, that can impair achieving efficient outcomes. Perspective-taking should allow individuals both to discover efficient, but hidden, solutions and to capture more value for themselves. In contrast, we predicted that empathy would be less effective, and

may even tip the balance too far in favor of the other side's interests, leading individuals to miss opportunities for efficient exchange while also sacrificing their own potential gains.

It is important to note that the current research is the first to investigate the differential impact of perspective-taking and empathy in competitive, mixed-motive interactions and the first to explore the effect of these social competencies in a negotiation task involving conflicting positions that require discovering hidden agreements. Although previous research has explored the effects of perspective-taking and empathy separately in negotiations and prisoner's dilemmas (Batson & Moran, 1999; Kemp & Smith, 1994; Neale & Bazerman, 1983), none of these studies compared perspective-taking to empathy, and sometimes they have conflated these two constructs, both theoretically and empirically, making it difficult to pinpoint which is more important for negotiator success. By independently manipulating and measuring perspective-taking and empathy, the current studies seek to document the differential effects of these two social competencies in strategic interactions.

Study 1

Study 1 used a negotiation over the sale of a gas station, where a deal based solely on sale price was impossible. Specifically, the buyer's reservation price (the maximum he/she was authorized to pay) was lower than the seller's reservation price (the minimum he/she was willing to accept), resulting in a negative bargaining zone for sale price. However, both parties' underlying interests were compatible: The buyer wanted to hire managers to run the station, and the seller needed help financing a sailboat trip and to obtain employment after returning. Thus, parties could agree to a sale price below the seller's reservation price, but with a stipulation of future employment. To reach a successful deal, participants had to discover this alternative solution themselves during the course of the negotiation. We predicted that, compared to those

high in empathy, individuals high in perspective-taking would be more likely to reach an agreement that met both parties' interests.

Method

Participants. Participants were 70 full-time MBA students (51 males, 19 females) who were enrolled in a negotiations course.

Procedure. Participants were randomly assigned to dyads playing the role of either buyer or seller in dyadic negotiation involving the sale of a gas station (Goldberg, 2000). Participants were given confidential role instructions one week prior to the negotiation and given 50 minutes to negotiate a deal face-to-face in separate breakout rooms during class.

The main dependent measure was whether dyads were able to negotiate a deal based on the parties' interests. An outcome was considered successful if the terms involved 1) a sale price not greater than the buyer's reservation price, *and* 2) the addition of extra issue(s), such as a job upon return. Outcomes were considered unsuccessful if they 1) involved only the sale price of the station or 2) if parties reached an impasse. Therefore, the outcome measure was a dichotomous variable (successful vs. unsuccessful or no deal) that was coded at the dyadic level.

Measures of Perspective-Taking and Empathy. One week later, participants completed an online personality inventory, which included the reliable and widely used seven-item perspective taking and seven-item empathy scales (Davis, 1980). Items query tendencies towards perspective-taking (e.g., "I believe that there are two sides to every question and try to look at them both.") and empathy (e.g., "Sometimes I don't feel very sorry for other people when they are having problems," *reverse scored*). We averaged the items to give a single score for each participant for each construct. Given the main dependent variable was at the dyadic level, perspective-taking and empathy were also averaged for each dyad. We also assessed the "Big

Five” personality traits (Costa & McCrae, 1985), using the ten-item inventory (Gosling, Rentfrow, & Swann, 2003) to ensure any effects were independent of other major personality variables.

Results and Discussion

Overall, 24 of the 35 dyads (68.5%) reached a successful deal in this exercise.

Dyad-level analyses. Using simultaneous logistic regressions, we examined the effects of dyadic levels of perspective-taking and empathy, the Big Five traits, and gender on the likelihood of negotiating a deal. Results demonstrated that only dyads’ perspective-taking tendencies acted as a significant predictor of whether a successful deal was reached, even when controlling for gender and the Big Five personality factors (see Table 1). The predicted negative relationship between empathy and deal discovery was in the expected direction, but missed significance.

