

# Experience in integrative negotiations: What needs to be learned? ☆

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## Abstract

In this research we focus on the roles of experience and understanding in fostering integrative negotiation performance. We report on two experiments in which we distinguish between understanding opponents' general priorities among issues versus understanding their specific gains for particular offers. Although experience enhanced integrative performance even in the absence of understanding, we found that understanding the specific gains had an incremental effect on performance. We conclude that while generally acknowledging opponents' interests is not sufficient, the additional inferential step of assessing their specific gains throughout the negotiation process is advantageous. © 2006 Elsevier Inc. All rights reserved.

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Negotiation is a continual interpersonal interactive process of decision making, in which participants perceive and interpret the information available to them and proceed to act on these perceptions. Improving negotiation skills and increasing the ability to negotiate effectively is crucial not only in managerial, political, and business contexts, but in all avenues of life. A primary topic of negotiation research concerns the achievement of integrative agreements as opposed to distributive agreements. Distributive agreements represent agreed divisions of a fixed pie of resources, where one side's gains are the other side's losses. Integrative agreements, in contrast, reconcile the interests of both parties, and lead to higher joint benefit (Pruitt, 1983; Walton & McKersie, 1965). The present research seeks to gain a better

understanding of the roles of experience and of cognitive processing in fostering integrative negotiation performance.

Many negotiation situations contain integrative potential, i.e., an increase in the joint gain available to the negotiators over and above the joint gain afforded by a fixed-sum solution (Thompson, 2001). In negotiations involving complex agendas where several issues are under consideration, integrative agreements can be achieved through different specific strategies (e.g., Bazerman, 2001; Thompson, 2001). In this research we focus primarily on one of these integrative strategies, namely "logrolling," which is an appropriate strategy for creating value when parties have different priorities among issues. It specifically refers to a strategy whereby value is created by each party conceding on low priority issues in exchange for concessions on issues of higher priority.

Although integrative agreements are frequently available, mutually beneficial, and therefore desirable solutions, the behavioral research on negotiation and conflict resolution reveals that negotiators are often inefficient in that they fail to reach integrative agreements (e.g., Bazerman, Magliozzi, & Neale, 1985; Bazerman & Neale, 1983, 1992; Thompson, 1990b; Thompson, Gentner, & Loewenstein, 2000; Thompson & Hastie, 1990). Prior research has shown that repeated experience with an integrative negotiation

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task can improve negotiators' integrative outcomes (e.g., Bazerman et al., 1985; Neale & Bazerman, 1991; Thompson, 1990a, 1990c; Thompson & DeHarpport, 1994; Thompson & Hastie, 1990). However, important questions concerning the nature of the learning process involved in such repeated experience remain unanswered, particularly questions about the precise link between experience, cognitive understanding, and performance.

An important and relevant distinction has been made in the decision-making literature between experience and expertise (Bazerman, 2001; Dawes & Corrigan, 1974; Hammond & Grassia, 1985; Neale & Bazerman, 1991; Neale & Northcraft, 1990). Experience is defined as repeated feedback that typically leads to mindless behavioral modification and to habitual learning that does not necessarily require understanding. Expertise, on the other hand, is defined as developing a "strategic conceptualization," understanding what constitutes an effective strategy and why, and consciously monitoring the process. While experience is mainly effective for performing a specific task, a central feature of expertise is the ability to be adaptive to changes in situational demands and to effectively transfer skills across different tasks.

As Neale and Bazerman (1991) note, negotiators' high quality outcomes can be a result of one of three processes: (1) randomly selecting an effective strategy without any knowledge of what he or she has done correctly, (2) learning a particularly effective script from experience, but having little understanding why this particular script works in this particular situation, or (3) acquiring a strategic conceptualization of negotiation situations that summarizes when and why particular strategies are effective (i.e., expertise). Similarly, Thompson (1990b, 1990c) points out that in repeated negotiations with a particular task that has a limited number of optimal solutions, reaching an integrative agreement does not necessarily require the negotiator's improved understanding of the other party or of the underlying integrative potential. It can also be reached by the negotiator merely stumbling upon an optimal agreement, which is a specific script that works in the particular task, without comprehensively understanding the situation.

Hence, examining learning by solely looking at performance in an unchanging setting limits the ability to capture the nature of the underlying learning process involved. Indeed, research on learning integrative negotiation skills has not been limited to the study of performance in a specific task. The degree to which experience enhances the depth of understanding and expertise has also been examined, by measuring negotiators' assessments of the other parties' interests and utility functions (e.g., Thompson, 1990a, 1990c, 1992; Thompson & DeHarpport, 1994; Thompson & Hastie, 1990), as well as by examining the transferability of learned principles to a different negotiation context (e.g., Bereby-Meyer, Moran, & Unger-Aviram, 2004; Loewenstein & Thompson, 2000; Loewenstein, Thompson, & Gentner, 1999; Mannix, Northcraft, & Neale,

1991; Thompson, 1990a, 1990c). However, to date, the findings of such studies are inconclusive.

Although experience has commonly been found to result in improved assessments of the opponent's interests (e.g., Thompson, 1990a, 1990c; Thompson & DeHarpport, 1994; Thompson & Hastie, 1990), there are some indications that the improvement in understanding due to mere experience is rather limited. For example, in a study by Thompson (1992), even when negotiators bargained under ideal conditions—with immediate, clear, and complete process feedback—their judgments of the other party remained faulty. Moreover, positive transfer of integrative negotiation skills to differently structured tasks was not easily achieved, and typically required more than simple repeated experience (e.g., Bereby-Meyer et al., 2004; Loewenstein & Thompson, 2000; Loewenstein et al., 1999; Mannix et al., 1991; Thompson, 1990a, 1990c).

Previous studies are also inconclusive regarding the role of improved understanding in enhancing subsequent integrative behavior. On one hand, many authors have emphasized the key role of judgment accuracy for achieving improvement in integrative negotiation performance (e.g., Thompson, 1990a, 1990c; Thompson & DeHarpport, 1994; Thompson & Hastie, 1990). Gaining information about the other party has been shown to be an important factor in efficient bargaining (e.g., Bazerman & Carroll, 1987; Pruitt & Lewis, 1975; Raiffa, 1982; Weingart, Thompson, Bazerman, & Carroll, 1990; Zeng & Sycara, 1998). On the other hand, some work, including work referring to perspective taking, suggests that even if negotiators possess knowledge about their opponents' priorities, they may not have the ability or the motivation to actually use this information during the negotiation process (e.g., Bazerman, 2001; Bazerman & Neale, 1983; Carroll, Bazerman, & Maury, 1988; De Dreu, Koole, & Steinel, 2000; Pinkley, Griffith, & Northcraft, 1995; Samuelson & Bazerman, 1985; Shubik, 1971).

