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What Other's Disappointment May Do to Selfish People:  
Emotion and Social Value Orientation in a Negotiation Context

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Abstract

We examined whether individual differences in social value orientation (SVO) moderate responses to other's expressions of disappointment in negotiation. The literature suggested competing hypotheses: (1) prosocials are more responsive to other's disappointment because they have a greater concern for other, versus (2) proselfs are more responsive because they see other's disappointment as a threat to their own outcomes. Results of a computer-mediated negotiation, in which a simulated opponent expressed either disappointment, no emotion, or anger supported the second prediction: Proselfs conceded more to a disappointed opponent than to a neutral or angry one, whereas prosocials were unaffected by the other's emotion. This effect was mediated by participants' motivation to satisfy the other's needs, which disappointment triggered more strongly in proselfs than in prosocials. Implications for theorizing on emotion, SVO, and negotiation are discussed.

Keywords: EMOTION, DISAPPOINTMENT, SOCIAL VALUE ORIENTATION,  
NEGOTIATION

## What Other's Disappointment May Do to Selfish People:

## Emotion and Social Value Orientation in a Negotiation Context

Conflict is an inherently emotional event. Personal and business conflicts alike have strong potential to elicit emotions, which may in turn influence conflict development (Barry, 1999). One of the most common and constructive ways of resolving conflict is by means of negotiation, which may be defined as a discussion between two or more parties aimed at resolving a divergence of interest (Pruitt & Carnevale, 1993). Given that conflict is an emotional occurrence, emotions may influence attempts at conflict resolution in general, and negotiation in particular. So far most empirical research on emotion in conflict and negotiation has focused on the effects of anger and/or happiness (Friedman et al., 2004; Kopelman, Rosette, & Thompson, 2006; Sinaceur & Tiedens, 2006; Van Kleef, De Dreu, & Manstead, 2004a, b). Other relevant emotions, such as disappointment, have received relatively little attention.

Disappointment is a highly relevant emotion in conflict situations. It arises when progress toward a goal is below expectations (Carver & Scheier, 1990) and/or when a desired outcome is not achieved (Bell, 1985; Frijda, 1986; Van Dijk & Van der Pligt, 1997). As such, it is germane to conflict and negotiation, which are all about distributing social and economic resources with the aim of achieving particular outcomes. In this light, it is surprising—if not disappointing—that little is known about the role of disappointment in this context. This study aims to increase understanding of the interpersonal effects of disappointment in negotiation. More specifically, we set out to investigate how responses to another's disappointment are moderated by individual differences in social value orientation, that is, dispositional preferences for particular distributions of outcomes between self and others (Messick & McClintock, 1968; Van Lange, Otten, De Bruin, & Joireman, 1997). By examining the moderating influence of social value

orientation, we aim to shed more light on the role of disappointment in negotiation. Before elaborating on the interplay of these factors, let us first consider prior work on the social effects of disappointment.

#### A Social-Functional Perspective on Disappointment in Negotiation

According to a social-functional perspective (Frijda & Mesquita, 1994; Keltner & Haidt, 1999; Morris & Keltner, 2000; Parkinson, 1996; Van Kleef et al., 2004a), emotions are not merely an individual state of the mind. Rather, emotions function as social communications, conveying information about one's feeling about things, one's social intentions, and one's orientation toward others (Keltner & Haidt, 1999). As such, emotions influence not only the behavior of those who experience them, but also the behavior of those who *perceive* them. From this perspective, expressions of disappointment in negotiation should be especially revealing, as disappointment signals that one has received less than anticipated (Van Kleef, De Dreu, & Manstead, 2006). In social-functional terms, the expression of disappointment may thus be conceived of as a distress call. Much like expressions of distress, expressions of disappointment may elicit prosocial behavior from observers by signaling that one is not doing well (Batson, 1987; Barnett, King, & Howard, 1979; Eisenberg et al., 1989; Fabes, Eisenberg, Karbon, Troyer, & Switzer, 1994; Morris & Keltner, 2000; Van Kleef et al., 2006).

Consistent with this social-functional analysis, a number of studies indicate that expressions of disappointment can exert a significant influence on negotiation processes and outcomes. In the first study that we are aware of, Thompson, Valley, and Kramer (1995) examined how an opponent's emotions affect a focal negotiator's judgments regarding negotiation success. Independently of objective negotiation performance, they found that negotiators felt more successful when the opponent was disappointed rather than happy. This finding suggests

that negotiators take the other's disappointment as a signal that the other was hoping for more, and therefore that they themselves did a good job in extracting concessions from the other.

People may also deliberately express disappointment in order to change the behavior of a target person in desired ways (Timmers, Fischer, & Manstead, 1998). Recent evidence indicates that such a strategy can be effective. In the context of a computer-mediated negotiation, Van Kleef et al. (2006) found that negotiators who were confronted with expressions of disappointment from their (simulated) opponent inferred that the other had received too little, and accordingly they made smaller demands in the course of the negotiation than did negotiators who were confronted with a non-emotional, guilty, or regretful opponent. In line with the social-functional perspective, these findings indicate that expressing disappointment may form the basis of an effective negotiation strategy: Disappointment signals that one's outcomes are below expectations, which may lead others to give in.

