

Running head: SMALL GROUP NEGOTIATION

**Small Group Negotiation:**

**Do Individualists Exploit Cooperators?**

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### Abstract

Small heterogeneous groups are increasingly used to negotiate important decisions. This study examines how the differences in motivational orientations impact negotiation outcomes in three-person groups. We examined the effects on outcomes of varying the number of members with an individualistic motivational orientation (goal of maximizing own outcome) and with a cooperative motivational orientation (goal of maximizing both own and joint outcome). A total of 231 students participated in a negotiation simulation. At the individual level, negotiators with an individualistic orientation outperformed negotiators with a cooperative orientation in mixed groups. The criteria that determined satisfaction also differed depending upon orientation. At the group level, perceived fairness, but not the quality of the agreement, varied between groups. Members in groups with only cooperatively oriented members perceived the negotiation to be fairer than did members in other groups.

### Small Group Negotiation: Do Individualists Exploit Cooperators?

Small groups frequently negotiate important decisions inside and between organizations. The groups, e.g., integrated teams and project groups (Keller, 2001), typically have members with different professional and organizational affiliations. Negotiations often become difficult because members must handle many potentially conflictive concerns. Consider, for example, three companies that form a partnership. Members of the negotiating group have joint interests related to the success of the partnership, and potentially conflictive interests related to the allocation of burdens and rewards between the companies. The mixed-motive nature of the tasks creates a dilemma for the group members (Lax & Sebenius, 1986) regarding how to approach the negotiations. Some members may focus heavily on the competitive aspects of the negotiations and be motivated to only maximize their own gain (i.e., individualists). They may do so because they believe that the value of getting engaged in a partnership depends only on own gain. Other members may be inclined to focus also on the joint interests of the emerging partnership and are therefore motivated to maximize both own and joint gain (i.e., cooperators). They may do so because they believe a viable partnership depends on values being created for all the partners. Thus, given that competitive and cooperative forces coexists in many small group negotiations, we may expect members in small negotiating teams to be as likely to differ as to share motivational orientations (Brett, 2001).

Recent research on mixed-motive tasks (i.e., negotiation) has addressed how group members' orientation affect group outcome (De Dreu, Weingart, & Kwon, 2000). The research has, however, primarily focused on groups with homogeneity in orientations, that is; groups composed of only individualistic oriented members has been compared with groups composed of only cooperative oriented members. But cooperatively oriented group members

may have to deal with individualistically oriented group members, and vice versa. Research on heterogeneity between negotiators in the same group has therefore been called for. In their meta-analytic review of orientations in negotiations, De Dreu et al. (2000, p. 902) stated that mixed orientations is an "... issue fully ignored in the study of social motives in integrative negotiation". Thus, the purpose of this study is to make a first step to explore how the mixture of individualistically and cooperatively oriented members' affects the outcome in small group negotiations. The article starts with a short presentation of the negotiation concept, and of the research approach used here and typically in behavioral negotiation research. We then describe the concept of motivational orientation, and present the negotiation research that helps us to develop our hypotheses. Next, we describe our methodological choices and present the result from our experimental study. Finally, we discuss our findings and their implications for practice and future research.

### The Negotiation Framework

Negotiation is a process where two or more parties make joint decisions in order to resolve their conflicting preferences (Bazerman, Mannix, & Thompson, 1988). Negotiations have several critical characteristics (Thompson, 1990); communication is open and interactive, intermediate solutions are feasible, parties can make temporary offers and counteroffers, and an agreement is not reached before all parties accept a proposal.

The basic challenge in integrative negotiations is the mixed-motive nature of the task. Negotiation implies tension between the creation and claiming of values (Lax & Sebenius, 1986). The parties have incentives to cooperate in order to increase the size of the total pie (i.e., to integrate). Typically, outcomes better than compromises can be achieved by making trade-offs across issues of differential importance to the parties. In order to make such trade-offs, information exchange and joint problem solving (i.e., integrative behavior) are needed.

Simultaneously, however, the negotiators must safeguard themselves against exploitation and secure a fair share of the value created for themselves. This is achieved through distributive behavior where they argue, focus on positions and ask for concessions. The tension between integration and distribution makes negotiations difficult and challenging. Therefore, negotiators frequently fail to reach high quality agreements that fully capitalize on the differences in priorities between negotiators. Motivational orientations and their interplay are here seen as potentially important causes of the process and outcomes achieved in integrative negotiations.

When causal and universal hypotheses are tested in behavioral negotiation research, experimental simulations are often used (e.g., Brett, 2001; Pruitt & Carnevale, 1993; Thompson, 1998). Such simulations enable the researchers to create the core negotiation dilemma (i.e., the tension between creating and claiming). The use of scoreable outcomes enables the researchers to compare outcomes across negotiating groups. Furthermore, the controlled setting also makes it possible to test causal hypotheses. It is, however, critical that the negotiation simulation capture the essential features of negotiations. Thus, a negotiation task should include both integrative and distributive aspects. Furthermore, the simulation ought to allow for communication, intermediate solutions, temporary proposals, veto power, and give the negotiators information only about their own payoffs. As a result, a negotiation simulation differs substantially from matrix games, such as the prisoner's dilemma game, and other experimental games typically used in experimental economics and psychology (Thompson, 1990). In our research we do not assume that negotiators are fully rational. Neither have they full information about the payoff structure. They have only knowledge about their own preferences (and are not allowed to exchange preference charts). The payoff matrix is designed such that if they engage extensively in integrative behavior (i.e., link

issues, and indicate priorities) they get higher joint outcome than if they engage in distributive behavior (i.e., argue over positions on single dimensions). Furthermore, we assume that people vary in terms of their motivational orientation. In our study we examine whether differences in motives (self versus self and other concerns) affect outcome. Behaviors are the micro-mediating process between motivational orientation and outcomes.

