DOES “COULD” LEAD TO GOOD? ON THE ROAD TO MORAL INSIGHT

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Dilemmas featuring competing moral imperatives are prevalent in organizations and are difficult to resolve. Whereas prior research has focused on how individuals adjudicate among these moral imperatives, we study the factors that influence when individuals find solutions that fall outside of the salient options presented. In particular, we study moral insight, or the discovery of solutions, other than selecting one of the competing moral imperatives over another, that honor both competing imperatives or resolve the tension among them. Although individuals intuitively consider the question “What should I do?” when contemplating moral dilemmas, we find that prompting people to consider “What could I do?” helps them generate moral insight. Together, these studies point toward the conditions that enable moral insight and important practical implications.

Imagine that you learned some confidential information from a friend about an impending event that would put your own company and one of your clients at great risk of considerable loss (Badaracco & Useem, 1993). This situation—based on the actual experience of a financial services employee—presents two possible courses of action: (1) disclose the information to your boss, who can take action to prevent the loss, but, in so doing, breach confidentiality and loyalty to your friend; or (2) uphold your commitment to confidentiality and friendship by remaining silent, thereby risking tremendous damage to your employer and one of its clients. In this moral dilemma, the competing principles of confidentiality to your friend and duty to your firm and client are both highly valued, and choosing one value seems to necessitate forgoing the other, making the problem difficult to solve with no obvious “right” answer.

Among the myriad ethical challenges that employees face, a survey of 162 corporate executives (\(M_{\text{tenure at firm}} = 8.85\) years, \(SD_{\text{tenure at firm}} = 5.73; 28\%\) female) revealed that these types of situations—moral dilemmas involving tradeoffs between competing values or principles (Badaracco & Useem, 1993; Hogan & Paine, 1997; Palmer, 2012; Toffler, 1986)—are the most difficult and among the most prevalent type of ethical challenge at work (see Appendix A for more details).\(^1\) Forty-five percent of executives ranked dilemmas that involve tradeoffs between two moral principles (“right vs. right” dilemmas) as the most difficult type of ethical challenge they had experienced. Additionally, the majority of situations (70%) raised by executives involved moral tradeoffs (i.e., vying principles that compel an individual to act, such as honesty vs. duty to the organization or fairness vs. loyalty to a coworker). In contrast, only 30% of recalled ethical challenges featured “right-versus-wrong” situations that involved temptations to violate moral principles in order to benefit oneself.

Despite both the reported difficulty and prevalence of right-versus-right moral dilemmas, a small proportion of the papers (18%) published in management and psychology journals from 2000 to 2015 has studied

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\(^1\) Executives considered the ethical issues that they—and the employees they manage—have faced, and then rated different types of ethical dilemmas based on prevalence and difficulty.
these types of ethical challenges (see Table 1 for details about the literature review we conducted to identify this estimate). The majority of papers on ethics (82%) has focused on right-versus-wrong situations, illustrating how and why people are tempted to cheat and lie (Chugh & Bazerman, 2007; Moore, Detert, Treviño, Baker, & Mayer, 2012; Shu, Gino, & Bazerman, 2011) as well as the myriad organizational sources of misconduct (Brief, Buttram, & Dukerich, 2001; Darley, 1996; Palmer, 2012; Vaughan, 1999).


**Table 1**: Research on Ethics Published between 2000 and 2015, Categorized by Dilemma Type

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<th>Type of dilemma</th>
<th>Publications</th>
<th>Total papers</th>
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**Notes:** We searched for empirical articles published in *Academy of Management Journal*, *Administrative Science Quarterly*, *Journal of Personality and Social Psychology*, *Psychological Science*, *Organizational Behavior and Human Decision Processes*, *Personnel Psychology*, and *Journal of Applied Psychology* that contained one or more of the following terms: ethics, ethic, ethical, unethical, ethically, moral, morality, morals, immoral, amoral, dishonest, honest, deception, dishonesty, honesty, dishonesty, honestly, misconduct, wrongdoing. Papers were included if the primary decisions or behaviors that were studied involved ethics and were categorized based on whether the majority of studies in the paper featured right-versus-right or right-versus-wrong situations.
Morelli, Lowenberg, Nystrom, & Cohen, 2008; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Kohlberg, 1971; Levine & Schweitzer, 2014). In these dilemmas, individuals are often caught in a conflict that entails sacrificing a moral principle (e.g., acting ethically and fairly, being loyal, and avoiding harm) in order to protect or uphold duty to another individual (e.g., a co-worker, supervisee, manager) or entity (e.g., team or organization). To resolve these dilemmas, individuals may prioritize one imperative over another, resulting in difficult ethical challenges, people generally ask themselves the Socratic question “What should I do?” (Victor & Cullen, 1988). In a pilot study, we randomly presented individuals with either moral or amoral dilemmas and found that most people thought about what they “should” do for moral situations (61%), whereas a smaller proportion of individuals (36%) considered “should” when confronting an amoral dilemma (see Appendix B for more details about this study). And guidance is typically cast in terms of “should.” For example, we created a data set with the ethics codes of Fortune 50 companies sampled in 2013 and counted the number important or when competing moral imperatives are difficult to rank in terms of their relative priority.

Because of the unique challenges in resolving moral dilemmas, we classify moral insight as a distinct type of integrative problem-solving within the moral domain. For example, in the dilemma posed at the beginning of this paper, a moral insight solution that seeks to honor both values might be to raise a question to one’s boss that would lead her to investigate the possibility of this impending event without breaking confidentiality to the friend. In the famous Heinz dilemma (Kohlberg, 1971), for example, rather than choose between stealing a drug your spouse needs for survival and obeying laws that protect property, some people suggest that Heinz might speak to the druggist who owns the medicine (Gilligan, 1982)—a solution that seeks to resolve the tension between the competing moral principles involved in the dilemma.

Thus, moral insight involves a form of creative thinking applied to ethical challenges, yet, to date, research has found an inverse relationship between creativity and ethicality (Gino & Ariely, 2012; Gino & Wiltermuth, 2014). Research in the domain of self-dealing—in which ethical principles are pitted against the wrong of self-dealing—has revealed that creativity sparks greater mental flexibility in justifying unethical behavior (Gino & Ariely, 2012; Wang, 2011). Our research explores the possibility that creative cognition operates differently in the domain of dilemmas, where individuals face competing moral imperatives rather than an opportunity to gain personally at the expense of ethics. We study how encouraging creative thought in the context of moral dilemmas—by challenging individuals’ default approach toward them—helps individuals find solutions that do not compromise ethics.

To investigate how individuals might reach moral insight, we turn to their default approach when contemplating moral dilemmas. When encountering difficult ethical challenges, people generally ask themselves the Socratic question “What should I do?” (Victor & Cullen, 1988). In a pilot study, we randomly presented individuals with either moral or amoral dilemmas and found that most people thought about what they “should” do for moral situations (61%), whereas a smaller proportion of individuals (36%) considered “should” when confronted with an amoral dilemma (see Appendix B for more details about this study). And guidance is typically cast in terms of “should.” For example, we created a data set with the ethics codes of Fortune 50 companies sampled in 2013 and counted the number important or when competing moral imperatives are difficult to rank in terms of their relative priority.

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of times the word “should” appeared in each ethics code. We found that “should” appeared approximately 30 times on average. Organizations, it seems, also frame the principles to guide managerial conduct in terms of “should.”

Taken together, these findings demonstrate that should mindsets appear to be the unique default and recommended approach to contemplating moral dilemmas. A “mindset” is commonly defined as cognitions that, once activated, persist over various contexts (Luchins, 1942; Luchins & Luchins, 1959) and have the potential to influence later choices on a variety of tasks (see, e.g., Galinsky, Gruenfeld, & Magee, 2003, for a discussion of a power mindset). Despite the perversiveness of having a should mindset when confronting moral dilemmas, we challenge this default approach and suggest that it curbs the generation of moral insight. Whereas a should mindset may encourage individuals to think analytically in weighing the vying moral claims of the most apparent courses of action, people may often benefit from a could mindset that involves a more expansive exploration of possible solutions before making a final decision. We propose that considering what one could do shifts people from analyzing and weighing what they assume to be fixed and mutually exclusive alternatives to generating options that might reconcile underlying imperatives. When facing ethical dilemmas, shifting individuals from a more conventional should mindset to a less conventional could mindset encourages greater exploration of possibilities, increasing individuals’ ability to discover practical solutions to moral dilemmas that move beyond conceding one or more moral principles to meet another.

The present research makes three main contributions to the literature. First, it extends how ethical dilemmas have traditionally been studied. Prior research on dilemmas has presented individuals with a choice between two possible decisions, showcasing the tension between imperatives—at least one of which is moral—and revealing the factors that lead individuals to choose one value or principle over the other (Jones, 1991; Kohlberg, 1971). Rather than investigate which of two predetermined options is chosen and why, we examine how novel options that satisfy both imperatives might be generated. Additionally, we not only investigate individuals’ preferences of what they would do in hypothetical dilemmas—as studies on right-versus-right dilemmas have often done—but also push the study of moral dilemmas to examine behaviors, investigating which actions, out of the multiple possibilities available, individuals generate to resolve the moral dilemmas presented.

Second, we integrate research from ethics, negotiation, and creativity to study moral insight, or unconventional solutions that honor or resolve competing moral imperatives. Thus far, research linking creativity and ethics has focused on the domain of self-dealing, showing that creativity increases the likelihood that individuals will engage in unethical behavior (Gino & Ariely, 2012; Wang, 2011). When individuals are tempted to cheat for personal gain, creativity generates greater mental flexibility in service of justifying unethical actions. But, creativity may operate differently in the domain of dilemmas, where individuals face competing moral imperatives rather than an opportunity to gain personally at the expense of ethics. We suggest that, for moral dilemmas, creative thinking—prompted through having a could mindset—helps individuals engage in divergent thinking, which may ultimately help them resolve the collision of ethical imperatives.

Third, we offer a simple-to-implement psychological intervention that helps individuals address moral dilemmas more constructively. Among the array of possible interventions, ranging from psychological changes to redesigning organizations (Zhang, Gino, & Bazerman, 2014), our proposed intervention is based on a subtle psychological shift in an individual’s mindset that reframes how they can resolve ethical dilemmas. Based on research in negotiations showing that an individual’s mindset with respect to interpersonal conflict is malleable and impacts their ability to reach integrative solutions (e.g., Kray & Haselhuhn, 2007), we seek to understand how shifting individuals’ mindsets in intrapersonal moral conflicts impacts their approach to these dilemmas—from a contest between two alternatives to an open-ended quest for possibilities. In particular, we study how reframing an individual’s approach to competing moral imperatives—from asking “What should I do?” to “What could I do?”—prompts a shift from choosing between these competing imperatives to generating insight that honors both imperatives or resolves tension between them.

**THEORY AND HYPOTHESES**

To study how individuals face these dilemmas, organizational and psychological research has investigated the factors that influence how individuals (a) recognize the moral issues at stake (i.e., reach moral awareness; Jennings, Mitchell, & Hannah, 2015; Reynolds, 2008; Sparks & Hunt, 1998; Tenbrunsel & Smith-Crowe, 2008), and (b) choose among the competing moral imperatives in conflict. In particular, research from psychology on moral decision-making
has shown that there are five primary dimensions on which individuals recognize that their behaviors have moral implications: harm, fairness, loyalty, authority, and purity (Graham, Nosek, Haidt, Iyer, Koleva, & Ditto, 2011). While individuals vary on the extent to which they are morally attentive (i.e., chronically perceptive of the moral aspects of situations; Reynolds, 2008), environmental factors also affect moral awareness. For instance, approaching a situation with a legal or economic lens mitigates the extent to which individuals recognize that their behaviors have ethical implications (Messick, 1999; Tenbrunsel & Smith-Crowe, 2008).

In addition to studying individuals’ awareness and judgments of the moral implications in moral dilemmas (Haidt, 2001; Monin, Pizarro, & Beer, 2007; Uhlmann, Pizarro, Tannenbaum, & Ditto, 2009), research from psychology on moral decision-making has examined how individuals adjudicate among competing imperatives (Greene et al., 2004; Kohlberg, 1971). Individuals broadly approach dilemmas with either a utilitarian (based on consequences of actions) or deontological approach (based on adherence to rules, principles, and duty) (Conway & Gawronski, 2013; Greene et al., 2001; Reynolds, 2006). For example, in one commonly used dilemma, referred to as “the trolley problem,” individuals are asked whether they should actively divert a runaway trolley onto a path that would kill one person in order to save five lives (the utilitarian choice), or whether they should choose inaction, spare one life, and leave the train on course to kill five people (the deontological choice) (Foot, 1967; Thomson, 1986).

Examining which options individuals select has provided insight into moral cognition and the conditions under which deliberation or intuition are respectively more likely to guide moral decisions. For example, researchers have learned that emotions and intuition often influence ethical judgments and decisions (Ditto, Pizarro, & Tannenbaum, 2009; Greene, Nystrom, Engell, Darley, & Cohen, 2004; Haidt, 2001; Lee & Gino, 2015; Monin et al., 2007; Uhlmann et al., 2009), which had long been assumed in psychology to be a product of logical and deliberative reasoning. Moral intuition (or “gut reactions” to moral dilemmas) typically leads to deontological decisions (i.e., “killing is wrong, regardless of the consequences”), whereas deliberation may lead individuals to override these intuitive responses to make utilitarian decisions (i.e., killing one life is permissible in order to save the lives of many; Greene et al., 2008). Which form of cognition is best suited to a particular ethical challenge has also been subject to debate in the literature (Greene, 2013; Haidt, 2001; Monin et al., 2007; Zhong, 2011).

In addition to investigating individuals’ moral intuitions and reasoning when facing tradeoffs in dilemmas, researchers have investigated how individuals form moral judgments of others facing these decisions. In general, individuals perceive choices driven by empathic concern as more valued (Conway & Gawronski, 2013; Everett, Pizarro, & Crockett, 2016; Levine & Schweitzer, 2015). Levine and Schweitzer (2015) found cases in which sacrificing certain moral principles (e.g., being honest) is desirable: when individuals tell a lie that prosocially lies out of empathic concern to protect others from unnecessary harm. Additionally, individuals are more valued as social partners and perceived as more trustworthy when they make deontological choices—related to empathic concern (Conway & Gawronski, 2013)—over utilitarian options (Everett et al., 2016).