A number of recent studies provide additional indications that acknowledging the other parties' priorities may not be sufficient for accomplishing integrative outcomes, and that while using this information appropriately at the negotiation table may be a key factor, it is not straightforward (Gentner, Loewenstein, & Thompson, 2003; Nadler, Thompson, & Van Boven, 2003). These studies typically demonstrated instances where integrative negotiation performance was inferior, even though negotiators had full information and/or were highly accurate about the priorities of the other party.

In line with the distinction between possessing and using information, we distinguish in the present study between two types of judgment accuracy: (a) *judging the other parties' general profit schedules*, and (b) *assessing their specific gains for particular offers that are exchanged during the negotiation process*. As mentioned above, previous studies relied mostly on the elicited assessment of the other party's *general profit schedule*—i.e., assessment of the opponent's payoff schedule for each of the negotiating issues—as their

measure for judgment accuracy (e.g., Thompson & DeHarpport, 1994; Thompson & Hastie, 1990). This measure can indicate the degree to which the negotiator understands the other party's priorities, i.e., whether the negotiator accurately assesses which issues are more important and which are less important to the other party. However, we argue that negotiators may understand their opponents' profit schedules in general terms, yet still not apply and further process this knowledge in order to estimate what their opponents might gain from different proposals throughout the negotiation process.

We maintain that the processing of information from the opponent's perspective can be an important contributing factor to successful negotiations. This idea is consistent with the literature on the role of perspective taking in negotiations. Previous research (Bazerman & Neale, 1982, 1983; Neale & Bazerman, 1983) found that negotiators who had a greater tendency to think about the perspective of others were more successful in their negotiations. This increased attention to the perspective of the other party allowed them to better predict their opponents' goals, expectations, and reservation points, all keys to negotiating successfully. In the present study, we therefore examined the role of understanding, and in particular the role of increased information processing that entails focusing on and thinking about the other's perspective. The latter was examined by measuring assessments of the other party's specific gains for particular offers (also used in the study by Moran & Ritov, 2002). We used this measure in addition to the more common measure—judgment of the other party's general profit schedule.

Finally, we ask whether negotiators' integrative performance can improve as they gain experience, without any type of understanding. There are several indications in the literature that even if enhanced understanding and more accurate processing of information does improve integrative negotiation performance, such improvement may also occur without increased understanding. For example, Moran and Ritov (2002) found that proposing highly integrative counter-offers did not necessarily require improved understanding of the other parties' interests. Even in the study by Thompson and DeHarpport (1994), where the main finding supported the notion that judgment accuracy plays a key role, there is evidence that it may not be a necessary condition. Although in their study integrative performance improved to the greatest degree for those participants who received maximum feedback and showed the largest improvement in judgment accuracy, the performance of negotiators who received no feedback at all also improved over time, even though there was no parallel improvement in their judgment accuracy.

Taken together, previous findings suggest that although repeated integrative experience may lead to improved assessment of the other parties' general priorities, it may not lead to high levels of cognitive processing and understanding of the other parties' perspective. Moreover, although improved understanding can enhance integrative

negotiation performance, it may not be a necessary condition. In the present research employing two experiments, we aim to further explore the links between experience, cognitive understanding and processing, and performance in both unchanging (Experiment 1) and changing (Experiment 2) environments.

## Experiment 1

In the first experiment we concentrated on the initial stages of the negotiation process, and examined the effects of experience in an unchanging setting. Our focus on the initial stage was motivated by the intriguing evidence provided by Thompson and Hastie (1990) that most of the effective learning for integrative negotiations occurs during the first few minutes of the negotiation. An additional motivation for focusing on the initial stage stems from the robust findings regarding the crucial role of initial offers in negotiations. The fact that the value of the initial offer has been found to have a great impact on the final agreement in distributive negotiations (see Benton, Kelley, & Liebling, 1972; Chertkoff & Conley, 1967; Galinsky & Mussweiler, 2001; Liebert, Smith, Hill, & Keiffer, 1968; Rubin & Brown, 1975; Yukl, 1974), suggests that the antecedent of an integrative agreement may already be revealed in the initial offer. Indeed, this notion was supported in a recent study by Moran and Ritov (2002), where participants with no previous experience with the negotiation task evaluated and responded to different initial offers forwarded to them by an opponent. In that study, the specific composition of the initial offer was found to have an effect beyond the already documented effect of its total value. In particular, logrolling opening offers (characterized by high inter-issue variance) led to more logrolling counter-offers and integrative agreements than equal value non-logrolling opening offers (with low inter-issue variance).

In the present study, we employed the same methodology but focused on the role of experience. We first looked at the effect of experience on understanding, and then continued to explore the effects of experience and of understanding on promoting integrative performance.

Based on the above literature review, we hypothesize that:

**H1.** Integrative experience will increase the accuracy of assessing the other parties' general priorities.

Given the robust findings on the positive effect of experience on integrative negotiation performance, our second hypothesis is:

**H2.** Integrative experience will lead to more integrative performance in the initial stage of the negotiation

As presented in the introduction, there are some indications that having information about the opponent does not guarantee improved integrative performance. Notwithstanding, if, as proposed by many researchers, understanding enhances integrative performance, then:

**H3a.** Greater accuracy in assessing the other parties' general priorities should lead to more integrative performance, over and above the effect of integrative experience, and

**H3b.** Greater accuracy in assessing the other parties' specific offer values should lead to more integrative performance, over and above the effect of integrative experience.

Lastly, if as suggested in the introduction improved understanding is not a necessary condition for improved integrative performance over time, then we predict:

**H4.** Integrative experience will enhance integrative performance, over and above the effects of accuracy in assessing the other parties' general priorities and of accuracy in assessing the other parties' specific values for the given offers.

## Method

### Participants

One-hundred and thirty undergraduate Management and Industrial Engineering students participated in the experiment as part of a class exercise. Eighty-six participated in the experimental condition and an additional 44 participated in an external control condition. All of these students were inexperienced with regard to participation in multi-issue laboratory negotiation tasks.