### Motivational Orientation

A negotiator's orientation is defined in terms of preferences towards own and others' outcomes. The individualistic and the cooperative orientations are especially relevant in negotiations, as they parallel the claiming-creation dilemma present in mixed-motive situations. An individualistically oriented negotiator has the goal of maximizing own outcome, while a cooperatively oriented negotiator has the goal of maximizing both own and the other negotiators' outcomes.

A specific orientation may have its origin in individual dispositions and/or situational characteristics. As an individual disposition (trait), orientation is often labelled social value orientation and refers to relatively stable preferences toward certain combinations of own and others' outcomes (Messick & McClintock, 1968). Orientation stemming from situational characteristics (state) is usually labelled motivational orientation and refers to outcome preferences in specific negotiation episodes (Deutsch, 1994). Situational characteristics affecting a negotiator's preferred outcome distribution may be in the form of explicit instructions (Beersma & De Dreu, 1999), responsibility to constituents (Ben-Yoav & Pruitt, 1984a), incentive structure of the task (De Dreu, Giebles, & Van de Vliert, 1998), and expectations about future interactions (Ben-Yoav & Pruitt, 1984b). We focus in this study on motivational orientation (state) induced by instructions. From a managerial point of view, implications of explicit instructions given to negotiators may be particularly interesting. From

a researchers point of view, the use of instructions allows for randomly assignments to various experimental conditions.

Motivational processes are sometimes not explicitly distinguished from behavior and performance (Mitchell & Larson, 1987). Motivational orientation is a goal and therefore different from behavior (cf. Rhoades & Carnevale, 1999). However, orientation is expected to direct behavior and affect performance in negotiations (Deutsch, 1994; Pruitt & Rubin, 1986), but situational circumstances may alter the choice of behavior. Meeting opponents with different orientations, for example, may be one situational characteristic that affects the negotiators behavior and thereby the outcome (Olekalns, Smith, & Kibby, 1996). This will be further discussed in the next part.

#### Hypotheses Development

We first focus on heterogeneous groups where negotiators with cooperative orientations are pitted against negotiators with individualistic orientations. Previous research on *homogeneous* dyads has documented that motivational orientations influence behavior and outcome in predictable ways (De Dreu et al., 2000; Pruitt & Carnevale, 1993). Negotiators with an individualistic orientation have a tendency to engage themselves in distributive behavior (i.e. argumentation, calls for concessions, threats), while negotiators with a cooperative orientation have a stronger tendency to use integrative behavior (i.e. multi-issue offers, information exchange, supportive statements). Consequently, cooperatively oriented dyads are usually found to achieve higher joint gain than individualistically oriented dyads (De Dreu et al., 2000).

However, what happens when cooperatively and individualistically oriented negotiators meet? Research on social value orientation in experimental gaming (e.g., Kelly & Stahelski, 1970; Liebrand, Jansen, Rijken, & Suhre, 1986; McClintock & Liebrand, 1988)

indicates that members of mixed orientation dyads adjust their choices dependent upon the choices of the other (i.e., behavioral assimilation). These studies have generally found that cooperators shift their behavior towards non-cooperation if the other consistently chooses not to cooperate. Individualists seem less likely to reciprocate their opponent's behavior (Liebrand et al., 1986), but may cooperate only when it is in their self-interest to do so. Experimental games are, however, more structured than negotiations (and negotiation simulations). Nevertheless, recent research in behavioral negotiation supports the prediction that a negotiator with a cooperative orientation may, to some extent, match the distributive behavior of an individualistically oriented opponent (Rhoades & Carnevale, 1999). In their study, the participants were asked to read conflict scenarios in which their motivational orientation and the behavior of the other party were manipulated. Cooperatively oriented negotiators were likely to problem solve if their opponent chose to problem solve, but drifted towards contentious behavior if the other negotiator contended.

Given some matching done by cooperative oriented negotiators, the next question is how this affects the distribution of outcomes. We believe that negotiators with an individualistic orientation will have an advantage because (1) they have planned for contending behavior, (2) they will be the first to contend, and (3) they will contend more persistently. First, without information about their opponents, negotiators typically expect their opponents' to have the same orientation as themselves (Iedema & Poppe, 1994; Kuhlman, Brown, & Tetac, 1992). Thus, an individualistically oriented negotiator is likely to expect a distributive negotiation and plan accordingly (i.e. setting high opening offers and concede slowly). The cooperatively oriented negotiator, on the other hand, will prepare for an integrative negotiation (i.e. making multi-issue proposals and reveal priority information).



Second, negotiators with an individualistic orientation will be the first to contend. Cooperatively oriented negotiators will not steer towards distributive behavior before they get to know the others' intentions. In a group setting, it is especially difficult to become aware of the other parties' intentions (Kramer, 1991). Thus, we expect an initial mismatch of behavior in the early stages of the negotiation. The cooperatively oriented negotiators give information and try to develop a joint problem solving process. The individualistically oriented take advantage of the situation, present demands, and get an initial advantage in the negotiations. An alternative to mismatching is opportunistic behavior by the negotiators with individualistic orientations (Rhoades & Carnevale, 1999). They pretend to match integrative behavior in order to get an information advantage. Thereby they can get information about the other parties' preferences, strategically misrepresent their own preferences, and get a favourable individual outcome (O'Connor & Carnevale, 1997).