Whereas empirical studies on dilemmas to date typically involve forced tradeoffs between moral imperatives, our research complements these approaches by focusing on the courses of action individuals develop when they are not forced to decide between imperatives, but, rather, when they might formulate solutions. By relaxing constraints on which courses of action individuals can choose, we provide individuals with the opportunity to reach moral insight, moving beyond the two most apparent courses of action colliding in a dilemma to honor both competing imperatives or resolve the tension among them. To reach moral insight, moral awareness (Reynolds, 2006, 2008) is a necessary, but insufficient, condition: individuals must be aware of the ethical considerations in these dilemmas, but then they must go on to find creative solutions that honor those ethical considerations.

**Developing Moral Insight**

We suggest that, when facing moral dilemmas, people generate *moral insight* in the same way they generate insight when facing creativity problems (Isen, Daubman, & Nowicki, 1987). Moral insight is enacted through the generation of novel and practical solutions that move beyond conventional responses requiring the sacrifice of one or more moral principles to meet another. Research on insight problems has indicated that the cognitive processes that lead to solutions neither occur to people immediately on presentation of the problem, nor emerge from analysis and deliberation. Rather, the insight strikes like a bolt—the proverbial “Eureka!” moment—changing the solver’s mental representation of the problem (Schilling, 2005; Seifert, Meyer, Davidson, Patalano, & Yaniv, 1994; Sternberg, 1988).
In the context of moral dilemmas, we argue that generating moral insight involves shifting individuals’ mental representation of dilemmas away from making a choice between forced tradeoffs. Research on insight has focused on solutions that require individuals to relax the assumptions of a given problem. For example, in the classic Duncker’s (1945) “candle problem,” individuals are asked to fix a lit candle to a wall using a box of matches and a box of thumbtacks. The solution is not to tack a lit candle to the wall directly, as most individuals initially attempt, but to tack an emptied thumbtack box to the wall instead, allowing the box to serve as a stand for the lit candle. Just as insight in problems like Duncker’s (1945) candle entails relaxing the assumption that the functions of objects are fixed, moral insight entails relaxing assumptions that there are fixed options from which to choose. In contrast to research on non-moral insight (Duncker, 1945) and creativity (Mednick, 1962; Rowe, Hirsh, & Anderson, 2007), which typically examines convergence around a single but non-obvious relationship between objects and concepts, central to our definition of moral insight is the possibility that multiple solutions exist beyond selecting one side of the dilemma or the other. These solutions can vary both in their feasibility and how they meet those multiple competing imperatives. However, development of one or more of the solutions reflects the individual’s moral insight to move beyond simply determining which imperative to prioritize at the expense of another.

**Shifting to a Could Mindset**

Existing research has shown the importance of matching cognitive processes to the nature of the ethical challenge faced. For example, extended contemplation has been shown to increase the likelihood that individuals will make ethical decisions in both individual and group contexts, particularly when individuals lack justifications for their unethical behaviors (Caruso & Gino, 2010; Gunia et al., 2012; Shalvi et al., 2012). However, in other conditions, most notably when another’s welfare is pitted against an actor’s own interests, quick intuitive responses increase the likelihood of an ethical choice (Rand, Greene, & Nowak, 2012; Zhong, 2011). In sum, interventions that tailor cognition to the nature of the ethical challenge are essential (Bennis, Medin, & Bartels, 2010; Moore & Tenbrunsel, 2014).

In the context of moral dilemmas, individuals generally approach these problems by contemplating what they should do (see Appendix B). By invoking a should mindset, individuals may conjure their “ought” selves, representing a mental model of their duties, obligations, and responsibilities (Higgins, 1987; Rogers, 1961). In the context of moral dilemmas, individuals adopting a should mindset may focus on the relative importance of different injunctive norms (i.e., based on what individuals believe others find permissible [Cialdini, Kallgren, & Reno, 1991; Elqayam, Thompson, Wilkinson, Evans, & Over, 2015]), underlying the tension in these moral dilemmas.

Consequently, adopting a should mindset implies forcing individuals to narrowly focus on weighing and choosing among two possible courses of action (De Dreu, Giacomantonio, Shalvi, & Sligte, 2009; Kurtzberg, 2009; Trope & Liberman, 2010). For example, when contemplating the Heinz dilemma with a should mindset, individuals may immediately start weighing the moral costs of stealing against the moral costs of letting a loved one die. Furthermore, Higgins and colleagues have found that, when individuals think about “should” and “oughts,” they typically adopt more of a prevention-oriented mindset, leading them to consider the avoidance of negative outcomes (Higgins, 1997; Higgins, Roney, Crowe, & Hymes, 1994). Taken together, adopting a should mindset to resolve dilemmas may lead individuals to satisfice in settling for the least undesirable solution that meets one ethical priority while providing justifications for failing to honor the other value.

In contrast, shifting individuals’ contemplation toward what they could do—a mindset that recognizes other possibilities might exist—may enable individuals to gain psychological distance from the focal tension. By seeing the problem from a more distant perspective, individuals with a could mindset may realize that the tradeoff between saving a life and not stealing is not necessarily irreconcilable, increasing the likelihood that individuals might arrive at insight solutions (e.g., solicit donations through social media). Langer and Piper (1987) found that considering what objects could be, as opposed to what objects were, helped individuals transcend the problem of “functional fixedness,” or the inability to use objects beyond the purposes for which they were originally designed (Isen et al., 1987; Luchins, 1942). When confronted with the need to erase a pencil mark without using an eraser, individuals who merely considered what objects could be were more likely to recognize that a rubber band could be used in lieu of an eraser, compared to those who considered what these objects were. Just as thinking about what objects could be influenced individuals to perceive the problem from a distance and overcome the rigidity of considering only conventional uses of objects, we propose that
contemplating what one could do in moral dilemmas helps individuals think beyond the rigidity of making forced tradeoffs between moral principles and reach solutions that honor both imperatives featured (see Figure 1 for conceptual model).

Hypothesis 1. A could mindset relative to a should mindset increases the propensity to reach moral insight.

Research on decision-making has shown that, when individuals shift from a narrow to a broad decision frame, they consider multiple objectives, alternatives, and outcomes (Larrick, 2009). By unlocking the recognition that multiple possibilities exist, developing a could mindset may also unlock individuals’ ability to engage in “divergent thinking,” or the development of multiple solutions that span boundaries (McCrae, 1987; Runco, 1991; Silvia et al., 2008). In Langer and Piper’s (1987) study, those who considered what the objects could be were able to consider a greater variety of alternative uses for the focal object. Although interlinked, there is a conceptual difference between having a could mindset and divergent thinking: whereas a could mindset involves the awareness that multiple solutions might exist, divergent thinking is the ability of individuals to consider multiple approaches to a problem.

Because divergent thinking involves thinking “without boundaries” or “outside the box” (Thompson, 2008: 226), it leads to the discovery of insightful solutions (Baer, 1994). By considering multiple possibilities, divergent thinking helps individuals make new connections and associations (Guilford, 1968, 1982), reducing individuals’ propensity to settle upon obvious answers and increasing their ability to reach innovative solutions to problems (Williams, 2004; Woodman, Sawyer, & Griffin, 1993).

In research on interpersonal conflict, thinking creatively beyond conventional options has been found to generate integrative solutions (De Dreu et al., 2009; Kurtzberg, 1998), so we have adapted principles from negotiation to study the intrapersonal conflict that individuals experience when confronted with ethical dilemmas. When negotiators perceive their environment as competitive, they often assume that goals across negotiating parties are negatively related, implying that they must make distributive tradeoffs in order to find solutions (Carnevale & Probst, 1998; Tjosvold, 1998). This competitive mindset often leads individuals to reach purely distributive solutions that assume the size of the economic pie as given (Baron, Bazerman, & Shonk, 2006; Demoulin & Teixeira, 2010; Fisher, Ury, & Patton, 2011; Malhotra & Bazerman, 2007). In contrast, negotiators who realize the potential to reconcile competing sides are more likely to discover integrative solutions that expand the size of the overall pie and often maximize outcomes for both negotiating parties (Brandenburger & Nalebuff, 1996; De Dreu, 2003; Harinck & De Dreu, 2008). Taken together, we propose that applying a could mindset toward ethical dilemmas prompts people to develop a wider set of possible options, enhancing individuals’ ability to look beyond forced tradeoffs and ultimately helping them formulate moral insight solutions that uphold colliding moral imperatives. We thus hypothesize:

Hypothesis 2. A could mindset increases divergent thinking—or the formulation of multiple possibilities—in moral dilemmas relative to a should mindset.

Hypothesis 3. The effect of a could mindset on the propensity to reach moral insight is mediated by the extent to which individuals engage in divergent thinking.

While divergent thinking may often lead to moral insight, we note that divergent thinking and moral insight are distinct constructs. Not all possibilities generated from divergent thinking are necessarily moral insights. For example, ideas generated from greater divergent thinking might entail creative justifications for selecting one moral imperative over another, selecting an unethical course of action, or even abstaining from taking action. More concretely, someone who engages in divergent thinking in the Heinz dilemma could consider multiple different ways of stealing the drug (e.g., hiring someone to steal the drug, or going into the drugstore to buy a cheap drug and then swapping out the cheap one for the expensive drug). Among the many possible solutions, none of those possibilities would be considered moral insight, which we define as solutions that (a) move beyond the two salient options presented, and, critically, (b) resolve or honor multiple competing imperatives.

Overview of the Present Research

We test our predictions regarding the impact of a could mindset on generating moral insight across four experiments. Despite the default approach of individuals to contemplate moral dilemmas with a should mindset, we find, in two studies, that contemplating “What could I do?” leads individuals to engage in more divergent thinking as they explore possible options, helping them to find more moral insight solutions across both hypothetical contexts (Study 1) and an incentive-compatible context (Study 2). We then explore the impact of a could mindset in two other settings of ethical challenges common for managers. Study 3 shows that adopting a could
mindset in interpersonal contexts increases collective divergent thinking, helping individuals generate moral insight. Finally, Study 4 examines boundary conditions based on the type of ethical dilemma featured, investigating how a could mindset fares when there exists a temptation to cheat for self-gain.

STUDY 1: CONTEMPLATING MORAL DILEMMAS

In Study 1, participants considered a series of dilemmas and indicated either what they “could” or “should” do in response before finally reporting what they “would” do. We hypothesized that, relative to a should mindset, a could mindset would influence individuals to engage in divergent thinking (Hypothesis 2), better equipping individuals to generate solutions that concede neither imperative embedded in the dilemma (Hypotheses 1 and 3).3

Participants

Two hundred and ten individuals (M_{age} = 35.02 years; 59.2% female) recruited through Amazon’s Mechanical Turk participated in an online study in exchange for $1.50.4 Five participants were not eligible to complete the study because they incorrectly answered the attention check,5 leaving 205 participants included in the analysis.

Design and Procedure

Participants were randomly assigned to adopt either a could mindset or a should mindset while contemplating four ethical dilemmas (see Dilemmas 1–4 in Appendix D). Those randomly assigned to adopt a could mindset provided written responses to the question “What could you do?” for each of the four dilemmas, whereas those assigned to think in a should mindset provided written responses to the question “What should you do?” All participants then answered the question “What would you do?” as well as follow-up questions about their responses to each dilemma. Two independent coders blind to the study’s hypotheses rated each of the participants’ written responses for their divergent thinking and whether the proposed solutions were considered moral insights that satisfied the competing values in each of the dilemmas.

Measures

**Manipulation check.** As a manipulation check, two independent coders blind to the hypotheses of the study recorded the number of instances in which participants used the words “could” and “should” in

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3 In a pilot study (see Appendix C), we compared adopting a could mindset against should and would mindsets. Individuals in a could mindset perceived moral imperatives featured across ethical dilemmas as more compatible relative to those in a should or a would mindset. However, we did not observe differences between should and would mindsets, providing further evidence that individuals approach moral dilemmas with a should mindset as their default. That is, differences between adopting should and could mindsets were not due to should mindsets reducing perceptions of moral imperatives as compatible, but, rather, could mindsets increasing perceptions of compatibility. Consequently, we did not include a would condition in Studies 1–4.

4 This amount was considered a standard market rate at the time the study was conducted. Past research has shown that the Mechanical Turk service provides reliable data for research purposes (Buhrmester et al. 2011).

5 Participants were presented with a series of pictures and instructed to select the last option.
their written responses to the question “What [should/could] I do?” across the four dilemmas. Because we achieved high inter-rater reliability, we averaged the ratings from the two raters for the number of times participants mentioned “could” (ICC$_3 = .93$, $p < .001$) and “should” (ICC$_3 = .94$, $p < .001$).

**Divergent thinking.** To measure divergent thinking, we used two different measures based on prior research (Guilford, 1967). First, participants self-reported the number of solutions they considered as they answered the question “What [should/could] I do?” Second, two independent coders rated the extent to which participants’ solutions were “outside of the box” and “spanned different categories of solutions” (1 = not at all, 4 = somewhat, 7 = extremely) based on Amabile’s (1996) consensual assessment technique. We aggregated the two rater’s responses into a single measure since the two raters achieved high reliability (ICC$_3 = .89$, $p < .001$). Below, we present results of both self-reports and external raters separately. We also averaged the standardized scores of both internal and external ratings of divergent thinking as they were highly correlated (ICC$_1 = .75$, $p < .001$).

**Moral insight.** We triangulated on moral insight in two ways: using one measure that is more concrete and another that is more abstract. For the concrete measure of moral insight, two coders categorized responses to the question “What would I do?” for each dilemma as either one of the conventional solutions (e.g., “steal the money” or “do not steal” in the Heinz dilemma) or one of the set of solutions that two separate coders had identified as seeking to address both imperatives. For example, solutions in response to the Heinz dilemma such as “bring the story to the local media” and “start a charitable foundation for my spouse” were considered to represent moral insight. Because we obtained high reliability between raters across the four dilemmas, we averaged these ratings into a single measure for each dilemma and summed these scores across all four dilemmas to obtain a single measure of moral insight (ICC$_3 = .86$, $p < .001$).