Two explanations as to why exactly negotiators tend to concede to other's expressions of disappointment seem plausible, and both are related to individual differences in social value orientation. The first explanation is based on *concern for other*. Van Kleef et al. (2006) demonstrated that disappointment produces interpersonal effects similar to those of other distress-related emotions (e.g., worry), which have generally been shown in other contexts to facilitate prosocial behavior aimed at easing the other's pain (Batson, 1987; Barnett et al., 1979; Eisenberg et al., 1989; Fabes et al., 1994; Morris & Keltner, 2000). Further, Lanzetta and Englis (1989) demonstrated that individuals show more empathic responses to others' distress when they expect a cooperative rather than a competitive interaction, suggesting that a cooperative mind-set, which generally involves higher concern for other, facilitates prosocial responses to others' distress. These studies suggest that a negotiator's concern for other may play an important

role in determining the impact of an opponent's disappointment, with individuals with a high concern for other possibly being more susceptible to expressions of disappointment than those with a low concern for other.

A second explanation concerns the role of *concern for self* and strategic information processing. Van Kleef et al. (2006) reported data suggesting that the interpersonal effects of disappointment on demands and concessions are moderated by the focal negotiator's tendency to consider versus discard the other's emotion. They found that negotiators with low levels of trust were less likely to incorporate their counterpart's emotional state in their decision making process and to adapt their demands accordingly. This finding shows parallels with research on the interpersonal effects of anger and happiness in negotiations, which has documented that these effects are moderated by the focal negotiator's motivation to consider the implications of the other's emotion for their own goal attainment (Van Kleef et al., 2004a, b). If this motivation is reduced, for example because the focal negotiator is not dependent on the other for his or her outcomes, then the emotion effect is eliminated (Sinaceur & Tiedens, 2006; Van Kleef et al., 2004b). In other words, it appears as though selfish motivations may also play a role in determining the interpersonal effects of disappointment on negotiation behavior—negotiators may only act on their counterpart's emotion when they infer that failing to do so might negatively affect their own outcomes.

In sum, two alternative explanations can be advanced as to why negotiators concede more to disappointed counterparts than to non-disappointed ones. The first explanation assumes that the interpersonal effects of disappointment on concession making are driven by prosocial considerations and a concern for the other. The second explanation assumes that the effects are driven by more strategic, self-oriented considerations. The question of what leads individuals to

give in to disappointed others thus represents a problem that is as yet unresolved. In the present paper we seek to address this puzzle by directly examining the role of self versus other concern in the form of social value orientation. From a theoretical standpoint, social value orientation is particularly interesting in relation to disappointment (as opposed to other emotions), because both are related—albeit in different ways—to the distribution of outcomes.

### Social Value Orientation

Past research and theorizing regarding cooperation and competition has underscored the importance of individual differences in social value orientation. This concept, which is defined in terms of preferences for particular distributions of outcomes for self and others, centers on differences among prosocial, individualistic, and competitive orientations (Messick & McClintock, 1968; Van Lange, Otten et al., 1997). Prosocial orientation is defined in terms of enhancing own and other's outcomes (i.e., maximizing joint outcomes) as well as equality in outcomes (i.e., minimizing absolute differences in outcomes for self and another person); individualistic orientation is defined in terms of enhancing outcomes for self, and being largely indifferent to outcomes for another person (i.e., maximizing individual outcomes); and competitive orientation is defined in terms of enhancing the difference between outcomes for self and other in favor of the self (i.e., maximizing relative outcomes; Kelley & Thibaut, 1978).

The concept of social value orientation is rooted in research on experimental games focusing on cooperation and competition, which are contexts in which differences among all three social value orientations are potentially important. However, in many situations two of these three most commonly identified orientations, namely the individualistic orientation and the competitive orientation, are functionally equivalent—for instance, in situations of mixed-motive interdependence, where the competitive tendency to try and maximize one's own outcomes



relative to the other converges functionally with the individualistic tendency to maximize one's own outcomes without regard for the other's outcomes. That is, individualists and competitors should—and do indeed—behave similarly in situations where these orientations prescribe the same behavior. In research focusing on conflicts between self-interest and collective interest, it is therefore common practice to combine individualists and competitors into a single category called "proselfs" when the focus is on a situation in which no differences between both personality types are to be expected (see e.g., De Cremer, 2002; De Cremer & Van Lange, 2001; De Cremer & Van Vugt, 1999; Joireman & Duell, 2005; Olekalns & Smith, 1999; Steinel & De Dreu, 2004; Stouten, De Cremer, & Van Dijk, 2005; Van Dijk & De Cremer, 2006; Van Kleef & De Dreu, 2002; Van Lange & Semin-Goossens, 1998).

There is increasing evidence that differences between prosocials and proselfs (i.e., individualists and competitors) are key to understanding two broad motivational phenomena. First, relative to proselfs, prosocials tend to be more strongly concerned about other's outcomes. Perhaps the strongest case in point is that prosocials allocate more points, money, or resources to others in a variety of different tasks, such as decomposed games, public good dilemmas, and dictator games (McClintock & Liebrand, 1988; Parks, 1994; Van Lange, De Cremer, Van Dijk, & Van Vugt, 2007). Also, prosocials tend to report greater levels of attachment to other people, which in turn may illuminate why they approach others more cooperatively than do proselfs (Van Lange, Otten et al., 1997). And, relative to proselfs, prosocials engage in a greater number of donations, in particular donations aimed at helping the poor and the ill (Van Lange, Bekkers, Schuyt, & Van Vugt, 2007). Such findings are suggestive of the notion that prosocials are more strongly concerned with the well-being of others, in part through mechanisms such as the activation of feelings of attachment and empathy. Indeed, activation of empathy may account for

the relatively greater tendency among prosocials to donate to organizations that help the poor and the ill. Thus, *concern for other* represents an important difference between prosocials and proselfs.