Finally, although cooperatively oriented negotiators may try to match their opponents' behavior, they are not likely to be as persistent in their contending as are negotiators with an individualistic orientation. The motivational orientation is assumed to affect the cognitive processes of the negotiator (Carnevale & Pruitt, 1992). As cognitive processes are influenced or operate through motivational processes, we believe that individualistically oriented negotiators are more persistent in their contending behavior. For example, an individualistic orientation is expected to produce a fixed-pie assumption (Pruitt, 1990). Believing that they negotiate over a fixed pie makes a distributive approach the only feasible strategy in order to maximize individual outcome. If negotiators with a cooperative orientation are less susceptible to a fixed-pie assumption, they may occasionally try to change the game by suggesting trade-offs and thereby reveal their own preferences. Their opponents then get an information advantage. Thus, we put forward the following prediction:

*Hypothesis 1:* In heterogeneous negotiating groups, individualistically oriented negotiators achieve higher individual outcome than cooperatively oriented negotiators

We suggest that motivational orientation not only affect the individual outcome but also the criteria the negotiators use when they evaluate the quality of the negotiations. Satisfaction is important in negotiation for several reasons. First, in many situations the individual may not have strong objective criteria to evaluate the quality of the agreement. They may not know which alternative agreements that were potentially available to them. Second, satisfaction is important, regardless of objective outcome, because it may influence the willingness to implement agreements, and to engage in future negotiation encounters with the other parties (Brett & Rognes, 1986). Individualistic and cooperative orientations channel the attention of the negotiator in partly different directions. Negotiators with an individualistic orientation will most likely focus only on their own results when they evaluate the negotiations. People with cooperative orientations are concerned both with own and group results and will most likely use a more complex set of criteria when evaluating the negotiations. Differences in outcome evaluation depend of course on consistency in orientation over time. We believe orientation to be stable and to influence perception of task (Pruitt, 1990) and outcome. Therefore, we suggest:

*Hypothesis 2:* Individualistically oriented negotiators will base their satisfaction on own outcome, while cooperatively oriented negotiators will use both own and joint gain as criteria for satisfaction.

We now turn to questions of the effects of composition (individualistic groups, mix-orientation groups, cooperative groups) on joint outcome and fairness. As discussed earlier, research on dyadic negotiations has shown that dyads consisting of two cooperatively oriented negotiators engage in more joint problem solving processes, and are less likely to use

pressure-tactics, than dyads with individualistically oriented negotiators. Consequently, cooperative dyads generally reach more integrative settlements than individualistically oriented dyads, as shown in the meta-analytic review by De Dreu et al. (2000). Two studies of group negotiations found cooperatively oriented groups to do better than individualistically oriented groups (Beersma & Dreu, 1999; Weingart, Bennett, & Brett, 1993). However, Beersma & De Dreu (1999) compared groups of individualistically oriented negotiators with groups with team orientation (i.e., members were instructed to maximize joint gain) rather than cooperative orientations (i.e., maximize own and others outcome). Weingart et al. (1993) found cooperatively oriented groups to do better than individualistically oriented groups only when instructed to consider the negotiation issues sequentially. When instructed to negotiate all issues simultaneously, the individualistically oriented groups did as well as the cooperatively oriented groups. Neither of the two studies examined mixed groups.

In mixed motive negotiations, integration (i.e., joint gain) is typically achieved when negotiators give in on low priority issues and are firm on high priority issues. The process of logrolling becomes very complex in groups as compared to dyads (Thompson, 1998). The parties may, for example, make tradeoffs indirectly (party A gets a concession from B that gets a concession from C etc). In order to be able to create values the parties must share information, trust each other, and engage in energetic joint problem solving (Kramer, 1991). This is most likely to happen when all parties are concerned both with own gain (have high aspirations) and with the gains of the others as well. They will help others without being altruistic. However, when one or more individualistically oriented member is introduced to the group, the cooperatively oriented members are likely, to some degree, to match the distributive behavior of the individualistic member(s). This will hinder development of the trusting climate necessary for information sharing and complex tradeoffs. The

individualistically oriented negotiator may still be able to claim a large share of the pie (see arguments above), but the pie will be small as integrative value is not created. Hence, we put forward the following hypothesis:

*Hypothesis 3:* Group outcome is higher in groups where all members are cooperatively oriented than in groups that have one or more individualistically oriented member(s).

The above arguments also suggest that the shared perception of fairness will be highest in groups with only cooperatively oriented members. Members of cooperatively oriented groups are found to trust each other more than members of individualistically oriented groups, and to be less likely to use substantiating arguments (Weingart et al., 1993). The dynamic in groups with cooperatively oriented members may therefore generate perceptions of fairness in the exchange, and produce a pleasant group climate. The members may also feel that their interests are taken into consideration and thereby value the outcome highly. In groups with one or more individualistically oriented member(s), a power game and a more antagonistic climate may develop, resulting in less perceived fairness. Thus, in sum the above arguments lead to the following prediction:

*Hypothesis 4:* Group perceived fairness is higher in groups where all members are cooperatively oriented than in groups that have one or more individualistically oriented member(s).

