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Ethical decision making: on balancing right and wrong

Shalvi, S.

Publication date
2011

[Link to publication](#)

Citation for published version (APA):

Shalvi, S. (2011). *Ethical decision making: on balancing right and wrong*. [Thesis, fully internal, Universiteit van Amsterdam].

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Chapter Four

People Avoid Situations That Enable Them to Deceive Others

An article based on this chapter is in press: Shalvi, S., Handgraaf, M.J.J & De Dreu, C.K.W. (2011b). People avoid situations that enable them to deceive others. *Journal of Experimental Social Psychology*.

People enter labor institutions to earn a living, and bargain with others to seek beneficial deals. They join charity organizations that help others in need or join their friends to play baseball on a Saturday afternoon. In such situations, people invest time and energy interacting with others that may, or may not, yield some personal benefits. In other words, people gravitate towards some social interactions that, through mutual and sustainable cooperation, provide protection and opportunities for individual advancement (Baumeister & Leary, 1995; Kameda, Takezawa & Hastie, 2005). Once individuals enter such social settings, they may try to maximize self-interest and opt to defect rather than cooperate with others—they may free-ride on their colleagues' efforts, or try to outperform their negotiation partner. If, however, all group members defect in these or related ways, the advantage of cooperation is lost and individuals may prefer leaving rather than continue interacting with one another (Hauert, De Monte, Hofbauer & Sigmund, 2002; Semmann, Krambeck & Milinski, 2003). This is indeed what seems to happen: People maneuver themselves in and out of social situations such as groups and organizations, approach some social interactions while avoiding others.

Others before us have noted the functionality of entering and avoiding social interactions (Hart & Van Vugt, 2006; Hauert, et al. 2002; Semmann, et al. 2003; Maner, DeWall, Baumeister & Schaller, 2007; Orbell & Dawes, 1993; Van Lange & Visser, 1999). However, it is unclear whether and how specific features and characteristics of social situations, including the way interdependencies are structured, influence entrance behavior. And even if we assume that people gravitate towards some situations more than towards others, it remains unclear why this would be the case – why are individuals attracted to certain situations more than to others; which motives drive people to select into social situations or, alternatively, go to great lengths to avoid them? It is this question that we address in the current research.

When navigating through social space, people engage mental operations, projecting and imagining themselves into future states (McClure, Laibson, Loewenstein & Cohen, 2004; Gilbert, Pinel, Wilson, Blumberg & Wheatley, 1998). They may compare and evaluate alternative states and possible scenarios (Roese, 1997), consider whether they should take responsibility over the fate and outcomes of their prospective interdependent other (Handgraaf, Van Dijk, Vermunt, Wilke, & De Dreu, 2008), feel attracted to the positive emotions, and aversive to the possible negative feelings such future states may generate (Gilovich & Medvec, 1995).

Entrance decisions may be made in a relatively deliberate, effortful way that involves a considerable amount of strategic consideration. Alternatively, however, the individual may rely on a limited set of criteria that distinguish situations and make them more or less attractive to enter or avoid. One fundamental cue that people may use to make entrance decisions is whether (or not) the situation provides opportunities to serve personal interests in a private and anonymous matter (e.g., without the interdependent others being aware of it). In bargaining situations, for example, sellers may have private information about the value of the goods, and this provides them with an advantage over prospective buyers. Such situations may be particularly interesting because they allow the individual to secretly serve self-interests at the expense of the interdependent counterpart: They may allow one to appear fair without being fair. It remains unclear however, whether people are attracted to take the driver's seat in such tempting situations, are indifferent of doing so, or wish to avoid such tempting situations even at a personal cost.

Whereas neoclassical economic theory would predict that individuals may feel particularly attracted to such tempting situations, different streams of research in social psychology suggest otherwise. First, there is ample evidence that decision makers not only take into account their own immediate and personal gains and losses but also the outcomes of interdependent others (e.g., Handgraaf, et al., 2008; Loewenstein, Thompson, & Bazerman, 1989; Messick & Sentis, 1985; Van Beest & Van Dijk, 2007). As a case in point, consider research using the ultimatum bargaining game, in which a proposer offers a division of a commodity (e.g., money), and a responder can accept or reject the proposed division. If the responder accepts, the commodity is divided as proposed; if the responder rejects, neither party receives anything (Güth, Schmittberger & Schwarze, 1982). Studies consistently show that people propose distributions that approximate fairness (i.e., a 50/50 split of the resource) and people tend to reject distributions that substantially deviate from fairness (e.g., Handgraaf, Van Dijk, Wilke & Vermunt, 2003; Handgraaf, Van Dijk & De Cremer, 2003; Oosterbeek, Sloof & van de Kuilen, 2004). Clearly, proposers take into account responders' outcomes, and responders not only consider what they would get but also the outcome to be received by the proposer. Whether grounded in reputation concerns or in genuine concern for others, people value fairness and a self-image of being a morally appropriate, and socially considerate human being (Tabibnia, Satpute, & Lieberman, 2008; Haidt, 2007; Tangney, Stuewig, & Mashek, 2007).

Second, recent work indicates that people are generally lie-averse even when lying advances their personal interests (Mazar, Amir & Ariely, 2008; Mead, Baumeister,

Gino, Schweitzer & Ariely, 2009; Shalvi, et al., 2011a). People are aversive of lying too when doing so hurts the interdependent other. For example, in a classic study on the role of consequences on deception in social settings, Gneezy (2005) found that people were willing to forego personal profit to avoid deceiving another person. The likelihood with which participants deceived their partner not only varied as a function of the personal profit generated by the lie but also by the loss to their partner (also see Lundquist, Ellingson, & Johannesson, 2009). Again, it appears that people value other's outcomes, that such other-concerns provide input into their decisions, and that people are willing to serve others at a personal cost to themselves.

Although evidence is lacking, these findings together suggest that individuals may be aversive of (rather than indifferent or even attracted to) situations that may tempt them to lie and deceive others. Lying and deception compromises internal moral standards, a desire to view oneself as an honest and morally appropriate person (Mazar, Amir & Ariely, 2008), and may tempt one into actions that hurt the interaction partner's outcomes. When entering social interactions with another person, as in a negotiation situation, one assumes (partial) control over the interaction partner's outcomes and thus becomes (partially) responsible for other's outcomes (Handgraaf, Van Dijk, Wilke & De Dreu, 2008). Such fate control and responsibility make the tempting situation particularly aversive. Put differently, we conjecture that people decide to avoid rather than enter situations that provide opportunities to serve their self-interests by deceiving others into disadvantageous positions, and that this is because they find "being in charge" more aversive in tempting situations.