Individual-level analyses. We examined perspective-taking and empathy separately for each role (again controlling for the Big Five and gender). Results indicated that the buyer’s chronic perspective-taking significantly predicted whether a deal was reached, $B = .37$, $Wald(1) = 5.19$, $p = .023$, whereas the seller’s chronic level of perspective-taking did not significantly predict a deal, $p > .91$. Chronic levels of empathy did not predict a deal for either role, p ’s $> .34$. At the individual level, the only Big Five trait that significantly predicted whether a deal was reached was the station owner’s openness to experience, $B = .30$, $Wald(1) = 5.91$, $Ex(B) = 1.35$, $p = .015$.

Perspective-taking tendencies (particularly in the buyer) increased negotiators’ ability to arrive at a creative solution that met both parties’ needs. Empathy, in contrast, did not prove effective in deal discovery. Importantly, the advantages of perspective-taking were independent of the Big 5 personality variables, providing discriminate validity for its role in negotiations.

Although not initially predicted, only the buyer's perspective-taking tendency made a difference in producing a deal. However, this reasoning is consistent with recent research showing the importance of the buyer's role in soliciting information in this gas-station negotiation (Maddux et al., in press). Although the seller needs to reveal personal information (not surprisingly, the seller's openness to experience mattered in the current negotiation), a deal cannot be achieved unless the buyer plays an active role in soliciting and appreciating the value of the seller's disclosures in crafting a solution. Thus, only the buyer's perspective-taking ability predicted deal-making.

Study 2

Study 2 offered the first empirical manipulation that contrasted perspective-taking and empathy in a negotiation setting. We also measured each participant's satisfaction with how the other side treated them during the negotiation to further elucidate the likely benefits of each social competency in negotiations.

Method

Participants. Participants were 152 full-time MBA students¹ at a business school who were enrolled in a negotiations course.

Experimental Manipulations. Participants were given confidential role instructions (with experimental manipulations) the same day they negotiated. Because buyers' perspective-taking ability proved crucial in getting a deal in Study 1, we experimentally manipulated perspective-taking for the buyer only.

Buyers assigned to the control condition were simply told to focus on their own role. Buyers in the *empathy condition* were given the following instructions: "In preparing for the negotiation and during the negotiation, take the perspective of the service station owner. Try to

understand what he/she is *feeling*, what *emotions* he/she may be experiencing in selling the station. Try to imagine what you would be *feeling* in that role.” Buyers in the *perspective-taking condition* were told: “In preparing for the negotiation and during the negotiation, take the perspective of the service station owner. Try to understand what he/she is *thinking*, what his/her *interests and purposes* are in selling the station. Try to imagine what you would be *thinking* in that role.”

Following the negotiation exercise, on a 7-point scale anchored at (1) not at all satisfied and (7) extremely satisfied, participants indicated how satisfied they were with the way they were treated during the negotiation.

Results

Deals as a function of perspective-taking and empathy. A chi-square analysis revealed that percentage of successful deals varied as a function of experimental condition, $\chi^2(2, 76) = 6.79, p = .03$ (see Figure 1). Dyads with a perspective-taking buyer (76%) were more likely to achieve a deal than dyads in the control condition (39%), $\chi^2(1, 48) = 6.7, p = .01$. In contrast, empathizers (54%) had no advantage in deal-making compared to control participants, $\chi^2(1, 51) = 1.06, p = .30$. The predicted advantage of perspective-taking over empathizing was in the expected direction, but missed significance, $\chi^2(1, 53) = 2.89, p = .089$.

Condition also affected the station owners' satisfaction with how the buyer treated them, $F(2,73) = 12.51, p < .001, \eta^2 = .26$. Sellers who negotiated with a buyer in the control condition had the lowest level of satisfaction ($M = 5.0, SD = 1.0$), followed by sellers who negotiated with a perspective-taker ($M = 5.7, SD = .85$), and sellers who had an empathic buyer expressed the most satisfaction ($M = 6.3, SD = .70$). All three means differed significantly from each other, t 's $> 2.4, p$'s $\leq .02$. Being empathized with led to the highest level of process satisfaction.