## Method

### *Participants and Procedure*

A total of 231 Norwegian undergraduate business students enrolled in an organization behavior course participated in the study. Their mean age was 23 years, and 30% were females. The experiment was conducted during a class meeting in the course. The students

were informed about the negotiation simulation, and those that did not want to participate were free to leave (about 15 students). General background information about the exercise was then distributed to the remaining 231 students. The general information contained information about the case, the issues to be resolved, and the available alternatives on each issue.

Next, the participants were randomly assigned motivational orientation, roles, and were grouped into three-person groups. We found no significant differences in gender across orientations, roles and compositions. With the help from eight research assistants, the groups were lead to separate rooms. Each negotiator received an envelope containing (a) confidential role instructions and reservation points, (b) manipulation instructions, and (c) a chart. The chart consisted of the issues to be resolved, description of alternatives on each issue along with some arguments, and the points, or payoff, associated with each alternative. Negotiators saw only their own payoff, and were not allowed to exchange preference charts.

When finishing the preparation, after 15 minutes, the groups started negotiating. They were allowed to negotiate for 35 minutes, and got an additional 10 minutes to finalize the agreement if necessary. Groups that did not reach an agreement after a total time of 45 minutes were recorded as impasse groups. Immediately after finishing the negotiations, the participants individually answered the post-negotiation questionnaire containing background information, manipulation checks, and perceptual measures. Finally, the session was concluded with an introductory lecture in negotiation, and the participants were debriefed.

#### *Design and Task*

There were four different group compositions; (a) groups with three cooperatively oriented members (CCC-composition), (b) groups with two cooperatively oriented and one individualistically oriented member (CCI-composition), (c) groups with one cooperatively

oriented and two individualistically oriented members (CII-composition), and (d) groups with three individualistically oriented members (III-composition). On the individual level, the design made it possible to compare across the two motivational orientations (cooperative and individualistic) in the heterogeneous groups (CCI- and CII-compositions).

The experimental task consisted of a three-person negotiation exercise developed for this study. The participants negotiated how they would form a business partnership, and enacted the roles of managers representing different companies; airline, insurance, consulting, respectively. They negotiated the construction of a joint office complex. Five issues, each with four or five alternatives, had to be negotiated. The issues were: (1) move-in date, (2) geographical location of the building, (3) architectural design, (4) distribution of maintenance costs, and (5) establishment of joint service functions. To reach an agreement, the group had to resolve all the issues.

The payoff matrix is shown in table 1. The matrix is slightly different from those used in previous studies of group negotiations. First, the simulation is symmetric. This means that all the members have the same maximum achievable points, and equal chances of reaching this sum. A symmetrical game makes it possible to compare individual results across roles, and it also reduces the incentives for forming stable coalitions. Second, the negotiation simulation has two types of issues; integrative and distributive. The three integrative issues (issue 2, 3, and 5) allow for joint gain, or integrativeness, through logrolling of the three issues. The design of the integrative issues is similar to the structure used by Mannix, Thompson, & Bazerman (1989). The two distributive issues (issue 1 and 4) made the symmetry in the payoff matrix less obvious, raised the potential conflict level in the groups, and made the negotiations more challenging and realistic. The reservation point, or the walk away value that the negotiator would achieve if no agreement was reached, was set to 150

points, which during pre-tests were found to be high enough to require some effort in order to reach an agreement, but low enough to avoid too many impasses.

### *Experimental Manipulations*

Following previous research on motivational orientation in negotiating dyads (e.g., Pruitt & Lewis, 1975) and negotiating groups (Beersma & De Dreu, 1999; Weingart et al., 1993), the two motivational orientations, individualistic and cooperative, were manipulated through written instructions. The manipulations were presented as instructions to negotiators from management (cf. Weingart et al., 1993). In the individualistic condition, the participants read the following instruction:

Today's decision is very important for the company. The points are indicators of profit. The more points you earn, the more profitable the investment will be for the company. In today's decision, you should act out of self-interest. You should be concerned with how well you do it yourself. The reason for this is that we in our company need a good result in these negotiations. We will carefully examine the results when the negotiations are finished. The results will be of great importance for your future career-possibilities in the company, and your performance will be evaluated by how good a negotiation outcome our company achieves in the negotiations. Your primary goal is, therefore, to *maximize your own outcome*.

In the cooperative condition, the participants read the following instruction:

Today's decision is very important for the companies. The points are indicators of profit. The more points the companies earn in total, the more profitable the investment will be. In today's decision, you should not act purely out of self-interest. You should be concerned with how well the other parties are doing, as well as how well you do it yourself. The reason for this is that we in our company want to have a good

relationship with the parties we eventually will be sharing offices with. Also with regard to the company's reputation, we want you to consider the other parties interests. However, at the same time, it is decisive that we get a good outcome for ourselves. We will carefully examine the results when the negotiations are finished. The results will be of great importance for your future career-possibilities in the company, and your performance will be evaluated by how good a negotiation outcome the three companies achieve in total, as well as the outcome for our company. Your primary goal is, therefore, to *maximize your own and the others' outcome*.

