

## Research Article

## Bounded Ethicality

## The Perils of Loss Framing

Mary C. Kern<sup>1</sup> and Dolly Chugh<sup>2</sup><sup>1</sup>Department of Management, Baruch College, and <sup>2</sup>Department of Management and Organizations, Stern School of Business, New York University

**ABSTRACT**—*Ethical decision making is vulnerable to the forces of automaticity. People behave differently in the face of a potential loss versus a potential gain, even when the two situations are transparently identical. Across three experiments, decision makers engaged in more unethical behavior if a decision was presented in a loss frame than if the decision was presented in a gain frame. In Experiment 1, participants in the loss-frame condition were more likely to favor gathering “insider information” than were participants in the gain-frame condition. In Experiment 2, negotiators in the loss-frame condition lied more than negotiators in the gain-frame condition. In Experiment 3, the tendency to be less ethical in the loss-frame condition occurred under time pressure and was eliminated through the removal of time pressure.*

Even ordinary people are prone to shocking ethical<sup>1</sup> lapses (e.g., Darley & Latané, 1968; Milgram, 1974). Empirical study of ethics has surged in the past two decades (Tenbrunsel & Smith-Crowe, 2008), providing clear evidence that ethical thinking and behavior is prone to many of the same mental processes and pitfalls, some outside of consciousness, as the rest of human thinking and behavior (Messick & Bazerman, 1996). Just as the notion of bounded rationality suggests that people are prone to systematic and predictable cognitive errors, the notion of “bounded ethicality” suggests that people are prone to systematic and predictable ethical errors (Chugh, Bazerman, & Banaji, 2005).

Bounded ethicality points directly to automaticity as a force in ethical decision making (Greene & Haidt, 2002). Damasio’s

(1994) study of patients who incurred brain damage suggested that visceral, automatic flashes of affect guide moral choices, independently of learned knowledge about morality. Greene, Nystrom, Engell, Darley, and Cohen (2004) used neuroscientific data to illustrate that the areas of the brain tooled for cognitive reasoning and those that generate more automatic responses are both activated during moral decision making. Similarly, Haidt (2001) posited that moral intuition precedes moral reasoning, arguing that one’s overall moral judgment is heavily biased toward the leanings of a rapid and automatic process, rather than a slower, more thoughtful one.

## FRAMING EFFECTS

In the studies reported here, we explored the effect of automaticity on the cognitions and behaviors of decision makers in the moment of ethical choice. What are the roles of the decision maker’s cognitive framing of the situation and the decision maker’s available cognitive resources? We turned to framing effects (Tversky & Kahneman, 1981) as the foundation of our inquiry. The transformative effects of framing are well established (for reviews, see Camerer, 2000; Kuhberger, 1998). A framing effect occurs when transparently and objectively identical situations generate dramatically different decisions depending on whether the situations are presented, or perceived, as potential losses or gains (Tversky & Kahneman, 1981). Framing effects are integral to prospect theory (Kahneman & Tversky, 1979; Tversky & Kahneman, 1981), a model of choice that describes an “S-shaped value function” to illustrate the differences in how gains and losses, relative to a reference point, are valued. A critical feature of this curve is that it has a steeper slope in the loss domain than in the gain domain. As a result, people are loss averse; that is, they are willing to go to greater lengths to avoid a loss than to obtain a gain of a similar size (Kahneman, Knetsch, & Thaler, 1990; Tversky & Kahneman, 1991).

We considered the implications of framing effects for ethics. When making decisions, individuals often choose from an array of possible responses, with some choices being more, or less,

Address correspondence to Mary Kern, Department of Management, Box B9-240, Baruch College, New York, NY 10010, e-mail: mary.kern@baruch.cuny.edu, or to Dolly Chugh, Department of Management and Organizations, Stern School of Business, 44 West 4th St., New York, NY 10012, e-mail: dchugh@stern.nyu.edu.

<sup>1</sup>We generally use *moral* to refer to a situation that lacks a normatively correct response and *ethical* to refer to a situation in which a particular response would be widely regarded as more appropriate than another. However, the usage of these terms varies in the literature.

ethical than others. Given the previous work on framing effects, we reasoned that individuals who perceive a potential outcome as a loss will go to greater lengths, and engage in more unethical behavior, to avert that loss than will individuals who perceive a similarly sized gain. This logic formed the initial basis for the present research.