In Study 2, manipulating perspective-taking increased the probability that buyers would create a solution that met both sides' needs. In addition, both perspective-taking and empathy led to increased satisfaction with how sellers felt they were treated. Although empathy had immediate affective benefits for the other side, empathizers did not have an advantage over control participants in producing more deals which would provide long-term value for themselves and their opponent. In contrast, perspective-takers secured the most agreements with sufficient opponent satisfaction.

Study 3

The previous two experiments investigated whether perspective-taking and empathy would help negotiators discover the compatibility of underlying interests in the face of seemingly conflicting positions. Oftentimes, however, a negotiation explicitly involves multiple issues in which negotiators have different priorities; negotiators can improve their outcomes by conceding on low priority issues in exchange for their high priority ones, a technique called logrolling (Froman & Cohen, 1970). Mere compromise, or simply "splitting" all issues down the middle, is an impediment to reaching efficient agreements compared to making mutually beneficial trade-offs (Thompson, 1990; 2001; Tripp & Sondak, 1992).

Multi-issue negotiations also highlight a dilemma negotiators face: finding a balance between capturing value for oneself (value-claiming) and maximizing the available resources for both parties (value-creating; Lax & Sebenius, 1986). To be most effective, negotiators must both create as large a pie of resources as possible (to produce the most economically efficient agreements) and also claim as much of that pie as possible (to satisfy their self-interest).

In Study 3, we manipulated perspective-taking and empathy to explore how these social competencies affect the amount of both joint (i.e., dyad-level) and individual gain. We predicted

that perspective-taking would be more effective at both creating value and at claiming more of that increased value than empathy, which we predicted might even decrease individual gain, a measure of how well negotiators protect and pursue their own interests.

Method

Participants. Participants were 146 full-time MBA students who were enrolled in a negotiations course.

Negotiation exercise. Individuals participated in a two-party job negotiation exercise involving a candidate and recruiter. Eight issues were negotiated: Two issues were distributive, meaning the parties' preferences were in complete opposition to each other. Two issues were compatible, meaning that the parties' preferences were identical. Finally, the remaining four issues were integrative, meaning negotiators had different low and high priority issues; for example, bonus was worth up to 4,000 points for the candidate, but only 1,600 for the recruiter; in contrast, vacation time was worth 4,000 for the recruiter and only 1,600 for the candidate. The maximum joint gain for both parties was 13,200 points.

Procedure. The procedure was similar to Study 2 (participants were given their role information in the same class session as the negotiation). Participants had thirty minutes to negotiate.

Experimental manipulations. Participants playing the role of the recruiter were randomly assigned to one of three conditions. As in Study 2, participants in the *control condition* were asked to consider their own role carefully. In the *empathy condition*, participants read: "In preparing for the negotiation and during the negotiation, take the perspective of the candidate. Imagine what it would *feel like* to be in his/her situation. Try to visualize yourself on the other side of the table, in that different role." In the *perspective-taking condition*, participants read: "In

preparing for the negotiation and during the negotiation, take the perspective of the candidate. Try to understand what they are thinking in their situation. After reading your role, try to visualize yourself on the other side of the table, in that role, thinking as the candidate.”

Dependent Measures. We had three outcome measures. To assess the discovery of mutually beneficial tradeoffs, we measured joint gain, the total points each dyad achieved together (possible range: -8,400 points to 13,200 points). We also coded whether dyads reached the maximum of 13,200 points or fell short. To assess individual gain, we analyzed the total points that each side obtained individually.

Results

Joint gain. An initial one-way analysis of variance (ANOVA) indicated a significant main effect for condition, $F(2,72) = 4.51, p = .014, \eta^2 = .115$. Dyads in the perspective-taking condition ($M = 12,150, SD = 1,064$) achieved significantly higher joint gain than dyads in the control condition ($M = 10,961, SD = 1,614$), $F(1,45) = 8.10, p = .007, \eta^2 = .156$. Additionally, dyads in the empathy condition ($M = 11,711, SD = 1,292$) tended to achieve more joint gain than dyads in the control condition but this effect did not reach significance, $F(1,52) = 3.49, p = .067, \eta^2 = .064$. No difference emerged comparing the perspective-taking and empathy conditions, $p = .22$.