### *Dependent Variables*

*Individual outcome.* This variable was measured as the total points achieved by the negotiator across the five issues, given the final agreement of the group. For example, if the group agreed on alternative B on the first issue (see table 1), each negotiator would receive 25 points on that issue. The negotiators' scores ranged from 0 points for the least preferred alternative on each issue, to an individual outcome of 500 points if the negotiator got the most preferred alternative across all the five issues. Individual outcomes within groups had a high negative intraclass correlation,  $ICC = -.43$ ,  $F(17, 36) = 0.09$ . This indicates that a high individual outcome for one member goes along with low individual outcome for other members (Kenny & La Voie, 1985). The observations are thus not independent of each other, and the results from analysis of variance are questionable (Hoyle & Crawford, 1994). When comparing individual outcomes within groups we therefore used difference analyses. In each group, we subtracted the (mean) individual outcome for the member(s) with a cooperative orientation from that of the member(s) with an individualistic orientation, and did a one-sample t-test with a test value of zero (i.e., no difference). This procedure eliminates the dependency problem through aggregation, but at the cost of reduced degrees of freedom.



*Group outcome.* We used two indicators of group outcome; (1) joint sum, and (2) Pareto efficiency (Weingart et al., 1993). *Joint sum* is the total points achieved by the group, and was measured simply by adding together the individual outcomes of the three negotiators in a group. Joint sum is the typical measure of group level outcome in negotiation research (Neale & Northcraft, 1991). The maximum joint sum was 825 points, and 675 was the minimum score. *Pareto efficiency* relates the agreements to Pareto optimal settlements. An agreement is Pareto optimal if there is no other solution than the one arrived at, where at least one member of the group will be better off, without any other being worse. In the task used, there are 247 Pareto optimal solutions among the 2000 possible agreement combinations. We developed an index based on Tripp & Sondak (1992) where we measured the number of possible agreements that were Pareto superior to the solution chosen by each group. The groups received a score that reflected the number of possible agreements that would be a Pareto improvement compared to the agreement achieved by the group. The variable was standardised, and then reversed so that higher values indicate higher Pareto efficiency. The correlation between joint sum and Pareto efficiency was .89 ( $p < 0.001$ ).

*Outcome satisfaction.* We measured outcome satisfaction in the post negotiation questionnaire by asking the participants to rate satisfaction with the outcome on a five-point scale (1 = low, 5 = high). Previous research in psychology and organizational behavior has shown that single-item measures of satisfaction produce acceptable validity (Wanous, Reichers, & Hudy, 1997). Research finds that single-item measures of satisfaction compare favorably to multi-issue measures of satisfaction in terms of validity (Nagy, 2002; Wanous & Reichers, 1996). Furthermore, single-item measure of outcome satisfaction is used in previous studies on behavioral negotiation (Oliver, Balakrishnan & Barry, 1994).

*Perceived fairness.* According to social justice theory (e.g., Greenberg, 1987), the judgment of fairness are based on two types of evaluations; (1) evaluation of the allocation of resources, and (2) evaluation of the process that lead to this allocation. We therefore measured perceived fairness in the post negotiation questionnaire by asking the subjects to rate outcome fairness and process fairness on five-point scales (1 = low, 5 = high). We used the average scores, and treated the index as a formative measure, as the concepts represent different parts of the overall fairness judgment. In order to validate the variable at the group level, we had to demonstrate a relative homogeneous perception of fairness in each group (George, 1990). We used the within-group interrater agreement index (James, Demaree, & Wolf, 1984; 1993) to examine the consensus between group members. Agreement within group was calculated separately for each group, and for each item. Average interrater agreement for the group was .83 for process and .84 for outcome, and did not differ across compositions. This is well above the suggested benchmark of .70 (George & Bettenhausen, 1990), and indicates that dyadic members had relatively similar perceptions of fairness. This justifies using perceived fairness as a group variable (George & James, 1993).

## Results

### *Manipulation Checks*

Participants were asked in the post negotiation questionnaire to indicate their primary objective in the negotiation. They had to select from three alternatives regarding their motivational orientation (Weingart et al., 1993); (1) maximize own outcome, (2) maximize own and others' outcome, and (3) other. Chi-square analysis showed that the manipulation had been successful,  $\chi^2(2, n = 229) = 86.40, p < .0001$ . Those receiving a cooperative orientation instruction were significantly more likely than the other subjects to answer "maximize own and others' outcome", while those receiving an individualistic orientation

were significantly more likely to answer “maximize own outcome”. Given the main goal of this research, to examine groups with mixed orientations, we included in our primary analyses groups where all the members showed perfect correspondence between manipulation instruction and manipulation check. In addition, two groups, both in the CII-composition, failed to reach agreement and were excluded from the sample, leaving 37 groups in the primary analyses. Because of the reduced N in the primary analyses, we also did additional analyses where all groups were included (except the impasse groups). Groups were treated according to the group members’ answer in the manipulation check. When the hypotheses were tested, the results from the additional analyses were similar to the findings from the primary analyses.

### *Hypotheses Testing*

Hypothesis 1 stated that individualistically oriented negotiators would get higher individual outcomes than their cooperatively oriented opponents. The data supported hypothesis 1. Individualistically oriented negotiators got higher individual outcomes ( $M = 262.50$ ,  $SD = 44.53$ ) than did their cooperatively oriented opponents ( $M = 233.80$ ,  $SD = 34.29$ ). A difference analysis showed this difference to be significant,  $t(17) = 2.68$ ,  $p < .05$ . Figure 1 displays average individual outcome as a function of own motivational orientation and group composition. As can be seen from the figure, individualistically oriented negotiators got higher individual outcomes than cooperatively oriented negotiators, both when they were in majority,  $t(8) = 2.19$ ,  $p < .05$ , and in minority,  $t(8) = 1.56$ ,  $p < .10$  (one-tailed tests).

