Contemplation and Conversation: Subtle Influences on Moral Decision Making

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ABSTRACT

This research investigated the role of contemplation, conversation (conceptualized as social contemplation), and explanations in right-wrong decisions. Several theories suggest that contemplation or morally-oriented conversations will promote ethical decisions and that immediate choice or self-interested conversations will not; other theories suggest that individuals' explanations will reinforce their decisions. An experimental task tempting people to lie supported all of these predictions. In addition, truth-tellers viewed the situation as morally-oriented and non-truth-tellers viewed it as oriented around self-interest, both before and after their decisions. These findings provided the basis for a new, process model of moral decision making.

Key words: morality, ethics, contemplation, conversation, explanations

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Moral decisions abound in organizations: builders choose between durable and cheap materials; salespeople choose to reveal or conceal available discounts; and accountants decide when creative becomes deceptive. Recent scandals at Goldman Sachs, Satyam Computers, Siemens, and Societe Generale document the importance of moral decisions for managers, employees, customers, and shareholders (Ashforth, Gioia, Robinson, & Trevino, 2008)—and these are just a few of many corporate examples. The unfortunate frequency of unethical decision-making in organizations around the world raises obvious questions about the basic, underlying causes of these decisions.

Moral decisions, which Jones (1991) and Kidder (1996) have characterized as value-based, volitional choices with interdependent consequences, feature prominently in organizations. The current research investigates a set of moral decisions that are not just common but crucially important in organizational contexts: right-wrong decisions (Ashforth et al., 2008; Beauchamp, Bowie, & Arnold, 2008; Brief, Buttram, & Dukerich, 2000; Darley, Messick, & Tyler, 2001; Jones, 1991; Tenbrunsel & Smith-Crowe, 2008). Although most people feel that they have a good sense of what is right and wrong, right-wrong decisions remain difficult because doing the wrong thing can be incredibly tempting. Yet, the long-term consequences of an unethical decision can impose dramatic costs on organizations (Beauchamp et al., 2008; Brief et al., 2000): recent allegations against Goldman Sachs, for instance, resulted in significant reputational damage and fines of $550 million (Guerrera, Sender, & Baer, 2010). Thus, it is surprising that research on right-wrong decisions is not voluminous: many theoretical and empirical questions remain open, including questions concerning the basic, psychological processes that directly influence individuals' moral decisions (Darley et al., 2001; Trevino, Weaver, & Reynolds, 2006).

The literature on moral decision making, including both right-wrong and right-right decisions, has investigated the effects of a wide range of important individual and contextual factors, including gender (Brady & Wheeler, 1996; Whipple & Swords, 1992), rewards and sanctions (Flannery & May, 2000; Hegarty & Sims, 1978), moral intensity (Jones, 1991), moral philosophies (e.g., Cyriac & Dharmaraj, 1994; Hegarty & Sims, 1978; Hunt & Vasquez-Parraga, 1993), age (Ruegger & King, 1992; Stevens, Harris, & Williamson, 1993; White & Dooley, 1993), and codes of ethics (Trevino & Youngblood, 1990; Weaver, Trevino, & Cochran, 1999), among others. In this research, individual and contextual factors have been characterized as bad apples vs. bad barrels (Ashforth et al., 2008), or organizations of corrupt individuals vs. corrupt organizations (Pinto, Leana, & Pil, 2008).

Our research complements these findings by examining two, key individual and contextual *processes* that precede many moral decisions: contemplation (individually conducted moral reasoning; Kohlberg, 1969) and conversation (an exchange of situation-relevant statements between two or more parties; Schegloff, 1984, 1987). This focus on proximal processes immediately preceding a decision reflects our assumption that *how* individuals decide is an important determinant of *what* they decide (Keeney & Raiffa, 1993; Lange, 2008). People have more control over their own decision processes than they do over other potentially influential factors (Lange, 2008). For example, people facing moral decisions can often control their own contemplation more readily than their gender or their company's code of ethics. By isolating these two, fundamental processes preceding moral decisions, our research focuses directly on the immediate causes of moral decisions and highlights potentially effective interventions.

Our research also investigates explanations, a third key process that often accompanies moral decision making in organizations. Explanations have been defined as individuals' social accounts of their decisions (e.g., Scott & Lyman, 1968; Shaw, Wild, & Colquitt, 2003). Our focus on explanations builds from several assumptions: that organizational actors often demand that decision makers explain important decisions (Shaw et al., 2003), that conversations and contemplation often

result in the construction of explanations, and that conversations are a typical context for explanations (e.g., "Causal explanation takes place in and takes the form of conversation"; Hilton, 1990: 5). Thus, we view explanations as an essential component of right-wrong decision making in organizations. Since individuals craft explanations either as they make their decisions (Beach, 1998) or after they have decided (Cushman, Young, & Hauser, 2006; Haidt, 2001; Shaw et al., 2003), our empirical approach investigates both possibilities: we assess the relationship between *a priori* explanations and decisions (by analyzing conversation content) as well as the relationship between decisions and *post hoc* explanations (e.g., Kelley, 1967). Because it is difficult to measure exactly when individuals actually make their decisions, *a priori* and *post hoc* refer to explanations' position relative to the visible "event" of registering the decision.

Like contemplation and conversation, explanations also fit an individual/contextual dichotomy, as right-wrong decision makers may need to explain both their own decisions and the situation that led to their decision (Scott & Lyman, 1968). Overall, our goals are to understand the effects of and the linkages between contemplation, conversation, and explanations. Ultimately, we hope to develop a set of prescriptions that facilitate ethical decision making in organizations.

RIGHT-WRONG DECISIONS

Right-wrong decisions represent an especially important subset of moral decisions because they are common and consequential, in organizations and in general (Beauchamp et al., 2008; Brief et al., 2000; Jones, 1991; Margolis & Molinsky, 2008). For example, the Association of Certified Fraud Examiners estimates that U.S. businesses lost $994 billion on employee fraud in 2008 alone.

Unlike general, everyday decisions, moral decisions necessarily concern values; unlike right-right decisions, which involve a difficult choice between competing moral values (e.g., justice and mercy; Kidder, 1996), right-wrong decisions pit a moral value (e.g., honesty) against basic self-interest (e.g., lying to get ahead). Thus, right-wrong decisions include alternatives that are clearly ethical (reflecting normative values) and clearly unethical (reflecting the temptation to violate

normative values for personal gain).[1] Although what is right and what is wrong in a right-wrong decision may be easy to identify, right-wrong decisions can be far from easy to make. On one hand, organizations and individuals often do "right" (e.g., Johnson & Johnson's swift recall of Tylenol); on the other, doing "wrong" can be tremendously enticing. The underlying reason behind many corporate scandals is not that people do not understand the "wrongness" of their actions: Enron executives, for example, almost certainly knew that their accounting practices were irregular (McLean & Elkind, 2004). The social and organizational problem lies in the fact that, even with this knowledge, people still do wrong (Brief et al., 2000).

The normative clarity of right-wrong decisions—the fact that an ethical "right" is clear and obviously distinguishable from an unethical "wrong"—makes it possible to conduct straightforward tests of the link between psychological processes and ethicality (Tenbrunsel & Smith-Crowe, 2008). Right-right decisions, in contrast, are particularly ambiguous, as either option (e.g., justice or mercy) is normatively acceptable, even admirable. At the same time, the past research on right-right decisions has yielded important, theoretical insights that facilitate analysis of the dynamic forces behind right-wrong decisions—most notably, the notion that cognitive awareness of relevant moral values is an important precursor to ethical decisions. Because empirical research on right-wrong decisions is relatively thin (Tenbrunsel & Smith-Crowe, 2008), our hypotheses draw from models of both right-right and right-wrong decision making.

PSYCHOLOGICAL PROCESSES

Rational and moral reasoning models suggest that in moral situations, contemplation is an essential element of moral decision making (e.g., Etzioni, 1988; Keeney & Raiffa, 1993; Kohlberg, 1969; Murnighan, Cantelon, & Elyashiv, 2001; Piaget & Gabain, 1966). Other models, however,

[1] We use the term "moral" categorically, to describe a particular type of decision, i.e., one concerning values. We use the term "ethical" evaluatively, to describe decisions that are normatively appropriate (with its opposite being unethical).

suggest that contemplation is peripheral (Haidt, 2001) or counterproductive, fostering moral disengagement and self-interested choices (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

Pure contemplation, completely devoid of social context, may not be realistically possible (Allport, 1968), especially in organizations (Darley et al., 2001; Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Thus, we also assess the effects of conversations, which we conceptualize as social contemplation. Because conversations, by definition, involve an exchange (i.e., monologs do not qualify; Schegloff, 1984, 1987), they allow individuals to assess - unsystematically and unscientifically - how at least one other individual sees the situation and its related norms (Bettenhausen & Murnighan, 1991). They also allow people to begin formulating their own explanations and decisions. Conversations can obviously take many forms (Goodwin & Heritage, 1990); they are particularly influential when a speaker is well-informed, articulate, engaging, and on-point (e.g., Hovland, Janis, & Kelley, 1953). We present a conservative test of conversation's effects by confining our analysis to truly minimal conversations: simple email exchanges with an anonymous stranger who alludes to situational norms.