For our abstract measure of moral insight, two coders determined whether each solution generated met the primary moral imperatives featured in each dilemma. Because we obtained high reliability between raters across the four dilemmas, we averaged these ratings into a single measure of moral insight for each dilemma and summed these scores across all four dilemmas (ICC$_3 = .82$, $p < .001$).

Below, we present these measures separately. Because our concrete and abstract measures of moral insight were correlated (ICC$_3 = .90$, $p < .001$), we also averaged the two standardized abstract and concrete measures to obtain a single measure of moral insight that we used in our mediation analysis.

**Results**

Table 2 presents the means, standard deviations, and correlations of the variables we measured. Appendix F reports all additional variables collected and analyses conducted for this study and all subsequent studies in this paper.

**Manipulation check.** We found that those in the could mindset used the word “could” ($M = .90$, $SD = 1.02$) more times in their responses than those in a should mindset ($M = .24$, $SD = .45$), $t(203) = 6.16$, $p < .001$, $d = .86$, whereas those in a should mindset wrote more responses containing the word “should” ($M = .29$, $SD = .67$) than did those in a could mindset ($M = .12$, $SD = .36$), $t(203) = 2.32$, $p = .02$, $d = .33$, suggesting that our manipulation was indeed effective.

**Divergent thinking.** We conducted a repeated measures analysis of variance (ANOVA) with participant mindset (should vs. could) as the between-subjects factor, the dilemma as the within-subjects factor, and the number of solutions participants reported considering for each dilemma as the dependent variable. Across the four dilemmas, participants reported having considered more solutions in the could mindset ($M = 5.11$, $SD = 1.68$) than in the should mindset ($M = 4.41$, $SD = 1.07$), $F(1, 194) = 10.70$, $p < .001$, $\eta^2_p = .05$. The interaction between the dilemma type and mindset was also significant, $F(3, 582) = 6.53$, $p < .001$, $\eta^2_p = .03$.6

We conducted a similar analysis using the coders’ ratings of how participants’ solutions spanned boundaries across the four dilemmas and found that having a could mindset increased divergent thinking ($M = 3.19$, $SD = 1.22$) relative to having a should mindset ($M = 2.42$, $SD = 1.01$), $F(1, 202) = 22.99$, $p < .001$, $\eta^2_p = .10$. We did not find a significant interaction between the dilemma type and mindset, $F(3, 606) = 2.08$, $p = .11$, $\eta^2_p = .01$.

---

6 Pairwise comparisons reveal that those in a could mindset reported more ideas generated in Dilemma 1 ($M_{could} = 1.69$, $SD_{could} = 1.04$, $M_{should} = 1.31$, $SD_{should} = .74$), $p_1 = .004$ and Dilemma 2 ($M_{could} = 1.28$, $SD_{could} = .61$, $M_{should} = 1.06$, $SD_{should} = .24$), $p_2 = .001$. There did not appear to be a difference in the self-reported number of solutions generated for Dilemma 3 ($M_{could} = 1.07$, $SD_{could} = .26$, $M_{should} = 1.08$, $SD_{should} = .30$), $p_3 = .83$, and Dilemma 4 ($M_{could} = 1.09$, $SD_{could} = .29$, $M_{should} = 1.05$, $SD_{should} = .22$), $p_4 = .25$. Participants may have generated fewer ideas for Dilemmas 3 and 4 as they were toward the end of the experiment.
Tables 2 and 3. Divergent thinking: self-reported total number of solutions considered

Table 2: Means, Standard Deviations, and Correlations for the Variables Measured (Study 1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Response contains “could”</td>
<td>0.56</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Response contains “should”</td>
<td>0.21</td>
<td>0.55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Divergent thinking: self-reported total number of solutions considered</td>
<td>4.75</td>
<td>1.44</td>
<td>0.52***</td>
<td>0.02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Divergent thinking: based on ratings from two independent coders</td>
<td>2.76</td>
<td>1.19</td>
<td>0.41***</td>
<td>0.04</td>
<td>0.60***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Moral insight solutions (concrete)</td>
<td>0.82</td>
<td>0.83</td>
<td>0.23***</td>
<td>0.02</td>
<td>0.36***</td>
<td>0.63***</td>
<td></td>
</tr>
<tr>
<td>6. Moral insight solutions (abstract)</td>
<td>1.37</td>
<td>1.06</td>
<td>0.28***</td>
<td>0.001</td>
<td>0.39***</td>
<td>0.70***</td>
<td>0.80**</td>
</tr>
</tbody>
</table>

**p < .01  ***p < .001

**Moral insight.** Using our concrete measure of moral insight, we found that a could mindset ($M = 1.59, SD = 1.12$) generated more moral insight across the four ethical dilemmas relative to a should mindset ($M = 1.17, SD = .96$), $F(1, 196) = 8.99, p = .003, \eta^2_p = .04$. We did not find a significant interaction between the dilemma type and mindset, $F(3, 588) = .89, p = .45, \eta^2_p = .005$.

Using our abstract measure of moral insight, we found that a could mindset ($M = .97, SD = .89$) generated more moral insight across the four ethical dilemmas relative to a should mindset ($M = .68, SD = .75$), $F(1, 196) = 7.05, p = .009, \eta^2_p = .04$. We did not find a significant interaction between the dilemma type and mindset, $F(3, 588) = 1.02, p = .38, \eta^2_p = .005$.

**Mediation analysis.** We examined whether divergent thinking—based on our triangulated measure from internal and external ratings—mediated the effect of a could mindset on participants’ ability to generate moral insight solutions, based on our triangulated measure of moral insight (Baron & Kenny, 1986). A could mindset was positively associated with divergent thinking ($\beta = .32, t = 4.80, p = .001$; see Table 3). When controlling for divergent thinking, the effect of adopting a could mindset was reduced to non-significance (from $\beta = .20, t = 2.86, p = .005$ to $\beta = .001, t = .005, p > .99$), and divergent thinking predicted participants’ ability to generate moral insight solutions ($\beta = .61, t = 10.46, p < .001$). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero [.12, .28], suggesting a significant indirect effect (MacKinnon, Fairchild, & Fritz, 2007). Analyses with either external or internal ratings of divergent thinking produced similar results (see Appendix F).

**Discussion**

When asked what they “would” do, could thinkers were better able to reach moral insight by generating solutions that did not simply select one side of a dilemma at the expense of the other, supporting Hypothesis 1. We also found evidence in support of Hypotheses 2 and 3, which predicted that, relative to those in a should mindset, could thinkers would be more likely to engage in divergent thinking, which would in part explain individuals’ propensity to reach moral insight.

**STUDY 2: “COULD” MINDSET INCREASES MORAL INSIGHT**

Study 1 provided evidence consistent with our predictions. However, the prior studies relied on hypothetical scenarios rather than real dilemmas faced by participants. To address this issue, in Study 2, full-time employees wrote speeches announcing their decision about an ethical dilemma adapted from a real ethical challenge that a former executive faced. Employees were incentivized such that the top 10% of solutions featured in these speeches would be awarded a monetary prize, as rated by a panel of independent judges. We predicted that, even when incentivized to reach a higher-quality solution, individuals adopting a could mindset would be more likely to reach moral insight than those adopting a should mindset.

**Participants**

Three hundred and ten full-time employees ($M_{age} = 35.81$ years; 49% female) recruited from an online Qualtrics panel completed this study.

**Design and Procedure**

Whereas we manipulated participants’ mindsets in the previous two studies by directly asking them what they could or should do after reading each dilemma, in this study, we sought to instill a could or should mindset in an unrelated context prior to experiencing a moral dilemma. Participants were informed that they would...
complete a series of different tasks and that the first task would entail evaluating a video for clarity of content. Participants were randomly assigned to watch one of two videos that we created to instill either a could or should mindset (see Appendix E for a transcript of the video). In these videos, participants learned about one way to approach solving a difficult ethical dilemma—by asking oneself either “What could I do?” or “What should I do?” After watching the video, participants briefly summarized the main message of the video and provided comments about the clarity of its content.

In the second part of the study, participants read about their new role as the president of a non-profit organization that “advocates for the elimination of child labor in Southeast Asia and aims to increase efforts to keep these children in school.” As president, they faced a dilemma that featured a tension between upholding the organization’s mission to reduce child labor practices and obtaining funding from a source known to violate child labor laws.

In recent years, you have struggled to get funding as political governments have diverted resources to environmental concerns and natural disasters taking place in the region. . . . You need $100,000 to keep your organization open in the next week or you risk having to shut down your operations.

Yesterday, TechGen, a multibillion-dollar company that produces technology products, approached you and offered to donate $200,000 to your organization. This donation would not only help you reduce your debt, but also infuse your organization with cash, allowing you to start additional projects that would help keep children in school. Initially, you were excited about this donation, until you learned about TechGen’s unethical practices of using child labor in other countries. You suspect that this company has approached you to make a donation to reduce any negative opposition to this company opening factories in the Southeast Asia region.

Based on this information, participants wrote a speech announcing their decision to the public. The top 10% of solutions—as rated by other participants—received a $5 bonus. Participants then answered a series of questions measuring divergent thinking as well as their mindset as they wrote the speech (a measure we used as our manipulation check).

A separate group of 258 individuals (M_{age} = 37.69 years; 52% female) from Amazon’s Mechanical Turk rated five randomly selected speeches such that an average of 4.19 judges (SD = .89) evaluated each speech. For each speech, judges blind to the hypotheses of the study rated whether the solutions were considered moral insights.

In Study 1, it was possible that adopting a could mindset might have encouraged participants to meet the primary moral imperatives through unethical means (e.g., evading taxes could be one way to avoid stealing from the druggist while also saving the spouse’s life). To understand whether adopting a could mindset might encourage justifications of unethical behavior, judges rated the ethicality and overall quality of the solutions provided.

**Measures**

**Manipulation check.** At the end of the study, participants rated the extent to which they considered what they “could” and “should” do while they were facing the dilemma (1 = not at all to 7 = very much).

**Divergent thinking.** After writing their speeches, participants rated the degree to which they engaged in divergent thinking based on their responses to the following three items: “While writing your speech, to what extent did you try to open the set of possibilities,” “explore alternatives,” and “explore different possibilities before narrowing on your approach?” (α = .83).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Divergent thinking</th>
<th>Moral insight solutions</th>
<th>Moral insight solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X → M</td>
<td>X → Y</td>
<td>X, M → Y</td>
</tr>
<tr>
<td>Could mindset</td>
<td>0.32***</td>
<td>0.20**</td>
<td>0.001</td>
</tr>
<tr>
<td>Divergent thinking</td>
<td>0.61***</td>
<td></td>
<td>0.61***</td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>0.10</td>
<td>0.03</td>
<td>0.37</td>
</tr>
<tr>
<td>95% bias-corrected CI</td>
<td></td>
<td></td>
<td>[0.12, 0.28]</td>
</tr>
</tbody>
</table>

Notes: CI = standardized confidence interval for the indirect effect. The table reports standardized coefficients for each regression.

* p < .05
** p < .01
*** p < .001

TABLE 3

Mediation Analysis on Moral Insight Solutions Formulated (Study 1)
**Moral insight.** As in Study 1, we triangulated on moral insight using both concrete and abstract measures. To measure moral insight more concretely, judges categorized the employees’ solutions as either one of the conventional solutions (i.e., accept the donation or decline the donation) or a solution that incorporated any one of the following elements enabling the organization to remain viable without forgoing its value to eliminate child labor: accept the money and work with the donor to remove child labor from its practices, accept the money contingent on the donor changing its practices, and directly asking the audience for funding. Based on a pilot test, research assistants had identified these responses as solutions that sought to address both imperatives.

To measure moral insight more abstractly, judges explicitly rated (a) whether the solutions fully honored both of the following imperatives, and (b) the extent to which the solutions met each of these objectives: “allowing the organization to continue operating” and “upholding [its] value of eliminating child labor” (1 = not at all to 7 = a great deal). Across these items, judges achieved high inter-rater reliability (ICC1 > .76, ps < .001).

Because the correlation between the abstract and concrete measures of moral insight was moderately high (ICC1 = .73, p < .001), we triangulated on the construct of moral insight by averaging the standardized scores of these measures.

**Ethicality.** Raters also determined the extent to which the solution was ethical (1 = not at all to 7 = extremely).

**Decision quality.** Raters also evaluated solutions based on how good the solutions were to determine the speech writers who would receive a monetary prize (1 = not at all to 7 = extremely).

### Results

Table 4 presents the means and standard deviations of the variables we measured.

**Manipulation check.** As expected, those adopting the could mindset (M = 5.69, SD = 1.43) considered what they could do more than those in the should mindset condition (M = 5.02, SD = 1.64), t(307) = 3.82, p < .001, d = .44. Similarly, those in the should mindset condition (M = 5.75, SD = 1.57) considered what they should do more than those in the could mindset condition (M = 5.38, SD = 1.49), t(307) = 2.14, p = .03, d = .24.

A repeated measures ANOVA with mindset as the between-subjects factor and responses on the two manipulation check questions as the within-subjects factors revealed a significant interaction, F(1, 307) = 25.09, p < .001, ηp² = .08. Those in the could mindset thought about “could” more than “should,” t(148) = 2.37, p = .02, d = .27, whereas those in the should mindset thought about “could” less than “should,” t(159) = 4.58, p < .001, d = .52.

**Divergent thinking.** In support of Hypothesis 2, employees in the could mindset condition (M = 4.98, SD = 1.51) engaged in more divergent thinking relative to those in the should mindset condition (M = 4.57, SD = 1.41), t(307) = 2.52, p = .01, d = .29.