The Present Study

In three experiments (4.1, 4.2, and 4.3), we tested hypotheses about entrance behavior in one of two modified Ultimatum Bargaining Games (UBG). We created a low and a high temptation game (LT and HT, respectively) and asked participants to enter the situation to make an offer or, alternatively, to take an exit value (i.e., avoid interdependence; for similar approach see Dana, Cain & Dawes, 2006). Participants, as proposers, had to allocate 30 chips. However, only the proposers were aware of the chip value, the responders were not. In the LT condition, each chip was worth 2 monetary units (MU; $1\text{MU} = 0.10\text{€} \approx \text{US\$ } 0.14$) to the proposer and 2 MUs to the responder; alternatively, in the HT condition, each chip was worth 2 MUs to the proposer and 1 MU to the responder (Kagel, Kim & Moser, 1996). Under LT, a 15:15 split thus implies an equal monetary outcome for proposer and responder ($2 \times 15 = 30$ MUs to both), but under HT, an unequal outcome emerges (i.e., $15 \times 2 \text{ MU} = 30\text{MUs}$ to

proposer and 15 x 1 MUs = 15 MUs to responder). Since a 15:15 split is generally taken as fair and likely to be accepted by responders (Kagel et al. 1996), HT proposers have the option of serving self-interest by appearing (but not being) fair. Compared to LT, the HT situation is thus equally risky, more fitting to maximize self-interest, yet is also more morally challenging.

If people aim to maximize personal profit they should prefer those social situations that provide most opportunity for maximizing self-interest and ignore the social consequences associated with their behavior. This should result in people entering the HT game more often than the LT game. However, our literature review highlighted the role deception aversion and leads to the alternative prediction that people avoid situations in which they may be tempted to serve personal self-interest by engaging in seemingly, but not actually, fair and ethical behavior. This should even be the case if their interaction partner is unable to discover such inappropriate behavior. Put formally, we predict that individuals avoid the HT game more than the LT game (Hypothesis 1); that the HT game is more aversive than the LT game in terms of becoming directly responsible for the other's outcomes (Hypothesis 2); and that such aversion of becoming responsible mediates the effects of temptation on entrance decisions (Hypothesis 3).¹

Experiment 4.1

One of the dominant reference points in an UBG offer is the fair split of the chips. To explore whether the exit option's value influences entrance decisions, we manipulated the exit value that was proposed to participants to be one chip higher (vs. lower) than the equal chip split (15). Obviously, the exit's value would make a difference in extreme cases; a very low exit option will lead more people to enter any of the games, while a very high exit option will lead most people not to. However, in Experiment 4.1 we focused on a rather subtle manipulation of the exit option, assessing if people's entrance decision will be influenced by whether the exit allows them (or not)

¹ We note that the focus of our investigation is on studying a situational factor, the level of temptation embedded in the structure of interdependency. As such, we do not study interdependent outcome preferences from an individual difference perspective (e.g., Social Value Orientation; De Dreu & Boles, 1998; De Dreu & Van Lange, 1995; Kuhlman & Marshello, 1975; Van Dijk et al., 2004; Van Lange, 1999) but rather from a situational perspective. It might be argued that especially individuals with a cooperative orientation are aversive of tempting situations, and thus in all three experiments we measured social value orientation (using the measurement and procedures described in De Dreu & Boles, 1998). In none of the experiments we found any effects of social value orientation, alone or in interaction with other experimental variables, suggesting that social value orientation does not differentially affect entrance behavior. In the general discussion we speculate about possible reasons for these (non)findings.

to secure what is commonly perceived as a fair (50%-50%) offer that is likely to be accepted, without engaging in the interaction. This subtle manipulation was included in this initial study chiefly to calibrate the exit option we offered participants as an alternative to entering the game and making an offer.

Additionally, in Experiment 4.1 we took some measures to address several alternative explanations that might arise because of some differences between the HT and LT games. First, it is more difficult to calculate what a fair offer is in the HT game than in the LT situation (e.g. a 20:10 split in HT vs. a 15:15 split in LT). We measured the time taken to make the entrance decision: If calculation complexity plays a role, we should find that entrance decisions are made slower in the HT rather than the LT game. Second, people may decide to avoid the HT game more than the LT game because the former confronts them with a (distributionally) unjust setting more than the LT situation. We measured the extent to which participants felt that the situation allowed them to make a fair offer. If people avoid the HT game because it limits their ability to make a fair offer, we should find differences on this measure between the two settings.

Method

Design and Participants. We used a 2 (temptation level: high vs. low)² X 2 (exit option: 16 vs. 14 chips) between subjects factorial design. Ninety-one students (75% females) participated as part of a course requirement. They received €7 for participation, and were randomly assigned to an experimental condition ($n = 22-26$ per condition). Gender had no effects in this experiment (or in any of the other studies) and is not addressed any further.

Task and Procedure. Participants were seated in front of computers in separate rooms and cubicles, preventing them from seeing or communicating with each other. Because doors were kept closed throughout the session participants did not know how many people were present in the lab at any given moment. Participants were asked to read instructions explaining the rules of the UBG. They read that they were assigned to the role of (potential) proposer, and that they would get the option to divide 30 chips,

² To verify that indeed the HT situation evokes higher levels of temptation compared with the LT situation we introduced to a difference sample of 60 students one of the two games. We asked them about the extent to which they felt that the situation described created a moral challenge (e.g., "I felt that my morality was tested", "deciding whether to make an offer or not was morally challenging", "the decision is morally difficult"; 10 items, $\alpha = .89$). Confirming that our manipulation was successful, participant who evaluated the HT situation found it more morally challenging ($M = 3.66, SD = 1.04$) than those evaluating the LT situation ($M = 3.06, SD = 1.12$), $t(58) = 2.10, p < .05$.

each worth 2 MU to them and, depending on experimental condition, 1 MU or 2 MU to the other person (in the HT vs. LT, respectively). They were told that if the responder accepted their offer, the chips would be divided as proposed. If the responder rejected the offer, neither participant would receive any money. Participants were further told that if they decided to make an offer, the responder would learn the total number of chips divided (i.e., 30) but would not learn the value each chip held for either proposer or responder. We informed all participants that every fifth dyad in the experiment would be paid according to their actual decisions.³ They were also told that they would remain anonymous to each other at all times.

Hereafter, we gave participants the possibility to avoid the UBG by telling them that, instead of making an offer, they could also take a fixed amount of chips (14 vs. 16, depending on condition). If they choose not to make the offer, the responder would receive no information about the game, meaning that these others would never learn of the possibility of a division of chips taking place. The computer then prompted the participant make an entrance decision and, thereafter, to respond to a short questionnaire. This completed the experiment. Participants were debriefed and paid.

Dependent Variables. The main dependent variable was whether participants choose to enter the interaction. To assess calculation complexity, we measured the time people needed to make their entrance decision. To assess aversion of becoming responsible of the other's outcomes we asked participants to what extent they were willing to "take into account other's wishes", and "be responsible for the other person's outcome" (1 = not at all to 7 = very much; $\alpha = .73$). Finally, participants responded to several items assessing their understanding of the decision situation, and whether they felt that the situation allowed them to make a fair offer (1 = not at all to 7 = very much).