Hypothesis 2 suggested that individualistically oriented negotiators would base their satisfaction on own outcome, while cooperatively oriented negotiators would use both own and joint gain as criteria for satisfaction. We found partly support for hypothesis 2. First, we

examined the individualistically oriented negotiators. Individual results and group outcome (joint sum) were regressed on satisfaction. As predicted, satisfaction was significantly related to individual outcome ( $\beta = .55, p < .001$ ), but not to group outcome ( $\beta = -.15, ns$ ),  $R^2 = .29, p < .001$ . Second, we did the same analysis with the cooperatively oriented negotiators. This regression was not significant,  $R^2 = .03, ns$ . However, inspecting the correlations within each group composition revealed a high and significant relation between group outcome and satisfaction in groups where all members were cooperatively oriented ( $r = .54, p < .001$ ). Furthermore, we added a measure of unbalance (standard deviations of group members' individual outcome) in step 2. This increased the explained variance to .24 ( $\Delta R^2 = .21, p < .001$ ), demonstrating that the distribution of individual outcome was important for satisfaction of members with a cooperative orientation ( $\beta = -.48, p < .001$ ).

Hypothesis 3 predicted that groups where all the members were cooperatively oriented would get higher group outcome than groups with one or more individualistically oriented member. The data did not support hypothesis 3. We found no differences in joint sum,  $F(3, 33) = .19, ns$ , and Pareto efficiency,  $F(3, 33) = .35, ns$ , across the four group compositions. Means and standard deviations for the two indicators of group outcome in each of the four compositions are shown in table 2.

Hypothesis 4 stated that cooperatively oriented groups would perceive higher fairness than other group compositions. We found support for hypothesis 4. Group perceived fairness differed significantly across group compositions,  $F(3, 32) = 3.48, p < .05$ . The mean values displayed in table 2 demonstrate that the differences were in the expected direction. Planned pair comparisons showed that the cooperatively oriented groups perceived higher fairness than each of the other group compositions ( $t$ -values  $> 2, p$ -values  $< .05$ ). No other pair comparisons were significant. We also ran separate analyses for process fairness and outcome

fairness, and analyses with group outcome (joint sum) as covariate. The results remained the same.

### Discussion

The purpose of this study was to build on and extend previous research on motivational orientation in negotiation by focusing on three-person group negotiations and heterogeneity in orientations. Behavioral negotiation research has traditionally examined homogeneous dyads and found dyads with cooperatively oriented members to perform better than dyads with individualistically oriented members. In this study we found that motivational orientation also has an impact on effectiveness in group negotiations. In mixed groups individualistic oriented negotiators achieved higher individual outcome than cooperatively orientated negotiators (i.e., hypothesis 1 was supported) and they used different criteria for satisfaction (i.e., hypothesis 2 was partly supported). Group composition did, however, not affect group outcome (i.e., hypothesis 3 was not supported), but groups with only cooperatively oriented members perceived higher fairness than the other group compositions (i.e., hypothesis 4 was supported).

### *Research Implications*

At the individual level of analysis, we found differential effects of motivational orientation on both the individual outcome and on the criteria used for judging effectiveness. We found that negotiators with an individualistic orientation achieved significantly higher individual outcome than the cooperatively oriented negotiators, both when they were in majority and when they were in minority in the groups (marginally significance). From a game theoretical perspective, the fact that individualistically oriented negotiators exploit cooperatively oriented opponents may seem obviously and trivial. However, in experimental games, behavior is largely restricted to either cooperative or conflictive moves, and the

outcomes are fully determined by these moves. This is not the case in behavioral negotiation, where the relation between orientation, behavior, and outcome may be quite complex.

Therefore, studies on mixture in orientations has been called for in behavioral negotiation research (e.g., Brett, 2001; De Dreu et al., 2000).

Apparently, in our study the individualistically oriented negotiators have engaged in more forceful distributive behavior and exploited their cooperatively oriented partners. The cooperatively oriented negotiators have neither matched the distributive behavior sufficiently, nor have they been able to put pressure on the individualistically oriented negotiators to reduce distributive behavior. The finding that even a cooperatively oriented majority seem unable to safeguard against exploitation, contradicts the suggestion that individualistically oriented negotiators in minority will be isolated and sanctioned (Brett, 1991). Further research should explore whether cooperatively oriented members are able to guard against individualistically oriented members when they are in a larger majority. For example, in a group of five, four cooperatively oriented members may isolate one individualistically oriented member. This point to the importance of examining different sized groups.

The findings suggest that negotiators base their evaluation of results on their motivational orientation. Negotiators seem to both act, get results, and evaluate outcomes based on their motivational orientations. Thus, behavioral and attitudinal assimilation between individuals in a small negotiating group may be limited. The results call for more in-depth studies of the interplay between behaviors of negotiators with different motivational orientation.