Second, prosocials tend to enhance not only outcomes for self, but also outcomes for another person and equality in outcomes, whereas proselfs are concerned with their own outcomes, in an absolute or relative sense. Hence, an important difference is that proselfs are more *exclusively* focused on outcomes for self. The strong concern with self is manifested in low levels of cooperation in, for example, single-trial social dilemmas in which a cooperative choice cannot be reciprocated—that is, when a cooperative choice cannot be made out of considerations of long-term self-interest. However, in other contexts, proselfs (especially individualists) can sometimes come to behave quite cooperatively when it is in their (self-) interest to do so. A persuasive example is provided by classic research revealing that individualists fairly rapidly turn to cooperative behavior when paired with another who consistently rewards cooperation and punishes non-cooperation (i.e., a so-called tit-for-tat partner; Kuhlman & Marshello, 1975; see also McClintock & Liebrand, 1988; Sattler & Kerr, 1991; Van Lange & Visser, 1999), although the opposite pattern has also been demonstrated (i.e., prosocials becoming more selfish when paired with a selfish partner; Kelley & Stahelski, 1970). In addition, there is research suggesting that individualists are only prepared to make sacrifices in an ongoing relationship if they feel strongly dependent on (and committed to) their partner, while prosocials do so even when they do not feel very dependent on their partner (Van Lange, Agnew, Harinck, & Steemers, 1997). Other research suggests that competitors are more sensitive to changes in the cooperative or competitive nature of the situation than are prosocials (Carnevale & Probst, 1998). Finally, recent work has revealed that prosocials exhibit the same level of cooperation irrespective of whether

they anticipate a single interaction or a future of repeated interaction. In contrast, individualists and competitors exhibited considerably more cooperation when they anticipated future interaction (Klapwijk & Van Lange, 2008).

Altogether, there is good evidence to suggest that proselfs (individualists, in particular) tend to approach interdependence situations in which they anticipate repeated interaction with a "strategic" mind-set, such that they behave cooperatively in an attempt to enhance their personal outcomes in the long term. That is, they are likely to exhibit noncooperative behavior when such actions promote their own outcomes. However, when they feel that such behavior might harm their outcomes now or in the future, for instance because it would reduce the likelihood of getting to an agreement, they switch to a more cooperative approach—that is, they may use cooperation as means toward the goal of enhancing good outcomes for self in the short run or long run. Therefore, relative to prosocials, proselfs are more likely to behave cooperatively out of self-interest rather than a concern for other.

### Present Study

The present study examines how individual differences in social value orientation moderate the interpersonal effects of disappointment in negotiation. A focus on the combined effects of these variables is of theoretical interest for several reasons. First, in a conflict setting, both disappointment and social value orientation relate to distributions of outcomes—disappointment signals dissatisfaction with how outcomes are distributed, and social value orientation relates to dispositional preferences with regard to how such distributions are made. In addition, because differences in social value orientation reflect differences in concern for self versus other, examining social value orientation in relation to disappointment has the potential to shed new light on the process underlying the interpersonal effects of disappointment in negotiation

(i.e., whether expressions of disappointment exert interpersonal influence by appealing to individuals' concern for other or concern for self). Finally, because disappointment and social value orientation share a focus on outcomes, moderating influences of social value orientation should be more likely to emerge in relation to disappointment than in relation to emotions that do not pertain specifically to outcomes.

On the basis of the foregoing discussion we advance two competing hypotheses regarding the interactive effects of disappointment and social value orientation. On the one hand, based on the assumption that the interpersonal effects of disappointment are driven by a *concern for other*, it can be hypothesized that prosocials will be more strongly affected by the other's emotion than proselves, because prosocials tend to be more concerned with others' outcomes than proselves (e.g., McClintock & Liebrand, 1988). Thus, if this were true we should find that prosocials are more motivated to satisfy the other when he or she expresses disappointment rather than no emotion, which should lead them to concede more to a disappointed opponent than to a neutral one. In contrast, according to this reasoning, proselves should be less motivated to satisfy the other and therefore less likely to adapt their demands to the other's emotional state.

On the other hand, based on the assumption that the interpersonal effects of disappointment are driven by a *concern for self*, it can be hypothesized that proselves will be more strongly affected by the other's emotion than prosocials. That is, proselves may be more attuned to the strategic aspects of the situation, and they may be more likely than prosocials to modify their behavior in response to strategic information that becomes available during the interaction (McClintock & Liebrand, 1988; Van Lange & Visser, 1999), such as information signaled by the opponent's disappointment (Van Kleef et al., 2006). If this reasoning holds up, we should find that proselves are more motivated to satisfy the other when he or she expresses disappointment rather than no

emotion, which should in turn lead them to concede more to a disappointed opponent than to a neutral one. In contrast, according to this logic, prosocials should be (relatively) unaffected by the other's emotion, because they are less attuned to the strategic information provided by the other's disappointment.