Results

Manipulation checks. Participants replied to five questions assessing their understanding of the game. Specifically, they indicated that if an offer was accepted the chips would be divided as offered, and that if an offer was rejected neither participant would receive anything. They also indicated the value of the chips to themselves and the responders, and that these values would not be known to their partner. We

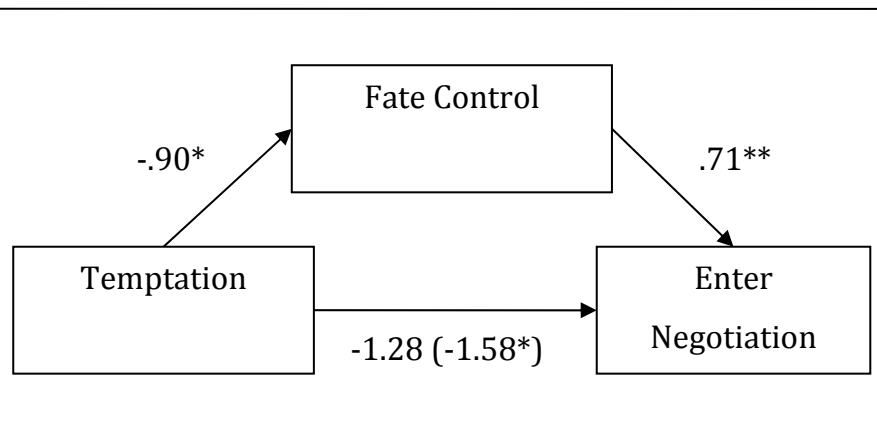
³ In order to pay participants according to their actual decisions, we asked all participants at the end of the experiment to indicate the lowest amount of chips they would accept as responders. For participants who chose to make an offer we compared their actual offer to the minimal acceptable amount set by the participant that was seated in their cubicle in the previous session. Participants who chose not to divide were paid according to the number of chips offered for not dividing (14 or 16 chips, depending on condition). Those participants who were selected to receive pay, were paid an additional €3.5 on average.

excluded from all reported analyses those 13 participants who failed to correctly answer any of these questions. Including these participants did not change the results or main conclusions.

Entrance behavior. A logistic regression was used to determine whether the proportion of participants entering the bargaining situation varied as a function of experimental condition. Results supported hypothesis 1: the decision to make an offer (dummy coded to hold 1 for entering and 0 for avoiding) was affected by temptation condition, $B = -1.58$, Wald's $\chi^2 (1, N = 78) = 3.88, p < .05$. Regardless of the exit option (14 or 16 chips) the percentage of participants who entered the interdependency was higher in the LT condition (86.5%), than in the HT condition (58.5%). This pattern was present both when 14 chips were offered as an exit option, $\chi^2 (1) = 3.67, p = .055$ (marginal), and when 16 chips were offered as an exit option, $\chi^2 (1) = 4.16, p < .05$. The effects for exit value ($B = 0.78$, Wald's $\chi^2 (1, N = 78), ns.$) and the interaction between exit value and temptation level ($B = 0.26$, Wald's $\chi^2 (1, N = 78), ns.$) were not significant.

Outcome Responsibility. To test whether aversion of becoming responsible for the other's outcomes mediates the effects of temptation on the entrance decisions, a series of regression models were estimated according to the methods described by Baron and Kenny (1986) while standardizing the logistic regression coefficients as required when assessing mediation with binary dependent variables (Mackinnon & Dwyer, 1993). We submitted to a regression analysis the temptation level, exit value and the interaction between them as predictors of the willingness to become responsible for the other's outcome. Supporting hypothesis 2, similar to the pattern of results found when predicting the decision to enter and make an offer, we found only an effect for temptation predicting aversion of becoming responsible ($\beta = -.86, t (77) = -2.95, p < .01$). Participants in the HT condition reported lower desire to be in charge ($M = 3.96, SD = 1.37$) than those in the LT condition ($M = 4.81, SD = 1.15$).

Figure 4.1. Fate control as a mediator of the temptation effect on the decision to enter negotiation.



Note. The direct effect of temptation on the decision to negotiate is in parentheses. * $p = .05$, ** $p < .01$.

A logistic regression analysis predicting the decision to enter from both responsibility and temptation further showed that while responsibility influenced the decision to enter ($B = .63$, $SE = .24$; Wald's $\chi^2 (1, N = 78) = 7.00$, $p < .01$) the effect of temptation on entrance rates was significantly reduced ($B = -1.16$, $SE = .61$; Wald's $\chi^2 (1, N = 78) = 3.56$, $p = .06$), Sobel $Z = -1.97$, $p < .05$. In other words, confirming Hypothesis 3, the aversion of being responsible for the other's outcome fully mediated the relation between temptation level and the entrance decision (see Figure 4.1).

Addressing alternative explanations. First, a 2 (temptation: high vs. low) X 2 (exit value: 14 vs. 16 chips) ANOVA with (log-transformed) decision time revealed no significant effects for temptation, $F (1, 77) = 3.06$, *ns.*, exit value, $F (1, 77) = .09$, *ns.*, or their interaction, $F (1, 77) = 1.67$, *ns.* On average, participants spent 6.01 seconds ($SD = 5.91$) on deciding whether to move into the bargaining game. It seems that decision complexity is not a factor in our design.⁴

Second, a 2 (temptation: high vs. low) X 2 (exit value: 14 vs. 16 chips) ANOVA with the ability to make a fair offer as dependent variable revealed no significant effects

⁴ Reaction time for taking the decision of whether to enter or not was additionally measured in experiments 4.2 and 4.3 and never produced any significant effects. We thus return to this alternative explanation only in the general discussion.

for temptation ($M_{HT} = 5.13$ vs. $M_{LT} = 5.62$), $F(1, 77) = 1.97$, *ns.*, exit value ($M_{low} = 5.27$ vs. $M_{high} = 5.48$), $F(1, 77) = .38$, *ns.*, or their interaction, $F(1, 77) = 1.72$, *ns.* This means that participants did not perceive the HT game as limiting their ability to make a fair offer more than the LT game. We additionally ran all mediation analyses detailed above while controlling for the extent to which participants felt that they may have made a fair offer. This did not change the results.

Experiment 4.2

Experiment 4.1 showed that people entered interdependent social situations more when these did not allow them to propose seemingly fair but personally advantageous offers (LT game), than when such an opportunity did exist (HT game). This supports the hypothesis that people avoid morally challenging social situations even when doing so comes at a cost to oneself. This general tendency was independent of the exit option manipulation (we return to this in the general discussion), and was not driven by calculation complexity or the perceived ability to be fair. In addition, it is unlikely that this general tendency to avoid tempting situations emerged because people see the HT game as riskier than the LT game. Such a strategic risk-related decision is based on (1) the profit it yields relative to the available exit value, and (2) the likelihood of the offer being accepted. Both LT and HT games were intentionally equal on these two factors. First, proposers' chip value was held constant at 2 MUs in both games. Thus, the profit a given (accepted) offer yields to the proposer is equal in both games. Second, because it was made explicit and well-understood by participants that responders were unaware of chip values at all times, the proposers' assessment of the likelihood of an offer being accepted should have been equal across conditions.