We found promising hints supporting these predictions in existing work. Newberry, Reckers, and Wyndelts (1993) showed that professional tax preparers who were trying to keep a client were more likely to sign a return with a large deduction related to an ambiguous tax issue than were those trying to win a new client. Heath, Larrick, and Wu (1999) showed that goals serve as reference points, and Schweitzer, Ordóñez, and Douma (2004) found that participants who fell just short of an unmet goal were the least ethical, as compared with participants who met a goal or fell far short of the goal. Other work has explored related effects in sales (Kellaris, Boyle, & Dahlstrom, 1994) and moral choice (Petrinovich & O'Neill, 1996). The collective implication of these experiments is that a loss frame will prompt more unethical behavior than a gain frame.

Further, framing effects appear to be examples of automaticity, so that their likelihood of occurrence is reduced when decision makers are “cognitively engaged with the problem, have enough time to process the information, and have the cognitive ability to fully process the information” (Stanovich & West, 2002, p. 433). These findings are consistent with Tversky and Kahneman’s (1981) original speculation that framing effects are immediate, analogous to visual perception’s automatic functioning. More recently, brain-imaging experiments have shown that brain activation patterns that occur when an individual demonstrates the framing effect differ from those that occur when an individual does not demonstrate the framing effect (De Martino, Kumaran, Seymour, & Dolan, 2006), suggesting that automatic processes generate the framing effect, whereas engagement in more deliberative mental processes can reverse it. Framing effects seem most likely to occur under conditions that demand an automatic, rather than a reasoned, response. Because reasoning is fueled by cognitive resources, such as time for deliberation, reasoning is vulnerable to being rushed, fragmented, or skipped altogether under conditions of time pressure (Gilbert, 2002). Thus, framing offers an opportunity to examine automaticity in action in ethical decision making. We expected that the influence of the loss frame on ethical decision making would be heightened when participants did not have sufficient cognitive resources for reasoning.

## THE PRESENT RESEARCH

We hypothesized that ethical decision making is prone to framing effects. Because individuals are loss averse, we predicted that they would be more likely to endorse and engage in less ethical behavior (such as lying) when a decision was presented in a loss frame rather than a gain frame. In addition, we

expected that the influence of the frame on ethical decision making would be increased when decision makers were under time pressure, because of the greater automaticity in thinking.

We manipulated the frame of decision makers by describing either the probability of a potential gain or the probability of a potential loss in the situation. The gain and loss conditions presented transparently identical problems that were simply expressed in different language so as to manipulate participants’ framing of the situation. In three between-subjects experiments, with different dependent measures and samples, we obtained evidence supporting our hypotheses. We tested for a main effect of frame using a judgment task (Experiment 1) and then using behavioral measures of misrepresentation and false promises (Experiment 2). Finally, we tested the hypothesis that the effect of framing on ethics is the result of an automatic process by explicitly imposing and removing time pressure (Experiment 3).

## EXPERIMENT 1

### Method

Fifty-five undergraduates (56% female, 44% male) participated in Experiment 1 for monetary compensation. This experiment had a between-subjects design.

Participants read the following scenario:

You are an entrepreneur interested in acquiring a business that is currently owned by a competitor. The competitor, however, has not shown any interest in either selling his business or merging with your company. To gain inside knowledge of his firm, you consider hiring a consultant you know to call contacts in your competitor’s business and ask if the company is having any serious problems that might threaten its viability. If there are such problems, you might be able to use the information to either hire away the company’s employees or get the competitor to sell.

As of now, your analysis suggests that you have a 25% chance of gaining/75% chance of losing the acquisition. How likely are you to hire this consultant (1 = very unlikely, 7 = very likely)?

In pretesting, a similar sample of 37 participants rated hiring the consultant ( $M = 2.38$ ,  $SD = 1.48$ ) as less ethical than not hiring the consultant ( $M = 4.30$ ,  $SD = 2.28$ ),  $F(1, 36) = 41.30$ ,  $p_{\text{rep}} = .99$ ,  $\eta_p^2 = .53$ . Thus, higher numbers on the rating scale reflect a greater likelihood of engaging in unethical behavior.