As noted, the inevitable presence of other organizational actors means that explanations, a third psychological process, are also critically important. Because people are required or feel compelled to explain their decisions (Festinger, 1957; Lewicki, 1987), explanations are particularly common in organizations (Shapiro, 1991). After explanations become public, they can also act as fodder for future conversation and contemplation, with additional organizational implications.

CONTEMPLATION

Scholars have long suggested that contemplation can help people resolve moral conflicts. Both Plato (1909/300's BC) and Aristotle (1972/300's BC) viewed reasoning as the arbiter of conflicting values; other philosophers (e.g., Aquinas, 1274/1947; Bentham, 1823; Kant & Ellington, 1785/1983; Rawls, 1971) have also posited a direct connection between values and the conscious consideration of rules. More recent models of moral reasoning (e.g., Kohlberg, 1958, 1969; Piaget &

Gabain, 1966) and value-based decision making (e.g., Etzioni, 1988; Keeney & Raiffa, 1993) suggest that contemplation allows decision makers to access, consider, and integrate moral values, increasing the likelihood of ethical decisions.

Developmental theorists (e.g., Kohlberg, 1958, 1969; Piaget, 1932) have characterized contemplation as the cornerstone of moral reasoning, and reasoning as the essence of moral decision making, particularly for right-right decisions. For instance, Kohlberg (1958) pitted family loyalty against social justice by asking people whether a husband should steal a life-saving drug that he could not afford to save his sick wife. To resolve dilemmas like these, Piaget and Kohlberg suggested that individuals must engage their moral reasoning systems: they treated contemplation as an essential means for accessing moral values and, ultimately, making a reasoned, ethical decision.

A broad range of moral decision making models and related research continue to suggest that contemplation can facilitate access to moral values and promote ethicality. For example, Jones (1991) emphasized that ethical decisions require moral awareness, a likely outcome of contemplation (Cushman et al., 2006). Theories of moral imagination (e.g., Werhane, 1999) contend that people need to consider a situation from several perspectives, including a moral perspective, to achieve moral awareness. Etzioni's (1988) and Keeney and Raiffa's (1993) economic approaches suggest that pre-decision contemplation can help individuals balance personal values against economic considerations, and Beach's (1998) image theory suggests that individuals make tough, high-stakes choices by "searching for arguments" that are consistent with their values, goals, and plans. Finally, recent research on "necessary evils" (Margolis & Molinsky, 2008; Molinsky & Margolis, 2005) suggests that individuals who make tough, moral choices every day (e.g., police officers) are most effective when they cognitively contemplate the right-wrong elements of their choices.

Moral decision making models have also characterized a *lack* of contemplation as a basis for undermining ethicality. Murnighan et al.'s (2001) model of bounded personal ethics, for example,

suggests that individuals' immediate reactions to temptation are typically self-interested, reflecting deeply-seated, evolutionary motives. In emphasizing moral awareness, Jones (1991) also implied that making choices quickly can prevent individuals from appreciating a situation's moral intensity, blunting their access to advanced moral reasoning. Finally, Moore and Loewenstein (2004) suggested that self-interest is automatically compelling, and that, at a minimum, people need time to contemplate before they can realistically consider their moral obligations. Collectively, these models suggest that decisions made immediately are ethically perilous, and that contemplation can promote ethical decisions by facilitating access to moral values. Empirical tests of the connection between contemplation and ethicality, however, have been relatively rare (Tenbrunsel & Smith-Crowe, 2008). This may partly reflect the indeterminacy of right-right decisions (i.e., which "right" is more ethical), which we avoid in this research by investigating relatively unambiguous right-wrong choices. Whatever their economic merits, for example, the moral merits of honesty and lying are easily differentiated (Haidt, 2001). We suggest that contemplation can be particularly valuable in right-wrong decision making because it gives people time to actively consider the values associated with the less tempting, "right" choice. In essence, contemplation lets decision makers weigh their moral principles against their self-interested desires. This all suggests that contemplated choices should be more ethical than immediate choices (i.e., choices made with enough time to process the situation, but not enough time to contemplate).

Models of moral intuition (e.g., Greene & Haidt, 2002; Haidt, 2001; Haidt & Hersh, 2001; Haidt, Koller, & Dias, 1993; Tetlock, Kristel, Elson, Green, & Lerner, 2000) and moral disengagement (e.g., Bandura, 2002; Bandura et al., 1996; McAlister, Bandura, & Owen, 2006), however, question the importance of contemplation. Moral intuition models investigate decisions in which the "wrong" evokes a strong, negative emotion, typically disgust (e.g., whether to eat a pet to stave off hunger; Haidt, 2001). Haidt (2001) argued that these affectively-charged decisions prompt automatic, effortless, and emotional reactions (i.e., moral intuitions), which lead to quick decisions.

In other words, people immediately know which alternative is right without needing to contemplate. Indeed, contemplation is only necessary *post hoc*, to help individuals construct socially-acceptable explanations. Moral intuition models are consistent with models of naturalistic decision making (e.g., Dane & Pratt, 2007; Zsambok & Klein, 1997), which suggest that people make many choices immediately, without contemplation.

Moral disengagement models address decisions in which the "wrong," though clearly wrong, can be portrayed as "right" (e.g., lying "to keep your friends out of trouble"; Bandura et al., 1996). Bandura and his colleagues (e.g., 1996) define disengagement as the outcome of this reconstrual process, which seems to require contemplation. In other words, moral disengagement models suggest that contemplation *releases* people from their moral constraints by helping them find creative reconstruals of behavior that would otherwise seem wrong. Overall, then, the moral intuition and moral disengagement models question the importance of contemplation.

Although "wrongs" that evoke disgust or that invite reconstrual are important, we suggest that most of the right-wrong decisions that organizational actors face do neither. Many organizational decisions concern money rather than "disgusting" taboos. In addition, many organizational decisions are stark—juxtaposing a clear right against a clear wrong—which should make it difficult to reinterpret moral obligations and reconstrue a "wrong" as right. Thus, although we recognize that contemplation can focus attention on either ethical or self-interested action, we predict that, for right-wrong decisions in organizations, contemplation will encourage a consideration of moral values and increase the likelihood of ethical decisions. Thus:

Hypothesis 1: Compared to immediate choice, contemplation will result in more ethical decisions.

CONVERSATION

The social nature of organizations means that organizational decision-making models must account for social context. A huge literature on decision-making, some morally-relevant, has

investigated the psychological impact of social context (e.g., Haney, Banks, & Zimbardo, 1973; Latané & Rodin, 1969; Milgram, 1963), and recent moral decision making models respect the importance of social interaction, at least implicitly (e.g., Brown, Trevino, & Harrison, 2005; Cohen, Gunia, Kim, & Murnighan, 2009; Gino, Ayal, & Ariely, 2009). The social exchange of situationally-relevant statements (i.e., conversation), however, does not yet have a fundamental role (Darley et al., 2001; Trevino et al., 2006). Thus, we introduce conversation as an important arena of inquiry in moral decision making.

We conceptualize conversations as *social contemplation* because they allow people to think out-loud, with others' assistance. In particular, conversations allow people to compare their interpretation of the situation with others' interpretations (e.g., Festinger, 1954). Because conversations are "situated within specific contexts and designed with specific attention to these contexts" (Goodwin & Heritage, 1990: 5), they can help people make sense of what is appropriate or inappropriate (e.g., Bettenhausen & Murnighan, 1991; Cialdini, Reno, & Kallgren, 1990; Milgram, 1963). Because people may not "know what they think until they see what they say" (Weick, 1993), and because they strive to be consistent (Festinger, 1957), what people say can matter as much as what they hear.

If conversation is akin to social contemplation, then the effects of conversing (i.e., conducting a two-way exchange of situationally-relevant information) should be similar to the effects of contemplation, which suggests:

Hypothesis 2: Compared to immediate choice, conversations will result in more ethical decisions.