The main goal of Experiment 4.2 was to provide further evidence for the psychological mechanism underlying the decision to avoid tempting situations. Results of Experiment 4.1 supported the mediation prediction (H3) that, when confronted with tempting situations, people are less willing to become responsible for the other's outcomes, and therefore decide to avoid the interaction altogether. In Experiment 4.2, we provided proposers with information about the other person's level of cooperativeness, potentially influencing proposers willingness to be responsible for this other's outcomes. Specifically, we varied the degree to which the counterpart is perceived as a cooperative or competitive person (De Dreu & Van Kleef, 2004). We reasoned that when participants anticipated their counterpart to be dispositionally cooperative they would be more willing to be responsible for this other person's outcomes compared to when they anticipated a competitive counterpart. Facing a

cooperative partner should make tempting situations particularly aversive and promote avoidance of such situations; facing a competitive partner, in contrast, should make tempting situations less aversive, or perhaps even more attractive than less tempting situations. Put differently, when participants' threshold for acting in an unfair way would be raised by interacting with a cooperative person they will be more like to avoid interacting with this person when temptation increases. But when the other is depicted as competitive, participants' threshold for acting in an unfair way should be lowered. Accordingly, we expected greater avoidance in the high rather than low temptation condition, especially when the responder is cooperative, and the reverse pattern to occur when the responder is competitive.

Method

Design and Participants. We used a 2 (temptation level: high vs. low) X 2 (responder's putative personality: cooperative vs. competitive) between-subjects design with 76 undergraduate students (71% females) as participants. Participants received €7 for participation, and were randomly assigned to conditions ($n = 19$ per cell).

Procedure and Task. The procedure and task were identical to Experiment 4.1 except that we manipulated the responder's putative personality to be cooperative or competitive (De Dreu & Van Kleef, 2004; Steinel & De Dreu, 2004; Van Kleef, De Dreu & Manstead, 2006). At the beginning of the experiment, participants completed a 20 item Personality Test allegedly measuring collaboration skills. The items addressed the extent to which one tends to cooperate in daily life (e.g., "In the bus, I vacate my seat for older people"; "I enjoy working with other people"; "Love and respect are more important than status and money"; "Winning is everything"; "I like situations in which it is me against someone else"). Participants were asked to indicate their agreement on 5-point Likert scales (1 = strongly disagree to 5 = strongly agree).

Upon completion of the test, participants received the same instructions as in Experiment 4.1 (here we offered all participants 16 chips as exit option). Shortly before the actual decision making, participants were told that proposers would receive feedback about their responder's test results, whereas the responders would not (De Dreu & Van Kleef, 2004). In the cooperative partner condition, participants received a feedback sheet that suggested a rather cooperative profile for their partner. In the competitive partner condition, they received a feedback sheet suggesting a rather competitive profile. Specifically, on the partner's feedback sheet, participants saw all

the answers the partner gave and a total score indicating a cooperative or a competitive orientation.

Dependent Variables. As in Experiment 4.1, the main dependent variable was entrance decision. We additionally checked the adequacy of the manipulation of other's personality by asking participants, at the very end of the experiment, to indicate the extent to which their partner was competitive or cooperative (1 = very competitive, to 7 = very cooperative).

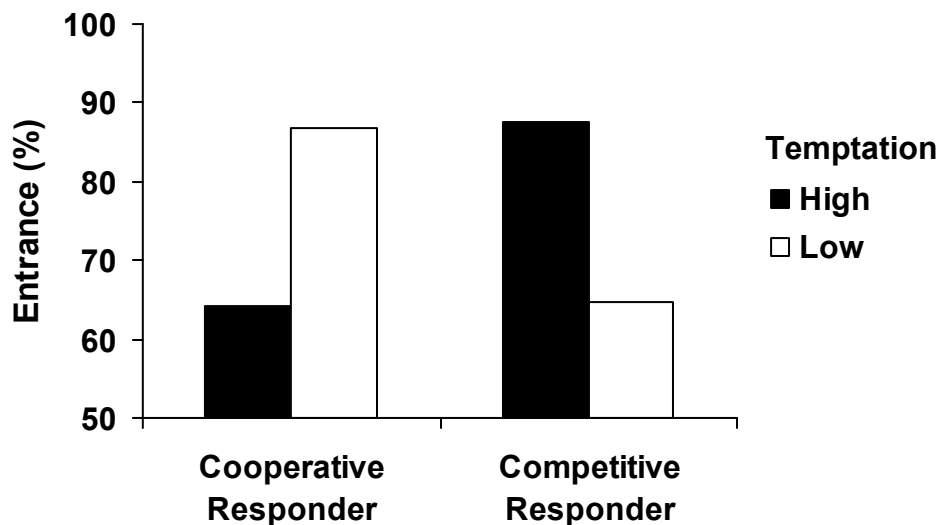
Results

Manipulation checks. The same comprehension checks as in Experiment 4.1 were used and the 14 participants who failed to correctly answer any of these questions were excluded from all reported analyses those. Including these participants did not change the reported results.

The manipulation check for partner's personality was analyzed in a 2 (temptation: high versus low) X 2 (responder's orientation: cooperative vs. competitive) ANOVA. This analysis showed only a strong main effect for other's personality: Participants in the cooperative partner condition rated their partner as more cooperative and less competitive than those in the competitive partner condition, $M = 6.48$ versus $M = 1.93$, $F(1, 61) = 289.25$, $p < .001$. Neither the main effect for temptation level nor the interaction term were significant, both $F(1, 61) < 1$, *ns*.

Entrance Behavior. We used a logistic regression with temptation, responder's orientation and their interaction as independent variables, and entrance decision as criterion. Neither the main effect for temptation level, $B = -1.34$, Wald's $\chi^2(1, N = 62)$, *ns*, nor responder's personality, $B = 1.27$, Wald's $\chi^2(1, N = 62)$, *ns*, were significant. As expected, however, the interaction term between temptation and responder's personality was significant, $B = -2.62$, Wald's $\chi^2(1, N = 62)$, $p < .05$. Figure 4.2 shows that with a cooperative partner, fewer participants entered into the HT than the LT game (64.3% versus 86.7%). But with a competitive partner, more participants chose to enter in the HT than LT game (87.5% versus 64.7%).

Figure 4.2. Entrance (percentage) as a function of temptation and responder's orientation.



Experiment 4.3

Experiment 4.2 showed that participants entered the LT game more than the HT game, but only when the threshold for morally inappropriate behavior was high (being confronted with a cooperative responder). This pattern reversed when the threshold for morally inappropriate behavior was low (being confronted with a competitive responder). This corroborates our suspicion that, when navigating through social space, people avoid those settings that allow (and tempt) them to violate intricate standards of fairness, morality, and social considerateness. Only when the other appears competitive, it becomes less aversive to become responsible for the other's outcomes and people no longer shy away from temptation.