These two competing sets of hypotheses were tested in a controlled, computer-mediated negotiation experiment, in which participants received verbal expressions of emotion from a simulated opponent (cf. Van Kleef et al., 2004a, b, 2006). To examine whether any moderating influence of social value orientation is unique to disappointment or generalizes to other expressions of negative affect, we also included a condition in which the opponent expressed anger. Because concern for self and concern for other are conceptually more closely related to disappointment (which is about outcomes in relation to expectations; Frijda, 1986; Van Dijk & Van der Pligt, 1997) than to anger (which is about other-blame and aggression; Smith, Haynes, Lazarus, & Pope, 1993), we did not expect to find differential effects of anger as a function of social value orientation. In addition to testing these hypotheses regarding the effects of other's emotion and own social value orientation on behavior we looked at the possible mediating role of the motivation to satisfy the other in a more exploratory fashion.

## Method

### *Participants and Experimental Design*

A total of 115 undergraduate students (80 females and 35 males) at the University of Amsterdam participated in the study for course credit. The experimental design included the opponent's emotion (disappointment vs. no emotion vs. anger) and the participant's social value orientation (prosocial vs. proself) as the independent variables, and demands as the main dependent variable. Participants were randomly assigned to the experimental conditions using a

double-blind procedure.

### *Procedure*

For each session, four to eight participants were invited to the laboratory. On arrival participants were welcomed to the experiment and seated in separate cubicles in front of a computer. From that point onward all instructions, questionnaires, and experimental tasks were presented on the computer screen.

*Assessment of social value orientation.* Social value orientation was assessed with the triple-dominance measure of social values—a measure that has been demonstrated to have good internal consistency (Liebrand & Van Run, 1985), test-retest reliability (Kuhlman, Camac, & Cunha, 1986; Van Lange & Semin-Goossens, 1998), and construct validity (De Dreu & Boles, 1998; Parks, 1994). The introduction to the task emphasizes that "the other" is somebody that the participant has never knowingly met (i.e., a hypothetical other) and "the points" represent a resource that is valuable to the participant and to the other person. Participants were asked to make decisions in nine "decomposed games." In each decomposed game, they could choose among three different distributions of points between themselves and an (hypothetical) other person (for more information about the instructions and validity of this instrument, see Van Lange, Otten et al., 1997).

Table 1 provides some examples of the decomposed games used in the current study. In example 1, option A represents a competitive choice, because it provides a greater advantage over the other's outcomes ( $480 - 80 = 400$ ) than either option B ( $540 - 280 = 260$ ) or option C ( $480 - 480 = 0$ ). Option B represents an individualistic choice because one's own outcomes are larger (540) than are those in option A (480) or option C (480). Finally, option C is a cooperative choice because it provides equality, and a larger joint outcome ( $480 + 480 = 960$ ) than either

option A ( $480 + 80 = 560$ ) or option B ( $540 + 280 = 820$ ). Using the criterion of at least six consistent choices, 59 participants were classified as pro-social (51.3 %) and 51 were classified as selfish (44.3 %; individualists and competitors were combined in this category).<sup>1</sup> Five participants (4.3 %) did not make at least six consistent choices (i.e., were unclassifiable), and were dropped from the analyses.

After the decomposed games participants completed a 10-minute filler-task, and were given instructions about the upcoming negotiation task, which was presented as an unrelated study. To facilitate the manipulation of the opponent's emotion (see below), participants were led to believe that the purpose of the study was to find out how knowledge about one's opponent's intentions affects negotiation processes in a situation where the negotiating parties cannot see each other. They were then told that they would engage in a computer-mediated negotiation with another participant (whose behavior was in fact simulated by the computer).

*Negotiation task.* The negotiation task was one previously used by Van Kleef et al. (2004a, b; see also De Dreu & Van Lange, 1995; Hilty & Carnevale, 1993). The task captures the main characteristics of real-life negotiation (i.e., multiple issues differing in utility to the negotiator, information about one's own payoffs only, and the typical offer-counteroffer sequence). In the current version, participants learned that they would be assigned the role of buyer or seller of a consignment of mobile phones, and that their objective was to negotiate the price, the warranty period, and the duration of the service contract of the phones. They were then presented with a payoff chart (see Table 2) that showed which outcomes were most favorable to them, and they learned that their objective was to earn as many points as possible. Level 9 on price (\$110) yielded 0 points and level 1 (\$150) yielded 400 points (i.e., increments of 50 points per level). For warranty period, level 9 (9 months) yielded 0 points, and level 1 (1 month) yielded

120 points (i.e., increments of 15 points per level). Finally, for duration of service contract, level 9 (9 months) yielded 0 points, and level 1 (1 month) yielded 240 points (i.e., increments of 30 points per level). Participants were told, "You can see that the best deal for you is 1-1-1, for a total outcome of 760 points (400 + 120 + 240)." The corresponding payoff table for the other party was not displayed, and participants were told only that it differed from their own.