### Procedure

The research paradigm we employed was adapted from Bazerman et al. (1985) (modified from the methodology originally developed by Kelley, 1966, Pruitt & Lewis, 1975). The experimental condition was run in three separate sessions (*N*'s were 22, 28, and 36). At the beginning of each session, participants were given an information package that included a description of the task as a free market negotiation. They were told that the market consists of representatives of two different company types, "Type A" and "Type B," who shall engage in two-party negotiations in which three issues were negotiable. Participants were randomly and evenly assigned to be representatives of Type A or Type B companies. All Type A's and all Type B's received identical information. All participants were told to attempt to gain maximum profit during the fixed market period (20 min), by reaching agreements with as many representatives as possible of the other type of company (Type B or Type A, respectively). Each participant also received an "individual" profit schedule specifying his/her profit for each level of each of the three issues (see Appendix A). As in Bazerman et al. (1985), the profit span (maximum potential profit) differed between issues, and participants had incomplete information: they did not receive information concerning their opponents' profit schedule. As can be seen in Appendix A, issue "R" was a distributive issue, and issues "D" and "F" were logrolling issues. The minimum agreement pie for this negotiation was \$8000. Splitting this minimum pie equally between the two parties would afford each of them \$4000. Integrative agreements—i.e., agree-

ments resulting in a pie greater than \$8000, might be obtained by parties logrolling on issues D and F. An optimal integrative agreement could be reached when parties logrolled and agreed on transaction terms of level 1 for issue D and level 9 for issue F. Such an agreement would lead to a combined profit of \$10,400 for both negotiators, with each of them gaining at least \$4000—the amount he or she would gain from an equitable non-integrative agreement (i.e., equally splitting the minimum \$8000 pie).<sup>1</sup>

After 10 min of reading instructions and profit schedules, participants were randomly matched for the first negotiation and proceeded to engage in a 20-min simulation of the market. They filled out a negotiation report after each negotiation, in which they specified the sequential number of the negotiation (first, second, etc.), whether an agreement was reached, and the terms agreed upon (if agreement was achieved). Upon completion of the report, participants were randomly rematched by experimenters with a partner with whom they had not previously negotiated.

When the market terminated, participants proceeded to engage in a test phase. We gave each participant an additional page of instructions, in which we requested him or her to presume that he or she was negotiating the identical task with another opponent in the same market. At this stage, participants were presented with a single initial offer, supposedly forwarded by this new opponent, and spent up to twenty minutes completing a questionnaire referring to the initial offer.

Two initial offer types were manipulated between subjects, one high variance—logrolling, and one low variance—distributive (no logrolling). The overall value of the two types of offers from the participants' perspective was held constant. The larger pie (combined value) of the logrolling offer was due to the fact that it was worth more to the other party than the distributive offer. Appendix A shows the profit schedules and the initial offers that were submitted. As can be seen, both the integrative and the distributive offers forwarded to "Type A" participants ("2-3-9" and "5-6-6," respectively) were worth a total value of \$4800 for their recipient. However for the other party (the supposed initiator), the integrative offer was worth more than the distributive one: \$5300 and \$3500, respectively.<sup>2</sup> The same was true with respect to the two offer types forwarded to "Type B" participants ("4-4-5" and "1-7-8").

In the questionnaire, participants first assessed the initial offer's attractiveness for themselves and for the other party,<sup>3</sup> and then were requested to:

<sup>1</sup> Such an optimal outcome could also be reached when parties agreed on level 9 for issues R and F and level 1 for issue D, or on level 1 for issues D and R and level 9 for issue F.

<sup>2</sup> This information was not explicitly given to the participants.

<sup>3</sup> Results of analyzing these attractiveness rating measures did not provide additional information to the main findings and conclusions of the current study. Hence, for reasons of simplicity and readability, we did not report them.

- (a) Assess the initial offer's value for the initiator on each of the issues: They were requested to assess what the initiator's profits would be on each of the three issues: "D," "R," and "F," for the level he or she had presumably offered.
- (b) Propose a counter-offer.
- (c) Estimate the other party's general profit schedule, by assessing the lowest and highest value for him or her on each of the issues. Participants were again presented with their own profit schedule, together with an identically formatted blank profit schedule. They were asked to assume that the blank schedule was that of the other party. Their task was to fill in the values of the minimum and the maximum levels of each of the issues, reflecting their assessment of the other party's profit schedule.

A potential limitation of the above described method is that although profit schedules were given as private information, we did not include safeguards against participants sharing this information. Consequently, in order to directly test the role of information availability, we included an external control condition with an additional 44 participants from the same subject pool as the participants of the experimental condition. The procedure for these participants was similar to the procedure used for the experimental condition, except that after they read the instructions and their own profit schedules, the participants were given the full profit schedule of the other party. They were allowed to examine the other party's profit schedule for five minutes, after which it was collected by the experimenter. Then, without engaging in any actual negotiations, participants proceeded to engage in a test phase identical to the test phase in the experimental condition.

### Measures

*Integrative experience.* Two measures of integrative experience were included:

- (1) Experiencing integration: In tasks of the type we used in the present experiment, i.e., repeated negotiations in unchanging integrative markets, finding the optimal integrative solution could be an "aha!" experience, where the proverbial light goes on. Therefore, we chose to measure integrative experience primarily by classifying participants into those that did (coded as 1) versus those that did not (coded as 0) reach at least one optimal integrative agreement during the market session. An optimal agreement was defined as one for which the pie score, i.e., combined profits of both parties, was \$10,400.
- (2) Extent of prior integrative experience: Since learning the optimal agreement might involve a more gradual, accumulative process (rather than an insight type of experience), we additionally measured the extent of each participant's integrative experience by computing his or her aggregate pie score for the entire market

(i.e., summing up all his or her agreement pie scores). Hence, participants with higher aggregate pie scores had more integrative negotiation experience than those with lower aggregate pie scores.

*Integrative performance.* Our measure of integrative performance was *the counter-offer response*: Integrative performance in the test phase was measured in terms of the counter-offer's pie score, i.e., the combined profits of both parties associated with the counter-offer they proposed in the questionnaire. The more integrative (logrolling) the counter-offer, the higher the pie score.

*Understanding.* Two judgmental measures were included to measure the different levels of understanding and processing the other party's interests:

- (1) The general estimation error: Our measure is a revised version of the common judgmental measure used in several previous studies by Thompson and her colleagues to measure understanding the other party's interests (Thompson, 1991; Thompson & DeHarpport, 1994). As reported in the Procedure section, when estimating the other party's profit schedule, participants assessed only the lowest and highest value on each of the issues. We used these values to compute the assessed profit span of the other party for each issue by subtracting the lowest value from the highest one. For example, if the participant assessed the highest possible value (the maximum potential profit) for the other party on issue "D" to be \$2000 and the lowest possible value (the minimum potential profit) on that issue to be \$0, the assessed profit potential span for issue "D" would be \$2000 (\$2000 minus \$0). We then computed the difference between the other party's assumed profit span and the other party's actual profit span (as determined by their profit schedule) for each issue. The sum of these differences across the three issues is the estimation error, which served as our measure of the accuracy of the estimation of the other party's profit schedule. It is important to note that the critical integrative aspect negotiators should understand concerning the other parties' general profit schedule is their priorities among the issues. In the present study this would manifest itself by negotiators of Type A estimating that for their opponents—i.e., Type B—issue F has a smaller profit span (and is therefore less important) than issue D. Similarly, negotiators of Type B should estimate that for their opponents—i.e., Type A—issue D has a smaller profit span than issue F (see Appendix A). For specifically assessing whether participants understood this point, we classified them into two groups: those who did versus those who did not accurately assess the other party's profit span to be smaller for their least important issue than for their most important issue. The correlation between this

measure and the general estimation error was extremely high ( $r = .923$ ), suggesting that the latter is also an appropriate measure of understanding this critical integrative aspect. Given the high correlation, using both measures would be redundant, and we chose the general estimation error, which is more commonly used.