We next examined the proportion of dyads in each condition that maximized the overall size of the pie by achieving 13,200 points (the best possible collective outcome). Twelve percent of dyads in the control condition, 22% in the empathy condition, and 40% in the perspective-taking condition achieved this outcome. Although these proportions did not differ overall, $\chi^2(2, 73) = 5.15, p = .076$, perspective-takers were more likely to achieve the maximum joint gain compared to the other two conditions, $\chi^2(1,73) = 4.31, p = .038$.

Individual gain. We examined individual gain for each party as a function of experimental condition (see Figure 2), controlling for the effect of the opposing party's individual gain since each individual is embedded in a negotiation dyad (see Maddux et al., in press).

We first conducted a one-way analysis of covariance (ANCOVA) on recruiter individual gain (the role that was experimentally manipulated) with condition as our independent variable and with the candidate's (their opponent's) individual gain as a covariate. Results showed a significant effect of condition $F(2, 69) = 4.02, p = .022, \eta^2_p = .10$. Perspective-takers secured significantly more points ($M = 6,220, SD = 2,284$) compared to control participants ($M = 5,515, SD = 2,365$), $F(1, 43) = 7.33, p = .01, \eta^2_p = .15$, whereas empathizers ($M = 5,092, SD = 2,377$) tended to achieve even fewer individual points compared to control participants although this predicted effect missed significance, $F(1, 50) = 2.19, p = .145, \eta^2_p = .04$.

We next conducted a one-way ANCOVA on candidate individual gain with condition as our independent variable and with the recruiter's individual gain as a covariate. There was a significant effect of condition $F(2, 69) = 4.76, p = .01, \eta^2_p = .12$. Candidates who negotiated with an empathizing recruiter ($M = 6,619, SD = 2,175$) achieved higher individual gain than candidates who negotiated with control recruiters ($M = 5,446, SD = 2,091$), $F(1, 50) = 5.82, p = .02, \eta^2_p = .10$. Candidates who negotiated with a perspective-taking recruiter ($M = 5,930, SD = 2,129$) also achieved significantly more points compared to the control condition, $F(1, 43) = 6.84, p = .01, \eta^2_p = .14$. The perspective-taking and empathy condition did not differ from each other, $F(1, 44) < 1, p = .55, \eta^2_p = .01$.

In Study 3, taking the perspective of one's opponent produced both greater joint gains and more profitable individual outcomes than control participants. Perspective-takers achieved

the highest level of economic efficiency, without sacrificing their own material gains. In contrast, empathizing recruiters received the lowest individual outcomes, with increases in joint gains going mostly to the empathizer's opponent. Interestingly, it appears that the negotiator who would achieve the best individual outcome is one who takes the perspective of an empathizing opponent, suggesting that negotiation outcomes may be driven by the interaction between these two social competencies.

General Discussion

The current research extends our knowledge of the relative benefits of two important social competencies – perspective-taking and empathy – for navigating strategic social interactions. Perspective-taking consistently resulted in greater success compared to empathy, regardless of whether these constructs were measured or manipulated. Perspective-takers were able to uncover underlying interests to generate creative solutions where a prima facie deal was not possible (Studies 1 and 2) and crafted more efficient deals with greater collective and individual gain than did empathizers and control participants (Study 3). Thus, understanding the interests and motives of opponents in competitive decision-making interactions appears to be more valuable than emotionally connecting with them.

Empathy was generally less useful than perspective-taking, and was, at times, a detriment to both discovering creative solutions and self-interest. However, it is possible that the positive interpersonal capital built up in an initial negotiation (as shown via increased levels of process satisfaction in Study 2) could facilitate future agreements between negotiators, such that the outcome benefits of empathy may emerge over the course of time. By increasing the other side's process satisfaction, empathy may be particularly helpful in other types of negotiations. For example, in disputes, where negotiators often come to the table angry and with a desire to be

heard, empathy may help calm and soften outbursts from the other side that can escalate conflict. Similarly, empathy may be particularly valuable in mediation, where negotiators often need to be satisfied with the process before agreeing to a deal.