At the group level of analysis, we found composition to affect fairness perception but not joint gain. The non-finding with regard to joint gain is contrary to the findings consistently found in research on dyads where cooperatively oriented dyads have been found

to do better than individualistically oriented dyads. Tentative findings from previous research on groups have suggested that results from dyads get replicated in groups (Beersma & De Dreu, 1999; Weingart et al., 1993). However, as stated earlier, Beersma and De Dreu (1999) examined team orientation rather than cooperative orientation, and Weingart et al. (1993) only found differences when the groups were forced to negotiate each issue sequentially. Together, the studies and our results suggest that the findings from dyads cannot be easily generalized to the group setting. Furthermore, in their meta-analytic review De Dreu et al. (2000) found that effects of orientation on joint outcomes were stronger the fewer issues the negotiation task contained, and suggested that the impact of motivational orientation on negotiation are reduced by cognitive constraints. Given that group negotiations are more cognitively challenging than dyadic negotiations (Bazerman et al., 1988; Kramer, 1991), our findings corroborates this suggestion. Motivational orientations may have a lesser impact on joint outcome in groups than in dyads. Future research is needed to examine if, and under what conditions, motivational orientation influences group outcomes.

We did however find composition to affect perception of fairness. The members of homogeneous cooperatively oriented groups had a higher degree of perceived fairness than had members in the groups with one or more individualistically oriented negotiator. Thus, the presence of an individualistically oriented negotiator triggers an unbalanced negotiation dynamic that reduces perceived fairness. It must be noted that this is a shared perception of all group members, also the individualistically oriented negotiators themselves. Moving from the laboratory to real life negotiations, we may speculate about the long-term effects of reduced fairness. Groups that meet frequently to negotiate (e.g. boards, project teams and management groups) may find the lack of fairness to be unsettling, and both climate and the quality of the

negotiations may deteriorate over time. Future research on subjective outcome measures such as perceived fairness is certainly needed in negotiation research (cf. Oliver et al., 1994).

### *Methodological Reflections*

In this study we used a negotiation exercise to simulate and isolate the core dilemma of simultaneously creating and claiming value in integrative negotiation situations. In the exercise the participants were allowed to interact freely in their efforts to reach an agreement. By using an exercise rather than real life negotiations we increased internal validity at the cost of external validity. We believe this trade-off is justified since the scoreable game enabled us to compare outcomes across negotiating groups, and since the design gave control for variables not focused upon in this study.

Nevertheless, the discussion about the ability to generalize should not be ignored. The main questions are if the results can be generalized from (1) a simulation to real life negotiations, and from (2) students to professional negotiators. According to Harris (1990 p. 295), "... there is little or no evidence that field studies produce different results than laboratory studies across several OB and HRM topics". Recently, Rhoades, Arnold, & Jay (2001) replicated laboratory research on affect in negotiation and conflict management with a field study. The findings clearly suggest that laboratory findings can be generalized. Of course, simulated negotiations do not have all the structural characteristics of real life negotiations (Gordon, Smith, & Sneider, 1984). What is important, though, is not that the simulation equals real life negotiations along all dimensions, but that it incorporates the *essential* characteristics of real negotiations (Locke, 1986). This simulation was therefore carefully developed, and based on the structure that is typically used in research on integrative negotiation. However, it is a potential problem that the simulation only had limited personal consequences for the participants. Although questionnaire data and our observations



of the negotiations indicate strong personal involvement, effects of orientation may be altered when more are at stake for the negotiators. It has been argued that the effects found in the laboratory only get stronger in more personally involving real life situations (cf. Mook, 1983). Still, we can not rule out that there may be interaction effects between motivational orientation and personal involvement.

The second question regarding generalization concerns the use of students rather than professional negotiators as participants. Dyads with professional negotiators are found to reach higher joint outcome than student dyads in negotiation simulations (Neale & Northcraft, 1986). However, the students and the professionals were affected by cognitive biases (e.g., framing) in the same way. This indicates that it might be differences in the level of outcome, but that the pattern of effects is similar as the variables affect students and professionals in the same way. Nevertheless, we must as always be careful when generalizing from single studies. The major strength of laboratory experiments is clearly the controlled test of effects that are assumed to be universal.

### *Practical Implications*

Assuming that the effects found in this study are universal, several practical implications can be drawn. First, cooperatively oriented members easily get exploited by individualistically oriented members. Therefore, when higher-level managers give their negotiators instructions to be cooperatively oriented, several safeguards against exploitation must be taken. The cooperatively oriented negotiators must prepare for distributive behavior, they must in the initial stages search for clues about the opponents' orientation and not make unilateral concessions. The cooperatively oriented negotiators may also prepare to educate their counterparts in constructive negotiations. This can be done by clearly labelling distributive behavior and by mixed communications (Brett, Shapiro, & Lytle, 1998). Mixed

communications implies that the negotiators explicitly invite others to collaborate, but clearly state that they will sanction the other parties if they do not match cooperative signals. Thus, when one enters into negotiation with the goal of creating both for self and others, one must also be prepared for distribution and for efforts to change the game. Without such preparations, cooperatively oriented negotiators may get exploited such as the participants in our study.

Second, at the group level we got effects of motivational orientation on fairness, but not on the group outcome. Fairness is of course important in negotiation when for example boards decide, companies integrates, alliances are established and developed, and when resources are allocated among departments. Thus, from an organizational perspective on internal negotiations, and from an interorganizational perspective (e.g., the alliance) on external negotiations, instructing negotiators to be cooperatively motivated is feasible. However, in group negotiations, as opposed to dyadic negotiations, cooperative motivational orientation is not sufficient for achieving high joint gain. Therefore, as we discussed above, inducing cooperative orientations must be supplemented with other means such as safeguarding tactics and the use of specific procedures in the negotiation process. Thus, group negotiations with integrative potential are challenging and difficult for managers. Motivational orientation impacts the negotiation, but it is not sufficient to induce cooperative motivational orientation to get to high quality and fair “win-win” solutions.