- (2) The specific estimation error: As explained in the introduction section, negotiators may acknowledge their opponents' profit schedules in general terms, but this does not necessarily mean they can or will apply this knowledge accurately in estimating what their opponents might gain from different specific proposals. In order to examine the accuracy of applying information about the other party, we included the estimation of the initial offer's value for the other party as an additional judgmental measure. For each issue, we computed the absolute difference between the actual and the assumed value of the initial offer for the other party. The sum of these differences across the three issues is the specific estimation error, which served as our measure of the accuracy of assessment of the offer's value for the other party.

## Results

The zero order correlations among the different potential predictors of integrative performance are presented in Table 1. These include the two measures of experience (experiencing integration and the extent of integrative experience), the initial offer type, and the two estimation errors (the general estimation error and the specific offer estimation error).

Not surprisingly, the two measures of understanding—the *general estimation error* and the *specific offer estimation error*—were significantly correlated. Given the theoretical importance of distinguishing between these constructs, and since the correlations between them—although significant—were not extreme, we continued in our subsequent analyses to consider both and to assess the unique role of each of them.

There was also a significant correlation between the two measures of integrative experience—*experiencing integration* and *the extent of integrative experience*. As explained in the Method, the *extent of prior integrative experience* is a measure of the negotiator's aggregate pie score (or joint

profit score) for the entire previous market, which indicates the overall integrative experience that each participant accumulated throughout the market. *Experiencing integration*, on the other hand, merely depicts whether the participant did or did not reach at least one optimal integrative agreement during the previous market session. If discovering the optimal integrative solution is typically an insightful, “aha!” experience, then this would be a more appropriate measure of experience. Hence we next explored whether or not there was evidence in our market session data to support the “aha!” hypothesis. We primarily tested this notion by examining whether the probability of reaching an optimal agreement significantly increased after previously succeeding in reaching one such agreement.

Initially, we found that with the exception of one participant, all reached at least one agreement during the market period, with an average of 4.8 ( $SD = 2$ ) agreements per participant. Moreover, on average, 36% ( $SD = 0.3$ ) of the participants' agreements were optimal, with most participants (73%,  $N = 62$ ) reaching at least one optimal agreement during the market. For each of the participants that reached at least one optimal agreement, we computed the proportion of optimal agreements that he or she reached after accomplishing the first optimal agreement (excluding ten participants whose first optimal agreement was also their last agreement). In line with the “aha!” notion, a majority of participants (56%; 29 of the 52) *always* reached optimal agreements after reaching their first optimal one, suggesting that an insight type of experience is highly plausible.

In our subsequent analyses we therefore regard the *experiencing integration* measure, which corresponds to an insight type of experience as our primary measure of integrative experience. However, given the theoretical importance of distinguishing between the two types of learning—insight versus gradual, and since we cannot rule out the possibility that accumulative gradual learning is also apparent, we briefly report results regarding the *extent of integrative experience* measure as well.

We began by examining whether *experiencing integration* promoted understanding of the other parties' interests. Comparing the understanding measures of participants that did (coded as 1) versus those that did not (coded as 0) reach an optimal integrative solution during the market session revealed that experiencing integration did to some degree promote understanding. In line with H1, the general estimation error was smaller for participants who did expe-

Table 1  
Correlations among potential predictors of integrative performance

	Experiencing integration	Extent of integrative experience	Initial offer type	General est. error	Specific offer est. error
Experiencing integration	1.00				
Extent of integrative experience	0.531*	1.00			
Initial offer type	0.102	0.040	1.00		
General est. error	-0.175	-0.131	0.047	1.00	
Specific offer est. error	0.038	-0.052	0.068	0.496*	1.00

Number of observations: 78 (case wise deletion of missing data).

\*  $p < .05$ .

rience integration ( $M=3177$ ,  $SD=2392$ ) than for those who did not ( $M=4145$ ,  $SD=1722$ ),  $t(79)=1.74$ ,  $p<.05$ , one tail. The specific offer estimation error, however, was not significantly different for these two groups ( $M=2445$ ,  $SD=2081$  versus  $M=2452$ ,  $SD=1352$ , respectively),  $t(82)=0.01$ ,  $p=.99$ . Hence, experiencing integration improved the ability to assess the other parties' general priorities but not to evaluate the other parties' outcomes for specific offers.

We subsequently examined the influence of the *extent of previous integrative experience* on understanding the other parties' interests. Two separate general linear models for testing the effect of the aggregate pie score (as the independent variable) on each of the understanding measures revealed no significant effects. Hence, having a greater extent of integrative experience did not promote understanding of the other party.

We next explored the roles of integrative experience and of the two types of understanding in improving integrative performance. With regard to this question we particularly wanted to determine whether experience promoted integrative responses at the initial negotiation stage, whether understanding enhanced integrative behavior beyond the effect of previous integrative experience, and whether improved understanding was a necessary condition for more integrative behavior.

We addressed these questions by means of a general linear model for predicting counter-offers (i.e., the counter-offer pie) from experiencing integration (i.e., whether participants did or did not experience integration, coded as 1 or 0, respectively), the two measures of understanding (i.e., the general estimation error of the other party's profit schedule and the specific offer estimation error of the other parties' offer outcomes), and the initial offer type (coded as 0 for distributive and 1 for integrative).

Results of this analysis are reported in Table 2. As can be seen in the table, the significant predictors of counter-offer integrativeness were experiencing integration, type of initial offer, and the specific offer estimation error. The general estimation error (i.e., the assessment of the other parties' general profit schedule) did not qualify as a significant predictor.

A parallel analysis using the extent of previous integrative experience measure (i.e., the aggregate agreement pie score) instead of the experiencing integration measure

revealed a similar pattern of results (although the specific offer estimation was only marginally significant,  $p<.1$ ).<sup>4</sup>

We next turned to assess the role of information as a determinant of the increase in integrative responses. This was tested by comparing the counter-offers of the experienced participants in the experimental condition with those of the fully informed but inexperienced participants in the external control condition. We found that the mean counter-offer pie of the original experienced group was significantly higher than the mean offer pie of the control group ( $M=9186$ ,  $SD=1062$  versus  $M=8545$ ,  $SD=715$ ),  $t(128)=3.6$ ,  $p<.001$ . Hence, complete information without experience in an integrative market does not seem to foster an overall increase in the tendency to respond with integrative counter-offers. This result suggests that acquiring more information about the other party's priorities is not sufficient and cannot fully account for the higher degree of logrolling we observed among experienced negotiators.