To enhance involvement in the negotiation task, they were informed that points would be converted to lottery tickets at the end of the experiment, and that the more points earned, the more lottery tickets one would obtain and the greater would be one's chance of winning a EUR 50 prize. To emphasize the mixed-motive nature of the negotiation, participants were told that only those who reached an agreement would participate in the lottery. Thus there were incentives both to earn as many points as possible and to reach an agreement.

After a short break during which the computer supposedly assigned buyer and seller roles to the participants, all participants were assigned the role of seller. They were told that the buyer (i.e., the opponent) would make the first offer and that the negotiation would continue until an agreement was reached or time ran out. Just before the negotiation started, participants learned that an additional goal of the study was to examine the effects of having versus not having information about the opposing negotiator's intentions. They read that the computer had randomly determined that they would receive information about the intentions of the opponent, and that the opponent would not receive information about their intentions.

After these instructions, the negotiation started and the buyer (i.e., the computer) made a first offer. Over the negotiation rounds the buyer proposed the following levels of agreement (for price - warranty - service): 8-7-8 (Round 1), 8-7-7 (Round 2), 8-6-7 (Round 3), 7-6-7 (Round 4), 7-6-6 (Round 5), and 6-6-6 (Round 6). Past research has shown that this preprogrammed strategy



has face validity and is seen as intermediate in cooperativeness and competitiveness (De Dreu & Van Lange, 1995). A demand by the participant was accepted if it equaled or exceeded the offer the computer was about to make in the next round. If no agreement was reached by the sixth round, the negotiation was interrupted (see Van Kleef et al., 2004a, b).

*Manipulation of the opponent's emotion.* After the first, third, and fifth negotiation rounds, participants received information about "the intentions of the buyer," which contained the manipulation of the buyer's emotion. Participants had to wait for about a minute and a half while the buyer was supposedly asked to reveal what he or she intended to offer in the next round, and why. After this short wait, participants received what appeared to be the buyer's answer. This was presented in a separate box, in a different font, and contained some minor typing errors to enhance experimental realism. The buyer's intentions were held constant across conditions and contained the buyer's intended offer for the next round. That is, after Round 1 the buyer wrote "I think I will offer 8-7-7," which would indeed be the buyer's next offer. The buyer's intention information also contained an emotional statement that constituted the experimental manipulation.

After the first negotiation round, participants in the disappointed opponent condition received the following message from their opponent (translated from Dutch): "I am pretty disappointed about this," followed by the intention statement "I think I will offer 8-7-7," which was the same for all conditions. In the control condition participants only received the intention statement. In the anger condition the opponent wrote "This offer makes me really angry," again followed by the same intention statement. After the third round, participants in the disappointment condition received the following statement: "This is going wrong, I am very disappointed," followed by the intention statement "I am going to offer 7-6-7." Participants in the

control condition only received the intention statement. Participants in the anger condition read "This is really getting on my nerves," followed by the intention statement. Finally, after the fifth round all participants read the intention statement "I am going to offer 6-6-6," which was followed in the disappointment condition by "because I am really disappointed." In the anger condition the statement was followed by "because this negotiation pisses me off." The Dutch versions of these emotion statements have been successfully pretested and used in previous research, and have been found to be perceived as credible (see Van Kleef et al., 2004a, 2004b, 2006).

*Dependent measures.* The offers made by participants in each round were transformed into an index revealing the negotiator's total level of demand for each negotiation round (i.e., the number of points demanded in that round, summed across the three negotiation issues of price, warranty, and service; see Table 2). Levels of demand in the six rounds were in turn combined into an index of the negotiator's average demands (see De Dreu, Carnevale, Emans, & Van De Vliert, 1994; Van Kleef, Steinel, van Knippenberg, Hogg, & Svensson, 2007).

In addition, participants completed a post-negotiation questionnaire that contained manipulation checks and a number of items designed to measure participants' motivation to satisfy the opponent. Participants indicated their agreement with a number of statements on 7-point Likert type scales (1 = *totally disagree* to 7 = *totally agree*). To check the adequacy of the emotion manipulation, perceptions of the opponent's disappointment were measured by three items (e.g., "The buyer appeared to be disappointed during the negotiation"), which were combined into a single index of perceived disappointment ( $\alpha = .78$ ). Perceptions of the opponent's anger were assessed with two items (e.g., "The buyer appeared to be angry during the negotiation"), which were averaged into a single index of perceived anger ( $r = .78$ ). Motivation

to satisfy the opponent was measured by four items (e.g., "During the negotiation I tried to satisfy the buyer"; "During the negotiation I wanted to make the buyer feel good"), which were also averaged into a reliable scale ( $\alpha = .84$ ).

## Results

All analyses reported below are based on the full 3 (opponent's emotion: disappointment vs. no emotion vs. anger) by 2 (social value orientation: prosocial vs. proself) design.

### *Manipulation Check*

ANOVA revealed a significant main effect of the opponent's emotion on the perceived disappointment scale,  $F(2, 104) = 40.23, p < .001$  (partial  $\eta^2 = .44$ ), indicating that participants in the disappointed opponent condition indeed perceived the opponent as more disappointed ( $M = 5.99, SD = 0.91$ ) than did participants in the non-emotional opponent condition ( $M = 4.07, SD = 0.99$ ) and the angry opponent condition ( $M = 4.32, SD = 0.86$ ). Participants in the anger condition also perceived the opponent as angrier ( $M = 5.71, SD = 1.64$ ) than did those in the disappointment condition ( $M = 3.74, SD = 1.65$ ) and the non-emotional condition ( $M = 2.88, SD = 1.04$ ),  $F(2, 104) = 33.76, p < .001$  (partial  $\eta^2 = .39$ ). There were no main or interaction effects of SVO (both  $F$ s  $< 1, ns$ ). These data indicate that the manipulation of the opponent's emotion was successful.