Hypotheses 1 and 2 suggest that contemplation and conversation will have similar effects. Conceptually, both are "black boxes" with unspecified content. Our analysis of contemplation, however, suggested that contemplation encourages ethicality because it highlights moral values that counterbalance an initial, immediate inclination toward self-interest. Thus, contemplation may lead

to ethical decisions because of its content. This suggests that the content of a conversation should also shape its effects. From a methodological standpoint, studying conversation content is easier than studying contemplation content, because conversation content is easily observable. What people think comes largely from within, while what they discuss emerges publicly (Schegloff, 1984, 1987). This allows us to "open the black box" of conversation and consider the effects of its content. Although conversation content can vary almost infinitely (Goodwin & Heritage, 1990), we created strong constraints on the conversations in our experiment, restricting people to a single, short email exchange. This allowed us to focus on a central attribute of conversations: their normative content (Bettenhausen & Murnighan, 1991; Pillutla & Chen, 1999; Sherif, 1936).

Because norms help people make sense of ambiguous situations, we predicted that normative content would influence the effects of conversations on ethicality. In right-wrong situations, two norms are particularly prominent and likely to arise from conversation: those that support what is "right" and those that support what is "wrong" (Etzioni, 1988; Tenbrunsel & Messick, 1999). Comments about a situation's moral issues can highlight what is right, emphasizing moral norms, prompting moral awareness, and suggesting that moral action is appropriate (Etzioni, 1988). In contrast, comments about a situation's economic issues can highlight norms of self-interest, suggesting that moral awareness may not be particularly relevant and that economic outcomes are acceptable and appropriate (Miller, 1999; Ratner & Miller, 2001).

Thus, we predict that conversations that evoke moral norms, even in the most minimal fashion (minimal "moral conversations"), will facilitate and validate the consideration of moral values, suppressing self-interest and providing social proof that others consider moral action appropriate (Cialdini et al., 1990). In contrast, minimal conversations that evoke norms of self-interest (minimal "self-interested conversations") should facilitate and validate self-interest, suppressing moral awareness and providing social proof that others consider self-interested action

appropriate.[2] Control conversations, which we manipulated to evoke no normative content, should logically have intermediate effects:

Hypothesis 3: Moral conversations will lead to more ethical decisions than control conversations, which will lead to more ethical decisions than self-interested conversations.

Prior research does not differentiate between various means of raising moral awareness; for example, Jones (1991) suggests that as long as awareness is activated, ethical decisions will be more likely. Hypothesis 3 suggests that moral conversations will raise moral awareness and promote ethicality, and that self-interested conversations will not. If contemplation also raises awareness and promotes ethicality relative to immediate choice (Hypothesis 1), then contemplation and moral conversation should have similar effects, as should immediate choice and self-interested conversation:

Hypothesis 4: Moral conversations and contemplation will have similar effects, leading to more ethical decisions than self-interested conversations and immediate choice.

EXPLANATIONS

People who work in organizations have many reasons to care about their own and their colleagues' explanations (Shaw et al., 2003) because explanations, like conversations, can act as sensemaking devices, helping individuals understand complex situations (Weick, 1993). Especially when the stakes are high, as they can be in right-wrong decisions, explanations become important and often necessary (Lewicki, 1987; Scott & Lyman, 1968). Thus, any model of right-wrong decision making in organizations should include explanations. In addition, contemplation and conversation can help individuals construct explanations, and conversation can allow them to test or share their explanations (Festinger, 1954).

[2] Although conversations can include elements of both norms, we made the distinction rigid for theoretical and empirical clarity.

It is easy to see how explanations connect with moral intuition and moral reasoning models: Moral intuition models suggest that right-wrong decisions prompt immediate, morally-dichotomous reactions: people know what is right and wrong right away (Haidt, 2001). Moral reasoning models suggest that contemplation is required to appreciate right and wrong (Kohlberg, 1969). Either way, people who have reached an initial inclination can then engage in a search for arguments (Beach, 1998) or justifications (Bandura et al., 1996)—on their own (via further contemplation) or socially (via conversation)—that can help convert inclinations into decisions or justify decisions already made. Thus, people may begin to develop explanations either before ("*a priori*") or after registering their decisions ("*post hoc*").[3] Indeed, Cushman et al. (2006) suggest that people try to justify their decisions, both *a priori* and *post hoc*, using similar reasons. Either way, explanations typically support decisions (e.g., Festinger, 1957), even at the expense of ethicality (Zhong, Ku, Lount, & Murnighan, 2010).

When individuals make questionable decisions, they often attribute them to the situation and its norms; when they make laudable decisions, they often attribute them to personal factors (e.g., Bandura et al., 1996; Milgram, 1963). Attributions are not the same as explanations, however: explanations are specifically designed for an audience and must anticipate their likely reactions (Hilton, 1990). Thus, people typically construct explanations to *communicate* causes in socially-acceptable ways: "One speaks of *giving* causal explanations but not attributions" (Hilton, 1990: 65; emphasis in original).

Ironically, explanations are most acceptable when they convince the audience that little explanation is necessary—that the behavior in question reflects taken-for-granted assumptions and that anyone facing this situation would do the same thing (Bettenhausen & Murnighan, 1991; Miller,

[3] Decision makers who have moral intuitions, ala Haidt (2001), will have immediate inclinations without contemplation. Much of their contemplation will then constitute *post hoc* explanations. Decision makers who morally-reason, ala Kohlberg (1969), will contemplate before they make a moral decision. We do not view contemplation at that time in the process as explanation, because this contemplation precedes any substantive decision making. We categorize these thoughts as "*a priori*" because they occur before decisions are behaviorally registered.

1999; Sherif, 1936). Thus, explanations tend to succeed when they focus on the situation and its norms. Although attribution theory implies that only wrongdoers should cite the situation in their attributions, we suggest that people who act ethically will also cite the situation in their *explanations*. Situational explanations for ethical choices provide a socially-acceptable rationale (everyone facing this situation would act the same way); they also avoid the appearance of self-promotion. In addition, situational explanations for unethical choices can provide an acceptable rationale and avoid blame. Thus, situational, norm-focused explanations should be effective in both cases, for ethical and for unethical decisions. (Note, however, that people can still make personal attributions privately.)

As noted, two classes of norms—moral and self-interested—often arise in right-wrong situations. It seems reasonable that situational, norm-focused explanations, like conversations, will focus on these same two norms. In other words, decision makers in the midst or the wake of a right-wrong decision are likely to explain it as a function of moral or self-interested norms—whichever supports their decision. They could say, for example, that the situation demands honesty, or that everyone "looks out for #1." As these examples highlight, neither moral nor self-interested explanations are inherently ethical or unethical, since the latter could be amoral rather than unethical.

Our empirical context allowed us to test whether moral decision makers used situational explanations, both *a priori* and *post hoc*. While it was impossible to unobtrusively assess the *a priori* explanations of people who contemplated, what people said in their conversations provided a source of *a priori* explanations. In the context of this study, people heard a conversation partner's statement, replied, and then made their own decision. If their replies were consistent with both the partner's statement and their own decision, it would suggest that people were mimicking and implementing their partner's viewpoint. If their replies were more consistent with their partner's statement than their ultimate decision, it would suggest that they were mimicking but not implementing the partner's viewpoint. If their replies were more consistent with their own ultimate decision than their

partner's viewpoint, it would suggest they had already reached an initial inclination and were using the explanation to justify it *a priori*, i.e., before registering it.

As noted, we interpret *a priori* explanations as a justification mechanism. Attribution theory (Kelley, 1967) suggests that individuals tend to use *post hoc* explanations for the same purpose. Thus, for both *a priori* and *post hoc* explanations:

Hypothesis 5: Individuals' explanations will be more consistent with their decisions than with their counterparts' conversational statements.

Hypothesis 6: Individuals who make ethical (unethical) decisions will emphasize the situation's moral (self-interested) norms in their explanations.

THE CURRENT RESEARCH

The current research presented participants with a clear, right-wrong decision: whether to tell an overt lie (in hopes of boosting their own payoffs) or tell the truth (and likely receive a lower payoff). To rule out other forces that might have influenced their decisions and to focus on fundamental psychological processes, we conducted a controlled laboratory experiment. This allowed us to isolate and compare the effects of contemplation and immediate choice with the effects of conversations that included one of three distinct sets of content.

Thus, we created five, independent conditions to observe the effects of contemplation, immediate choice, and three kinds of conversations: moral, self-interested, and control. In the contemplation condition, we asked individuals to "think very carefully" about their decision and gave them three minutes to do so. In the immediate choice condition, we asked individuals to make their decisions in a much shorter timeframe, limiting their opportunity to contemplate. Thus, immediate choice served as a comparison condition for contemplation.