To summarize, in the first experiment we found that experiencing integration improved the ability to assess the other parties' general priorities (in line with hypothesis H1) but not the ability to evaluate the other parties' outcomes for specific offers. Moreover, the extent of previous integrative experience did not significantly influence understanding. We also found that, as predicted in hypothesis H2, integrative negotiation experience, and the extent of this experience, led to an overall increase in logrolling responses already noticeable at the initial negotiation stage. This enhancing effect was apparent even when controlling for effects of understanding (in line with H4) and of information. In addition, while understanding the other party's general interests did not significantly contribute to the tendency to respond in an integrative manner (contrary to hypothesis H3a), being able to correctly assess the specific values of the different offers to the other party did contribute (providing support for H3b, although the effect was not large).

## Discussion

Results of the first experiment imply that much of the improvement in integrative negotiation performance in an unchanging environment can be accounted for by experi-

Table 2  
Results of general linear model for predicting counter-offer pie

Parameter	<i>B</i>	<i>t</i>	<i>P</i>	Partial eta squared
Intercept	8745.831	28.62	.00	.917
Experiencing integration	741.301	2.86	.00	.100
Initial offer type	559.547	2.51	.01	.079
General est. error	-1.086E-02	-.19	.85	.000
Specific offer est. error	-.130	-1.94	.05	.049

Dependent Variable: Counter-offer pie, *R* Squared = .226,  $F(4,4) = 5.4$ ,  $p<.001$ .

<sup>4</sup> An alternative explanation for the null effect of general understanding could be that participants who had, even if by accident, come to recognize the "best solution" during the experience phase assumed that this was the expected "correct response" in the test phase as well. In that case, the effects of understanding would necessarily be bounded. To test for this possibility, we ran an additional general linear model, in which we examined the effects of the two understanding measures on performance (i.e., on the counter-offer pie), excluding all participants that gave the optimal "1-5-9" solution as their counter-offer. The pattern of results for the remaining participants (59 out of 86) did not differ from that obtained with the full sample. As before, the specific offer estimation was significant,  $F_{1,56} = 5.3$ ,  $p<.03$ , while the general profit schedule error was not. Hence demand characteristics do not seem to be the explanation for the insignificant effect of understanding general priorities.

ence, most likely an insightful, “aha!” type of experience, rather than by merely understanding the other party’s priorities and values. Moreover, they indicate that this improvement in integrative performance is already apparent at the initial stage of the negotiation. Indeed, experience promoted not only integrative performance but also assessment of the other parties’ general priorities. However, the fact that integrative experience enhanced integrative performance, even when controlling for the effects of accuracy in assessing the other party’s interests, implies that understanding the other party is not a necessary condition for the improvement in integrative behavior.

Results further suggest that while being able to correctly estimate the other parties’ general priorities is not sufficient for improving integrative behavior, increased accuracy in assessing the specific values of the different offers for the other party (i.e., accurate processing of the information) is beneficial. Hence, although the relationship between experience and integrative performance in an unchanging setting does not seem to be mediated by understanding the opponents’ general priorities or their specific outcomes, the latter may have a significant incremental effect on integrative negotiations.

It is noteworthy, however, that the way in which we solicited understanding and performance measures in this study constrains its conclusions. Participants were first asked to provide initial offer estimates, then to make counter-offers, and finally to assess general profit schedules. Given this order, a possible explanation for the finding that initial offer estimates predicted counter-offers while general profit schedule estimations did not, could be that the former were provided before making counter-offers, while the latter were not. In other words, participants could have adjusted their counter-offers to match the initial offer estimates they already made. However, it seems equally likely that participants could also have adjusted their general profit schedule estimates to their preceding counter-offer responses. In that case one would expect the correlation between initial offer and its preceding estimate (i.e., specific offer estimation), and the correlation between initial offer and its succeeding estimate (i.e., general profit schedule estimation) to be similarly high. Notwithstanding, given the correlational nature of this study, which limits the causal conclusions that can be inferred, we continued to examine the notion that understanding the opponents’ specific outcomes has a greater influence on integrative performance than understanding their general priorities. This was done in a second study, in which we employed a controlled experiment.

## Experiment 2

In the second experiment we further assessed the importance of distinguishing between two levels of understanding the opponent’s interests: (a) estimating the opponent’s general interest structure, and (b) estimating the opponent’s outcomes for specific offers. Results of the first experiment

suggest that acknowledging the other party’s profit schedule in general terms is not sufficient for achieving an increase in integrative responses. However, applying this knowledge accurately in order to estimate what the opponent might gain from different proposals, seems to be important and to significantly contribute to the tendency to respond in an integrative manner. The second experiment sought to further examine the impact of considering the opponent’s outcomes for specific offers, using a controlled experimental manipulation.

In addition, in Experiment 1 we found that accurately assessing the other parties’ specific offer outcomes can improve performance within an unchanging environment. In Experiment 2, we tested whether such increased cognitive processing could also enhance performance in a transfer task. Appropriate transfer of acquired skills to a novel context is commonly assumed to indicate better understanding and successful learning of general principles, i.e., expertise. Indeed, there is a growing tendency in the literature to explore learning and evaluate training by examining transferability of skills to new contexts (e.g., Day, Arthur, & Gettman, 2001; Ford, Smith, Weissbein, Gully, & Salas, 1998; Singley & Anderson, 1989). This tendency is also noticeable in the literature on negotiations (e.g., Bereby-Meyer et al., 2004; Loewenstein et al., 1999; Thompson, 1990c). These studies have typically shown that although gaining expertise and transferring learned negotiation skills is possible, it is not easily achieved. Examples of effective mechanisms and training schemes that have been proposed are analogical encoding and motivating learning by providing learning goals and values. The present study aimed to investigate the effectiveness of another training mechanism—focusing the learner on considering the other party’s specific outcomes throughout the negotiation process.

In an initial training negotiation task we manipulated the negotiators’ focus on the other parties’ interests—focusing them either on their opponents’ general interest structure or on their opponents’ specific offer outcomes. We then examined their performance and understanding of a new task, which was different and more complex than the training task. Consistent with findings on role reversal which suggest that having negotiators verbalize each other’s viewpoint is beneficial and increases the likelihood of resolution (e.g., Ball, Bazerman, & Carroll, 1991), we expect training for perspective taking to be effective.

Based on the findings in our first experiment, we hypothesize that:

**H5.** Negotiators trained to focus on assessing their opponents’ outcomes for specific offers will achieve more integrative outcomes in a transfer task than negotiators trained to focus on understanding their opponents’ general profit schedules.

**H6.** Negotiators trained to focus on specific outcomes will assess the other party’s specific outcomes for different offers more accurately than negotiators trained to focus on general profit schedules.

## Method

### Participants

Thirty-six students participated in the experiment. We recruited the students via posted advertisements offering a payment of \$12 for participation in an experiment on negotiations. Upon signing up, participants were randomly assigned to one of two experimental conditions.