**Conventional solutions.** Those in a should mindset (M = .48, SD = .41) were more likely to decline the money than those in the could mindset (M = .32, SD = .41), t(307) = 3.53, p < .001, d = .40. Employees were no more likely to accept the money in the could condition (M = .12, SD = .25) than in the should condition (M = .10, SD = .23), t(307) = .53, p = .53, d = .06.

**Moral insight.** Based on the concrete measure of moral insight, employees in the could mindset condition were more likely to provide a solution research assistants had identified as meeting both imperatives (M = .47, SD = .42) than those in the should mindset condition (M = .29, SD = .37), t(307) = 3.41, p < .001, d = .44. We provide specific types of solutions that were classified as moral insights in Table 4. Based on the abstract measure of moral insight, judges were more likely to classify the solutions from those in the could mindset (M = .40, SD = .31) as honoring both imperatives compared to those in the should mindset condition (M = .32, SD = .29), t(307) = 2.75, p = .006, d = .31.

More specifically, solutions based on those in a could mindset better enabled the organization to satisfy its mission to continue operating (M = 4.30, SD = 1.69) relative to those in a should mindset (M = 3.82, SD = 1.63), t(307) = 2.55, p = .01, d = .29. At the same time, could solutions did not do so by sacrificing the organization’s values: that is, should mindset solutions (M = 5.34, SD = 1.42) did not uphold the organization’s values more than could solutions (M = 5.16, SD = 1.50), t(307) = 1.08, p = .28, d = .12.

**Ethicality.** Judges did not rate could mindset solutions (M = 5.11, SD = 1.53) as less ethical than should mindset solutions (M = 5.25, SD = 1.41), t(307) = .89, p = .38, d = .25.

**Decision quality.** Judges also rated could mindset solutions as higher in quality (M = 4.25, SD = 1.08) than should mindset solutions (M = 4.00, SD = 1.09), t(307) = 2.09, p = .04, d = .24.
Mediation analysis. We examined whether divergent thinking mediated the effect of adopting a could mindset on the triangulated measure of moral insight (Baron & Kenny, 1986). Adopting a could mindset was positively associated with divergent thinking ($b = 0.14$, $t = 2.48$, $p = 0.01$) (see Table 5). When controlling for divergent thinking, the effect of adopting a could mindset was significantly reduced (from $b = 0.20$, $t = 3.56$, $p = 0.001$ to $b = 0.16$, $t = 2.99$, $p = 0.003$), and divergent thinking predicted the likelihood of reaching moral insight ($b = 0.26$, $t = 4.71$, $p < 0.001$). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero [0.01, 0.07], suggesting a significant indirect effect (MacKinnon et al., 2007).

Discussion

Consistent with Hypotheses 1 to 3, participants were more likely to reach moral insight in incentive-compatible contexts. In this study, participants were incentivized based on how a panel of independent judges would rate the quality of the solution proposed. Consequently, it is possible that participants’ solutions did not reflect their true intentions, but, rather, the solutions that participants believed would generate the highest reward. To address this issue, in Study 3 (detailed below), we incentivized participants to adopt a could or should mindset, but did not attach a financial reward to the solutions proposed. Additionally, in Study 4, participants made a decision that would ostensibly impact someone else in the study. We also note that external raters did not judge could mindset solutions as less ethical relative to should mindset solutions. These findings demonstrate that, when individuals are prompted to think broadly, the ethicality of their solutions does not decline. We note that adopting a could mindset (a) increased moral insight by decreasing the individuals’ propensity to reject unethical money and (b) did not affect the extent to which individuals were likely to accept the unethical money. In follow-up analyses, rejecting the money and moral insight solutions did not differ in their perceived ethicality, $b = 0.07$, $t = 1.09$, $p = 0.28$, and both actions were perceived as more ethical than accepting the money, $b > 0.65$, $t = 7.97$, $p < 0.001$. Taken together, these findings demonstrate that adopting a could mindset did not encourage solutions that were perceived as less ethical.

We also note that it is intriguing that could solutions were not perceived as more ethical even though they were more likely to satisfy both moral imperatives and were perceived to be better in quality. When individuals adopt a should mindset while facing right-versus-right dilemmas, they are often choosing to uphold one moral imperative at the expense of another. Choosing to forgo one moral imperative may provide an indication for how much the decision-maker values the upheld imperative. In contrast, moral insights may sufficiently relieve or preempt the ostensible moral tension such that the ethical nature of the situation itself and the proposed solution is less pronounced. By removing the tension in the ethical dilemma, moral insight may also

### Table 4

<table>
<thead>
<tr>
<th>Solutions Proposed in Speeches Based on Ratings from 258 Independent Coders (Study 2)</th>
<th>Should</th>
<th>Could</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conventional Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accept donation</td>
<td>0.10</td>
<td>0.12</td>
</tr>
<tr>
<td>Decline donation</td>
<td>0.48</td>
<td>0.32</td>
</tr>
<tr>
<td>Total</td>
<td><strong>0.58</strong></td>
<td><strong>0.44</strong></td>
</tr>
<tr>
<td><strong>Moral Insight Solutions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appeal to audience for donations</td>
<td>0.12</td>
<td>0.17</td>
</tr>
<tr>
<td>Work with the company to remove child labor from its practices.</td>
<td>0.13</td>
<td>0.24</td>
</tr>
<tr>
<td>Contingency deal (only accept money if donor removes child labor from its practices)</td>
<td>0.05</td>
<td>0.11</td>
</tr>
<tr>
<td>Concrete measure of moral insight</td>
<td>0.29</td>
<td>0.47</td>
</tr>
<tr>
<td>Abstract measure of moral insight</td>
<td>0.32</td>
<td>0.40</td>
</tr>
<tr>
<td>Ethicality</td>
<td>4.57 (1.41)</td>
<td>4.98 (1.51)</td>
</tr>
<tr>
<td>Decision quality</td>
<td>5.25 (1.41)</td>
<td>5.11 (1.53)</td>
</tr>
<tr>
<td><strong>Divergent thinking</strong></td>
<td>4.00 (1.09)</td>
<td>4.25 (1.08)</td>
</tr>
</tbody>
</table>
| **Note:** Standard deviations are presented in parentheses.
remove salience of the ethicality of the decision at hand. Consequently, it may be possible for a moral insight solution that satisfies more moral imperatives to be rated as no more ethical than a conventional solution that satisfies fewer moral imperatives because the moral insight solution reduces or even removes the salient ethical tension in the original problem.

STUDY 3: “COULD” CHANGES THE CONVERSATION

Two studies showed that could mindsets increase divergent thinking and consequently the likelihood of reaching moral insight in private contemplation. Because individuals often discuss ethical challenges with others, we investigated, in Study 3, the extent to which a could mindset changes exploration of viable alternatives in interpersonal discussions. We conducted this study in a laboratory setting and incentivized individuals in dyads to adopt either a could or a should mindset. We expected to find that dyads adopting a could mindset would generate a greater number of solutions (Hypothesis 2). Further, we hypothesized that these dyadic interactions would in turn influence individuals’ private decision-making, leading individuals to generate moral insight (Hypotheses 1 and 3).

Participants

Two hundred and two individuals ($M_{age} = 22.97$ years; 49.5% female) forming one hundred and one dyads participated in a lab study at a university in the northeastern United States in exchange for $20 and the opportunity to earn an additional $2 based on their execution of instructions provided.

Design and Procedure

Participants were randomly assigned to adopt either a could mindset or a should mindset while discussing an ethical dilemma with a randomly assigned partner. All participants read an adaptation of the analyst’s dilemma (Badaracco & Useem, 1993), which involved deciding whether to tell their boss strictly confidential information that would help the company, but would hurt the individual who divulged this information (see Dilemma 4 in Appendix D). Dyads were given the opportunity to discuss this dilemma for 15 minutes in a virtual chat room, and were informed they could end the conversation earlier if they finished discussing the dilemma in the allotted time. To ensure participants would

---

### Table 5

<table>
<thead>
<tr>
<th>Variable</th>
<th>Divergent thinking</th>
<th>Moral insight solution</th>
<th>Moral insight solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$X \rightarrow M$</td>
<td>$X \rightarrow Y$</td>
<td>$X, M \rightarrow Y$</td>
</tr>
<tr>
<td>Could mindset</td>
<td>0.14***</td>
<td>0.19***</td>
<td>0.15**</td>
</tr>
<tr>
<td>Divergent thinking</td>
<td>0.14***</td>
<td>0.19***</td>
<td>0.25***</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.02</td>
<td>0.04</td>
<td>0.09</td>
</tr>
<tr>
<td>95% bias-corrected CI</td>
<td></td>
<td>[0.01, 0.07]</td>
<td></td>
</tr>
</tbody>
</table>

Notes: CI = standardized confidence interval for the indirect effect. The table reports standardized coefficients for each regression.

* $p < .05$

** $p < .01$

*** $p < .001$
remember to adopt either a could or should mindset during their conversations, we incentivized participants such that those randomly assigned to adopt a could mindset received $2 if they asked their partner “What could we do?” during the interaction, whereas should mindset participants received $2 if they asked their partner “What should we do?” At the end of the discussion, all participants then answered the question, “What would you do?” Participants were instructed that they did not need to agree with their partner on their decision of what they “would” do.

Two independent coders blind to the hypotheses of the study recorded whether participants used the words “could” and “should” in the conversations. The agreement between raters was significantly above and beyond chance agreement ($k_{\text{could}} = .74, p_{\text{could}} < .001$, $k_{\text{should}} = .50, p_{\text{should}} < .001$).

Divergent thinking. We triangulated on our measure of divergent thinking based on the total number of solutions discussed as well as the extent to which each of these solutions spanned different categories. Two coders identified the number of instances during each conversation when individuals suggested a new solution ($\text{ICC}_3 = .76, p < .001$; see Table 6). Additionally, these two coders rated the extent to which the discussions contained ideas that spanned different categories of solutions ($1 = \text{not at all}, 3 = \text{somewhat}, 5 = \text{extremely}$; $\text{ICC}_3 = .61, p < .001$). Because there was high inter-rater reliability between these two measures of divergent thinking ($\text{ICC}_3 = .76, p < .001$), we averaged the standardized scores of these measures to obtain a single rating of divergent thinking.

Duration of discussion. To understand whether the content of thought or the length of time discussing dilemmas was a stronger predictor of reaching moral insight, we measured the amount of time that participants spent conversing with their partners about the moral dilemma.

Moral insight. To triangulate on our measure of moral insight, we used similar concrete and abstract categories of solutions discussed in conversations with partner (Study 3)

<table>
<thead>
<tr>
<th>Categorization of each unique solution discussed in conversations</th>
<th>Categorization of individuals’ decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Should Should Should Should</td>
<td>Could Could Could Could</td>
</tr>
<tr>
<td><strong>Conventional Responses</strong></td>
<td></td>
</tr>
<tr>
<td>Tell boss confidential information</td>
<td>0.67</td>
</tr>
<tr>
<td>Keep information confidential</td>
<td>0.55</td>
</tr>
<tr>
<td><strong>Total Conventional Responses</strong></td>
<td>1.22 (.34)</td>
</tr>
<tr>
<td><strong>Moral Insight Solution</strong></td>
<td></td>
</tr>
<tr>
<td>Ask roommate for permission to tell boss confidential information</td>
<td>0.12</td>
</tr>
<tr>
<td>Convince the roommate that information ought to be revealed to boss</td>
<td>0.18</td>
</tr>
<tr>
<td>Make information anonymous (provide an anonymous tip, making source of information anonymous, or both)</td>
<td>0.19</td>
</tr>
<tr>
<td>Obtain same information through other channels first before telling boss</td>
<td>0.03</td>
</tr>
<tr>
<td>Notify boss that he should investigate the company and arrive at same information independently</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Total Moral Insight Solutions</strong></td>
<td>0.57 (0.65)</td>
</tr>
</tbody>
</table>

Note: Means represent the averaged binary coding of two independent coders.

### Measures

Table 6 presents the means and standard deviations of the variables we measured.

**Manipulation check.** Two independent coders blind to the hypotheses of the study recorded whether participants used the words “could” and "should" in the conversations. The agreement between raters was significantly above and beyond chance agreement ($k_{\text{could}} = .74, p_{\text{could}} < .001$, $k_{\text{should}} = .50, p_{\text{should}} < .001$).

### Table 6

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Note: Means represent the averaged binary coding of two independent coders.
measures as in Studies 1 and 2. For our concrete measure of moral insight, two independent raters coded the solutions as either a conventional solution (i.e., tell the boss the information or keep the information confidential) or as one of the many unconventional solutions that two separate research assistants had identified as upholding both the duty to the organization and loyalty to the roommate (see Table 6 for examples). Solutions were coded as moral insight if they contained at least one of these unconventional solutions. Because the two raters achieved high agreement (κ = .81, p < .001), we averaged the two coder’s ratings to obtain a single rating of moral insight.

For our abstract measure of moral insight, participants rated the extent to which they believed their solutions met multiple imperatives presented in the dilemma (1 = met only one objective, 7 = met all objectives).

The correlation between external coders’ ratings of moral insight and individuals’ perceptions of moral insight was moderately high (ICC3 = .67, p < .001). To triangulate on the construct of moral insight, we averaged the standardized scores between external judges’ perceptions of moral insight and internal raters’ self-assessment of the extent to which their solutions met both moral imperatives.

**Decision quality.** One hundred independent raters blind to the hypotheses also judged these categories of alternative solutions based on the creativity (1 = not at all creative to 7 = extremely creative) and quality of the solution (1 = extremely bad solution, 4 = neither good nor bad, 7 = extremely good solution).

**Results**

**Manipulation check.** Participants in the should mindset were more likely to mention “should” (M = 99.0%, SD = .07) in their discussion with their partner than those in the could mindset (M = 29.8%, SD = .28), t(99) = 16.53, p < .001, d = 3.32; similarly, those in the could mindset were more likely to mention “could” (M = 94.2%, SD = .16) in their discussion than those with a should mindset (M = 7.1%, SD = .18), t(99) = 25.89, p < .001, d = 5.20.