### *Demands*

ANOVA revealed a significant interaction between emotion and SVO,  $F(2, 104) = 4.97, p < .01$  (partial  $\eta^2 = .09$ ). The interaction is depicted in Figure 1. Simple effects analysis revealed a significant effect of the opponent's emotion for participants with a proself orientation,  $F(2, 104) = 6.35, p < .005$  (partial  $\eta^2 = .26$ ). Proselfs made lower demands to a disappointed other ( $M = 469, SD = 91$ ) than to a non-emotional ( $M = 564, SD = 76$ ) or angry ( $M = 551, SD = 50$ ) other, the

latter two conditions not differing significantly according to a Tukey test. By contrast, participants with a prosocial orientation were unaffected by the opponent's emotion (disappointment:  $M = 546$ ,  $SD = 88$ ; no emotion:  $M = 534$ ,  $SD = 127$ ; anger:  $M = 512$ ,  $SD = 82$ ),  $F(2, 104) < 1$ , *ns*. This pattern of results indicates that proselfs are more susceptible to other's expressions of disappointment (but not anger) than are prosocials.

#### *Motivation to Satisfy the Other*

ANOVA revealed a significant Emotion x SVO interaction on the motivation to satisfy the other,  $F(2, 104) = 5.09$ ,  $p < .01$  (partial  $\eta^2 = .09$ ). Simple effects analysis revealed that proself negotiators were more strongly motivated to satisfy a disappointed opponent than were prosocial negotiators ( $M = 3.17$ ,  $SD = 0.86$  vs.  $M = 2.49$ ,  $SD = 0.80$ , respectively),  $F(2, 104) = 6.11$ ,  $p < .02$  (partial  $\eta^2 = .16$ ). Non-significant reversed patterns were observed in the control condition (prosocials:  $M = 3.28$ ,  $SD = 1.05$ ; proselfs:  $M = 2.90$ ,  $SD = 0.90$ ),  $F(2, 104) = 1.50$ ,  $p = .22$  and in the anger condition (prosocials:  $M = 2.70$ ,  $SD = 0.83$ ; proselfs:  $M = 2.19$ ,  $SD = 0.97$ ),  $F(2, 104) = 2.57$ ,  $p = .11$ . This pattern of results shows that expressions of disappointment (but not anger) trigger a stronger motivation to satisfy the opponent in proselfs than in prosocials.

#### *Mediation Analysis*

To test whether proself negotiators' stronger responses to another person's disappointment can be explained in terms of their strategic motivation to satisfy the other person's needs, mediated regression analyses were conducted using the procedure described by Kenny, Kashy, and Bolger (1998). In Step 1 we entered the other's emotion, the participant's SVO, and their interaction as the independent variables, and demands as the dependent variable. In line with the ANOVA effects, this analysis revealed a significant interaction between emotion and SVO,  $\beta = .27$ ,  $t = 2.41$ ,  $p < .02$ . In Step 2, we used the same independent variables to predict the participant's motivation to

satisfy the other. This, too, yielded a significant interaction,  $\beta = .28$ ,  $t = 2.54$ ,  $p < .02$ , consistent with the ANOVA results. Finally, in Step 3 we simultaneously entered the independent variables (emotion, SVO, and their interaction) and the mediator (motivation to satisfy other) to predict demands. This yielded a significant effect of motivation to satisfy other on demands,  $\beta = .36$ ,  $t = 3.28$ ,  $p < .005$ , and reduced the formerly significant Emotion x SVO interaction to non-significance ( $\beta = .16$ ,  $t = 1.52$ ,  $p = .13$ ). A Sobel test indicated that the reduction of the direct path from the Emotion x SVO interaction to demands was significant,  $Z = 2.07$ ,  $p < .04$ . These results reveal that the interactive effect of the other's emotion and the participant's SVO on demands is fully mediated by the participant's motivation to satisfy the opponent's needs—a motivation that disappointment triggered more strongly in proselfs than in prosocials.

### Discussion

The present study investigated the moderating influence of social value orientation on the interpersonal effects of disappointment in negotiation. The literature suggested two competing predictions regarding the nature of this moderation. On the one hand, based on prosocials' greater concern for others, prosocials were expected to be more sensitive to other's expressions of disappointment than proselfs. On the other hand, based on proselfs' stronger tendency to strategically exhibit cooperation in an attempt to promote their personal outcomes in the future, proselfs were expected to be more responsive to expressions of disappointment than prosocials, because disappointment signals a potential threat to agreement. The findings provide support for the second hypothesis: Proselfs made smaller demands in the course of a negotiation when the other expressed disappointment compared to when the other expressed no emotion. In contrast, prosocials were unaffected by their opponent's emotional state. This effect was fully mediated by participants' motivation to satisfy the opponent's needs, a motivation that disappointment

triggered more strongly in proselfs than in prosocials. In support of the theoretical notion that social value orientation is conceptually more closely related to disappointment than to other emotions such as anger, we found no evidence that social value orientation moderates responses to expressions of anger.