The conversation conditions provided a conservative test of our predictions, as they were truly minimal: participants exchanged a single email with someone described as an anonymous, randomly-selected peer who was making the same decision that they were. Thus, conversation

partners had neither a stake in participants' decisions, nor any particular expertise. In actuality, these partners did not exist; instead, participants received pre-programmed messages indicating that morality or self-interest was the appropriate basis for action, or that the normative basis was unclear (the control conversation). After receiving one of these emails, participants in the conversation conditions sent a reply email that we coded for *a priori* explanations. In all five conditions, participants made a decision about whether to tell the truth or lie and immediately answered a series of open- and close-ended questions about their explanations, their evaluations of their conversation partner, their attributions, and other basic reactions.

Methods

Participants. One-hundred and forty-six undergraduates[4] (62 males, 76 females, 8 unreported, ranging from 17 to 24 years old; $M = 19.94$, $SD = 1.38$) from a major university in the U.S. Midwest enrolled in an experiment on "decision making." Participants were members of a business school subject pool who had indicated interest in experimental participation and replied to emails offering $5, plus up to $10 based upon their choices. All participants ultimately received $15.

The use of undergraduates in an experiment is a methodological choice that should be made carefully rather than conveniently. In the current research, we chose experimental methods to increase control and to test specific theoretical hypotheses; alternative (field) methods would almost necessarily suffer from variation in decision contexts, in the content of social interactions, and in the timing of participants' decisions. We also felt that right-wrong decisions that had obvious moral consequences were not particularly experience-dependent: by the time individuals have reached college, they know the difference between right and wrong, and they can make thoughtful decisions. Research on moral reasoning also suggests that most, if not all people have reached the peak of their

[4] These numbers do not include nine subjects who were dropped from the analyses – six for experiencing computer problems, one for running out of time, and two for expressing suspicion about the procedures.

moral development by their late teens (Kohlberg, 1958). Thus, undergraduates were an appropriate sample, and one that might be enticed by the limited outcomes that our budget could provide.

Procedures. Each participant sat at a computer terminal in either a private room or cubicle, completed a consent form, and was randomly assigned to one of the five conditions. The first screen indicated that they would work on a decision making task with a randomly-selected participant whom they would not meet during or after the experiment. They also learned that their decision(s) would determine how much of the additional $10 they would receive.

They were told that the members of each pair would be randomly assigned to the roles of player 1 and player 2. The computer, however, always assigned participants to be player 1 in a modified version of Gneezy's (2005) "deception game." Participants were told that $15 would be allocated between them and player 2: Option A would pay player 1 $10 and player 2 $5; Option B would pay player 1 $5 and player 2 $10. (See Appendix A for the payoff table and the instructions.)

Participants were told that player 2s would choose between the options, but that only player 1s knew the monetary values associated with each option. Thus, player 2s would choose between Options A and B based only upon information that the player 1s (participants) would send them. Although the words "truth" and "lie" were not mentioned, participants had only two choices: to send a truthful message, "Option B earns you more than Option A," or a lie, "Option A earns you more than Option B." Previous research (Cohen et al., 2009; Gneezy, 2005) has shown that most participants (80%+) expect their counterpart to believe them, meaning that they expect that a truthful message will decrease their payoff and a lie will increase it. Several participants did suggest that they had told the truth in hopes that their counterpart would not believe them. We ran all of the analyses with and without these participants; excluding them did not change the results. Thus, we included all of the data in the final analyses.

Manipulations. After reading the initial instructions, participants in the contemplation condition proceeded to a second screen that detailed the payment information and instructed them to

"Please think **very carefully** about which message to send." This screen remained visible for exactly three minutes, as indicated by a timer at the bottom. The next screen repeated the payment information and said: "Now it's time to choose. You have 30 seconds to make your decision. Click the message you want to send." In the immediate choice condition, participants proceeded directly from the instructions to the "Now it's time" screen.

Participants in the contemplation condition made their decisions quickly (M = 5.85, SD = 3.85 seconds), using much less than the available 30 seconds. The immediate choice condition provided neither time nor encouragement to contemplate, but it did include the 30-second decision screen because pretests indicated that participants needed as much as 30 seconds to understand the procedures and payment information. Without any contemplation time, the immediate choice participants took longer to make their decisions (M = 11.41, SD = 7.03 seconds; $t(62) = 3.85$, $p < .001$), suggesting that they needed slightly more time or that they were conflicted about their choice. Controlling for their response times in the analyses did not change any of the results.

After the initial instructions, participants in the conversation conditions learned that they and another, randomly-selected, anonymous "participant" would send each other one email. The instructions emphasized that their conversation partner was *not* their player 2 counterpart, but another player 1, making the same decision that they were, with a different player 2. In other words, conversation partners were in the exact same situation as participants. Although the order of the two emails was ostensibly random, the nonexistent "partners" always sent the first email.

In the moral conversation condition, the partner's message suggested that most people would be truthful in situations like this, so they were planning to send the truthful message; in the self-interested condition, the message suggested that most people would see the pursuit of self-interest as appropriate in situations like this, so they were planning to send the message that maximized their payoff; and in the control condition, the message suggested that most other people would have a hard time in situations like this, so they did not know what to do. The three messages were pretested

to be as parallel and believable as possible (see Appendix B for their exact content). After receiving one of these messages, participants replied and proceeded to their decision. Thus, all participants engaged in an exchange of situation-relevant statements. Consistent with pre-testing, their conversations lasted almost exactly as long as the contemplation condition [184 versus 180 seconds; $t(79) = 1.01$, $p = .32$]. Participants in all three conversation conditions took an average of about 10 seconds ($SD = 5.28$) to decide, much like the immediate choosers [$t(113) = .84$, $p = .40$].

In all of the conditions, after participants had made their decision but before it was delivered, they learned that they could add an additional line to their message: "This is the truth." After making this second decision, participants responded to a series of post-experiment questions concerning their perceptions of the situation, their counterpart, and their own decision. Finally, we thanked, debriefed, and paid participants individually, probing thoroughly for suspicion.

Measures

Preliminary Measures and Manipulation Checks. We included several measures to detect whether people tried to use "reverse psychology" by telling the truth and hoping for disbelief. Thus, participants indicated how much they expected player 2s to believe them and how much player 2s did believe them. The responses to these questions were highly correlated, so we combined them into a "belief" index ($\alpha = .90$). In addition, two independent coders blind to the hypotheses rated participants' emails and open-ended responses for participants' expectations that they would be believed, and their attempts to use reverse psychology. Finally, to check the conversation manipulations, participants indicated how much their email partners encouraged them to tell the truth or lie on 7-point, Likert-type scales (1 = not at all, 7 = very much so).

Ethicality. The main dependent measure was whether participants sent a lie (coded 1) or a truthful message (coded 2). Participants' choice to say "This is the truth" added to their decision: they could lie and call it the truth, simply lie, simply tell the truth, or tell the truth and call it the truth.

Because these four categories cannot be considered ordinal, however, we simply noted how often people in each condition added "This is the truth."

Explanations. We measured participants' explanations (moral norm versus self-interested norm) in three ways: via codings of their emails (conversation conditions only), their responses to an open-ended question, and a set of close-ended items. Two coders, blind to the hypotheses, read participants' emails and rated them on three dimensions: how much they explained the situation as "moral," "business," and "economic." Of 82 emails, 79 were codable. After coding 20 randomly-selected responses, the coders met to discuss and reconcile their disagreements. Each then rated the remaining emails independently. The three ratings were significantly correlated across coders (mean r = .40) and with each other (mean r = .54), so we reverse-scored the latter two and combined all three into an "*a priori* moral explanation index" (α = .79), capturing implicit moral versus self-interested norms. After making their decisions, participants responded to an open-ended question asking why they had chosen the message they did. After coding 50 of these responses (using the same moral / business / economic coding scheme), the two coders discussed and reconciled their disagreements, and then rated the remaining responses independently. These ratings were also correlated across coders (mean r = .38) and with each other (mean r = .54); they were combined (as before) into a "*post hoc* moral explanation index" (again, α = .79). Participants then responded to two items asking whether most people "would find it completely appropriate to send Message 1" and "…to send Message 2." Their responses were combined into a "self-reported moral norm index," albeit with somewhat low reliability (α = .61). Participants also completed two additional items asking whether they saw the situation as morally- or business-oriented.

Post-Experiment Perceptions. On an exploratory basis, participants also used 7-point scales to record their evaluations of their conversation partner (if they had one), their internal attributions, their regret, the difficulty of their decision, and their demographic information. In the conversations

conditions, a "partner respect index" (α = .84) averaged their responses to five questions about how much they agreed with their partner and how persuasive, smart, competent, and rational their partner was. A "partner ethics index" (α = .90) averaged their responses to four questions about their partner's honesty, cooperativeness, ethicality, and trustworthiness. An "internal attributions index" averaged participants' responses to four questions about how much their decisions reflected "who you are," "your sense of right and wrong," "caring," and "your religious (or spiritual) views (α = .77)." Two single-item measures assessed their feelings of regret and the difficulty of their decision. Appendix C lists all of the items.