Experiment 4.3 was designed to achieve three goals. First, in addition to the aversion of being responsible for the other's outcomes, it may be that the level of temptation present in the situation evokes anticipated moral emotions that mediate decision making (Schweitzer & Gibson, 2008; De Hooze, Zeelenberg, & Breugelmans, 2007). Specifically, when individuals consider entering high (rather than low) temptation situations they may also anticipate greater feelings of guilt and shame. This in turn may lead them to avoid such social situations. Accordingly, in Experiment 4.3 we assessed anticipated moral emotions and expected the HT game to evoke moral emotions more than the LT game. We explored whether such moral emotions mediate entrance decisions.

Thus far, we compared high with low temptation situations, and uncovered that people are averse of becoming responsible for the other's outcomes and thus of entering high temptation situations. What is unclear, however, is whether avoidance of the HT situation is driven by the motivation to do the other no harm (e.g., Baron, 1995) or, alternatively, that the approach of the LT situation is motivated by the ability to benefit the other. Accordingly, we created a third game called Generous. In Generous, the responder's chip value was higher (3 MU) than the proposer's (2 MU). As a result, a fair split of the chips (15:15) would lead the responder to walk away with more ($15 \times 3 \text{ MU} = 45 \text{ MU}$) than the proposer ($2 \times 15 = 30$), thus allowing the proposer to appear fair and to be (privately) generous. If entrance behavior is driven primarily by a desire to benefit others, people might be eager to avoid the HT game and to enter the Generous game even more than the LT game. However, if entrance decisions are geared primarily towards avoiding being unfair and immoral, we would expect a stronger tendency to avoid the HT game than to enter both Generous and LT. We expected the latter to be the case, as research has shown that people are more reluctant to hurt others than eager to benefit others (Baron, 1995; Van Beest, Van Dijk, De Dreu & Wilke, 2005; Leliveld, Van Dijk, & Van Beest, 2009).

A final and more exploratory objective in Experiment 4.3 was to assess the offers that are made by proposers who choose to enter the game. Interpreting offer behavior in voluntary settings requires a base line condition in which proposers are forced to enter (as is common practice in game-experimental research). We thus manipulated entrance to be either voluntary (as in Experiments 4.1 and 4.2) or forced. Past research on forced entrance conditions found that in asymmetric UBG conditions, in which only proposers knew the chips' value, proposers tended to be strategic and make offers that appeared fair in terms of chips, but were self-servingly unfair in terms of money (Boles, Corson & Murnighan, 2000; Pillutla & Murnighan, 1995; Pillutla & Murnighan, 2003; Van Dijk, et al., 2004; Van Dijk & Vermunt, 2000). We explored whether the strategic behavior observed under forced conditions replicates when people voluntarily enter the game.

Method

Design and Participants. We used a 3 (temptation level: high vs. low vs. generous) X 2 (entry conditions: voluntary vs. forced) between-subjects factorial design with 132 students (75% females) as participants. Participants received €7 for participation, and were randomly assigned to conditions ($n = 25\text{-}31$ per voluntary condition; $n = 15\text{-}16$ per forced condition).

Procedure and Task. The procedure and task were identical to those of Experiment 4.1 with 16 chips as exit option. The only difference in the current experiment was that unlike the proposers in the voluntary entrance condition, those in the forced entrance condition did not receive the option not to make an offer. After reading the instructions of the game, they were instructed to provide an offer to the responder. In both conditions, participants then answered a short questionnaire, and were debriefed and dismissed.

Dependent Variables. The main dependent variable was again the decision of whether to make an offer or not. Additionally, we asked the participants in the voluntary entrance condition who chose to make an offer, as well as those in the forced entrance condition, to indicate the number of chips (between 0 and 30) they offered the responder. In the post-task questionnaire we again assessed participants' willingness to become responsible for their counterpart's outcomes (3 items, $\alpha = .86$) and added a series of questions on anticipated moral emotions. Specifically, participants were asked indicate to what extent they anticipated that their decision to make an offer would make them feel guilty, ashamed, embarrassed, and comfortable (reverse coded), (1 = very little; to 5 = very much). A factor analysis revealed that all four items loaded on a single factor explaining 45.4% of the variance, $EV = 1.816$, all variable loadings $> .60$, and ratings were averaged into one index of anticipated moral emotions (Cronbach's $\alpha = .62$). Finally, as in Experiment 4.1, we asked participants for the extent to which they felt that "it was possible to make a fair offer".

Results

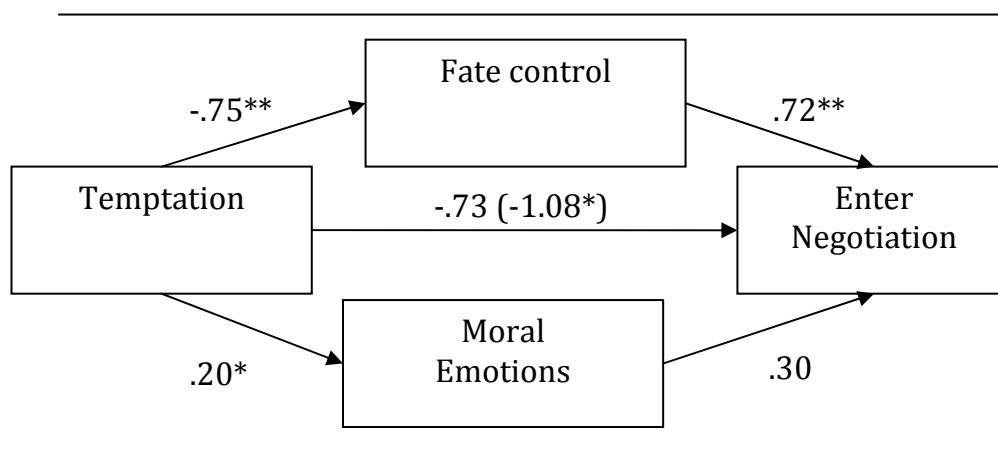
Manipulation checks. Analyses of the comprehension checks also used in Experiments 4.1 and 4.2 revealed that 21 participants failed to correctly answer any of these questions. These were excluded from all reported analyses. Including them did not change the results.

Entrance Behavior. Our hypotheses pertaining to entrance behavior could only be tested in the voluntary conditions. Using a logistic regression we tested whether individuals avoided the HT game more than the other games by contrast coding temptation level (.667 for HT and -.333 for LT and G). Supporting hypothesis 1, the percentage of participants who chose to enter the situation was lower in the HT game (54.2%) than in the LT and G games combined (77.2%), $B = -1.08$, Wald's $\chi^2 (1, N = 68)$, $p = .05$. People entered the HT game less than the LT game (54.2% versus 81.8%, $p < .025$); entrance to the HT game was somewhat lower than the G game (54.2% versus,

72.7% $p < .10$). This pattern is consistent with the idea that people are primarily motivated by avoiding situations that might tempt them to wrongdoing, and inconsistent with the idea that people enter the LT game more because it allows them to be fair (indeed, people entered the G game as much as the LT game, $B = -.93$, Wald's $\chi^2(1, N = 68)$, *ns.*).