### *Implications and Contributions*

In exploring how social value orientation moderates the interpersonal effects of disappointment in negotiation, the present work brings together two separate lines of research. The synthesis of these different lines of inquiry extends our knowledge about the negotiation process, the social effects of emotions, and the role of social value orientation in social interaction. We now consider some of the implications of our findings.

Most research on the interpersonal effects of emotions in negotiation has focused on anger and happiness (Friedman et al., 2004; Kopelman et al., 2006; Sinaceur & Tiedens, 2006; Van Kleef et al., 2004a, b). So far very little research has focused on the interpersonal effects of other emotions relevant to negotiation, such as disappointment. A rare exception is a study by Van Kleef et al. (2006), who demonstrated that negotiators concede more value to disappointed counterparts than to non-emotional or guilty ones. The present study extends this previous work by demonstrating for the first time that the interpersonal effects of disappointment are moderated by the focal negotiator's social value orientation.

Perhaps contrary to lay intuition, our results indicate that proselfs are more responsive to other's expressions of disappointment than are prosocials. This finding has implications for our understanding of the mechanisms underlying the interpersonal effects of disappointment. Van Kleef et al. (2006) showed that disappointment has interpersonal effects similar to other distress-related emotions such as worry, which have been shown in other research to facilitate prosocial

behavior (Batson, 1987; Barnett et al., 1979; Eisenberg et al., 1989; Fabes et al., 1994; Morris & Keltner, 2000). In this previous work the implicit or explicit assumption has often been that distress-related emotions trigger helping behavior by eliciting empathy in observers. Although the present results do not undermine this reasoning, they do suggest that in buyer-seller interactions, involving relative strangers who share no history or future of interdependence, other considerations may be quite important as well. Also, most research on empathy focused on more serious life events independent of the task at hand (such as relationship dissolution or contracting a disease), whereas the present research focused on a brief written statement expressing disappointment after some negotiations. The fact that proselves were more responsive to other's disappointment suggests that considerations of self-interest may play an important role in determining the interpersonal effects of disappointment in negotiations.

Strategic considerations are likely to play an especially important role in mixed-motive settings such as the present negotiation task, where there are incentives to cooperate and to compete. To emphasize the mixed-motive nature of the negotiation task, participants were told that only those who reached an agreement would participate in a lottery, and that chances of winning a prize depended on the outcome of the negotiation. Thus, on the one hand there was an incentive to earn as many points as possible (a competitive incentive), whereas on the other hand there was an incentive to reach an agreement (a cooperative incentive). In such a situation, expressions of disappointment on the part of the opponent take on strategic importance. Learning that one's opponent is disappointed indicates that s/he had expected or hoped for more, which forms a potential danger to agreement if one does not concede (Van Kleef et al., 2006). The question then is: How do negotiators use this information? The present findings indicate that proselves are more sensitive to the strategic implications of an opponent expressing

disappointment, to such an extent that they even become motivated to satisfy the other party's wishes—a rather "prosocial" motivation. This suggests that other's expressions of disappointment may transform selfish intentions into more prosocial intentions and produce concomitant prosocial behavior, even though the underlying motivation may still be rather selfish (e.g., to secure a favorable agreement).<sup>2</sup>

Interestingly, previous work has found that social value orientation also moderates the *intrapersonal* effects of emotions on behavior in mixed-motive situations. Ketelaar and Au (2003) examined the effects of feelings of guilt on subsequent cooperation in a repeated prisoner's dilemma game. Their results indicated that proselfs were more strongly affected by their own feelings of guilt (which had been experimentally induced) than were prosocials: Proselfs made more cooperative choices after they had been made to feel guilty than prosocials. This finding, too, suggests that proselfs may not be uniformly egocentric. Rather, it appears that proselfs can be very flexible in their behavior, acting selfishly when given the opportunity, but switching to more accommodating behavior when their own or their partner's emotions call for cooperation.

#### *Limitations and Avenues for Future Research*

We close by noting some limitations and avenues for further research. First, there was no face-to-face interaction. The primary purpose of this research was to enhance our understanding of the interpersonal effects of disappointment in negotiation by generating and testing new hypotheses about the interactive effects of disappointment and social value orientation. In doing so, we made an explicit decision to maintain as much experimental control as possible, and we chose to employ a computer-mediated negotiation paradigm to permit a carefully controlled manipulation of the opponent's emotion. As a result, some caution is needed when generalizing



the results to negotiation contexts outside of the laboratory. At the very least, our findings pertain to computer-mediated negotiations. Given the pervasiveness of negotiation as a form of social interaction and the increasing popularity of modern information technologies in communication, the question of how individuals react to each other's emotions in computer-mediated communication is itself of great theoretical and practical importance (McGrath & Hollingshead, 1994; McKersie & Fonstad, 1997; Moore, Kurtzberg, Thompson, & Morris, 1999). However, considering that this paradigm has previously yielded results that have been replicated in face-to-face settings (see Sinaceur & Tiedens, 2006) we have no reason to suspect that our findings are restricted to the domain of computer-mediated interaction. Future research could shed more light on this issue by investigating the extent to which the interpersonal effects of disappointment generalize across settings.