Results

Contemplation and moral conversations had strong effects: both led to more ethical decisions than immediate choice and self-interested conversations. Participants also provided *a priori* and *post hoc* explanations that consistently supported their actions, whether they told the truth or lied.

Preliminary Analyses and Manipulation Checks. Table 1 displays the correlations among the dependent variables. Gender and age had no effects in any of our analyses; we do not discuss them further. Participants did not differ across conditions in expecting their partner to believe them (overall M = 4.04 SD = 1.38), $F(4,141) = .98$, $p = .42$, and the conditions did not influence participants' expectations that their messages would be believed, as expressed in their emails, $F(2,79) = 1.36$, $p = .26$, or open-ended responses, $F(4,139) = .36$, $p = .84$. In addition, the conditions had no effect on participants' indications, in their open-ended responses, that they had used reverse psychology, $F(4,139) = .73$, $p = .58$. The coded data indicated that 87% of the responses contained no suggestion of reverse psychology. Thus, participants in the different conditions did not appear to use more or less reverse psychology, and reverse psychology did not appear to affect the results.

The manipulation of information in the conversations was successful: participants in the moral condition indicated that their counterparts encouraged them to tell the truth (M = 6.19, SD =

1.33) much more than did the participants in the self-interested (M = 1.86, SD = 1.30) or control (M = 1.82, SD = 1.28) conditions, $F(2,80) = 99.68$, $p < .001$; a similar but reverse pattern resulted for their ratings of the encouragement to lie, $F(2,80) = 50.26$, $p < .001$.

Ethicality. Contemplation led people to tell the truth more than immediate choices did, and people who had a minimal moral conversation told the truth significantly more than people whose conversations emphasized self-interest. As expected, the conditions led to significantly different rates of truth-telling ($X^2 = 12.89$, $p = .01$; see Figure 1). In each of the five conditions, however, truth-tellers equaled or outnumbered people who lied—a reassuring finding on its own.

Hypothesis 1, which predicted that contemplation would promote ethicality in comparison to immediate choice, was supported: almost 90% of the people in the contemplation condition sent truthful messages, compared to just more than half in the immediate choice condition [n = 26 of 30 (86.67%) vs. n = 19 of 34 (55.88%)]. A logistic regression yielded an odds ratio of 5.13, indicating that the odds of someone telling the truth were more than five times higher in the contemplation condition than in the immediate choice condition ($\beta = 1.64$, $SE = .64$, Wald $X^2 = 6.56$, $p = .01$). Entering response time as a covariate had no appreciable effects on these results, and response time itself was not significant ($p = .91$). None of the participants who contemplated told a lie and called it the truth, while 18% of the immediate choosers did. Likewise, immediate choosers lied more often and told the truth less often without adding "This is the truth" (see Table 2).

Hypothesis 2 predicted that conversations would increase ethicality, in comparison to immediate choice. To test this, we compared all three conversation conditions to the immediate choice condition. Although the proportion of truth-tellers was higher in the conversation conditions [n = 54 of 82 (65.85%) vs. n = 19 of 34 (55.88%)], and almost no participants in those conditions (6%) told a lie and called it the truth, a logistic regression indicated that this effect was not significant ($\beta = .42$, $SE = .42$, Wald $X^2 = 1.02$, $p = .31$). Thus, Hypothesis 2 was not supported.

Hypothesis 3, which predicted that a conversation's ethical impact would hinge on its content, was supported: 80% of the participants in the moral conversation condition sent truthful messages, compared to exactly half of the participants in the self-interested condition [n = 20 of 25 vs. n = 14 of 28]. Although significantly different from each other (β = 1.39, SE = .63, Wald X^2 = 4.89, p = .03), neither was significantly different from the control condition, which was about halfway between the two (moral: β = .59, SE = .64, Wald X^2 = .84, p = .36; self-interested: β = .80, SE = .55, Wald X^2 = 2.10, p = .15). The odds of telling the truth were four times higher for people who had a moral versus a self-interested conversation. Like contemplation, no one who had a moral conversation lied and called it the truth, while 7% of those who had a self-interested conversation did (see Table 2).

Hypothesis 4, which predicted that moral conversations and contemplation would lead to more ethical choices than immediate choice and self-interested conversations, was supported: 83.64% of the participants who contemplated or had a moral conversation told the truth compared to 53.23% of the participants who chose immediately or had a self-interested conversation (β = 1.50, SE = .45, Wald X^2 = 11.42, p = .001). The odds of truth-telling were 4.49 times higher in the former conditions than in the latter. The frequency of truth-telling did not differ in the contemplation and moral conversation conditions (β = .49, SE = .73, Wald X^2 = .44, p = .51), nor did it differ in the immediate choice and self-interested conversation conditions (β = .24, SE = .51, Wald X^2 = .21, p = .64). Participants in the contemplation and moral conversation conditions also reported having more difficulty making their decision (M = 5.15, SD = 1.63) than did participants in the immediate choice and self-interested conversation conditions [M = 4.34, SD = 1.50; $t(115)$ = 2.79, p = .006].

Insert Figure 1 and Tables 1 and 2 about here

Explanations. Hypothesis 5 predicted a stronger relationship between individuals' decisions and their explanations than between the conditions (i.e., the norms presented in their counterparts' conversations) and their explanations. Hypothesis 6 predicted that truth-tellers would emphasize the

situation's moral norms and that liars would emphasize the situation's self-interested norms in their explanations. Analyses of the coded emails and open-ended responses, as well as participants' self-report measures supported both hypotheses.

Individuals' *a priori* and *post hoc* moral explanations were not significantly influenced by the conditions [$F(2,79) = 2.06$, $p = .14$ and $F(4,136) = 1.10$, $p = .36$, respectively], but they were significantly associated with whether an individual sent the truthful message or the lie ($\beta = .76$, $SE = .17$, $p < .001$ and $\beta = 1.17$, $SE = .19$, $p < .001$, respectively). In addition, participants who sent the truthful message portrayed the situation's norms as more moral and less self-interested than participants who lied. This was true for both the *a priori* [*M's* = 4.00 vs. 3.24; *SD's* = .70 and .79; $t(80) = 4.47$, $p < .001$] and the *post hoc* moral explanations indices [*M's* = 4.19 vs. 3.02; *SD's* = 1.01 and 1.08; $t(139) = 6.34$, $p < .001$].

Participants' post-experiment, self-report responses were also consistent with these findings. Compared to people who lied, people who sent the truthful message indicated that norms favored sending the truthful message more than sending the lie [*M's* = 3.94 vs. 3.21; *SD's* = 1.15 and 1.20; $t(144) = 3.51$, $p = .001$], i.e., they endorsed moral norms. They also saw the situation as more morally-oriented [*M's* = 4.86 vs. 3.30; *SD's* = 1.99 and 1.67; $t(144) = 4.66$, $p < .001$] and less business-oriented [*M's* = 4.51 vs. 5.74; *SD's* = 1.83 and 1.09; $t(144) = 4.29$, $p < .001$] than people who lied. The conditions did have one significant effect: people who had a moral conversation ($M = 4.36$, $SD = .97$) felt that norms favored sending the honest message more than people who had self-interested conversations did [$M = 2.95$, $SD = 1.13$; Bonferroni $F(4,141) = 5.12$, $p < .001$].

Thus, truthful decisions and the morality of the situation coalesced, as did lies and the self-interested features of the situation. The data also indicate that individuals' *a priori* email explanations, their decisions, and their *post hoc* and self-reported explanations were all consistently and positively related to each other, and that their explanations were relatively uninfluenced by the experimental conditions. Because the conditions had little impact on people's explanations, in their

emails or afterwards, the findings suggest that people probably made their actual decisions before or during their email conversations in the three conversation conditions.

Post-Experiment Perceptions. Analyses of the other post-experiment measures further illuminate the cognitive, affective, and social aspects of participants' decision making processes. First, it appears that their evaluations of their conversation partners depended on the content of their conversations: interactions with both moral and self-interested partners led to more respect (M = 4.62, SD = 1.11 and M = 4.76, SD = .89) than did interactions with control condition partners (M = 3.44, SD = 1.15), $t(79) = 5.10$, $p < .001$. In addition, as expected, moral partners were rated as more ethical (M = 5.42, SD = .90) than control partners (M = 4.53, SD = .92) who were rated as more ethical than self-interested partners (M = 3.54, SD = 1.19; all F's > 3.50, all p's < .01).