Mediation analysis. Being Responsible or Anticipated Moral Emotions? To test whether aversion of being responsible and/or anticipating moral emotions mediate the effects of temptation on entrance decisions, a series of regression models were estimated (Baron and Kenny, 1986) while standardizing the logistic regression coefficients as required when assessing mediation with binary dependent variables (Mackinnon & Dwyer, 1993). The predictor variable in the models was temptation level (contrasting the HT game with the other games), and the mediators were aversion of being responsible and anticipating moral emotions; entrance decision was the dependent variable (note that the mediators were not correlated, $r(68) = -.05$, *ns.*). Replicating the results of Experiment 4.1 and further supporting hypothesis 2, a regression analysis revealed that temptation predicts aversion to being responsible ($\beta = -.75$, $t(67) = -2.26$, $p < .05$). Participants in the HT game reported higher aversion ($M_{HT} = 4.04$, $SD_{HT} = 1.49$) than those in the other games ($M_{LT} = 4.83$, $SD_{LT} = 1.06$; $M_G = 4.76$, $SD_G = 1.37$). Similarly, temptation level predicted anticipated moral emotions, ($\beta = .20$, $t(67) = 2.25$, $p < .05$). Participants in the HT game anticipated negative moral emotions to a greater extent ($M_{HT} = 2.32$, $SD_{HT} = .48$) than those in the other games ($M_{LT} = 1.91$, $SD_{LT} = .40$; $M_G = 1.92$, $SD_G = .39$).

Figure 4.3. Fate control as a mediator of the temptation effect on the decision to enter



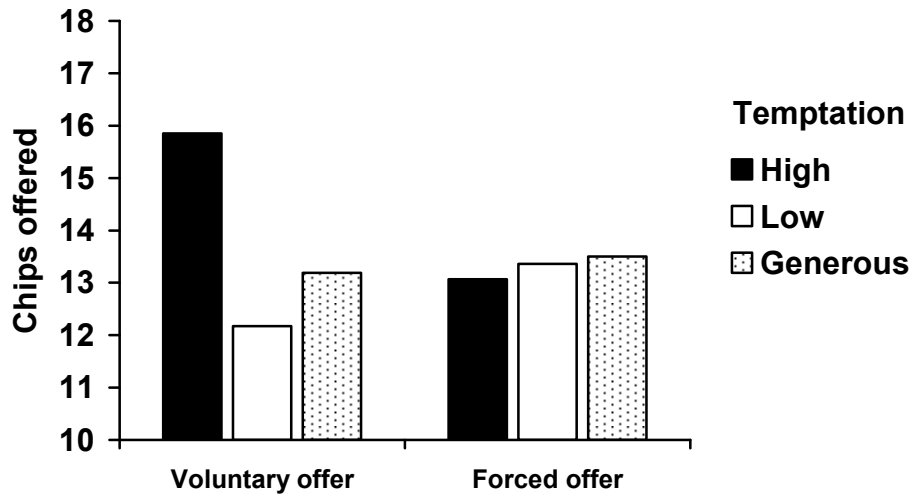
Note. The direct effect of temptation on the decision to negotiate is in parentheses. * $p < .05$, ** $p < .01$.

As shown in Figure 4.3, a logistic regression predicting entrance decisions from temptation, responsibility aversion, and anticipated moral emotions, showed that responsibility aversion influenced entrance decisions ($B = .72, SE = .24$; Wald's $\chi^2 (1, N = 68) = 9.05, p < .01$) and the effect of temptation on entrance decision was reduced to non-significance ($B = -.72, SE = .64$; Wald's $\chi^2 (1, N = 68) = 1.25, ns.$), directional Sobel $Z = -1.80, p < .05$. Moral emotions did not exert any additional effect ($B = .29, SE = .81$; Wald's $\chi^2 (1, N = 68) = .12, ns.$). These results provide additional support for Hypothesis 3, suggesting that responsibility aversion mediates the relation between temptation level and the entrance decision and render an explanation in terms of anticipated moral emotions less likely.

Offers. We analyzed the chips offered by the proposers who volunteered into the game and chose to make an offer as well as those made by proposers in the forced play condition. We used an ANOVA with 3 (temptation: high vs. low vs. generous) X 2 (entry conditions: voluntary vs. forced) as the independent variables and the number of chips offered as the dependent variable.

Results show that neither the main effect for game nor the main effect for entry condition were significant, both F 's $(1, 89) < 1.30, ns$. However, the interaction term was significant ($F (1, 89) = 3.03, p < .05, \eta^2 = .07$). As can be seen in Figure 4.4, replicating previous findings (Boles, et al., 2000; Pillutla & Murnighan, 1995; Van Dijk, et al., 2004; Van Dijk & Vermunt, 2000), temptation had no effect in the forced-play conditions, $F (1, 89) = .29, ns$. Proposers made similar offers (which carry similar likelihood of acceptance) in HT ($M = 12.60, SD = 4.12$), LT ($M = 13.38, SD = 2.80$), and G ($M = 13.50, SD = 5.03$) games. In the voluntary entrance condition, however, proposers offered more chips to the responder in HT ($M = 15.85, SD = 4.06$), than in LT ($M = 12.17, SD = 3.38$) and G ($M = 13.19, SD = 1.72$), $F (2, 89) = 3.98, p < .05$. A Dunnett's post hoc analysis revealed that within the voluntary entrance condition, the amount of chips offered by the proposers in HT was higher than the amount offered by proposers in LT ($D = 3.86, p < .01$) and G ($D = 2.66, p = .05$). The offers made in G did not differ from those made in LT. We will discuss these exploratory findings and their limitations in the discussion below.

Figure 4.3 Chips offered as a function of temptation and entry decision



Distributional unjustness as an alternative explanation. As in Experiment 4.1, a One-Way ANOVA with (temptation: HT vs. LT vs. G) predicting the ability to make a fair offer as dependent variable revealed no significant effects for temptation ($M_{HT} = 5.17$ vs. $M_{LT} = 5.63$ vs. $M_G = 5.14$), $F(2, 67) = .79$, *ns*. This means that participants did not perceive the HT situation to limit their ability to make a fair offer compared to the LT or G situations. As in Experiment 4.1, we additionally ran all mediation analyses detailed above while controlling for the extent to which participants felt that they may make a fair offer, but this variable did not change any of the reported results. This further corroborates the evidence obtained in Experiment 4.1 and 4.2, suggesting that entrance was driven by outcome responsibility considerations and not by the potential distributional unjust structure of the situation.