It is also notable that having a perspective-taking *partner* was also advantageous for negotiators across all three studies. Thus, it may be beneficial for negotiators to encourage their partners to do some perspective-taking, as well as empathizing. From a practical standpoint, the effects of our perspective-taking manipulations also indicate that considering other viewpoints can be adopted and learned by individuals. Even brief but active perspective-taking while preparing for a negotiation can yield improved individual and joint outcomes.

The current research suggests that in mixed-motive interactions, it is better to '*think for*' than to '*feel for*' one's adversaries, more beneficial to get inside their head than have them inside one's own heart. When approached in this manner, the peaceful conclusion of something as volatile as a nuclear standoff between two superpowers seems less like a surprise, and more like a predictable outcome borne of effective perspective-taking.

References

- Axelrod R. (1987). The evolution of strategies in the iterated Prisoners' Dilemma. In L. Davis (Ed.), *Genetic algorithms and simulated annealing*. Los Altos, CA: Morgan Kaufmann.
- Batson, C. D., & Ahmad, N. (2001). Empathy-induced altruism in a prisoner's dilemma II: What if the target of empathy has defected? *European Journal of Social Psychology, 31*, 25–36.
- Batson, C. D., Fultz, J., & Schoenrade, P. A. (1987). Distress and empathy: Two qualitatively distinct vicarious emotions with different motivational consequences. *Journal of Personality, 55*(1), 19-39.
- Batson, C. D., Klein, T. R., Highberger, L., & Shaw, L. L. (1995). Immorality from empathy-induced altruism: When compassion and justice conflict. *Journal of Personality and Social Psychology, 68*, 1042-1054.
- Batson, C. D., & Moran, T. (1999). Empathy-induced altruism in a prisoner's dilemma. *European Journal of Social Psychology, 29*, 909-924.
- Chartrand, T. L., & Bargh, J., A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology, 76*, 893 – 910.
- Coke, J. S., Batson, C. D., & McDavis, K. (1978). Empathic mediation of helping: A two-stage model. *Journal of Personality and Social Psychology, 36*, 752-766.
- Costa, P.T., Jr. & McCrae, R.R. (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Davis, M. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology, 10*, 85.

Davis, M. (1983). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. *Journal of Personality, 51*(2), 151-184.

Deutch, F., & Madle, R. A. (1975). Empathy: Historic and current conceptualizations, measurement, and a cognitive theoretical perspective. *Human Development, 18*, 267-287.

Epley, N., Caruso, E.M., & Bazerman, M.H. (2006). When perspective taking increases taking: Reactive Egoism in social interaction. *Journal of Personality and Social Psychology, 91*, 872-889.

Findler, N. V. (1990). *Contributions to a computer-based theory of strategies*. New York: Springer-Verlag.

Fisher, R., Ury, W., and Patton, B. (1991). *Getting to yes: Negotiating agreement without giving in* (2nd ed.). New York: Penguin.

Froman, L.A., Jr., & Cohen, M.D. (1970). Compromise and logroll: Comparing the efficiency of two bargaining processes. *Behavioral Science, 15*, 180-183.

Galinsky, A.D., & Mussweiler, T. (2001). First offers as anchors: The role of perspective-taking and negotiator focus. *Journal of Personality and Social Psychology, 81*(4), 657-669.

Goldberg, S. (2000). Texoil. In J. M. Brett (Ed.), *Negotiation and decision making exercises*. Evanston IL: Dispute Resolution Research Center, Northwestern University CD.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality, 37*, 504-528.

Hoffman, S. (1977). An American Social Science: International Relations, *Daedalus* 106:3, 41-60.

Kemp, K.E., & Smith, W.P. (1994). Information exchange, toughness, and integrative bargaining: The roles of explicit cues and perspective-taking. *The International Journal of Conflict Management*, 5(1), 5-21.

Lax, D. A. and J. K. Sebenius (1986). *The manager as negotiator: Bargaining for cooperation and competitive gain*. New York: The Free Press.

Lopes, L. L. (1976). Model-based decision and inference in stud poker. *Journal of Experimental Psychology: General*, 105, 217-239.