### Results and Discussion

As hypothesized, analysis of variance revealed a main effect for frame; participants in the loss-frame condition were more likely to engage in unethical behavior ( $M = 4.66$ ,  $SD = 1.88$ ) than were participants in the gain-frame condition ( $M = 3.77$ ,  $SD = 1.75$ ),  $F(1, 52) = 3.96$ ,  $p_{\text{rep}} = .92$ ,  $\eta_p^2 = .07$ . The mere cognitive presence of a loss frame triggered a greater willingness to stretch ethical boundaries, even in a fictionalized scenario in which participants had nothing to actually gain or lose.

## EXPERIMENT 2

## Method

*Participants*

Ninety-two part-time M.B.A. students (42% female, 58% male) participated in Experiment 2 during one of three sections of a negotiations course at two Northeastern colleges. Most participants were employed full-time at the time of the experiment and had at least 2 years of work experience. Data collection followed the recommendations for classroom data collection (Loyd, Kern, & Thompson, 2005). Students were randomly assigned to 46 negotiating dyads.

*Procedure*

The participants negotiated the Bullard Houses case (Karp, Gold, & Tan, 1998), which involves the sale of family property. The seller's agent is instructed that the family has a strong desire that the property be sold only to someone intending "tasteful use." The buyer's agent represents a developer of high-rise hotels and has been instructed not to reveal the buyer's identity or intended use of the property. This case forces negotiators to directly confront the issue of the intended use of the property.

Participants were randomly assigned to represent either the buyer's agent ("buyer") or the seller's agent ("seller"). Only the buyer's role provides the individual with strong incentives to engage in misrepresentation or false promises (behaviors rated as unethical in previous research by Robinson, Lewicki, & Donahue, 2000). Thus, the buyers' data are our focal interest here. Participants read proprietary role information and prepared in advance. In class, dyads were randomly assigned to condition (gain vs. loss) and given additional information in which the frame manipulation was embedded. The students had 45 min to negotiate. After negotiating, each dyad submitted an outcome summary, and then each individual negotiator completed a questionnaire that included our dependent measures.

*Manipulation of Frame*

The frame was manipulated for buyers only:

You are on commission based on the sales price of the building.  
You are being paid 3% of the sales price. Based on your analysis, you have a 25% chance of gaining/75% chance of losing this property, and thus your commission.

All sellers were told that they were being paid a commission based on the sales price of the building; sellers' materials did not refer to the probability of a potential outcome.

*Dependent Measures*

We operationalized unethical behavior with four measures. The first measure (*honesty*) was the buyer's global, self-reported rating of how honest he or she was in the negotiation (1 = *not at all honest*, 10 = *very honest*). These scores were reverse-coded,

so that higher numbers represent less honest behavior, to be consistent with the other scores reported in this article.

The second measure (*intentions*) captured the buyer's behavioral response to the case's ethical dilemma: how to respond to questions about the intended use of the property. In each dyad, both the buyer and the seller reported what the buyer had said was the intended purpose of the property. By comparing the actual facts of the case with these responses, we coded them into two categories: The buyer lied or misrepresented the intentions for the property (coded as 1), or the buyer accurately conveyed information related to the intentions for the property (coded as 0). Within dyads, the buyer's and seller's reports were consistent, with the exception of four discrepancies that were easily resolved by two independent coders using additional information that was provided on the questionnaires and outcome summaries.

The third (*misrepresentation*) and fourth (*false promises*) measures (adapted from Robinson et al., 2000) reflected the buyer's self-reported use of unethical negotiation tactics. Buyers reported whether they engaged in each of seven tactics in the negotiation (1 = yes, 0 = no). Four tactics related to intentional misrepresentation, and three tactics referred to promises made without an intention to deliver.

## Results and Discussion

All four measures of unethical behavior produced convergent evidence that buyers in the loss-frame condition engaged in less ethical behavior than buyers in the gain-frame condition. We did not find (or expect) significant differences between sellers' perceptions of buyers in the loss-frame condition and sellers' perceptions of buyers in the gain-frame condition, so we do not report data for sellers.

Buyers in the loss-frame condition reported being more dishonest ( $M = 3.52, SD = 2.52$ ) than buyers in the gain-frame condition ( $M = 1.48, SD = 1.94$ ),  $F(1, 44) = 9.64, p_{\text{rep}} = .98, \eta_p^2 = .18$ . Furthermore, buyers in the loss-frame condition lied more about their client's intentions for the property ( $M = .65, SD = .49$ ) than did buyers in the gain-frame condition ( $M = .33, SD = .48$ ),  $F(1, 42) = 4.65, p_{\text{rep}} = .93, \eta_p^2 = .10$ .