Discussion

Experiment 4.3 provided new support for the hypothesis that people avoid tempting situations more than less tempting ones. It further showed that people are not more attracted to situations that allow them to be (secretly and anonymously) generous. Together, these findings suggest that people avoid tempting situations because of a desire not to act immorally and socially inconsiderate more than because of a desire to approach situations in which they can demonstrate generosity. Preventing doing harm seems more important than doing well to others (the do-no-harm principle; Baron, 1995).

In addition to this new support, Experiment 4.3 showed that while tempting situations trigger anticipated moral emotions to a greater extent than less tempting situations, these moral emotions played no role in driving entrance decisions. Moral emotions thus appear to be a by-product rather than a key driver of the decision to create interdependency. Finally, in Experiment 4.3, we explored offer behavior and found that those who volunteered to enter the high temptation game made more generous offers than those volunteering in the low temptation or generous game (or those in the forced entrance conditions). To clarify, referring to generosity in this context, we mean that proposer's kept less chips to themselves in one condition more than the other, thus decreasing own outcome to benefit the other who did not know the differential value of the chips. Keeping in mind the selection bias inherent to this secondary analysis, this suggests, that those who volunteered into the high temptation game were not the small subset of shrewd and selfish individuals who exploit every possible opportunity to profit on the expense of others. Rather, it seems that when people decide to enter tempting situations, they actually "over-correct" and become relatively generous in their allocation decisions.

Conclusions and General Discussion

Humans are social animals – they interact with one another and cooperate to mutual benefit. Interacting with other individuals secures protection, fulfills basic affiliation needs, and provides opportunity to advance both individually and collectively (Aronson, 2008; Baumeister & Leary, 1995; Williams, 2001). Yet social interactions are also conflict-prone – individuals compete over scarce resources, they derogate each other's views and perspectives, and lash out when self-worth is compromised by others' disrespectful behavior (De Dreu, 2010; Miller, 2001). Accordingly, it stands to reason that people gravitate towards those social interactions that have the potential to fulfill basic needs for security, affiliation, and exploration. Equally reasonable is to assume that people avoid those social interactions that may create conflict and exploitation, and that may undermine rather than enhance one's feelings of self-worth. However, this latter possibility remained largely unexplored, as we know little about reasons people have to move away from, or towards, social interdependent situations. Focusing on structural properties of the interdependencies – whether or not one has the opportunity to privately deceive one's partner into a disadvantageous position – this research was designed to fill this void.

Across the three experiments, we found that people avoid situations to a greater extent when these situations offer the opportunity to privately and anonymously put

one's partner in a disadvantageous position while still appearing fair and moral. Second, we showed that these tendencies to avoid tempting situations are driven by people's decreased willingness to take responsibility for the other's outcomes. Influencing another person's fate in situations which might lead one to deceive this person is clearly aversive. The risk of deceiving the other and thus compromising one's self-image of a socially considerate, morally appropriate person may conspire to decide to avoid the tempting situation altogether. Indeed, when contemplating the decision to enter or avoid, participants anticipated more guilt and shame when facing tempting situations. Third, and finally, we found that people have a stronger aversion of such tempting situations, than of situations allowing them to be generous – avoiding hurting others appears more important than seeking to benefit others.

Theoretical Implications

Social psychology is about people living in groups, and interacting with others. Far less theorizing and research focuses on what type of interdependent situations people approach or avoid. However, a number of studies addressed parts of this broad issue. Interdependency theory (Thibaut & Kelley, 1959; Kelley & Thibaut, 1978; Rusbult & Van Lange, 2003; also see Lewin, 1947) proposes that people leave social situations when the social interaction yields less utility than the “comparison level of alternatives.” That is, when people expect to achieve greater utility in other (social) situations they become motivated to leave their current relationship – they may quit their job when more interesting employers become available, or end their relationship when a more attractive partner can be secured (also Dawes, McTavish, & Shee, 1977). Similarly, negotiators become tougher or end communications when the negotiation appears to result in outcomes below the individual's “best alternative to negotiated agreement” (BATNA, see e.g., Bazerman, Curhan, Moore, & Valley, 2000).

To these relatively disconnected areas of research, the present series of experiments contributes two insights. First, this earlier work considered people's motives to leave social situations and did not consider what drives people towards (not) entering particular social settings. Our experiments uncovered that people are relatively averse of social situations that allow them to privately and anonymously cheat their partner into a disadvantageous position. Although less strong, our experiments also suggest that people are not particularly attracted to situations that allow them to be generous. In short, our work shows that people navigate through social space with a particular eye towards avoiding undesirable (tempting) settings.

Second, previous work focused on selfish motives as driving people's decision to enter or leave social situations. It showed that people leave social situations when they can improve their personal outcomes elsewhere (Thibaut & Kelley, 1959) or avoid social situations that entail high risk of being exploited by others (Dawes et al., 1977). Our studies go one step further and show that people do not only leave aversive situations, but may even avoid entering them altogether. In addition, avoiding or entering social situations is determined by the extent to which people are willing to take responsibility over other's fate and outcomes. Across three studies we found that in such tempting situations, people are less likely to create an interdependent interaction due to the outcome responsibility it entails. People facing tempting situations that lend themselves for riskless exploitation of others, reported feelings of guilt, shame, and embarrassment, and avoided the situation. Moreover, those who did enter those tempting situation "over-corrected" and made relatively generous offers (e.g. kept less chips to themselves). Thus, because of their concerns for the other's fate people gravitate towards those social interactions that do not tempt them into performing immoral and unfair behavior, even under conditions of complete anonymity.

An issue is that across experiments we never obtained any evidence than entrance behavior is a function of social value orientation (see footnote 1). This is interesting because past research has documented a wide range of behaviors that are, a function of being chronically predisposed towards a pro-self vs. pro-social orientation (e.g., De Dreu & Boles, 1998; De Dreu & Van Lange, 1995; Kuhlman & Marshello, 1975; Van Dijk et al., 2004; Van Lange, 1999). There may be several explanations for the consistent lack of effects observed here. First, it may be that social value orientation impacts people's behavior in specific social situations but not their navigating between social situations. This would be consistent with the fact that we did not find effects on entrance decisions, but a rather straightforward effect on offer behavior in Experiment 4.3 (a positive correlation between cooperativeness and the number of chips that were offered).⁵ Second, it may be that social value orientation impacts the psychological mechanism driving towards entrance decisions – perhaps social values influence not so much whether people enter or avoid, but rather why they would do so. We speculate

⁵ Social Value Orientation was assessed as the number of cooperative choices across the nine decomposed games used to assess value orientations. Specifically, an ANOVA with game type (Ht vs. LT vs. G), exit (yes vs. no), and pro-social value (continuous) as between subjects factors revealed a marginal interaction between game type and exit, $F(2, 89) = 2.68, p = .07$ as well as a significant main effect for pro-social value, $F(1, 89) = 6.33, p < .05$. Across experimental conditions, a stronger pro-social value orientation related to more generous offers, $r(90) = .28, p < .01$.

that individuals with a chronic pro-social value orientation are driven more by “genuine” concerns about fairness and morality, whereas pro-self individuals are driven more by instrumental concerns for fairness and morality (e.g., Van Dijk et al., 2004). Future research is needed to settle this issue.