Maddux, W.W., Mullen, E., & Galinsky, A.D. (in press). Chameleons bake bigger pies and take bigger pieces: Strategic behavioral mimicry facilitates negotiation outcomes. *Journal of Experimental Social Psychology*.

Moore, D. A. (2005). Myopic biases in strategic social prediction: Why deadlines put everyone under more pressure than everyone else. *Personality and Social Psychology Bulletin*, 31, 668 – 679.

Neale, M.A. & Bazerman, M.H. (1983). The role of perspective-taking ability in negotiating under different forms of arbitration. *Industrial and Labor Relations Review*, 36, 378-388.

Oswald, P.A. (1996). The effects of cognitive and affective perspective-taking on empathic concern and altruistic helping. *The Journal of Social Psychology*, 136(5), 613-623.

Pruitt, D. G., & Rubin, J. Z. (1986). *Social conflict: Escalation, stalemate, and settlement*. New York: McGraw-Hill.

Smith, A. (1759). *Theory of Moral Sentiments*. London: A. Miller.

Spencer, H. (1870). *The principles of psychology*. London: Williams and Norgate.,

Thagard, P. (1992). Adversarial problem solving: Modeling an opponent using explanatory coherence. *Cognitive Science*, *16*, 123-149.

Thompson, L. (1990). Negotiation behavior and outcomes: Empirical evidence and theoretical issues. *Psychological Bulletin*, *108*, 515-532.

Thompson, L. (1998). A new look at social cognition in groups. *Basic & Applied Social Psychology*, *20*, 3-5

Thompson, L. (2001) *The mind and heart of the negotiator* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Thompson, L. & Hastie, R. (1990). Social perception in negotiation. *Organizational Behavior & Human Decision Processes*, *47*, 98-123

Tripp, T. and Sondak, H. (1992). An evaluation of dependent variables in experimental negotiation studies: Impasse rates and Pareto efficiency. *Organizational Behavior and Human Decision Processes* *51*, 273-295.

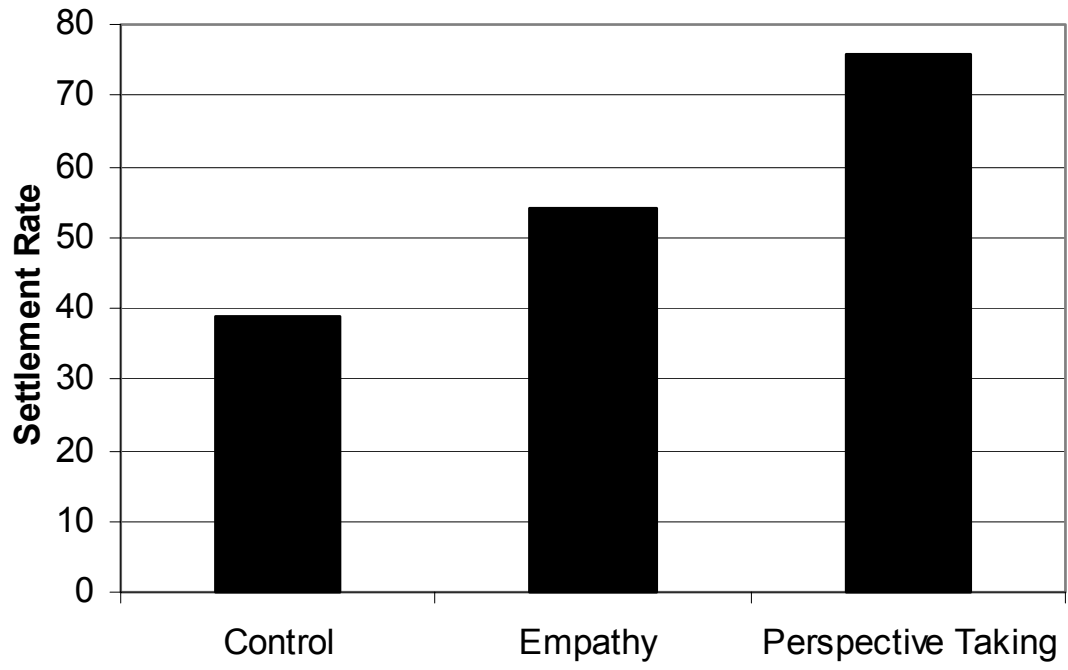
Table 1. Logistic regression analyses: Individual difference variables at the dyadic level as predictors of a deal (Study 1).