**Duration of discussion.** Dyads discussing what they “could” do spent more time discussing the dilemma (M = 601.91 seconds, SD = 310.5) than did dyads discussing what they “should” do (M = 482.85 seconds, SD = 246.97), t(99) = 2.17, p = .03, d = .43. We addressed this potential confound in our subsequent mediation analyses.

**Divergent thinking.** Having a could mindset elicited more responses on average from individuals (M = 2.39, SD = 1.06) than did having a should mindset (M = 1.84, SD = .72), based on the coding of all ideas generated during the discussions, t(99) = 3.07, p = .003, d = .62 (see Table 6). Additionally, two external coders perceived possibilities discussed in the could mindset as being more boundary spanning (M = 2.74, SD = 1.02) than ideas discussed under a should mindset (M = 2.22, SD = .95), t(99) = 2.63, p = .01, d = .53.

**Conventional solutions.** Based on ratings of two independent coders, those with a could mindset were less likely to choose a conventional solution (44%) relative to those in a should mindset (65%), t(198) = 3.22, p < .001, d = .46. More specifically, could responders were less likely to choose inaction (19%) than should responders (33%), t(198) = 2.41, p = .02, d = .34. We did not find a difference between could and should responders on whether they would tell their boss the confidential information without consulting their friend, t(198) = .91, p = .36.

**Moral insight.** For our concrete measure of moral insight based on ratings of two independent coders, those with a could mindset were more likely to propose a solution that would simultaneously protect the friend and provide critical information to their boss (53%) relative to those in a should mindset (31.8%), t(198) = 3.24, p < .001, d = .46.

Based on our abstract measure of moral insight, participants adopting a could mindset believed their solutions met more imperatives (M = 4.35, SD = 2.01) compared to those in the should mindset (M = 3.60, SD = 1.94), t(198) = 2.72, p = .007, d = .39.

**Decision quality.** A separate group of one hundred independent raters found these moral insight solutions to be more creative (M = 4.30, SD = .93) and higher in quality (M = 4.96, SD = .90) than solutions that entailed selecting one imperative over the other (i.e., either keeping the information confidential or telling the boss) (Mcreative = 1.90, SDcreative = 1.12; Mquality = 3.27, SDquality = 1.08, tcreative (99) = 20.79, pcreative < .001, dcreative = 2.33, tquality (99) = 12.13, pquality < .001, dquality = 1.69.

**Mediation analysis.** We examined whether the triangulated measure of divergent thinking would mediate the effect of adopting a could mindset on the propensity to reach moral insight as operationalized based on the average of standardized external and internal perceptions of moral insight (Baron & Kenny, 1986). Because those in the could condition spent more time chatting, we controlled for the
amount of time spent discussing these solutions. Adopting a could mindset was positively associated with the number of solutions generated ($\beta = .25, t = 3.68, p < .001$) (see Table 7). When controlling for the number of solutions, the effect of adopting a could mindset was significantly reduced (from $\beta = .23, t = 3.24, p = .001$ to $\beta = .09, t = 1.39, p = .017$), and divergent thinking predicted the likelihood of proposing a moral insight solution ($\beta = .57, t = 9.31, p < .001$). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero [$0.07, 0.22$], suggesting a significant indirect effect (MacKinnon et al., 2007).8

**Discussion**

Results from this study support our predictions in Hypotheses 1 to 3 at the dyadic level. Adopting a could mindset influences moral insight through divergent thinking, even when individuals have the opportunity to discuss possible solutions with one another. These findings demonstrate that developing a could mindset is not merely helpful for individual moral decision-making, but also for groups of individuals confronting ethical challenges.

In group contexts, we find that adopting a could mindset encouraged individuals to spend more time discussing these dilemmas and generating more ideas. Even controlling for the duration of discussion, we continued to find that adopting a could mindset increased divergent thinking and the propensity to reach moral insight. Taken together, could mindsets not only encouraged individuals to spend more time thinking about moral dilemmas, but also substantively changed how individuals spent their time thinking about them—from choosing among the ethical imperatives in conflict to expanding the set of options that honor these imperatives.

A critical limitation of Studies 1 to 3 is that we measured moral insight based on what participants indicated they would do across a series of scenarios, rather than directly responding to the dilemma in a way such that their behaviors would impact the dilemma’s key constituents. Thus, it is possible that participants identified solutions that they would not have actually enacted if we measured follow-through behavior. We address this issue in Study 4 by exploring a context in which participants’ actions would ostensibly impact others featured in an ethical dilemma.

**STUDY 4: “COULD” IN THE PRESENCE OF SELF GAIN**

Because prior research on right-versus-right dilemmas has focused on how individuals reason through moral dilemmas, existing research on dilemmas mostly entailed presenting individuals with hypothetical scenarios, including the ones we used in our Studies 1–3 (Greene et al., 2001; Toffler, 1986). Therefore, to study how individuals select a path other than the salient options presented, Study 4 moves beyond the study of scenarios and employs a paradigm such that participants face a dilemma in which their resolution would ostensibly have a real impact. Thereby, given the limitations of relying on vignettes in the field of behavioral ethics (Kish-Gephart, Harrison, & Treviño, 2010), we seek

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8 Mediation analyses without time as a control variable reveal similar results such that the indirect effect of being in a could mindset on reaching moral insight via increased divergent thinking excludes zero (.10, .23).
to understand how developing a could mindset not only affects planned moral insights (Studies 1–3) but also enacted moral insights.

This experiment also seeks to advance the study of organizational ethics—which often separates situations in which two ethical principles collide from situations in which self-interest and ethics compete—by introducing dilemmas that are more complex. In many real-world situations, dilemmas feature more than a contest of two moral principles. In fact, some dilemmas are hybrids that entail both a conflict of ethical principles or consequences (right vs. right) and the temptation to violate one moral principle for self-gain (right vs. wrong). For example, imagine that an employee feels pressured to inflate his/her company’s sales in order to land a client that would save the firm from dissolution and also to obtain a promotion. Or, perhaps a team leader feels pressured to exaggerate a teammate’s involvement in order to protect that teammate from getting fired and also to signal to senior managers that the team leader is an effective employee who deserves an annual bonus. In these examples, individuals are weighing the costs of violating an ethical principle (e.g., being honest) against the benefits of upholding another principle (e.g., duty to the organization in the first example, or desire to protect a teammate in the second) and personally benefiting (e.g., getting a promotion or raise). In this study, we investigate how adopting a could mindset affects the propensity to reach moral insight when the temptation for self-gain may pull individuals to prioritize one imperative over another.

To test the idea that adopting a could mindset may have differential effects depending on the type of ethical dilemma, participants confronted either (a) a right-versus-right dilemma in which they could act dishonestly in order to help their partner or (b) a hybrid dilemma in which they could act dishonestly in order to benefit both their partner and themselves. In the right-versus-right condition, individuals faced three main courses of action: (1) act unethically to help an individual in need; (2) act ethically, but fail to help this individual; or (3) develop moral insight (i.e., act ethically and help this individual). In the hybrid dilemma, individuals faced the same possibilities and, in addition, they could also benefit personally when they acted unethically.

In Studies 1 to 3, individuals who adopted a could mindset were more likely to develop moral insight in right-versus-right dilemmas. That is, individuals in a could mindset were more likely to help another individual without sacrificing a moral principle. However, we predicted that, when dilemmas also entail the temptation to break one ethical principle for self-gain, adopting a could mindset might encourage individuals to break their moral principle in order to advance their own interest. Prior research has found that creativity increases unethical behavior in right-versus-wrong contexts (Gino & Ariely, 2012; Vincent & Kouchaki, 2016). When individuals have the opportunity to cheat for self-gain, triggering them to think more creatively enables them to more readily justify their unethical actions and increases unethical behavior (Gino & Ariely, 2012). Thus, the possibility remains that, in hybrid dilemmas (where self-gain is a temptation), engaging in a could mindset might lead individuals to pursue a self-serving solution (that also conveniently helps someone else) at the expense of a moral principle. Thus, we hypothesize that:

**Hypothesis 4.** Whereas shifting from a should to a could mindset increases moral insight in right-versus-right dilemmas, adopting a could mindset increases ethical violations that benefit the self in hybrid dilemmas.

**Participants**

Five hundred and seventy-two individuals ($M_{age} = 27.18$ years; 48% female), full-time and part-time students in the United States, participated in this study in exchange for $5.

**Design and Procedure**

Participants were randomly assigned to one of four conditions in a 2 (Mindset: could vs. should) × 2 (Dilemma: right–right vs. hybrid) factorial design. At the beginning of the study, participants read that they would be matched to an individual from the community who is seeking help from them. They were informed that this individual has written them a message and they could respond to help this individual during the study. After participants were ostensibly paired with their partner, they were asked to write a brief introduction about themselves to their partner that would apparently be sent to their partner. Participants then received their partner’s introductory message, in which they learned that their partner was recently unemployed and seeking help to pay for their children’s education. All participants were sent the following

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request to act dishonestly in order to help this individual save costs on school supplies:

MESSAGE FROM PARTNER: I am a parent of three children and just recently lost my job. Now that school is starting, I am struggling to find the money to buy school supplies for my kids. So far, I’ve been trying to find deals online that will give me discounts until I get back on my feet.

Right now, lots of companies are giving people discounts if customers introduce their friends to products or services. One of the companies that is running a promotion right now is Amazon.com. [Right→right: For each new friend that I refer, I can get $10. Hybrid: For each new friend that I refer, we both get an additional $10.]

I would like five people to sign up, but am having trouble recruiting. Are you willing to sign up as five different people to help me? All you would need is to pretend to be five different people and provide five different emails. [Right→right: That way, you will help me save $50. Hybrid: That way, we can both save $50.]

To ensure that participants spent approximately the same amount of time contemplating this request, participants were instructed to write what they could or should do to help their partner for 1 minute. Participants learned that their initial thoughts would not be sent to their partner. After contemplating what they could or should do, participants then provided a response that would ostensibly be sent to the partner. After sending the response, participants were debriefed and just recently lost my job. Now that school is starting, I am struggling to find the money to buy school supplies for my kids. So far, I’ve been trying to find deals online that will give me discounts until I get back on my feet.

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A separate group of 272 individuals ($M_{age} = 38.24$ years; 59% female) from an online panel rated five randomly selected messages such that an average of 5.27 judges ($SD = 1.01$) evaluated each response. For each response, judges blind to the hypotheses of the study rated whether participants engaged in divergent thinking during the brainstorming process, whether each solution moved beyond simply accepting or declining their partner’s request, the extent to which each solution honored both moral imperatives in the dilemma, and the ethicality of each solution.

### Measures

**Manipulation check.** As a manipulation check, we coded whether individuals used “could” or “should” in their response to our intervention prompt.

**Divergent thinking.** As in Study 1, independent coders rated the extent to which participants’ solutions were “outside of the box” and “spanned different categories of solutions” ($1 = not at all, 4 = somewhat, 7 = extremely) based on Amabile’s (1996) consensual assessment technique. We aggregated the raters’ responses into a single measure since our raters achieved high reliability ($ICC_2 = .86, p < .001$).

**Conventional solutions.** We operationalized an ethical violation if the individual offered to create or provide five email addresses to the individual requesting help. We also measured when individuals declined to help, enabling them to uphold the moral principle of honesty, but also preventing them from helping the individual in need.

**Moral insight.** We measured moral insight using both a concrete and abstract measure. As a more concrete measure, judges categorized the employees’ solutions as either a conventional solution (i.e., offering five email addresses or declining to help in any way) or an unconventional one that included at least one of the following elements: offering to share the request with other friends to receive the discount legitimately, providing resources or suggestions about ways to save money, and/or offering to sign up legitimately as one person. Based on a pilot test, research assistants identified these solutions as the most common type of response that sought to address both of the primary values.

As a more abstract measure of moral insight, judges also evaluated whether the solutions fully honored both of the following imperatives or prioritized one imperative over the other: “helping their partner support their children’s education” and “upholding the value of honesty.” Across all items, these judges achieved high inter-rater reliability ($ICC_1 > .80, ps < .001$).

Because the concrete and abstract measure of moral insight was highly correlated ($ICC_1 > .90, ps < .001$), we standardized these measures and averaged them to obtain a single measure of moral insight.

**Ethicality.** Raters also determined the extent to which the solution was ethical ($1 = not at all to 7 = extremely$).

### Results

Table 8 presents the means and standard deviations of the variables we measured.

**Manipulation check.** As expected, those adopting a could mindset were more likely to use the word “could” (90%, 256/284) than those adopting a should mindset condition (4%, 12/288), $\chi^2(1, N = 572) = 424.46, p < .001, \text{Cramér’s } V = .86$. Similarly, those in the should mindset condition (94%, 266/288) were more likely to use the word “should” than those in a could mindset (1%, 3/284), $\chi^2(1, N = 572) = 478.52, p < .001, \text{Cramér’s } V = .92$. 


**Divergent thinking.** We conducted an ANOVA with ratings of divergent thinking as the dependent variable, and dilemma type, mindset, and their interaction as the independent variables. We found a significant main effect of adopting a could mindset such that those in a could mindset engaged in more divergent thinking \((M = 3.37, SD = 1.45)\) than those in a should mindset \((M = 3.13, SD = 1.36)\), \(F(1, 568) = 4.12, p = .04, \eta_p^2 = .007\). We also found a significant interaction between dilemma type and adopting a could mindset, \(F(1, 568) = 4.11, p = .04, \eta_p^2 = .007\). Simple effects analyses revealed that, for right-versus-right dilemmas, participants in a could mindset were more likely to engage in divergent thinking \((M = 3.42, SD = 1.46)\) than those in a should mindset \((M = 2.95, SD = 1.33)\), \(p = .004\). However, when individuals faced a dilemma that involved self-gain, having a could mindset did not impact divergent thinking \((M = 3.32, SD = 1.37)\) relative to having a should mindset \((M = 3.32, SD = 1.46)\), \(p = .99\).