### Procedure

The experiment had two between-subject conditions that were conducted separately: A general interest training condition and a specific offer training condition. Both conditions included two stages. The first was a training stage, in which participants repeatedly negotiated the same integrative task. The second stage was a test stage, in which participants negotiated a new integrative task.

In the first stage of both conditions, we randomly assigned participants to the role of buyer or seller in a negotiation market. We then gave each of them an information package which included instructions, a description of the task and of the market procedure, individual profit schedules, and negotiation report forms. They were told that during the market period, representatives of buying and selling companies would engage in three successive two-party negotiations, with different opponents each time. The negotiation task was similar to the one used in our first experiment. It included three issues (delivery terms, discount level, and terms of payment), and the values of the “individual” profit schedules were identical to those in Experiment 1 (see Appendix B). As can be seen in the Table, delivery and payment terms were logrolling issues, and discount level was a distributive issue. Hence, an optimal integrative agreement could be reached when parties logrolled and agreed on transaction terms of level 1 for delivery terms (60 days), and level 9 for payment terms (9 payments).

For each negotiation, participants were given a detailed report form to fill out during the negotiation process. In these forms participants were required to report each offer that was exchanged during the negotiation, specifying the party who made the offer (buyer/seller) and the levels offered on each issue. The negotiator’s focus on the other party’s interests was manipulated by varying the report requirements in the two experimental conditions, in the following way: In the *general interests training condition*, after every offer, participants were requested to provide their estimation of the other party’s general profit schedule, by assessing the lowest and highest possible profit for him or her on each of the issues. In the *specific offer training condition*, for every offer, participants were requested to report—in addition to their own profits for each of the three issues—their assessment of the offer’s value for their opponent, for each of the three issues. In both conditions, when the negotiation ended participants were requested to report whether an agreement was accomplished and if so to specify its terms.

Prior to the market, participants were given 10 min for reading instructions and profit schedules. Before each of the

three negotiations, the experimenter randomly matched each seller (buyer) with a different buyer (seller) and these dyads were then given 10 min for negotiating. When the third negotiation period terminated, the experimenter collected all materials from the first stage and gave participants a new package with materials for the second stage.

In the second stage participants were assigned roles in a new negotiation task. In this task, representatives of a real estate development company and of a city council negotiated four issues concerning a community development project (adapted from Thompson, Peterson, & Brodt, 1996). Participants were given individual profit schedules that indicated their utility points on each of the issues (see Appendix C). As can be seen in the Appendix, among the four issues to be negotiated, payment terms and number of sub-contractors were logrolling issues, retail space was a compatible issue (no conflict of interest was apparent since both parties preferred larger retail space), and open space was a distributive issue. This task differed from the first one on several dimensions, including context, number of issues, number of alternatives for each issue, and potential integrative strategies (compatible issues in addition to logrolling).

An optimal integrative agreement could be reached by agreeing on seven payments (level 5), four sub-contractors (level 1), and 6000 m<sup>2</sup> of retail space (level 5). In such an agreement negotiators could collectively gain a total of 15,300 points.

In this second task only one negotiation took place. Before negotiating, the experimenter matched dyads that had not previously negotiated with each other during stage 1, and they were allowed 15 min to negotiate. At the end of the negotiation (when time was up or agreement was reached), participants filled out a “transaction form” in which they reported whether an agreement was achieved, and if so, detailed the four terms they agreed upon.

At the end of this negotiation, as in Experiment 1, each participant was given an additional page of instructions, in which he or she was requested to presume that he or she was now negotiating the identical task with another opponent. Participants were then presented with a single initial offer, supposedly forwarded by this new opponent. As in the first Experiment, two offer types were manipulated between subjects, one integrative and one distributive. The overall value of the two types of offers, from the participants’ perspective, was held constant. However, for the other party, the integrative offer was worth more points than the distributive offer. As can be seen in Appendix C, which shows the initial offers that were submitted, the distributive and the integrative offers forwarded to the real estate development company representatives (“3-3-3-3” and “4-3-1-2,” respectively) were both worth a total value of 5250 points for their recipient. However, for the opponent (the city council representative who supposedly forwarded the offer), the integrative offer was worth 7050 points, while the distributive one was worth only 5250 points. The same was true with respect to the two offer types submitted to recipients representing the city council.

Upon receiving the initial offer, participants were asked to: (a) assess the initial offer's value for the initiator on each of the four issues, and (b) estimate the other party's general profit schedule, by assessing the lowest and highest value for him or her on each of the four issues.

### Results

We first assessed our training manipulation by examining whether over the three training negotiations, participants' improved in their assigned tasks in each condition—i.e., in estimating the other parties' specific offer values in the specific offer training condition and general interests in the general interests training conditions, respectively. As negotiations varied in the number of offers exchanged, we used the decrease in the estimation errors that were made following the first offer exchange in each of the three consecutive negotiation rounds as a criterion for learning. In both conditions the mean estimation error decreased from the first to the third negotiation. *t* Tests confirmed that the mean errors in the third negotiations were significantly smaller than in the first negotiations for the specific training condition ( $M=2219$ ,  $SD=1848$  versus  $M=3244$ ,  $SD=1282$ ),  $t(15)=1.8$ ,  $p<.05$  (one tail), and also for the general interests training condition ( $M=3126$ ,  $SD=2390$  versus  $M=4800$ ,  $SD=1045$ ),  $t(14)=2.85$ ,  $p<.005$  (one tail). These results imply that our manipulation was effective in training the participants as intended.

Although in this research we are primarily interested in participants' performance in the transfer task, we also analyzed the data on performance in the training phase. Given the low incidence of optimal agreements that were achieved throughout the training session: 4 out of 24 agreements (17%) in the general interests training condition and 2 out of 20 (10%) in the specific offer training condition, we continued by focusing on the mean pie size rather than on optimal agreements. We analyzed the mean pie size as a function of negotiation number and found that although the mean pie in both conditions increased over the three training negotiations, this increase was not statistically significant. This insignificant increase in performance is not surprising, given that this was a training phase in which participants were required to focus on learning rather than on performance. Indeed, prior research on achievement motivation goals found the main benefits of learning goals to be apparent in transfer tasks that follow training, rather than in the specific training tasks themselves (e.g., Bereby-Meyer et al., 2004).

Turning to our focal interest in the current study, we next examined the participants' performance in the transfer task. Our main hypothesis (H5) was that negotiators trained to focus on assessing their opponents' outcomes for specific offers will achieve more integrative outcomes in a transfer task than negotiators trained to focus on understanding their opponents' general profit schedules. In support of this hypothesis, we found the mean combined agreement points to be significantly higher in the specific offer training condition ( $M=14,325$ ,  $SD=959$ ) than in the

general interests training condition ( $M=13,440$ ,  $SD=718$ ),  $t(16)=2.2$ ,  $p<.04$ .<sup>5</sup>

We next turn to analyze the responses to the questionnaire, beginning with the general profit schedule estimation and continuing with the specific offer estimation. Although participants in the general estimation condition were trained to estimate the general priorities of the other party, the mean general estimation error in that group was greater ( $M=4308$ ,  $SD=1666$ ) than in the specific training condition ( $M=3181$ ,  $SD=2049$ ), and this difference approached significance,  $t(32)=1.8$ ,  $p=.09$ . The difference between the mean specific offer estimation errors in the two training conditions, although also not significant, was in the predicted direction; lower in the specific training condition than in the general training one ( $M=2416$ ,  $SD=1432$  and  $M=2988$ ,  $SD=1510$ , respectively),  $t(34)=1.16$ ,  $p=.3$ .