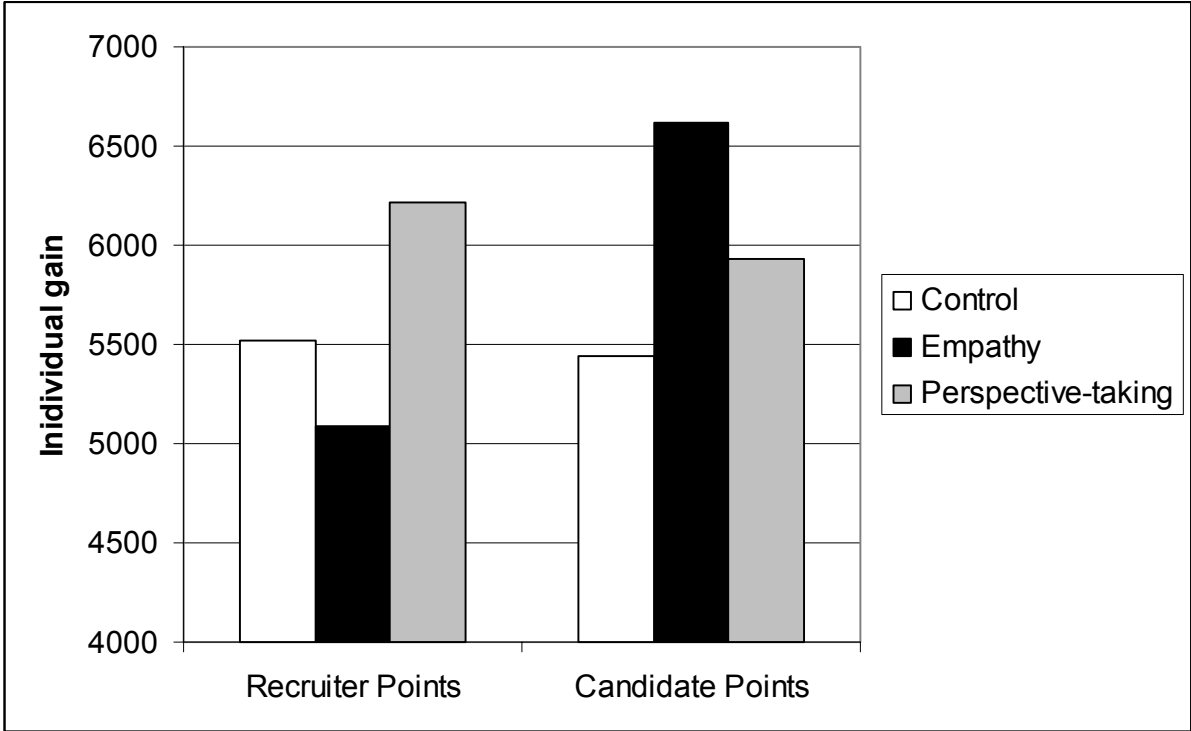
Individual Difference Variable	B	S.E.	Wald	df	Sig.	Exp(B)
Perspective-Taking	.486	.248	3.851	1	.050	1.626
Empathy	-.232	.140	2.740	1	.098	.793
Gender	-3.103	1.958	2.511	1	.113	.045
Extroversion	.090	.239	.142	1	.707	1.094
Neuroticism	-.526	.419	1.576	1	.209	.591
Openness to Experience	.429	.258	2.774	1	.096	1.536
Conscientiousness	-.875	.493	3.157	1	.076	.417
Agreeableness	-.653	.409	2.552	1	.110	.520

Figures

Figure 1: Settlement rate as a function of experimental condition (Study 2).

Figure 2: Individual gain as a function of role and experimental condition (Study 3). The recruiter role was the manipulated role.





Footnotes

¹ Participant sex was not recorded in Studies 2 and 3, where the student population was approximately 70% male.