**Conventional responses.** We conducted a similar ANOVA with ethical violations (i.e., accepting the partner’s request) as the dependent variable. We did not find a main effect of dilemma type or an interaction between dilemma type and adopting a could mindset, \(Fs < 2.33, ps > .33\). For right-versus-right dilemmas, participants in the could mindset were directionally less likely to cheat in order to help their partner (i.e., offer five different accounts) \((M = .23, SD = .36)\) than those in a should mindset \((M = .16, SD = .31)\), \(p = .07\). However, counter to our predictions about hybrid dilemmas that involve self-gain, having a could mindset did not affect the propensity to violate ethics for self-gain (with the benefit of helping another) \((M = .15, SD = .31)\) relative to having a should mindset \((M = .17, SD = .31)\), \(p = .70\).

Additionally, we conducted a similar ANOVA with a refusal to violate ethics to help their partner (and themselves in the hybrid dilemma) as the dependent variable. We found a marginal interaction between dilemma type and adopting a could mindset, \(F(1, 568) = 3.17, p = .08, \eta_p^2 = .006\). For right-versus-right dilemmas, participants in the could mindset were directionally less likely to lie to refuse help \((M = .21, SD = .34)\) than those in a should mindset \((M = .30, SD = .39)\), \(p = .04\). However, when individuals faced a hybrid dilemma that involved self-gain, having a could mindset did not increase refusal to help \((M = .27, SD = .36)\) relative to having a should mindset \((M = .24, SD = .36)\), \(p = .63\). We did not find a main effect of dilemma type or mindset, \(Fs < 1.22, ps > .27\).

**Moral insight.** We conducted a similar ANOVA with the concrete measure of moral insight as the dependent variable. We found a main effect of adopting a could mindset such that those in a could mindset were more likely to reach moral insight solutions \((M = .56, SD = .42)\) than those in a should mindset \((M = .49, SD = .42)\), \(F(1, 568) = 3.84, p = .051, \eta_p^2 = .007\). This main effect was qualified by a marginal interaction between mindset and dilemma type, \(F(1, 568) = 4.04, p = .05, \eta_p^2 = .007\). For right-versus-right dilemmas, participants in the could mindset were more likely to reach insight \((M = .58, SD = .42)\) than those in a should mindset \((M = .44, SD = .42)\), \(p = .005\). However, when individuals faced a dilemma that involved self-gain, having a could mindset did not affect the propensity of individuals reaching moral insight \((M = .54, SD = .43)\)
Mediated Moderation Analysis on Reaching Moral Insight (Study 4)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Divergent thinking</th>
<th>Moral insight solution</th>
<th>Moral insight solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X → M</td>
<td>X → Y</td>
<td>X, M → Y</td>
</tr>
<tr>
<td>Could mindset</td>
<td>0.08*</td>
<td>0.10*</td>
<td>0.04</td>
</tr>
<tr>
<td>Dilemma type (1 = hybrid, 0 = right vs. right)</td>
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<td>&lt; 0.001</td>
<td>−0.04</td>
</tr>
<tr>
<td>Mindset × Dilemma</td>
<td>−0.08*</td>
<td>−0.08†</td>
<td>−0.02</td>
</tr>
<tr>
<td>Divergent thinking</td>
<td>0.02</td>
<td>0.01</td>
<td>0.72***</td>
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<tr>
<td>Adjusted $R^2$</td>
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<tr>
<td>95% bias-corrected CI for right versus right</td>
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</tr>
<tr>
<td>95% bias-corrected CI for hybrid</td>
<td>[−0.08, 0.08]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: CI = standardized confidence interval for the indirect effect. The table reports standardized coefficients for each regression.

† $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

relative to having a should mindset ($M = .54 \ SD = .42$), $p = .97$.

We conducted a similar analysis with the abstract measure of moral insight based on raters’ perception of whether the solution honored both of the primary moral imperatives as the dependent variable. We found a significant main effect of adopting a could mindset such that those in a could mindset were more likely to honor both moral imperatives ($M = .41, SD = .33$) than those in a should mindset ($M = .34, SD = .32$), $F(1, 568) = 6.24, p = .01, \eta_p^2 = .01$. We did not find a main effect of dilemma type or an interaction between dilemma type and adopting a could mindset, $F < 2.48, ps > .12$. For right-versus-right dilemmas, participants in the could mindset were more likely to reach insight ($M = .44, SD = .34$) than those in a should mindset ($M = .32, SD = .31$), $p = .004$. However, when individuals faced a dilemma that involved self-gain, having a could mindset did not affect the propensity of individuals reaching moral insight ($M = .38, SD = .32$) relative to having a should mindset ($M = .35 SD = .34$), $p = .51$.

Ethicality. We conducted a similar analysis with ratings of ethicality as the dependent variable. We did not find a main effect of dilemma type, mindset, or the interaction of these two factors, $F < 1.71, ps > .19$.

Mediation analysis. We conducted a mediated moderation analysis to test how the triangulated measure of divergent thinking explains the interaction between mindset and dilemma type on the triangulated measure of moral insight (see Table 9). When controlling for divergent thinking, the interaction between adopting a could mindset and the type of dilemma was significantly reduced (from $\beta = −.08, t = −1.88, p = .06$ to $\beta = −.02, t = −.61, p = .55$), and divergent thinking predicted the likelihood of proposing a moral insight solution ($\beta = .72, t = 24.51, p < .001$). For those facing a right-versus-right dilemma, a 10,000 sample bootstrap analysis showed that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero [0.04, 0.19], suggesting a significant indirect effect (Preacher & Hayes, 2004). However, for those in the hybrid condition, the 95% bias-corrected confidence interval for the size of the indirect effect included zero [−0.08, 0.08], suggesting that divergent thinking did not mediate the relationship between being in a could mindset and reaching moral insight.

Taken together, these findings demonstrate that, when individuals are facing a right-versus-right dilemma, having a could mindset helps them engage in greater divergent thinking, enabling them to reach moral insights; however, when self-gain is involved in similar collisions of imperatives, having a could mindset did not generate moral insight, in part because having a could mindset did not trigger more divergent thinking.

Discussion

Counter to our predictions in Hypothesis 4, shifting to a could mindset did not increase self-dealing in hybrid dilemmas that involved the temptation to lie for self-dealing. Our prediction was based on prior research showing that creativity increases unethical behavior when the temptation for self-gain is present, enabling individuals to consider a wide range of acceptable reasons to cheat (Gino & Ariely, 2012). In prior studies, there was one primary outlet
for creativity: through unethical behavior. Results from this study demonstrate that, in self-dealing dilemmas in which creativity can be expressed ethically (i.e., through the enactment of moral insight), more divergent thinking may not necessarily lead to more cheating. In fact, even in dilemmas that entail self-gain, divergent thinking is prompted in service of finding ethical routes to the gain.

While, in right-versus-right dilemmas, participants in a could mindset engaged in more divergent thinking than those in a should mindset, in hybrid dilemmas with some self-gain on the line, individuals with a should mindset engaged in just as much divergent thinking as those with a could mindset. These findings demonstrate that, when temptations for self-gain are present in dilemmas, individuals, regardless of their mindset, may be more motivated to engage in divergent thinking that leads to moral insight benefitting the ethical imperatives in play and the decider. Consequently, although adopting a could mindset generated moral insight in right-versus-right dilemmas, adopting a could mindset did not increase moral insight in hybrid dilemmas. Overall, this pattern of findings is explained by the difference in divergent thinking driven by participants’ mindset and the type of dilemma they were facing.

**GENERAL DISCUSSION**

Given that moral dilemmas are vexing and difficult to solve because they often force individuals to prioritize one moral imperative over another, we have considered interventions aimed to help individuals think more expansively about possible solutions. We studied moral insight and demonstrated its importance in the context of moral dilemmas. Moral insight encompasses the discovery of solutions that move beyond choosing one moral imperative over the other, allowing for solutions that honor both imperatives or that resolve the tension among them. We showed that individuals’ mindsets strongly influence whether they generate moral insight when they contemplate moral dilemmas.

Across four studies, we demonstrated that, although individuals intuitively approach ethical dilemmas with a should mindset, shifting individuals to consider what they could do helps them find moral insight that honors competing moral imperatives in hypothetical (Study 1) and incentive-compatible contexts (Studies 2 and 4). Having a could mindset expands divergent thinking, generating moral insight in both private contexts as well as interpersonal contexts (Study 3). Furthermore, findings from Study 4 demonstrated that adopting a could mindset is helpful for generating moral insight in right-versus-right contexts, but neither helpful nor destructive for hybrid dilemmas that involve self-gain. Together, these findings show that a shift in mindset from “What should I do?” to “What could I do?” leads to moral insight in precisely those situations that managers find most challenging ethically, enabling people to formulate solutions that resolve the tension between competing imperatives across a series of ethical dilemmas.

**Theoretical Implications**

The present work contributes to research on behavioral ethics, creativity, and decision-making. Recent research on ethics in organizations has largely focused on the antecedents and consequences of misconduct (Bazerman & Gino, 2012; Treviño, den Nieuwenboer, & Kish-Gephart, 2014; Mead, Baumeister, Gino, Schweitzer, & Ariely, 2009; Schweitzer et al., 2004; Tenbrunsel, 1998; Tenbrunsel, Diekmann, Wade-Benzoni, & Bazerman, 2010), investigating the factors that influence individuals who care about morality to act unethically (Bryan, Adams, & Monin, 2012; Covey, Saladin, & Killen, 1989; Hershfield, Cohen, & Thompson, 2012; Jordan, Mullen, & Murnighan, 2011; McCabe, Treviño, & Butterfield, 2001), and the impact of these actions in the workplace (Greenberg, 1993; Palmer, 2012; Pfarrer, Decelles, Smith, & Taylor, 2008). More recently, the field has examined the impact of tools to help employees and managers make more ethical decisions when facing temptations to cheat (Gino & Margolis, 2011; Moore & Gino, 2013; Shu, Mazar, Gino, Ariely, & Bazerman, 2012). Although the tendency to choose wrong over right has understandably drawn the majority of research attention in the wake of a long list of business scandals over the last two decades (see Table 1 for details about the literature review conducted), more research on how individuals resolve moral dilemmas is needed, particularly given the perceived difficulty and prevalence of these dilemmas.

Our paper builds on existing research on the study of ethical dilemmas, which, to date, has largely focused on the factors that influence moral awareness, or the recognition that individuals’ decisions may conflict with one or more ethical standards (Butterfield, Treviño, & Weaver, 2000; Rest, 1986; Reynolds, 2008), and on thought experiments that test how individuals analyze, weigh, and adjudicate
conflicting imperatives in a dilemma (e.g., Greene et al., 2001; Toffler, 1986). Rather than assume a fixed contest that requires adjudication and a tradeoff, we integrate research from insight (Smith, 1995), decision-making (Larrick, 2009), negotiations (Harinck & De Dreu, 2008), and creativity (McCrae, 1987; Runco, 1991; Sternberg & Lubart, 1999) to permit ethical dilemmas to have (a) multiple solutions and (b) solutions that fall outside of the set of actions featured in the dilemma itself in order to honor both of the seemingly incompatible moral imperatives.

Just as research on interpersonal conflicts investigates the factors that foster integrative agreements between individuals, we seek to understand the factors that help individuals find integrative solutions when facing intrapersonal moral conflicts. We note that, whereas integrating value in interpersonal conflicts often entails leveraging differences in priorities and preferences across issues, “integrating value” in intrapersonal conflicts presents a particularly difficult set of challenges, as individuals are unable to take advantage of interpersonal differences that are so critical to value creation. Instead, to find integrative solutions in moral domains, individuals need either to turn a competing imperative into a compatible one or to consider an alternative solution that does not involve violating either moral imperative. Given the unique difficulties of resolving intrapersonal moral conflicts, the discovery of moral insight—situations that move beyond conceding one imperative in favor of another and that honor seemingly incompatible moral imperatives or resolve the tension between them—deserves more attention.

Additionally, our findings contribute to research on the link between creativity and ethics (Baucus, Norton, Baucus, & Human, 2008; Gino & Ariely, 2012; Gino & Wiltermuth, 2014; Kelly & Littman, 2001; Vincent & Kouchaki, 2016; Wang, 2011). How people most effectively handle different types of ethical challenges—conflict between right and wrong, on the one hand, and conflict between two rights (or the lesser of two evils), on the other—is illustrated by the contrasting effect of creativity. Thus far, research on ethical decision-making and creativity has focused on opportunities to do wrong in order to benefit the self, finding that creative thinking makes it more likely for people to cheat (Beaussart, Andrews, & Kaufman, 2013; Gino & Ariely, 2012; Wang, 2011). In contrast, we find that, in decision-making contexts that pit a moral principle against at least one other principle or imperative, approaching the problem with a creative mindset is conducive to discovering solutions that honor both of the competing moral imperatives.

We find that moral insight is particularly important in preventing the inherent tension between moral values from forcing individuals to automatically select one option over the other before even considering further possible options. We highlight how adopting a could mindset helps individuals utilize their creativity constructively to explore alternative solutions to moral dilemmas.

Our research findings challenge the default approach of people to contemplating right-versus-right dilemmas with an “ought” approach. Following research investigating the impact of contemplating situations that tempt individuals to cheat (Gunia et al., 2012; Moore & Tenbrunsel, 2014; Shalvi et al., 2012; Zhong, 2011), our intervention builds on the idea that the content of contemplation matters, particularly in situations in which creative problem-solving is helpful in navigating among competing imperatives and tradeoffs. In particular, shifting the content of the contemplation or conversation does not require a substantial change: merely shifting the consideration of what individuals should do—the default approach to moral dilemmas—toward what they could do helps individuals relax the constraints of the dilemma and generate moral insight.

**Practical Implications**

Whereas prior research in ethics has focused on interventions that mitigate misconduct in organizations, our research sought to identify simple-to-implement psychological solutions that equip individuals for a different type of ethical challenge—moral dilemmas. Our findings not only have implications for how organizations train employees to navigate difficult ethical dilemmas (i.e., training them to ask “What could I do?” when they encounter right-versus-right situations), but they also have implications for how to train managers and other individuals whose job is to counsel those facing ethical challenges.