Second, in addition to their situational explanations, participants had a variety of personal reactions. None of the conditions had an impact on the internal attributions index [$F(4,141) = .99$, p = .42], but truth-tellers reported stronger internal attributions (M = 4.80, SD = 1.44) than liars did [M = 3.24, SD = .95, $t(144) = 6.75$, $p < .001$. In addition, the liars expressed greater regret for their choices (M = 2.62, SD = 1.45 vs. M = 1.82, SD = 1.12), $t(144) = 3.65$, $p < .001$, suggesting that they were both cognizant of and possibly remorseful for their self-interested actions.

DISCUSSION

This research provides new insights and new evidence on three philosophically-central, psychologically-basic, and organizationally-relevant moral decision making processes: contemplation, conversations, and explanations. It integrated a variety of literatures to investigate one particularly important type of moral decision making. Our goal was to tease apart the effects of decision processes that everyday experience can easily confound. Our findings suggest that contemplation and conversation can influence people's right-wrong decisions: contemplation and moral conversations seem to provide alternate routes to ethicality, while immediate choice and self-interested conversations seem to provide detours around it. In addition, our findings suggest that

people devise situational explanations before and/or after their decisions that are consistent with those decisions.

The findings provide clear support for the assertion that contemplation is critical for moral decisions, as suggested by moral reasoning and other decision models (e.g., Kohlberg, 1969). At the same time, people in our experiment had no problem making relatively rapid decisions, supporting a central assumption of moral intuition models (e.g., Haidt, 2001). The data did not, however, support their contention that contemplation only occurs *post hoc*. The logic of the moral disengagement models was also not supported, as contemplation clearly amplified rather than dampened ethical action, relative to immediate choice. Although anecdotes often suggest that people use contemplation to construct explanations for their unethical actions, we did not observe this in our study. Thus, future research might continue to investigate when "unethical contemplation" is likely.

Toward a Process Model

Our findings provide the foundation for a process model of right-wrong decision making (see Figure 2). Given the status of the empirical research in this area, our model is necessarily preliminary; at the same time, it summarizes our findings succinctly and offers a platform for future research.

Insert Figure 2 about here

Overall, the model depicts the connections among a potentially right-wrong situation, individuals' immediate reactions, subsequent psychological processes, decisions, and explanations. It suggests that decision makers have immediate inclinations in these situations; processes like contemplation and conversation can then influence and potentially modify these inclinations, with explanations following quickly or even slightly preceding their decisions.

When individuals contemplate or converse, their decisions take time. Thus, we depict these processes as solid arrows in the figure, in contrast to the dashed arrow for immediate choice.

Because contemplation and moral conversations led to more ethical choices, possibly by facilitating access to moral values, we depict these lines with an upward slope. Moral reasoning researchers might interpret the data as evidence that contemplation or conversation allow for active engagement of the moral reasoning system. Because immediate choice and self-interested conversations led to less ethical decisions, possibly by suppressing individuals' moral values, they have a downward slope, reflecting the fact that self-interested conversations seemed to motivate individuals to lie. This downward slope is not as steep as the upward slope because individuals in these conditions still told the truth about half of the time.[5]

Everyone provided explanations for their decisions—quickly, with ease, and in direct relation to their decisions. Frankly, it is difficult to determine the exact timing of individuals' decisions and their explanations; the current data suggest that they may be almost contiguous. Strictly speaking, *a priori* explanations always preceded and *post hoc* explanations always followed people's registered decisions. However, the tight relationships between the *a priori* and the *post hoc* explanations and people's decisions suggests that explanations are integral to the decision process—before, during, and/or after—and that an intra-psychic decision may have preceded individuals' email explanations. Determining whether it did requires future research, possibly using neuro-imaging methods. Thus, based on our results, the figure depicts explanations as surrounding decisions (slightly).

We used individuals' emails, open-ended responses, and responses to a series of self-report items to assess their explanations; all of these measures were consistent with one another and were almost completely unaffected by the experimental conditions. Liars characterized the situation in terms of self-interest across all three modes of expression; truth-tellers characterized the same situation morally. Because the relationships between explanations and decisions were so consistent, our model locates ethical decisions next to moral explanations and unethical decisions next to self-

[5] For ease-of-presentation, the figure does not include control conversations.

interest explanations. In a sense, it seems that contemplation and conversation "locked-in" individuals' decisions, which locked-in contiguous explanations.

Because individuals may not "know what they think until they see what they say" (Weick, 1993) and because they try to be consistent in their private attitudes and their public statements (Festinger, 1957), individuals' explanations might also influence their subsequent moral reasoning and decisions. Thus, although our current data ended with Figure 2's explanations box, we speculate that current explanations may influence subsequent conversations and contemplation. For example, self-interested action that prompts self-interested explanations may easily highlight self-interested norms during future right-wrong decisions, which could then justify additional self-interested action. Thus, we include straight lines to connect explanations with subsequent situations. Although this prediction follows research on cognitive consistency (e.g., Festinger, 1957), it conflicts with recent research (e.g., Zhong, Ku, Lount, & Murnighan, 2010) suggesting that ethical actions license individuals to subsequently relax their moral standards, and vice-versa. These conflicting predictions provide particularly fruitful avenues for future research. In addition, if decision makers use conversations to explain their choices, as our participants seem to have done, then current explanations may influence future conversations, which could, in turn, influence *others*' subsequent moral choices. Thus, the potential spread of moral and self-interested norms via explanation-focused conversations offers another fruitful avenue for research.

Subtle Influences on Serious Choices

Although this research used what might seem like weak manipulations—asking people to think about a moral decision for only three minutes, choose immediately, or exchange a single email with a stranger—the effects were sizable. In addition to the fairly striking effects of contemplation, the results also highlight the influence of minimal social interactions, even in self-relevant contexts that involve moral decisions (Tetlock et al., 2000). The conversations in our experiment—as simple as they were—had potent effects, pushing people one way or the other. Given the current ubiquity of

email and text messaging, these findings are troubling. More generally, they suggest that right-wrong decisions can put people on the fence, straddling ethical action and temptation, and that even minimal influence processes can have big effects. This also suggests that the process of making right-wrong decisions deserves more research attention. Thus, research might attempt to identify whether various combinations of pre-decision processes might improve moral decision making, or explore the boundary conditions for the effects of contemplation and conversation.

The results also beg a straightforward question: why would anyone bend their moral standards for only $5? In fact, prior research suggests that $5 may have been generous: Gneezy's (2005) original study of these truth-lie decisions found that 36% of his participants lied for a mere $1. Similarly, Cohen et al. (2009) observed lying rates near 50% for individuals and 80% for groups, also for a single dollar. Pillutla & Murnighan (1995) also found that people chose patently unfair outcomes to earn an extra dollar. Despite our own theorizing, we still find it remarkable that the brief email messages in our study, from people whom participants had never and would never meet—and whose opinion had no bearing on their own outcome—could have such a strong impact on individuals' moral decisions. Whether conversations led them toward or away from ethicality, the fact that people were influenced at all by such minimal conversations is troubling, as it suggests that people routinely depend on others, even unknown others, to direct their moral choices.

Although our findings do support moral reasoning models' focus on contemplation, the "social pliability" of people's moral standards does not bode well for models of stable, well-reasoned moral systems (e.g., Kohlberg, 1969). The data suggest that, just as a moral conversation can bolster moral reasoning, a self-interested conversation can undermine it. Thus, our results suggest that a single individual's moral reasoning may exhibit wide and substantial variation, socially and circumstantially. It is important to qualify these statements by noting that Hypothesis 2 was not supported; conversation in and of itself did not seem to alter people's immediate reactions appreciably. Instead, it was the content of conversation that was critical. This is also likely to be true

for contemplation, as thoughts about the weather are unlikely to have much impact on moral choices. Future research might explore both contemplation and conversation content in-tandem, and the boundary conditions under which this content gains or loses relevance.

It is also important to acknowledge that organizational decision makers often choose their conversation partners, consciously or unconsciously, to support their intuitive inclinations. They may also seek different types of conversation depending on their inclinations. Conversation-based decisions in organizations, by this logic, could be more stable than the decisions in our experiment. However, the nearly 50-50 truth-lie ratio in our immediate choice condition suggests that decision makers in right-wrong situations are often torn, making it unclear whom to consult. Likewise, organizational advisors themselves may be torn, prompting unexpected and conflicting advice (Kidder, 1996). Lingering temptation, then, may be as natural in the field as it is in the lab.

Organizational and Managerial Implications

Our results also suggest that organizational actors may be able to alter their own moral behavior, and that of their peers. Thus, the process of right-wrong decision making deserves practical as well as research attention. Organizational leaders might consciously design moral decision making processes, integrating them into training and enforcing them institutionally via policies, rewards, and sanctions. Policies mandating a "cooling off period" or multiple levels of approval for consequential decisions, for example, might provide institutional analogs for contemplation, and ethics hotlines might act as institutional conversations. Opportunities for instituting and improving these kinds of procedures abound.