Buyers reported using misrepresentation tactics more often in the loss-frame condition ( $M = .38, SD = .35$ ) than in the gain-frame condition ( $M = .18, SD = .28$ ),  $F(1, 44) = 4.62, p_{\text{rep}} = .93, \eta_p^2 = .10$ . They also reported making more false promises in the loss-frame condition ( $M = .24, SD = .32$ ) than in the gain-frame condition ( $M = .09, SD = .24$ ),  $F(1, 44) = 3.02, p_{\text{rep}} = .88, \eta_p^2 = .06$ .

Experiment 2 demonstrates a clear difference in the behavioral ethics of negotiators in loss-frame versus gain-frame situations. Together, Experiments 1 and 2 illustrate how an easily manipulated cognitive perception, such as a loss frame, influences both intended and actual ethical behavior.

Although time pressure was not manipulated in this experiment, participants were operating under a demanding deadline,

which may have heightened the effects of framing. In our final experiment, we manipulated time pressure in order to directly explore how framing effects on ethics operate under conditions fostering automaticity versus those explicitly removing time pressure.

### EXPERIMENT 3

#### Method

Ninety-three participants (57% female, 43% male) were recruited for a 2 (gain vs. loss frame)  $\times$  2 (time pressure vs. no time pressure) experiment. They received monetary compensation.

Participants were randomly assigned to either the gain or the loss condition (25% chance of gaining a sale vs. 75% chance of losing a sale) and to the time-pressure or the no-time-pressure condition. In the time-pressure condition, participants were instructed, "Please respond as quickly as you can, relying on your first instinct. We are interested in your immediate reaction." In the no-time-pressure condition, participants were instructed, "For this question, please take your time in responding, thinking carefully about the question. We are interested in your response after you have had a chance to deliberate." Response time, measured in milliseconds, was used as a manipulation check for time pressure.

Participants read this scenario:

You are trying to sell your stereo to raise money for an upcoming trip overseas. The stereo works great, and an audiophile friend tells you that if he were in the market for stereo equipment (which he isn't), he'd give you \$500 for it.

You don't have a lot of time before you leave for your trip. Your friend advises that you have a 25% chance of gaining/75% chance of losing out on a sale before you leave for your trip. A few days later, the first potential buyer comes to see the stereo, and seems interested. The potential buyer asks if you have any other offers. How likely are you to respond by saying that you do have another offer? (1 = very unlikely, 7 = very likely).

Higher numbers on the rating scale reflect a greater likelihood of lying. In pretesting, a similar sample of 37 participants rated lying about having an offer ( $M = 2.65, SD = 1.81$ ) as less ethical than not lying about having an offer ( $M = 5.00, SD = 2.07$ ),  $F(1, 36) = 52.44, p_{\text{rep}} = .99, \eta_p^2 = .59$ .

#### Results and Discussion

The manipulation check indicated that the time-pressure manipulation was successful. Participants in the time-pressure condition responded more quickly ( $M = 10.2$  s,  $SD = 5.7$  s) than participants in the no-time-pressure condition ( $M = 13.3$  s,  $SD = 6.1$  s),  $F(1, 82) = 5.34, p_{\text{rep}} = .95, \eta_p^2 = .06$ . Furthermore, response time did not vary by frame,  $F < .01$ .

Figure 1 presents mean scores for all four conditions. Analysis of variance revealed a main effect for frame,  $F(1, 89) = 5.41, p_{\text{rep}} = .95, \eta_p^2 = .06$ ; participants in the loss-frame condition ( $M = 5.09, SD = 1.70$ ) were more likely to lie than participants in the gain-frame condition ( $M = 4.19, SD = 1.83$ ). This main effect was qualified by an interaction between frame and time pressure,  $F(1, 89) = 3.97, p_{\text{rep}} = .92, \eta_p^2 = .04$ . Planned contrasts revealed a significant difference between the gain-frame condition ( $M = 3.88, SD = 1.73$ ) and the loss-frame condition ( $M = 5.46, SD = 1.38$ ) within the time-pressure condition,  $t(89) = -3.18, p_{\text{rep}} = .99$ . No other differences were found. Thus, individuals under time pressure were more influenced by frame than were those not under time pressure.