Experiment 4.3 showed that people avoid tempting situations more than that they are attracted to situations in which they may (secretly) benefit the other. This finding is in line with the idea that people are more sensitive to (privately or publicly) harming others than benefiting them (do-no-harm principle; Baron, 1995). Recent work also supports this notion in the context of social decision making, including Ultimatum Bargaining (Leliveld, Van Beest & Van Dijk, 2008) and coalition formation (Van Beest, Van Dijk, De Dreu & Wilke, 2005). For example, Leliveld et al. found that framing the offer in terms of taking money from the responder leads proposers to make more generous offers compared to the offers that are made when offers are framed as giving to the responder. The studies on coalition formation further showed that people who had to form a coalition in order to secure payment had to choose between creating grand coalitions (splitting the money equally between more participants and getting less themselves) and small coalitions (splitting the money between less participants, violating equality, but gaining more personally) more often opted for the grand coalitions when the money to be split was described as a loss rather than a gain (Van Beest et al., 2005). Taken together, it thus seems that when deciding if and how to interact with others, people are more sensitive to not harming others than to benefiting them. However, future research, especially in the context of maneuvering in and out of social situations, is needed to substantiate this proposition.

A final albeit more descriptive contribution the current studies make relates to the differences in offers between voluntary entrance and forced entrance conditions in Experiment 4.3. Past research using experimental games predominantly used forced entrance conditions – participants volunteer for the experiment but are brought into the game and asked to make an offer, to respond to their partner’s offer, to decide between a cooperative or non-cooperative decision alternative, and so on. Such work indicates that when people are given the opportunity to privately and anonymously exploit their partner and deceive him or her into a disadvantageous position, they are quite likely to do so (e.g., Boles, et al., 2000; Pillutla & Murnighan, 1995; Van Dijk et al., 2004; Van Dijk & Vermunt, 2000). Replicating these findings, participants in the forced condition of Experiment 4.3 indeed acted in a strategic manner, offering similar amount of chips across the different games. Compared to such forced entrance conditions, and keeping in mind the inherent self-selection issue in the voluntary conditions, we found

that individuals who volunteer into tempting situations “over-correct” and behave exceedingly honest and fair. The ultimatum game offers were more generous when people volunteered than when they were forced. This finding may cast new light on the idea that when push comes to shove, individuals act selfishly in their own interest and ignore or even derogate those of others. Although our findings do not dismiss that people can be egocentric and dishonest, they warn against overestimating the prevalence of immoral, unfair and self-interested behavior. For settings into which people volunteer, such as marriages, labor exchanges, or economic trade negotiations, the average rate of deception and competition may be lower than previously concluded from forced-entry type studies. We suggest new work engages in a more systematic analysis of negotiation and trade tendencies when participants volunteered into the situation.

Alternative Explanations

Throughout, some alternative explanations for our results were considered. We already mentioned calculative complexity – the idea that people avoid the high temptation game more than the low temptation game because in the former it is more difficult to calculate what is fair or unfair. This possibility is rendered unlikely by three sets of findings. First, differences in calculative complexity (that might potentially evoke feelings of ambivalence or uncertainty) would have produced differences in the time needed to take the avoidance versus entrance decision. We did, however, never find this. Second, in the generous game introduced in Experiment 4.3 it is as difficult to calculate a fair offer as in the high temptation game (splitting chips in a 2:3 and 2:1 ratios). A calculative complexity account thus implies that both the generous and the high temptation game are avoided equally and more than the low temptation game. Again, this is not what we found – the high temptation game was avoided more than both the generous and the low temptation game. Third, in Experiment 4.2 participants entered rather than avoided the HT game more than the LT game when the counterpart was depicted as a competitive (but not cooperative) person. This pattern is in line with our proposition that people’s entrance decisions into more or less tempting situation would vary as a function of lowering the level of ethical threshold required in the situation (as is the case when interacting with a competitive person). It is hard to imagine that complexity considerations are driving these effects as we find no reason to assume that when interacting with a competitive person people would be suddenly attracted (rather than averse) to complex settings.

Another alternative explanation that we already discussed in the introduction to Experiment 4.2 invoked risk-tolerance. It proposes that people avoid the high temptation game more than the other games because of differential risk assessment. But a risk assessment implies, first of all, that the expected outcome from the game should be higher in some games than in others, and this was never the case – the monetary chip value for the participant was constant across games and in all games the responder was naïve about the monetary chip value (post-task checks consistently confirmed this was well-understood by our participants). Second, the exit value we provided was the same in all games, again rendering it difficult to see how strategic considerations about risk may have influenced our results. Of course, manipulating the exit value to be very attractive (e.g. 25 of 30 chips) or alternatively very unattractive (e.g. 5 of 30 chips) might have influenced the overall level of entrance versus avoidance decisions but, again, this cannot account for the differential avoidance rates we observed across games.

Third and final alternative explanation we addressed was that the high temptation situation might lead participants to feel that it reduces their ability to make a fair offer compared with the low temptation and generous settings. Put differently, this explanation suggests that people avoid such social situations that limit their ability to make a fair offer, because of the unjust features of the interdependence. Participants in both Experiments 4.1 and 4.3 did not report experiencing such feeling. In both experiments we controlled for the extent to which participants actually felt that they were able (or not) to make a fair offer to their counterparts but never found effects for temptation on this feeling. Furthermore, we never found evidence that the ability to make a fair offer correlated with the decision to make an offer nor that it affected in any way the mediation analyses we reported. Together these pieces of evidence point that people do not avoid the high temptation situation because it limits their ability to make a fair offer but rather because they wish not to take active responsibility over the other's outcomes.

Concluding Thoughts

Others before us noted that people avoid social situations with a high risk of being exploited by others (e.g., Maner, et al. 2007; Dawes, McTavish & Shaklee, 1977) and thus prefer social situations with systems that sanction defective behavior (Gurerk, Irlenbusch & Rockenbach, 2006). These tendencies are generally taken as reflecting a desire to avoid being exploited by others. A perhaps less obvious yet equally fitting explanation is that people avoid these situations because they are at odds with what

feels morally right and socially appropriate. In our studies, participants were always in the driver seat – it was them who could decide to serve personal interests by exploiting others or, alternatively, to be fair or even generous. In our studies, there was no risk of being exploited and abused by others (it was a single-shot completely anonymous interaction). Still, participants avoided the driver seat when the temptation to abuse and exploit others increased. Past findings together with the current work thus reveals that avoiding or taking responsibility over another's fate operates as a situation selection mechanism that facilitates avoiding exploitative interdependent interactions as well as situations that may lead one into temptation.