Our results further suggest that some organizational cultures may naturally foster ethical and unethical behavior. Organizations with a "fast pulse" or tendency to reward quick decision making may suffer ethical penalties by discouraging contemplation and conversation. Organizations that afford time to think and talk with others—especially ethical others—should benefit from more

ethical action. Similarly, organizations with interdependent workflows, which encourage conversation, might promote more ethical action than organizations of independent silos.

Clearly, the norms that organizational members endorse and espouse matter a great deal. Organizations full of economically-oriented employees, who laud and reward the pursuit of individual economic gain, are likely to produce and reproduce norms of self-interest (Miller, 1999). In contrast, organizations that not only laud but integrate moral values into everyday procedures may foster moral norms (Elster, 1989). Thus, organizations might concentrate on not only publicizing ethical attitudes, but on praising and rewarding ethical role models (Brown et al., 2005) and on providing value-based frameworks for decision-making (Keeney & Raiffa, 1993). At a minimum, our results suggest that organizational actors facing right-wrong decisions should take the time to think twice or to consult an ethical colleague, as either could promote an increase in moral awareness that might not surface from immediate choice or self-interested conversations. Both approaches appear to offer low-cost, high-impact routes to ethical action.

LIMITATIONS, FUTURE DIRECTIONS, AND CONCLUSIONS

The data in this study suggest that contemplation and moral conversation offer alternate paths to ethical action, while immediate choice and self-interested conversations undermine ethicality. People's explanations, whenever they occur, seem to directly support their decisions, whatever their psychological source. These findings allowed us to present a preliminary, process model of moral decision making; we recognize its limitations but remain excited about the future research that it might stimulate.

Our study was conducted in the laboratory, with all of its associated benefits and limitations. Although the lab enabled us to isolate subtle, psychological influences on moral decisions, with control that is unattainable in the field, it also created its own constraints. Our sample included undergraduates, with the normal cautions noted, so research using other samples would certainly be fruitful. Our study also used a single, simple situation, by design. Although researchers (e.g., Cohen

et al., 2009; Gneezy, 2005) have concluded that the deception game's simplicity contributes to its generalizability, other contexts may evoke additional decision processes.

Clearly, many avenues remain open for future research (Tenbrunsel & Smith-Crowe, 2008). Studies could investigate how initial conversations and first decisions influence subsequent decisions, whether moral emotions are necessary and how contemplation and conversation might activate them, the limits of contemplative decision processes, how contemplation and conversation combine, the optimal moral decision making process, and the influence of unconscious thought (Dijksterhuis, 2004). Future research could also follow the moral decision making process into the future, tracing the behavioral implications of people's ready-made explanations—on decision makers, others, and organizations as a whole. Finally, research could investigate conversation in more naturalistic settings, documenting when and why people seek conversations, who they seek, and what they say.

Many other approaches are eminently possible. Indeed, in the current climate of corporate malfeasance, future research is particularly welcome. We applaud and invite others to expand on our attempts to understand the psychological underpinnings of right-wrong decision making. Research that uncovers ways to promote the selection of "rights" over "wrongs" would bring tremendous benefit to organizations, their stakeholders, and their constituents.

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TABLE 1: CORRELATIONS AMONG PRIMARY DEPENDENT VARIABLES[a]

	Choice (1=Lie, 2=Truth)	*A priori* moral explanation index	*Post hoc* moral explanation index	Self-reported moral norm index	Moral Situation Rating	Business Situation Rating	Partner respect index	Partner ethics index	Internal attributions index	Regret	Happy with $5 payoff
A priori moral explanation index	.45***										
Post hoc moral explanation index	.47***	.41***									
Self-reported moral norm index	.28**	.14	.20*								
Moral situation rating	.36***	.41***	.50***	.12							
Business situation rating	-.34***	-.46***	-.35***	-.11	-.33***						
Partner respect index	-.15	-.01	.06	-.21^	.06	-.01					
Partner ethics index	.03	-.10	.09	.30**	-.06	.13	.27*				
Internal attributions index	.49***	.52***	.61***	.14^	.70***	-.35***	.19^	.05			
Regret	-.29***	-.07	-.23**	-.08	-.11	.19*	.10	-.08	-.21*		
Happy with $5 payoff	.30***	.11	.28**	.20*	.23**	-.07	-.12	.03	.22**	-.25**	
Decision difficulty	.15^	.01	.13	.03	-.02	-.04	-.06	.14	.10	-.28**	.17*

[a] ^ = $p < .10$, * = $p < .05$, ** = $p < .01$, *** = $p < .001$

TABLE 2: CHOICES BY CONDITION

	Lie + This is the truth	Lie	Truth	Truth + This is the truth
Contemplation (N=30)	0 (0%)	4 (13.3%)	16 (53.3%)	10 (33.3%)
Immediate Choice (N=34)	6 (17.6%)	9 (26.5%)	7 (20.6%)	12 (35.3%)
Moral conversation (N=25)	0 (0%)	5 (20.0%)	9 (36.0%)	11 (44.0%)
Control Conversation (N=29)	3 (10.3%)	6 (20.7%)	16 (55.2%)	4 (13.8%)
Self-Interested Conversation (N=28)	2 (7.1%)	12 (42.9%)	7 (25.0%)	7 (25.0%)

FIGURE 1: TRUTH-TELLING PERCENTAGES ACROSS CONDITIONS

(Brackets indicate statistically significant differences)