Another issue concerns the "cognitive" nature of the emotion manipulation that was used in the present experiment. The fact that we used verbal manipulations of emotion raises the question of whether our findings generalize to settings in which emotions are communicated in a different manner (e.g., nonverbally). One could argue that the effects would be different if people were presented with behavioral rather than cognitive emotion cues. This possibility cannot be ruled out on the basis of the present data. However, previous research on anger and happiness in negotiations has documented similar effects regardless of whether a verbal (Van Kleef et al., 2004a, b) or nonverbal (Sinaceur & Tiedens, 2006) manipulation was used. We therefore have no reason to doubt the generalizability of our findings. However, future research is needed to explore this issue in greater depth.

The present research examined how a proself orientation, as an individual difference variable, influences reactions to other's disappointment. However, we suggest that the present

findings may also be relevant to situations that trigger a proself orientation, for example, in business where making money is the norm and obligation. Clearly, people often experience disappointment when the quality of a product or service is lower than expected. How do companies deal with such matters? Although companies may sometimes be rude, more often than not, they seek to comfort the client in a variety of ways—for example, by noting that one should not expect heaven on earth, or by providing excellent (and costly) service. As such, it is not uncommon for self-oriented individuals to go far to comfort the client, thereby seeking to reduce the other's disappointment so that they can continue to do business in the future. In terms of future research, it would be interesting to compare situations that differ regarding norms of self-interest to see whether the present findings would be different in situations that prescribe prosocial behavior. In light of previous research indicating that prosocials contribute more to help the poor (a cooperative situation), we suspect that disappointment may actually have a stronger impact on prosocials than on proselfs in more cooperatively structured settings.

#### *Concluding Remarks*

Our results show that the same emotion (disappointment) can acquire a different meaning and, in turn, have different consequences depending on the perceiver's social value orientation. We found that disappointment triggered a stronger desire to satisfy the other's needs and elicited more cooperative behavior in proselfs than in prosocials. To fully understand the social consequences of emotion, researchers should therefore incorporate factors such as social value orientation in their theorizing. It is important to acknowledge in future research that individual and situational characteristics may alter the way in which individuals interpret other's emotions. Exploring factors that change the meaning of others' emotions and thereby affect subsequent behavior could greatly enhance our understanding of emotions, and in particular of the ways in

which emotions regulate social interaction.

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## Notes

<sup>1</sup> Following previous research (e.g., De Cremer & Van Lange, 2001; Joireman & Duell, 2005; Olekalns & Smith, 1999; Van Dijk & De Cremer, 2006), and because competitive and individualistic tendencies are functionally equivalent in the present task (i.e., in a distributive negotiation such as the present one, maximizing one's own outcomes requires the same behavior as maximizing the positive difference between own and other's outcomes), we combined individualists and competitors into a single category ( $n = 51$ ). Separate analyses involving individualists only ( $n = 42$ ) yielded identical results (Emotion x SVO interaction:  $F[2, 95] = 4.22$ ,  $p < .02$ ; simple effect of emotion for individualists:  $F[2, 95] = 4.99$ ,  $p < .01$ ). Separate analyses involving competitors only were not possible due to insufficient observations ( $n = 9$ ).

<sup>2</sup> Alternatively one might argue that proselves' greater sensitivity to other's disappointment stems from their own negotiation behavior. Proselfs may have been less cooperative in previous rounds of the negotiation than prosocials, which would lend more credence to the other's disappointment. To test this alternative explanation we adopted the following strategy. Because the opponent's first emotion expression took place after the first negotiation round, the first round can be seen as a base-line where the opponent's emotion can logically have no effect. (Indeed, ANOVA revealed no effect of emotion on demands in Round 1,  $F[2, 104] < 1$ ,  $ns$ ). The first round thus allows for an unconfounded test of possible differences in cooperation between prosocials and proselves. ANOVA however revealed no significant effect of SVO in Round 1,  $F(2, 104) < 1$ ,  $ns$ , indicating that prosocials and proselves did not differ in terms of their degree of cooperation. Accordingly, controlling for demands in Round 1 did not alter the results. These results thus argue against an alternative explanation in terms of differential cooperation in previous rounds.

Table 1

*Three Examples of Decomposed Games*

	Example 1		Example 2		Example 3	
	Self	Other	Self	Other	Self	Other
Option A	480	80	560	300	520	520
Option B	540	280	500	500	520	120
Option C	480	480	500	100	580	320

Table 2

*Participants' Payoff Chart*

Level	Price of Phones		Warranty Period		Service Contract	
	Price	Payoff	Warranty	Payoff	Service	Payoff
1	\$150	400	1 month	120	1 month	240
2	\$145	350	2 months	105	2 months	210
3	\$140	300	3 months	90	3 months	180
4	\$135	250	4 months	75	4 months	150
5	\$130	200	5 months	60	5 months	120
6	\$125	150	6 months	45	6 months	90
7	\$120	100	7 months	30	7 months	60
8	\$115	50	8 months	15	8 months	30
9	\$110	0	9 months	0	9 months	0

*Note.* Prices in euros were converted to US dollars and rounded to the nearest US\$5.

Figure Caption

*Figure 1.* Demands as a function of the opponent's emotion and participant's social value orientation.