### GENERAL DISCUSSION

We have shown that loss frames influence ethical judgments and behaviors. When choosing a response, people trying to avoid a loss are more likely to draw upon lower-road ethical choices than are people trying to attain a gain. We have explained this tendency using the theoretical basis of framing effects. Furthermore, we have demonstrated how this tendency can be eliminated by removing time pressure, which suggests that it is driven by automaticity.

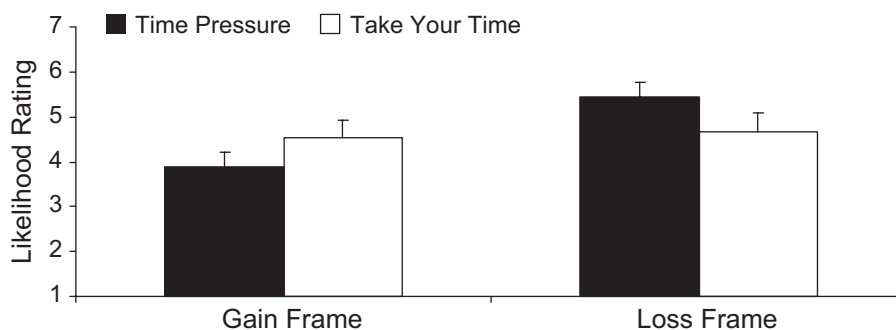


Fig. 1. Mean ratings of the likelihood of engaging in ethically ambiguous behavior in Experiment 3. Results are shown separately for the gain- and loss-frame conditions and the time-pressure and no-time-pressure conditions. Error bars represent standard errors.

Interestingly, we found a main effect of frame in Experiments 1 and 2, in which no timing instructions were provided, but did not find a main effect of frame in the no-time-pressure condition of Experiment 3. To better understand this pattern of results, we turned to response time data we collected in a separate study. Participants ( $n = 162$ ) in a similar sample were randomly assigned to three conditions: They (a) were given no timing instructions (as in Experiment 1), (b) received instructions that exerted time pressure (the equivalent of the time-pressure condition in Experiment 3), or (c) were told to “take your time” (the equivalent of the no-time-pressure condition in Experiment 3). In this study, we employed the consultant scenario from Experiment 1. Analysis of variance revealed a main effect for timing instructions,  $F(2, 159) = 3.36$ ,  $p_{\text{rep}} = .93$ ,  $\eta_p^2 = .04$ . Post hoc comparisons showed that response times for the overall task were significantly greater in the take-your-time condition ( $M = 41.07$  s,  $SD = 24.46$ ) than in both the no-timing-instructions condition ( $M = 33.11$  s,  $SD = 14.61$ ;  $p_{\text{rep}} = .94$ ) and the time-pressure condition ( $M = 32.14$  s,  $SD = 18.26$ ;  $p_{\text{rep}} = .95$ ). Condition had no effect on participants’ ethical decisions,  $F(2, 159) = 0.04$ ,  $p_{\text{rep}} = .51$ . Participants who were given no timing instructions responded as quickly as time-pressured participants, which suggests that the framing effect found in Experiment 1 emerged under natural conditions of automaticity; that is, in the absence of explicit instructions to “take your time,” participants performed as if under time pressure. A similar main effect for framing emerged in Experiment 2, which involved an in-class negotiation with a tight deadline that typically produces time pressure. In Experiment 3, the framing effect on ethics occurred in a manipulated condition of automaticity, and then was eliminated when the time pressure was explicitly removed; these results highlight time pressure’s heightening influence on the framing effect on ethics.

The convergent evidence from the three experiments using three different samples is a conservative test of our hypotheses, because all the experiments involved what was, in truth, a gain. The entrepreneur was trying to acquire an as-yet-undefeated competitor. The negotiating agent was trying to acquire an as-yet-unrealized commission. The stereo seller was trying to acquire an as-yet-unsecured sale. None of these situations involved a loss at all. One can imagine scenarios involving actual losses—the entrepreneur might be trying to avoid his or her company being poached, the agent might be trying to keep a client, and the stereo buyer might be trying to get money back. Yet simply *framing* the outcome as a loss or a gain was sufficient to generate the effect.

In fact, what makes the observed framing effect most ethically worrisome is the absolute consistency and transparency of the underlying reality facing decision makers in the loss-frame and gain-frame conditions. It is unsurprising that desperate people engage in desperate behaviors. However, decision makers need not face desperate circumstances to be at ethical risk. Framing effects are responses to gains or losses relative to a reference

point; the ethical risk does not require absolute desperation, but rather requires only relative levels of loss.