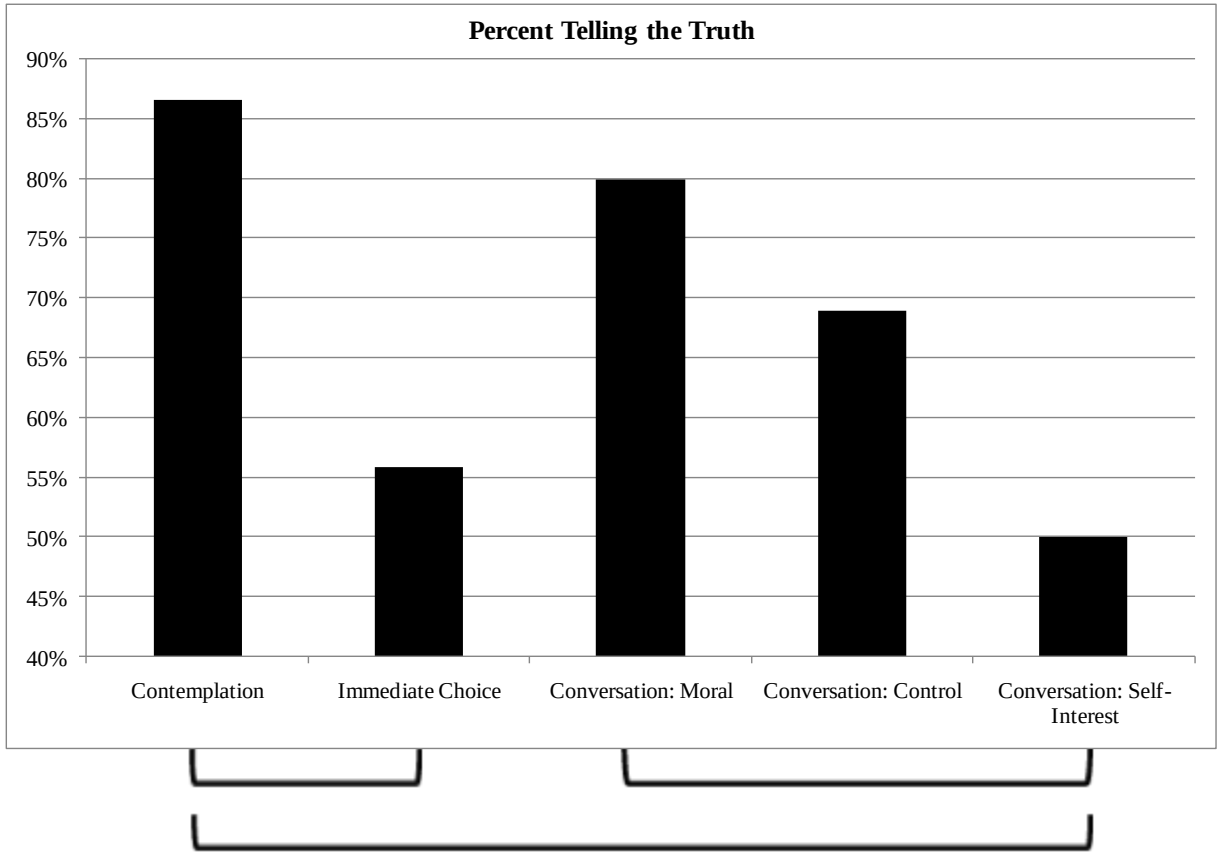
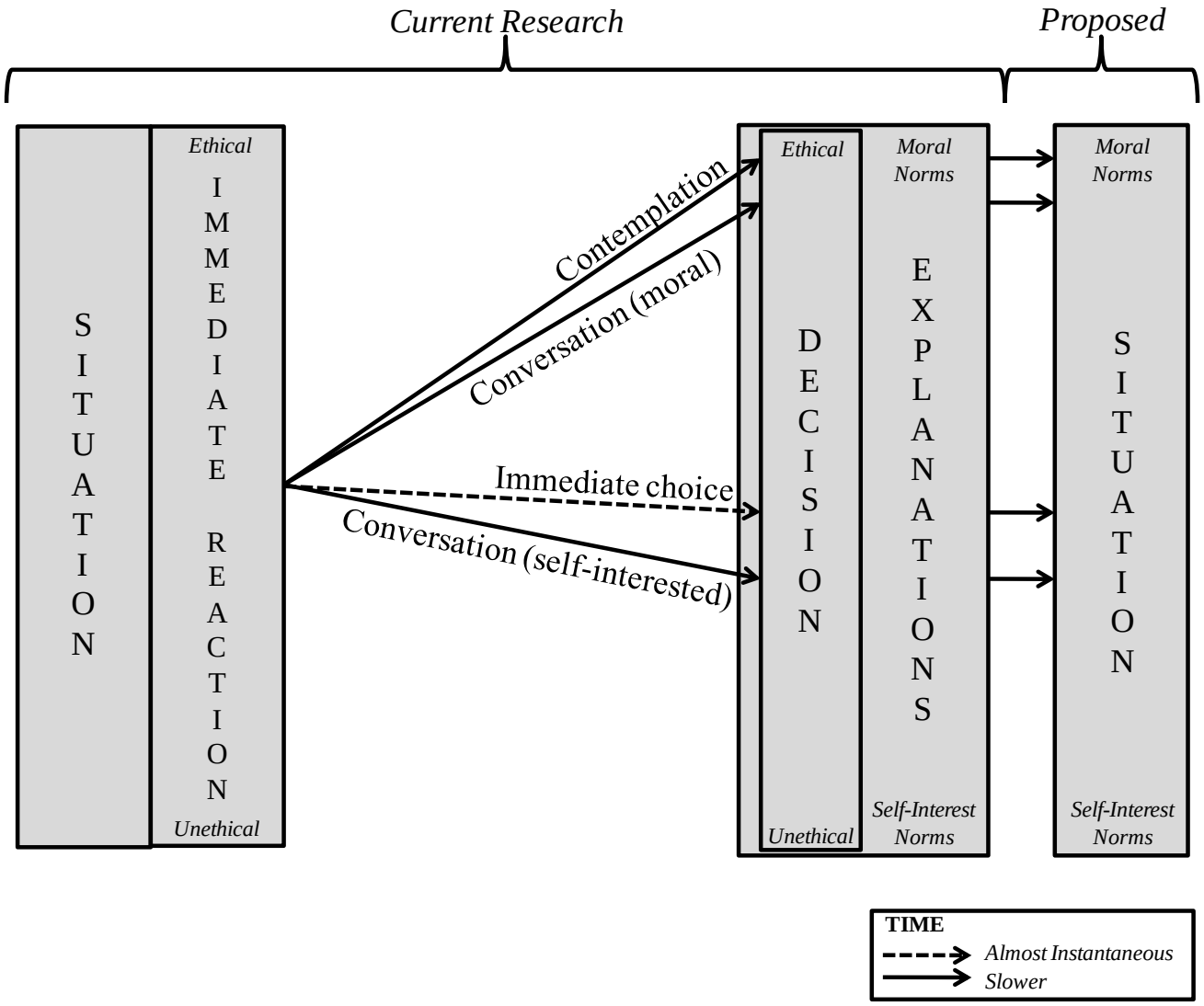


FIGURE 2: PROPOSED PROCESS MODEL OF RIGHT-WRONG DECISION MAKING



APPENDIX A: PAYOFFS AND MESSAGES AS SEEN BY PARTICIPANTS

Payment Options	Option A		Option B
You will receive…	$10		$5
Player 2 will receive…	$5		$10

Here are the possible messages you can send to player 2:

Message 1: Option A earns you more than Option B.

Message 2: Option B earns you more than Option A.

APPENDIX B: EMAIL FROM CONVERSATION PARTNER

Moral Conversation Condition
Hello, how are u? Tough choice, eh? I dont know- as i think about how we're gonna make this choice, I cant help thinking that most other people would try to tell the truth. Not sure but I'm guessing most people would b honest in this kinda situation. So…I think I'm gonna send the 2nd message. How bout u?
Self-Interested Conversation Condition
Hello, how are u? Tough choice, eh? I dont know- as i think about how we're gonna make this choice, I cant help thinking that most other people would try to gain the most money. Not sure but I'm guessing most people would do what's best for themself in this kinda situation. So…I think I'm gonna send the 1st message. How bout u?
Control Conversation Condition
Hello, how are u? Tough choice, eh? I dont know- as i think about how we're gonna make this choice, I cant help wondering what most other people would do. Not sure but I'm guessing most people would have a hard time deciding what to do in this kinda situation. So…I don't know which message I'm gonna send. How bout u?

*Note: Typos and errors were created to make the emails seem more realistic.

APPENDIX C: POST-EXPERIMENT QUESTIONS

Purpose/Index	Question	Scale
Conversation Conditions Only		
Manipulation check	During the electronic communication, the other participant suggested that I should lie to Player 2 about the two options	1=Not at all, 7=Very much so
Manipulation check	During the electronic communication, the other participant suggested that I should be honest with Player 2 about the two options	1=Not at all, 7=Very much so
Partner respect index	To what extent did you agree with the other participant's opinion during the electronic communication?	1=Not at all, 7=Very much so
Partner respect index	How persuasive was the other participant whom you interacted with electronically?	1=Not at all, 7=Very much so
Partner respect index	Tell us what you thought of the participant you spoke with electronically.	1=Stupid, 7=Smart
Partner respect index	Tell us what you thought of the participant you spoke with electronically.	1=Incompetent, 7=Competent
Partner respect index	Tell us what you thought of the participant you spoke with electronically.	1=Irrational, 7=Rational
Partner ethics index	Tell us what you thought of the participant you spoke with electronically.	1=Dishonest, 7=Honest
Partner ethics index	Tell us what you thought of the participant you spoke with electronically.	1=Calculating, 7=Cooperative
Partner ethics index	Tell us what you thought of the participant you spoke with electronically.	1=Unethical, 7=Ethical
Partner ethics index	Tell us what you thought of the participant you spoke with electronically.	1=Untrustworthy, 7=Trustworthy
All Conditions		
Post hoc moral explanations index	Briefly tell us why you chose to send the messages you did	Open-ended
Manipulation check	When you were deciding which messages to send, how much did you expect player 2 to believe you?	1=Not at all, 7=Very much so
Manipulation check	After you sent the messages, how much did you think player 2 believed you?	1=Not at all, 7=Very much so
Self-reported moral norm index	Most people in situations like this would find it completely appropriate to send Message 1 (Option A earns you more than option B.)	1=Strongly disagree, 7=Strongly agree
Self-reported moral norm index	Most people in situations like this would find it completely appropriate to send Message 2 (Option B earns you more than option A.)	1=Strongly disagree, 7=Strongly agree
Moral situation rating	To what extent did you see this as a moral situation?	1=Not at all, 7=Very much so
Business situation rating	To what extent did you see this as a business situation?	1=Not at all, 7=Very much so
Internal attributions index	How much did caring influence your decisions in this task?	1=Not at all, 7=Very much so
Internal attributions index	How much did your decisions in this task reflect who you really are?	1=Not at all, 7=Very much so
Internal attributions index	How much did your decisions in this task reflect your overall sense of right and wrong?	1=Not at all, 7=Very much so
Internal attributions index	How much did your decisions in this task reflect your religious (or spiritual) views?	1=Not at all, 7=Very much so
Regret	Do you regret the messages you chose to send?	1=Not at all, 7=Very much so
Happy with $5 payoff	How happy would you feel if Player 2 was getting $10 and you were getting $5?	1=Not at all, 7=Very much so
Decision difficulty	How difficult did you find the message decisions in this task?	1=Very difficult, 7=Very easy

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