In recent years, more organizations have created positions (e.g., ethics representatives and compliance officers) and services (e.g., ethics hotlines, training, and counseling) aimed to help employees address such difficult ethical challenges that arise in their organizations. Our findings from Study 3 demonstrate that beginning the conversation with “What could I do?” changes the trajectory of the discussion away from focusing on the two most salient options posed in the dilemma. When approached by an employee seeking help on an ethical dilemma, managers, ethics representatives, and counselors
could ask their employees targeted questions that generate divergent thinking, better enabling employees to reach moral insight.

Although our findings demonstrate that contemplating “What could I do?” helps individuals reach moral insight, we note that these findings do not demonstrate that individuals ought to adopt a could mindset in place of a should mindset. Adjudicating among moral imperatives and careful contemplation of reasoning behind actions helps individuals not only resolve moral dilemmas, but also generates greater moral awareness (Reynolds, 2006, 2008) and reduces questionable self-dealing (Caruso & Gino, 2010; Gunia et al., 2012; Shalvi et al., 2012). Rather, our findings demonstrate that, in addition to contemplating should, which appears to be the default approach to moral dilemmas, contemplating could beforehand helps individuals consider moral insight solutions they otherwise would not have considered had they only adopted a should mindset.

Limitations and Directions for Future Research

Our research has some limitations, with implications for future research. Theoretically, more research is needed to understand how shifting to a could mindset has different effects based on the types of moral dilemmas presented. In particular, future studies could further test when having a more expansive could mindset leads to more unethical behavior (i.e., contemplating “What could I get away with?”), and when it leads to moral insight. We hypothesize that one of the main determinants that might influence whether creativity is used to justify unethical behavior or to arrive at moral insight may depend on the type of ethical dilemmas individuals face.

Although ethical dilemmas are often classified into either right-versus-right or right-versus-wrong (Flannery & May, 2000; Hegarty & Sims, 1978), ethical dilemmas in reality often span a continuum between the former, in which the temptation to cheat for purely selfish reasons is absent, and the latter, wherein this temptation to benefit oneself is often the pull to engage in wrongdoing (Lu, Zhang, Galinsky, & Rucker, 2017). For example, the hybrid dilemma condition in Study 4 featured a situation in which in addition to deciding whether to cheat in order to help their partner, individuals were also tempted to cheat to benefit themselves. In Study 4, we did not find evidence that this additional element of self-gain increased creative justification of cheating. However, perhaps individuals might be more likely to engage in creative justification of cheating if they were personally rewarded more favorably for cheating. As the temptation for self-gain increases in a dilemma, individuals may be more tempted to utilize their creativity not for moral insight, but for creative justifications or methods circumventing ethics. So, too, creative thinking may differ in its effect if the collision of “rights” involves two principles (e.g., integrity vs. honesty), two consequences (e.g., harm to one party or another), or a consequence and a principle (e.g., honesty vs. harm). Thus, more research is needed to study how creative thinking interacts with the nature of the ethical challenge encountered.

From a methodological perspective, we conducted controlled experiments in the lab or using online panels, limiting the external validity of some of our findings. Participants responded to scenarios or faced ethical dilemmas created to measure intentions and behaviors systematically and identify the micro-processes that lead to moral insight. Although many of these dilemmas were adapted from real-world dilemmas that employees have faced, they were not in situ challenges that participants were confronting at work. To increase the generalizability of these findings, future research is needed to investigate the efficacy of instilling a could mindset and the emergence of moral insight in the field.

Additionally, it is possible that the instructions to adopt either a should or a could mindset created demand effects that either led individuals in could mindsets to consider more solutions than they otherwise would have on their own, or influenced those in the should mindset to restrict their thinking to answer the question posed more directly. To address this concern, we asked participants an open-ended question at the end of each experiment regarding what they thought the experiment was about. We did not find any instances in which participants in the could mindset condition found consideration of could as a leading question, or any evidence that participants suspected we were investigating the impact of adopting a could mindset on the creativity of their solutions.

Lastly, additional research is needed to understand how individuals evaluate the ethicality of moral insight decisions. For example, moral insights were not perceived as necessarily more ethical than conventional solutions, even if they satisfied both of the imperatives. One possibility is that, although moral insights honor each of the competing ethical imperatives, removing the focal tension in the moral dilemma also reduces the ethical salience of the
decision. That is, choosing to violate one moral imperative in order to uphold another provides information about how much the decider values the upheld imperative—how ethical they are in the eyes of evaluators. For example, prior research has shown that lying may be perceived as more ethical than being honest to avoid unnecessary harm (Levine & Schweitzer, 2014, 2015). However, when the focal ethical tension is removed, perceivers may find it difficult to assess the ethicality within the moral insight. Or, “net ethicality” may be cognitively complex to assess: one principle strongly upheld at the expense of another may seem as indicative of ethicality as two principles brought to peaceable reconciliation. Additional research is needed to understand how individuals evaluate the ethicality of decisions and the decision-maker when they remove the ethical tension from the problem.

CONCLUSION

Our research reveals how a significant set of ethical challenges, often overlooked in efforts to understand misconduct, benefit from the application of unconventional thinking. When encountering ethical dilemmas, shifting one’s mindset from “What should I do?” to “What could I do?” generates moral insight: the formulation of solutions that move beyond conceding one moral imperative for another to honor multiple moral imperatives or relieve the tension among them. Although our natural inclination is to contemplate dilemmas with a should mindset, adopting a could mindset opens a broader range of possibilities and brings us one step closer to moral insight—and one step closer to equipping managers for the complex array of ethical challenges they face.

REFERENCES


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**APPENDIX A**

**PILOT A: ETHICAL CHALLENGES THAT EXECUTIVES FACE**

The goal of this study was to examine the types of ethical challenges that corporate executives most commonly face and find the most difficult to resolve.

**Participants**

One hundred sixty-three corporate executives ($M_{age} = 40.4$ years, $SD_{age} = 6.15$; $M_{tenure at firm} = 8.9$ years, $SD_{tenure at firm} = 5.73$; 28% female) completed a survey about the ethical challenges that they face in their organizations.
Design and Procedure

Executives were asked to “think about the ethical issues in [their] organization that are most typical, especially for those [they] lead.” They then read about three different types of ethical dilemmas:

Right vs. wrong dilemmas: Temptations to violate principles in order to benefit personally. Examples include whether to inflate expenses on reimbursement forms; whether to use company property (e.g., tools, supplies) for your own personal purposes unrelated to your job; whether to say critical things about a peer, or withhold information from that peer, so you are seen in a more favorable light by a boss.

Right vs. right dilemmas: When ethical principles or valued objectives are in conflict with one another. Examples include whether to withhold confidential information from coworkers (for example, about an impending layoff) that would be critical and beneficial for them to know, whether to be truthful to a coworker at the risk of hurting them, or whether to harm one person or group in order to protect another individual or group (for example, taking company resources to help a client or customer in need).

Performance dilemmas: When ethical principles conflict with performance expectations. Examples include stretching the truth to hit targets; not being entirely honest in order to get a customer to make a purchase; inflating prices to enhance margins.

Difficulty ranking. After reading about these dilemmas, executives ranked these dilemmas in order from most difficult (rank as 1) to least difficult to handle (rank as 3).

Representation. Executives ranked the prevalence of each dilemma and indicated the percentage of all ethical issues—faced by your coworkers, direct reports, and those they lead—that each of these dilemmas captured.

Results and Discussion

Difficulty ranking. Forty-five percent of executives perceived right vs. right dilemmas as the most difficult, whereas 29% perceived performance conflicts and 26% perceived right vs. wrong dilemmas as the most difficult, \( \chi^2(2) = 9.17, p = .01 \).

Forty-four percent of executives perceived right vs. wrong dilemmas as the least difficult to resolve, whereas 31% perceived performance conflicts and 24% perceived right vs. right dilemmas as the least difficult to resolve, \( \chi^2(2) = 9.59, p = .008 \).

Representation. Thirty-five percent of executives perceived right vs. right dilemmas as the most prevalent, and 39% perceived performance conflicts as the most prevalent, whereas 26% perceived right vs. wrong dilemmas as the most prevalent, \( \chi^2(2) = 4.95, p = .08 \).

Forty-three percent of executives perceived right vs. wrong dilemmas as the least prevalent, whereas 24% perceived performance conflicts as the least prevalent and 33% perceived right vs. wrong dilemmas as the least prevalent, \( \chi^2(2) = 8.51, p = .01 \).

Additionally, executives perceived that 30% of dilemmas recalled were right vs. wrong dilemmas, 36% were performance related dilemmas, and 34% were right vs. right dilemmas.

Taken together, these results demonstrate that executives perceive right vs. right dilemmas as the most difficult ethical dilemma. In contrast, executives perceived right vs. wrong situations as the least difficult to solve and less prevalent than other types of dilemmas.

APPENDIX B

PILOT B: DEFAULT APPROACH TO ETHICAL DILEMMAS

The goal of this study was to examine how individuals intuitively approach moral dilemmas compared to amoral dilemmas.

Participants

We recruited sixty participants (Mage = 32.38, SD = 13.39; 38% female) on Amazon’s Mechanical Turk for a study that asked them to provide their thought process on hypothetical scenarios and paid them $0.50 in Amazon.com credit for completing the five-minute study. Past research has shown that the Mechanical Turk service provides reliable data for research purposes (Buhrmester, Kwang, & Gosling, 2011).

Design and Procedure

Participants were randomly assigned to read either two moral dilemmas (e.g., the Heinz dilemma) or two amoral dilemmas (see p. 4). They were then instructed to complete the following question with a word or phrase that best captured what they were thinking as they considered their response to each dilemma: “What _____ I do?” Two independent raters blind to the purpose of the study then coded each response based on whether they contained the word “should,” “could/can,” or “will/would.” Because we achieved good interrater reliability on the percentage of responses across the dilemmas that contained the word “should” (ICC2 = .99, p < .001) or “could” (ICC2 = .99, p < .001), we averaged the ratings between the two coders.

Based on the tendency for organizations to guide managers to consider what they “should” do when contemplating ethical challenges, we hypothesized that participants would be more likely to complete the question with the word “should” than the word “could” when approaching moral dilemmas. We also expected the use of “should” to be more frequent in moral rather than in amoral dilemmas.
Results and Discussion

Participants considered “should” a greater percentage of the time in a moral context ($M = 61.54\%, \ SD = .36$) than in an amoral context ($M = 36.03\%, \ SD = .35$), $t(58) = 2.76, \ p = .008, \ d = .72$. In contrast, participants who read moral dilemmas considered “could” ($M = 8.65\%, \ SD = .23$) a smaller percentage of the time compared to those who read amoral dilemmas ($M = 27.94\%, \ SD = .28$), $t(58) = 2.83, \ p = .006, \ d = .74$. These percentages also show that people generally approach moral dilemmas using a “should” mindset rather than a “could” mindset, using the former over 61% of the time and the latter less than 9% of the time. The remaining 30% of individuals contemplated what “would” or “will” I do.

Table B1

<table>
<thead>
<tr>
<th></th>
<th>“Should”</th>
<th>“Could”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral Dilemma</td>
<td>61.54% (.36)</td>
<td>8.65% (.23)</td>
</tr>
<tr>
<td>Amoral Dilemma</td>
<td>36.03% (.35)</td>
<td>27.94% (.28)</td>
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</tbody>
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These results indicate that people intuitively consider “What should I do?” more frequently when confronting moral dilemmas compared to amoral dilemmas, and that adopting a should mindset is more prevalent when contemplating moral dilemmas.

APPENDIX B

MORAL AND AMORAL DILEMMAS IN PILOT B

As you consider your response to each situation, please fill in the blank with the word that best captures how you are thinking about the problem.

What _________ I do?

Moral Dilemma 1

Adapted from the “Heinz dilemma” (Kohlberg, 1971).

Imagine that your spouse is near death from a rare kind of cancer. There was one drug that the doctors thought might save your spouse’s life. It was a form of radium that a scientist in the same town had recently discovered. The drug was expensive to make, but the scientist, who sold the drug through a drug store he owned, was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug.

You went to everyone you knew to borrow the money, but you could only get together about $1,000, which is half of what the drug cost. You told the scientist that your spouse was dying and asked him to sell it cheaper or let him pay later. But the scientist said: “No, I discovered the drug and I’m going to make money from it.” So you got desperate and considered breaking into the man’s store to steal the drug for your spouse.

Moral Dilemma 2

Adapted from “Merck Sharp & Dohme Argentina, Inc.” (Paine, 1997).

You are the manager of a multinational pharmaceutical company’s unit in Argentina, and you are facing a difficult situation. You took over the company’s unit in Argentina with the expectation that you would modernize its practices, infuse the company with a high standard of integrity and fairness, make the culture more professional, and improve performance dramatically. However, the company is still not on target to meet its sales goal for the year.

To make these goals, you have established a new internship program to recruit top caliber talent for possible careers with the company. From a pool of top-notch college students, the company would select 15 for a paid summer internship program.

You enlisted an outside consulting firm to handle the actual recruiting. The consulting company sifted through over 1,200 applicants and after an intense battery of tests only 30 were then selected to participate in a two-week program overseen by the company’s senior managers, who would test the 30 candidates’ skills in a variety of exercises. The final 15 would be selected at the end of those two weeks.

Just two days before you were set to announce the 15 college students chosen for the highly-selective summer intern program, you received a phone call from a middle manager who informed you that one of the candidates was the son of a high-ranking official in the government’s national health care program for government retirees, the single largest health care organization in the country. The student’s presence in the company workforce, the manager stated, would give the company an excellent opportunity to increase sales well beyond the goal that you had set by ensuring that all its drugs were included in the government health care formulary. Any company would envy you for this unexpected advantage. Of the 30 candidates, however, this particular individual was ranked number 16 on the list, just below the cut. The rankings were based upon the battery of tests and senior managers’ evaluations.

When Friday morning arrived, you were unsure how to proceed, but you had to inform the winning interns today.
Two days before the deadline, you realized that you mis-interpreted the essay prompt. The question was focused on how the pastoral and farm settings (not the setting of nations) in novels play a role in works of literature.