In this work, we paid specific attention to the actor, rather than the environment or the content of the decision. The framing of the situation, and the time pressure applied, were both targeted at the decision maker, and the ethical behavior being studied was that of the decision maker. By observing actual behavior, one can gain insight into the psychological realities facing individuals in what they perceive are difficult circumstances. We anticipate, for example, that in addition to time pressure, cognitive load would have ethical implications for decision makers. Future studies will benefit from considering even richer behavioral variables. Although Experiment 2 offers behavioral data, the behavior was self-reported and occurred within a simulation, rather than a real-world situation with real risks and benefits incurred through unethical acts.

What is the role of affect in the effect of framing on ethics? Recent work in neuroscience (De Martino et al., 2006; Weller, Levin, Shiv, & Bechara, 2007) has demonstrated that framing effects are influenced by affective processes. Additionally, perhaps a loss frame generates a different level and type of affective response than a gain frame, in which case affect may be a mediator in the effects we observed. Further research might explore the affective antecedents of ethical choices, building on work by Fetherstonhaugh, Slovic, Johnson, and Friedrich (1997) and Slovic (2007), who have argued that an emotionally processed stimulus (e.g., specific information about an individual in need) can lead to more helping behaviors than a cognitively processed stimulus (e.g., a statistic). These findings suggest that the automaticity of emotional processing may lead to helping behaviors. In this article, we have focused on the interaction between automatic processing and a loss frame, rather than on questions related to the main effect of automatic processing, leaving open important questions of how the automaticity fostered by time pressure might influence helping behavior.

In addition to affective experience, affective forecasting may also prove relevant. Kermer, Driver-Linn, Wilson, and Gilbert (2006) found that people overestimate how bad they will feel after a loss, and how long they will feel that way, and that these overly pessimistic affective forecasts underlie loss aversion. Perhaps more accurate affective forecasts would protect ethical choices from the effects of framing. Cognitive strategies, such as an explicit attempt to reframe a situation or to better calibrate one’s anticipated response to a loss, may prove useful in fostering ethical behavior. Eventually, research may lead to debiasing strategies for the ethically minded decision maker.

Framing may have its most robust effect on ethics when the less ethical choice requires action (vs. inaction) or commission (vs. omission; Spranca, Minsk, & Baron, 1991). Action is a potential confound in Experiment 1 (the less ethical choice of hiring the consultant required action, whereas the more ethical choice of not hiring the consultant required only inaction), but not in Experiments 2 and 3 (action was required for both the

ethical and the unethical choices). Future work might test action as a boundary condition for the framing effect on ethics, investigating whether a loss frame leads to less ethical behavior only if action is required.

Tversky and Kahneman (1981) coined the term “decision frame” to describe the “decision-maker’s conceptions of the acts, outcomes, and contingencies associated with a particular choice” (p. 453). Here, we focused on the role of these conceptions in ethical decision making, and on the cognitive resources required to manage them. By manipulating cognitive frames and resources, we explored the process underlying “in the moment” ethical choices, bringing cognitive variables into the study of bounded ethicality (Treviño, 1986). Just as the known cognitive pitfalls of framing effects allow for systematic prediction of the conditions under which decision makers are prone to cognitive error, the framing effect on ethics points to the conditions under which decision makers are in greatest ethical peril.

**Acknowledgments**—The two authors contributed equally to the development of this research. Order of authorship was determined by a coin toss. We thank Modupe Akinola, Zeynep Aytug, Mahzarin Banaji, Max Bazerman, Aqsa Durrani, Tina Opie, Maria Rodriguez, Yuval Rottenstreich, Tuvana Rua, Kelly See, Batia Wiesenfeld, and two anonymous reviewers.