### Conclusion

This study contributes to research on behavioral negotiation by being one of the first studies of how the mix of individualistically and cooperatively oriented group members’ affect negotiation outcome. The main lessons learned are that orientation did affect the distribution of values in the group (individualistically oriented members got a larger share

than cooperatively oriented members), but did not affect the creation of values. However, groups with only cooperatively oriented members perceived the negotiation to be fairer than did other groups. These findings highlight some of the challenges facing members participating in heterogeneous decision-making groups. Clearly, creating knowledge that helps negotiators to handle these challenges is a task for future research on small group negotiation.

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Table 1

*Payoff Matrix*

Issues	Alternatives	Role 1	Role 2	Role 3	Sum
Issue 1	A	25	0	50	75
	B	25	25	25	75
	C	0	50	25	75
	D	50	25	0	75
Issue 2	A	150	12.5	25	187.5
	B	200	0	0	200
	C	100	25	50	175
	D	0	50	100	150
	E	50	37.5	75	162.5
Issue 3	A	50	100	0	150
	B	0	0	200	200
	C	37.5	75	50	162.5
	D	12.5	25	150	187.5
	E	25	50	100	175
Issue 4	A	0	100	50	150
	B	50	0	100	150
	C	50	50	50	150
	D	100	50	0	150
Issue 5	A	100	0	50	150
	B	75	50	37.5	162.5
	C	50	100	25	175
	D	25	150	12.5	187.5
	E	0	200	0	200
Minimum payoff		0	0	0	675
Maximum payoff		500	500	500	825

*Note.* Negotiators saw only their own payoff, and were not allowed to exchange preference charts.

Table 2

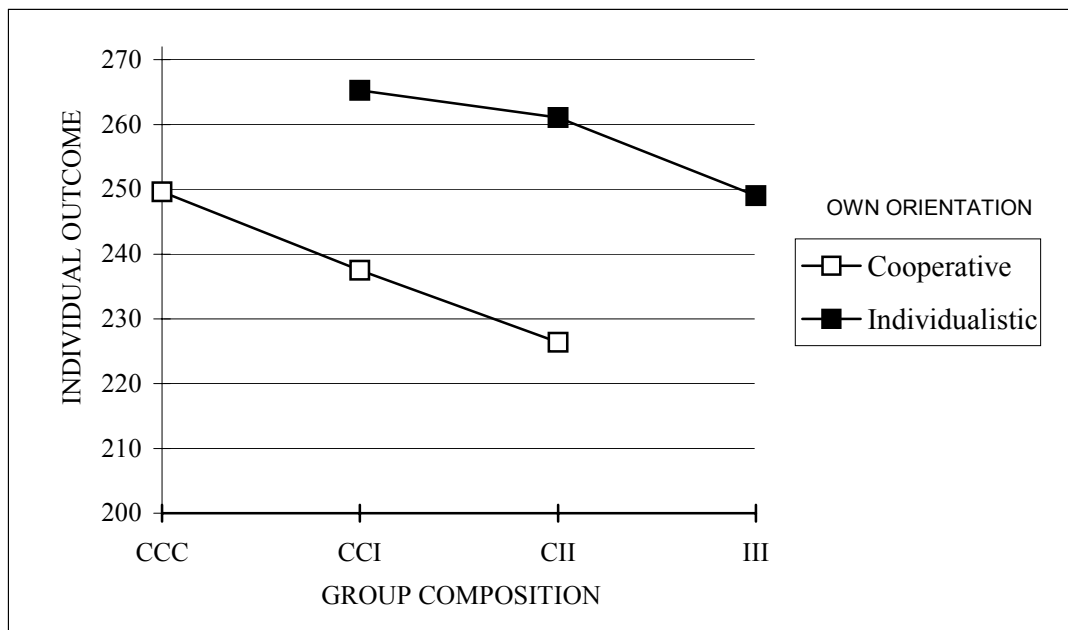
*Means and Standard Deviations for Group Effectiveness across Group Compositions*

Variable		CCC	CCI	CII	III
Joint Sum	<i>M</i>	749	740	749	747
	<i>SD</i>	28	31	21	32
Pareto Efficiency	<i>M</i>	.12	-.23	.20	-.12
	<i>SD</i>	1.74	1.15	1.04	1.20
Perceived Fairness	<i>M</i>	4.09 <sub>a</sub>	3.57 <sub>b</sub>	3.66 <sub>b</sub>	3.40 <sub>b</sub>
	<i>SD</i>	0.51	0.44	0.42	0.40

*Note.* CCC = three members with cooperative orientations, CCI = two members with cooperative orientations and one member with individualistic orientation, CII = one member with cooperative orientation and two members with individualistic orientations, and III = three members with individualistic orientations.

Means in the same row that do not share same subscripts differ at  $p < .05$ .

Fig. 1. Individual outcome as a function of own orientation and group composition



*Note.* CCC = three members with cooperative orientations, CCI = two members with cooperative orientations and one member with individualistic orientation, CII = one member with cooperative orientation and two members with individualistic orientations, and III = three members with individualistic orientations.