Although the estimation errors of the two groups were not significantly different, only participants in the specific training condition correctly assessed the integrative offer to be significantly more valuable to the other party than the distributive one. While in this condition, value assessments of the distributive and integrative initial offers were significantly different from each other ( $M=5261$ ,  $SD=870$  and  $M=6400$ ,  $SD=937$ ),  $t(14)=2.51$ ,  $p<.03$ , in the general training condition participants' estimations of the two types of offers did not significantly differ from each other ( $M=5459$ ,  $SD=715$  for the distributive offer and  $M=5989$ ,  $SD=1177$  for the integrative offer),  $t(18)=1.24$ ,  $p=.2$ . Hence, providing some support for hypothesis H6, negotiators who focused on specific outcomes more than those who focused on general profit schedules understood the crucial aspect of integrative offers—i.e., that integrative offers are worth more to the other party than are distributive offers.

### Discussion

Results of the second experiment strengthen and extend findings of our first experiment. First, they provide additional evidence for the importance of distinguishing between judging the other party's general priorities and assessing his or her specific offer outcomes. Second, they support the notion that considering the opponent's interests by assessing his or her specific offer outcomes during the negotiation process may be more effective for integrative negotiation than merely assessing the other party's general interest structure, without necessarily taking it into consideration when exchanging offers. These findings expand those of our first experiment, by showing that such cognitive processing has a positive effect on negotiation outcomes and not only on initial negotiation responses. Finally, they also suggest that it is beneficial to train negotiators to consider their opponents' interests (i.e., to take their opponents' perspective) throughout the negotiation process, rather than simply recognize them. This is possible

<sup>5</sup> All dyads reached an agreement. Among the 10 dyads in the general estimation condition, one reached the optimal solution. Among the eight in the specific offer estimation condition, two reached the optimal solution.

and effective not only for improving performance in the training task, but for other integrative negotiations as well.

### General discussion and conclusions

Although much has been written about integrative negotiation, knowledge is still insufficient regarding the psychological and cognitive determinants of integrative solutions. The distinction we propose between negotiators' understanding of the opponents' general profit schedules versus their gains for particular offers relates to this question. From a methodological point of view, the differential effectiveness of these two judgment measures suggests that future research should similarly adopt a range of understanding measures reflecting different levels and forms of processing. In addition to these theory-testing and methodological contributions, our findings articulate aspects of negotiator training that can increase the likelihood of achieving integrative outcomes.

The findings of the present research go beyond the already-established effect of experience on final negotiation agreements (Bazerman et al., 1985; Neale & Bazerman, 1991; Thompson, 1990a, 1990c; Thompson & DeHarpport, 1994; Thompson & Hastie, 1990), by showing that the increased tendency of the negotiators to logroll as they gained more experience was apparent, not only in the final agreements that they reached, but also during the initial stages of their transactions.

While many earlier studies emphasized the key role of understanding the interests of the opponent in achieving more integrative performance over time (Thompson, 1990a, 1990c; Thompson & DeHarpport, 1994; Thompson & Hastie, 1990), the present findings suggest that at least in an unchanging environment, understanding is not a necessary condition. This conclusion is supported in several ways. First, the effects of repeated experience on understanding were quite limited. Although experience did to some degree improve the estimations of the other party's general interest structure, it did not improve assessments of the other party's specific offer outcomes. Second, the improvement in understanding the other party's general interest structure did not lead to more integrative counter-offers. Lastly, although improved understanding of the opponent's specific offer outcomes did contribute to logrolling responses, integrative experience significantly enhanced integrative counter-offer responses, even when controlling for the effect of such improved understanding. Hence, even though accurately understanding the other party's specific outcomes can advance logrolling responses, such understanding does not seem to be a necessary condition for advancing integrative responses of negotiators with experience in a particular task. This finding is in line with the notion put forward by Neale and Bazerman (1991), as well as by Thompson (1990b, 1990c), that experience does not necessarily lead to expertise. Indeed, in repeated negotiations with a particular task, negotiators might learn a particularly effective strategy, without comprehensively understanding when and why this strategy is effective (i.e., expertise).

The finding that improved assessment of the other party's interests in general did not enhance integrative performance, while accurate assessment of the other party's specific offer values did, suggests that considering and accurately processing available information about the opponent is a significant determinant of successful integrative negotiations. This appears to be consistent with the motivated information processing model of negotiation developed by De Dreu and Carnevale (2003). Their model underlines the importance of inducing motivation for engaging in deep and systematic processing of information that is or becomes available during the negotiation, for achieving more integrative agreements and revisions of fixed-pie perceptions.

A distinction between availability of information and processing of information was also suggested by Pinkley et al. (1995). They found that while full information raised the probability of negotiating integrative agreements, it was not sufficient to ensure achieving them. Although information processing was not directly manipulated or measured in their study, they argue that inferior performance of fully informed negotiators can be explained by, and should be attributed to information processing errors.

In the present study, we directly measured and manipulated information processing, thereby providing more direct evidence for the importance of accurate information processing. In addition, our study addresses a unique form of information processing. We propose that processing information about the other parties' general priorities by assessing their specific values for the different offers throughout the negotiation process—i.e., taking into consideration the opponents' perspective—is beneficial and improves integrative performance and outcomes. This is consistent with previous findings that negotiators' attention to their opponents' goals and expectations, and their ability to adopt the opponents' perspective, is a key to successful negotiation.

Finally, regarding implications for negotiation training, our findings imply that simply allowing negotiators to experience integrative negotiations can enhance their tendency to engage in more integrative behavior in repeated negotiations within an unchanging environment. They also indicate that for achieving more, it is not sufficient to teach negotiators to consider the other parties' general interest structure. Merely acknowledging the other parties' interests, without additional cognitive processing activity of the learners, is not enough. It is important that trainees also learn to infer and estimate the other parties' specific outcomes. Training negotiators to do so, i.e., to consider their opponents' interests by considering their specific outcomes throughout the negotiation process, was shown to be possible and effective for improving performance, not only in the training task but in other integrative negotiations as well. These results complement several other studies in the negotiation learning literature, which show that although gaining expertise and being able to transfer learning in negotiations may not be easily achieved, it is possible (e.g., Beryby-Meyer et al., 2004; Loewenstein et al., 1999; Mannix et al., 1991; Thompson, 1990c). The present research pro-

vides encouraging evidence concerning an additional training method to those previously proposed (such as analogical reasoning, learning goals, etc.) for achieving such expertise.