## REFERENCES

- Camerer, C.F. (2000). Prospect theory in the wild: Evidence from the field. In D. Kahneman & A. Tversky (Eds.), *Choices, values, and frames* (pp. 288–300). Cambridge, England: Cambridge University Press.
- Chugh, D., Bazerman, M., & Banaji, M. (2005). Bounded ethicality as a psychological barrier to recognizing conflicts of interest. In D. Moore, D. Cain, G. Loewenstein, & M. Bazerman (Eds.), *Conflict of interest: Challenges and solutions in business, law, medicine, and public policy* (pp. 74–95). New York: Cambridge University Press.
- Damasio, A.R. (1994). *Descartes’ error: Emotion, reason, and the human brain*. New York: Putnam.
- Darley, J., & Latané, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology*, 8, 377–383.
- De Martino, B., Kumaran, D., Seymour, B., & Dolan, R.J. (2006). Frames, biases, and rational decision-making in the human brain. *Science*, 313, 684–687.
- Fetherstonhaugh, D., Slovic, P., Johnson, S., & Friedrich, J. (1997). Insensitivity to the value of human life: A study of psychophysical numbing. *Journal of Risk and Uncertainty*, 14, 283–300.
- Gilbert, D.T. (2002). Inferential correction. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 167–184). Cambridge, England: Cambridge University Press.
- Greene, J.D., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in Cognitive Sciences*, 6, 517–523.
- Greene, J.D., Nystrom, L.E., Engell, A.D., Darley, J.M., & Cohen, J.D. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron*, 44, 389–400.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834.
- Heath, C., Larrick, R.P., & Wu, G. (1999). Goals are reference points. *Cognitive Psychology*, 38, 79–109.
- Kahneman, D., Knetsch, J.L., & Thaler, R.H. (1990). Experimental tests of the endowment effect and the Coase theorem. *Journal of Political Economy*, 98, 1325–1348.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263–292.
- Karp, R., Gold, D., & Tan, M. (1998). Bullard Houses. In J.M. Brett (Ed.), *Teaching materials for negotiations and decision making, 2008* (p. 12). Evanston, IL: Northwestern University, Dispute Resolution Research Center.
- Kellaris, J.J., Boyle, B.A., & Dahlstrom, R.F. (1994). Framing and situational ethics. *Marketing Letters*, 5, 69–75.
- Kermer, D.A., Driver-Linn, E., Wilson, T.D., & Gilbert, D.T. (2006). Loss aversion is an affective forecasting error. *Psychological Science*, 17, 649–653.
- Kuhberger, A. (1998). The influence of framing on risky decisions: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 75, 23–55.
- Loyd, D.L., Kern, M.C., & Thompson, L. (2005). Classroom research: Bridging the ivory divide. *Academy of Management Learning and Education*, 4, 8–21.
- Messick, D.M., & Bazerman, M.H. (1996). Ethics for the 21st century: A decision making approach. *Sloan Management Review*, 37, 9–22.
- Milgram, S. (1974). *Obedience to authority: An experimental view*. New York: Harper & Row.
- Newberry, K.J., Reckers, P.M.J., & Wyndelts, R.W. (1993). An examination of tax practitioner decisions: The role of preparer sanctions and framing effects associated with client condition. *Journal of Economic Psychology*, 14, 439–452.
- Petrinovich, L., & O’Neill, P. (1996). Influence of wording and framing effects on moral intuitions. *Ethology and Sociobiology*, 17, 145–171.
- Robinson, R.J., Lewicki, R.J., & Donahue, E.M. (2000). Extending and testing a five factor model of ethical and unethical bargaining tactics: Introducing the SINS scale. *Journal of Organizational Behavior*, 21, 649–664.
- Schweitzer, M.E., Ordóñez, L., & Douma, B. (2004). Goal setting as a motivator of unethical behavior. *Academy of Management Journal*, 47, 422–432.
- Slovic, P. (2007). If I look at the mass, I will never act: Psychic numbing and genocide. *Journal of Judgment and Decision Making*, 2, 79–95.
- Spranca, M., Minsk, E., & Baron, J. (1991). Omission and commission in judgment and choice. *Journal of Experimental Social Psychology*, 27, 75–105.
- Stanovich, K.E., & West, R.F. (2002). Individual differences in reasoning: Implications for the rationality debate? In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 421–441). Cambridge, England: Cambridge University Press.
- Tenbrunsel, A.E., & Smith-Crowe, K. (2008). Ethical decision making: Where we’ve been and where we’re going. *Academy of Management Annals*, 2, 545–607.

- Treviño, L.K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *Academy of Management Review*, *11*, 601–617.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*, 453–458.
- Weller, J.A., Levin, I.P., Shiv, B., & Bechara, A. (2007). Neural correlates of adaptive decision making for risky gains and losses. *Psychological Science*, *18*, 958–964.

(RECEIVED 4/1/08; REVISION ACCEPTED 9/8/08)