We end by noting some limitations to our research. First, our sample consisted of students without previous negotiation experience. Future research should further explore the role of experience and of understanding by examining experienced negotiators as well. A second limitation is that the negotiation tasks we used were artificial, and negotiators' utility functions were predetermined by the experimenters, rather than self-generated. Although this is a commonly used method in the negotiation literature, it constrains generalizability. Notwithstanding these limitations, we believe this research has potentially important implications in highlighting the importance, both theoretical and methodo-

logical, of differentiating between levels and forms of cognitive processing and understanding. This research specifically contributes to the literature on social cognition and perspective taking in interpersonal contexts such as negotiations. It shows that mere acknowledgement of others' general interests may not be sufficient, and that the additional inferential step of assessing their specific outcomes is important and can be advantageous. Finally, from a practical point of view, our findings convey aspects of negotiator training that may increase the likelihood of achieving integrative outcomes.

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**Appendix A. Experiment 1: Profit schedules and initial offer types (adapted from Bazerman et al., 1985)**

“Party a” Profit Schedule: (\$)

Level	Issue D	Issue R	Issue F
1	0	0	0
2	200	300	500
3	400	600	1000
4	600	900	1500
5	800	1200	2000
6	1000	1500	2500
7	1200	1800	3000
8	1400	2100	3500
9	1600	2400	4000

Initial offer Types forwarded to “Type A” participants	Profits for recipient (party a)	Profits for other party (party b)
Distributive: 5-6-6	(\$800 + \$1500 + \$2500 = \$4800)	(\$2000 + \$900 + \$600 = \$3500)
Logrolling: 2-3-9	(\$200 + \$600 + \$4000 = \$4800)	(\$3500 + 1800 + \$0 = \$5300)

“Party b” Profit Schedule: (\$)

Level	Issue D	Issue R	Issue F
1	4000	2400	1600
2	3500	2100	1400
3	3000	1800	1200
4	2500	1500	1000
5	2000	1200	800
6	1500	900	600
7	1000	600	400
8	500	300	200
9	0	0	0

Initial offer Types forwarded to “Type B” participants	Profits for recipient (party b)	Profits for other party (party a)
Distributive: 4-4-5	(\$2500 + \$1500 + \$800 = \$4800)	(\$600 + \$900 + \$2000 = \$3500)
Logrolling: 1-7-8	(\$4000 + \$600 + \$200 = \$4800)	(\$0 + \$1800 + \$3500 = \$5300)

**Appendix B. Experiment 2—stage 1: Profit schedules (adapted from Bazerman et al., 1985)**

Buyers' Profit Schedule

Delivery Terms (No. of days for delivery)			Discount Level			Payment Terms		
Level	Alternative	Profit	Level	Alternative (%)	Profit	Level	Alternative	Profit
1	60 days	\$0	1	0	\$0	1	Cash	\$0
2	55 days	\$200	2	1	\$300	2	2 payments	\$500

**Appendix B** (continued)

Delivery Terms (No. of days for delivery)			Discount Level			Payment Terms		
Level	Alternative	Profit	Level	Alternative (%)	Profit	Level	Alternative	Profit
3	50 days	\$400	3	2	\$600	3	3 payments	\$1000
4	45 days	\$600	4	3	\$900	4	4 payments	\$1500
5	40 days	\$800	5	4	\$1200	5	5 payments	\$2000
6	35 days	\$1000	6	5	\$1500	6	6 payments	\$2500
7	30 days	\$1200	7	6	\$1800	7	7 payments	\$3000
8	25 days	\$1400	8	7	\$2100	8	8 payments	\$3500
9	20 days	\$1600	9	8	\$2400	9	9 payments	\$4000

## Sellers' Profit Schedule

Delivery Terms (No. of days for delivery)			Discount Level			Payment Terms		
Level	Alternative	Profit	Level	Alternative (%)	Profit	Level	Alternative	Profit
1	60 days	\$4000	1	0	\$2400	1	Cash	\$1600
2	55 days	\$3500	2	1	\$2100	2	2 payments	\$1400
3	50 days	\$3000	3	2	\$1800	3	3 payments	\$1200
4	45 days	\$2500	4	3	\$1500	4	4 payments	\$1000
5	40 days	\$2000	5	4	\$1200	5	5 payments	\$800
6	35 days	\$1500	6	5	\$900	6	6 payments	\$600
7	30 days	\$1000	7	6	\$600	7	7 payments	\$400
8	25 days	\$500	8	7	\$300	8	8 payments	\$200
9	20 days	\$0	9	8	\$0	9	9 payments	\$0

**Appendix C. Experiment 2—stage 2: Profit schedules (adapted from Thompson et al., 1996)**

## Real Estate Development Company's Profit Schedule

Payment terms (no. of payments)			Retail space (m <sup>2</sup> )			Number of subcontractors			Open space		
Level	Option	Points	Level	Option	Points	Level	Option	Points	Level	Option (%)	Points
1	3	500	1	0	100	1	4	200	1	30	50
2	4	1500	2	1500	700	2	3	600	2	25	250
3	5	2500	3	3000	1300	3	2	1000	3	20	450
4	6	3500	4	4500	1900	4	1	1400	4	15	650
5	7	4500	5	6000	2500	5	0	1800	5	10	850

Initial offer Types forwarded to "real estate development company"	Points for recipient (real estate)	Points for other party (City Council)
Distributive: 3-3-3-3	2500 + 1300 + 1000 + 450 = 5250	1000 + 1300 + 2500 + 450 = 5250
Integrative: 4-3-1-2	3500 + 1300 + 200 + 250 = 5250	600 + 1300 + 4500 + 650 = 7050

## City Council's Profit Schedule

Payment terms (no. of payments)			Retail space (m <sup>2</sup> )			Number of subcontractors			Open space		
Level	Option	Points	Level	Option	Points	Level	Option	Points	Level	Option (%)	Points
1	3	1800	1	0	100	1	4	4500	1	30	850
2	4	1400	2	1500	700	2	3	3500	2	25	650
3	5	1000	3	3000	1300	3	2	2500	3	20	450
4	6	600	4	4500	1900	4	1	1500	4	15	250
5	7	200	5	6000	2500	5	0	500	5	10	50

Initial offer Types forwarded to "City Council"	Points for recipient (City Council)	Points for other party (real estate)
Distributive: 3-3-3-3	1000 + 1300 + 2500 + 450 = 5250	2500 + 1300 + 1000 + 450 = 5250
Integrative: 5-3-2-4	200 + 1300 + 3500 + 250 = 5250	4500 + 1300 + 600 + 650 = 7050

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