Amoral Dilemma 2

You are currently in the Boston airport and have a job interview scheduled in New York in 5 hours. The flight is only 1 hour in duration and your interview is a thirty-minute commute away once you land in New York. You booked this flight since it would give you plenty of time to get to the meeting.

Just as you thought you were about to board the plane, the flight attendant announced that your flight is cancelled due to the plane’s engine problems. The next available flight in which you are guaranteed a seat is not for another 4 hours, which would make you late for your interview.

APPENDIX C

PILOT STUDY C: POTENTIAL TO REACH MORAL INSIGHT

In this pilot study, we examine the effect of three mindsets—should, would, and could—on the extent to which individuals perceived the potential to reach moral insight across four moral dilemmas. We operationalize participants’ potential of reaching moral insight based on research in interpersonal conflict (De Dreu, 2003). Disputants who recognized that their interests were not necessarily in direct opposition to their counterparts—and in fact, could have been compatible—were more likely to discover integrative solutions that maximized outcomes for both negotiating parties (Brandenburger & Nalebuff, 1996; Harinck & De Dreu, 2008). Thus, we operationalize the potential to reach moral insight (i.e., honoring seemingly incompatible moral imperatives) based on the extent that participants perceived seemingly incompatible moral imperatives as compatible.

Additionally, we included a would mindset to test if adopting any mindset other than a should mindset changes the way people perceive dilemmas. We expected that relative to having a should or would mindset, having a could mindset would help individuals recognize greater compatibility between seemingly incompatible moral imperatives.

Participants

Two hundred eighty individuals (Mage = 35.07 years; 64% female) recruited through Amazon’s Mechanical Turk participated in an online study in exchange for $0.75.

Design and Procedure

Participants contemplated four ethical dilemmas and were randomly assigned to answer the question “What ‘could,’ ‘should,’ or ‘would’ you do?” for each of them (see Dilemmas 1-4 in Appendix D). Participants then answered a series of questions that measured the extent to which they believed the two primary goals of each dilemma were compatible with one another.

Measure

Compatibility of moral imperatives. After providing responses to each of the dilemmas, participants rated the extent to which they believed it was possible to honor both moral imperatives presented (1 = “It is definitely possible to do both at the same time;” 2 = “It is possible to do both at the same time;” 3 = “It is not possible to do both at the same time;” 4 = “It is definitely not possible to do both at the same time”). For example, participants who read the Heinz dilemma were asked to what extent it was possible to simultaneously “save your spouse’s life” and “not breaking the law (not stealing the drug).” We reverse coded these items to measure the perceived compatibility of these moral imperatives.

Results

To test the impact of the participants’ mindset on the extent to which they believed they could honor the moral imperatives in each of these dilemmas, we conducted a repeated-measures analysis of variance (ANOVA) with the mindset (should vs. would vs. could) as the between-subjects factor and ratings across the four dilemmas as the within-subjects factor (repeated measures on dilemma). The results revealed a significant main effect of the participants’ mindset on the perceived compatibility of these moral imperatives, F(2, 277) = 6.55, p = .002, ηp² = .05. Post-hoc pairwise comparisons suggest that participants perceived greater compatibility after contemplating “What could I do?” (M = 2.51, SD = .53) compared to “What should I do?” (M = 2.30, SD = .53, p = .007) and “What would I do?” (M = 2.23, SD = .52, p = .001). There was no difference in ratings of compatibility between those who contemplated “What should I do?” and “What would I do?” (p = .38).

We also found a main effect of dilemmas, F(3, 831) = 23.37, p < .001, ηp² = .08, suggesting that participants perceived greater compatibility of imperatives in some dilemmas than in others. Post-hoc analyses revealed that participants perceived greater compatibility of moral imperatives in the first dilemma (M1 = 1.42, SD1 = 1.00, p < .08) and less compatibility in the fourth dilemma (M4 = 2.00, SD4 = .85, p < .001) than in the other dilemmas (M2 = 1.65, SD2 = .99, M3 = 1.55, SD3 = .87). The interaction between participants’ mindsets and type of dilemma did not reach statistical significance, F(6, 831) = 1.74, p = .11.
Discussion

Results from this pilot study are consistent with our first hypothesis that adopting a could mindset helps individuals perceive greater compatibility between moral imperatives relative to adopting a should mindset. The lack of evidence that should and would mindsets differ in their impact suggests that the impact of a could mindset is not driven by the possibility that should mindsets lead individuals to perceive less potential in reaching moral insight. Because we did not observe a difference between should and would conditions, we did not include a would condition in Studies 1-4.

APPENDIX D

Moral Dilemma 1

Adapted from the “Heinz dilemma” (Kohlberg, 1971).

Imagine that your spouse is near death from a rare kind of cancer. There was one drug that the doctors thought might save your spouse’s life. It was a form of radium that a scientist in the same town had recently discovered. The drug was expensive to make, but the scientist, who sold the drug through a drug store he owned, was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug.

You went to everyone you knew to borrow the money, but you could only get together about $1,000, which is half of what the drug cost. You told the scientist that your spouse was dying and asked him to sell it cheaper or let him pay later. But the scientist said: “No, I discovered the drug. I might save your spouse’s life. I won’t sell it for less.”

You proceeded, but you had to inform the winning interns today.

To what extent do you think 1) saving your spouse’s life and 2) not breaking the law (not stealing the drug) are compatible/incompatible?

Moral Dilemma 2

Adapted from “Merck Sharp & Dohme Argentina, Inc.” (Paine, 1997).

You are the manager of a multinational pharmaceutical company’s unit in Argentina, and you are facing a difficult situation. You took over the company’s unit in Argentina with the expectation that you would modernize its practices, infuse the company with a high standard of integrity and fairness, make the culture more professional, and improve performance dramatically. However, the company is still not on target to meet its sales goal for the year.

To make these goals, you have established a new internship program to recruit top caliber talent for possible careers with the company. From a pool of top-notch college students, the company would select 15 for a paid summer internship program.

You enlisted an outside consulting firm to handle the actual recruiting. The consulting company sifted through over 1,200 applicants and after an intense battery of tests only 30 were then selected to participate in a two-week program overseen by the company’s senior managers, who would test the 30 candidates’ skills in a variety of exercises. The final 15 would be selected at the end of those two weeks.

Just two days before you were set to announce the 15 college students chosen for the highly-selective summer intern program, you received a phone call from a middle manager who informed you that one of the candidates was the son of a high-ranking official in the government’s health care program for government retirees, the single largest health care organization in the country. The student’s presence in the company workforce, the manager stated, would give the company an excellent opportunity to increase sales well beyond the goal that you had set by ensuring that all its drugs were included in the government health care formulary. Any company would envy you for this unexpected advantage. Of the 30 candidates, however, this particular individual was ranked number 16 on the list, just below the cut. The rankings were based upon the battery of tests and senior managers’ evaluations.

When Friday morning arrived, you were unsure how to proceed, but you had to inform the winning interns today.

What could/should you do?

To what extent do you think 1) giving your company a financial advantage by hiring candidate 16 and 2) being fair to the other candidates are compatible/incompatible?

Moral Dilemma 3

Adapted from an experience of a former MBA student.

Imagine that you work in the financial office of Climatex, a large company that manufactures heating ventilation and air conditioning (HVAC) equipment. The CEO has been examining potential acquisitions in “new energy,” such as wind, solar, and geothermal. The board of directors has informed the CEO that any acquisition must promise at least a 6% return and, preferably, a return between 7% and 9%. In order to be approved, every potential acquisition needs to be presented with financial analysis that is reviewed by the board.

A friend of the CEO owns a solar-panel company, in which the CEO invested. The CEO asked you to conduct a financial analysis of the friend’s company since the CEO wanted to propose that Climatex acquire the friend’s company. The CEO asked that you prepare a report for the board.

In the CEO’s meeting with you, the CEO concluded, “This is a great opportunity for our company. Let’s find a way to recommend this as positively as possible to the board.”
You were excited by the project—a high profile assignment and a chance to present to the board of directors. You conducted financial analyses in the two most common and accepted methods for doing so, and one method revealed a return of 4.5% and the other revealed a return of 5.35%. Even with optimistic assumptions, the return fell underneath the 6% return standard set by the board. Before meeting with the CEO, you reviewed your work with a colleague you respected, and they came to the same results.

When you met with the CEO to share your analyses, the CEO asked you if the returns would look better if you changed some of the underlying assumptions in the analyses. The CEO finished the conversation by saying, “We just need a glowing recommendation to get the approval we need from the board on this one. This is your moment to shine and show your potential. Let’s see you deliver what we need.”

You felt conflicted. You would need to write a report containing three components: a description of the solar-panel company and its prospects, a quantitative analysis of estimated financial return, and a concluding recommendation to be presented in front of the board of directors. You did not want to damage your career going against the CEO, but at the same time, you wanted to maintain your integrity and make a recommendation that would not squander the company’s resources.

What could/should you do?
To what extent do you think 1) maintaining your integrity and 2) not damaging your career are compatible/incompatible?

**Moral Dilemma 4**

Adapted from the “Analyst’s Dilemma” (Badaracco & Useem, 1993).

Imagine that you are a rising star at a medium-sized investment bank (B&B), and you are currently facing a decision to choose between loyalty to your roommate or to your company and boss. To understand this predicament, it is important to understand that there exists a cult mentality at B&B in that those who stay at the company accept that loyalty to the organization goes before one’s health, family, and friends.

The situation started when you were working on a project that involved orchestrating a leveraged buyout for Suntech, one of B&B’s clients. In addition to providing short-term financing, B&B put together the syndicate of banks financing the deal and purchased the majority of Suntech’s assets, to be held for a long-term basis. Universal was another bank on the team that was involved with the structuring of the deal, underwriting the loan for the senior debt. It turns out that your roommate, Sandy was one of the people on Universal’s team working on the project.

One day after work, you came home to find your roommate Sandy in tears. Sandy basically pleaded for you to keep your conversation confidential, and you agreed, thinking this was a personal issue. It turned out that Universal was dissolving its capital finance group, meaning that not only was Sandy out of a job, but now the deal with B&B was in serious jeopardy. If you do not tell your boss at B&B about this news right away, then the public might hear of the news first, scaring away potential investors and putting both B&B and the client at risk. At the same time, you made a promise that Sandy would not tell anyone about the situation since this information is confidential.

What could/should you do?
To what extent do you think 1) maintaining the confidentiality agreement with your roommate and 2) informing your boss about the news are compatible/incompatible?

**APPENDIX E**

**Mindset Video**

_Could video: https://youtu.be/PasvFKsIUXA_
_Should video: https://youtu.be/js0nAH8eFoA_

Hi there! In this video we will discuss the best ways to approach moral challenges that you might face in the workplace and in your personal life.

When facing these difficult situations, it’s easy to get stuck on what to do. Although these problems are difficult, asking yourself “What could [should] I do?” can help you solve these problems.

For example, you might feel obligated to lie in order to protect a co-worker.

Employee asks a co-worker: If our manager asks, can you just tell her I showed up on time today. If the manager finds out that I was late today, I will be fired.

When you find yourself in these situations, consider “What could [should] you do?”

In another case, your boss might ask you to fudge information in order to help your company.

Manager tells employee: Can you adjust these profit margins so that we look better for our clients tomorrow?

What could [should] you do?
When faced with these situations in which different moral objectives are in conflict, consider asking yourself “What could [should] I do?”

In those situations, asking yourself “What could I do?” can lead you to find helpful solutions. Having a “could” mindset can help you think beyond the most obvious options. This “could” mindset helps you find better solutions beyond what you were initially considering. Let’s put this “could” mindset into practice.

[In those situations, asking yourself “What should I do?” can lead you to find helpful solutions. Having a “should” mindset can help you decide which solution is the best approach. This “should” mindset helps you pick between the choices in front of you.]
APPENDIX F: ADDITIONAL MEASURES AND RESULTS ACROSS STUDIES

Study 1

Mediation. We examined whether divergent thinking—as rated based on self-reports of the number of ideas generated—mediated the effect of a “could” mindset on participants’ ability to generate moral insight solutions (Baron & Kenny, 1986). A “could” mindset was positively associated with self-reports of divergent thinking (β = .24, t = 3.62, p = .004). When controlling for divergent thinking, the effect of adopting a “could” mindset was reduced to non-significance (from β = .20, t = 2.86, p = .005 to β = .11, t = 1.61, p = .11), and divergent thinking predicted participants’ ability to generate moral insight solutions (β = .38, t = 5.52, p < .001). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (.05, .15), suggesting a significant indirect effect (MacKinnon, Fairchild, & Fritz, 2007).

We examined whether divergent thinking—as rated via our external raters—mediated the effect of a “could” mindset on participants’ ability to generate moral insight solutions (Baron & Kenny, 1986). A “could” mindset was positively associated with independent coders’ ratings of divergent thinking (β = .32, t = 4.88, p < .001). When controlling for divergent thinking, the effect of adopting a “could” mindset was reduced to non-significance (from β = .20, t = 2.86, p = .005 to β = -.03, t = -.66, p = .51), and divergent thinking predicted participants’ ability to generate moral insight solutions (β = .72, t = 13.55, p < .001). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (.13, .33), suggesting a significant indirect effect (MacKinnon, Fairchild, & Fritz, 2007).

Study 2

Additional measures

Moral attentiveness. At the end of the study, participants answered a 12-item scale moral attentiveness scale (Reynolds, 2008).

Participants’ assessments. Employees assessed the extent to which their proposed solution met the primary objectives in conflict and their perceived creativity of their proposed solutions.

Creativity. Employees in the could mindset condition (M = 4.26, SD = 1.83) rated their own solutions as more creative than those in should mindset condition (M = 3.71, SD = 1.76), t(309) = 2.72, p = .007, d = .31.

Ethicality. Employees in the should mindset condition (M = 5.94, SD = 1.50) did not rate their own solutions as more ethical than those in could mindset condition (M = 5.94, SD = 1.51), t(309) = .01, p = .99, d = .001.

Judges’ ratings. Judges rated the extent to which the solutions honored each objective (1 = not at all to 7 = extremely). Judges also rated could mindset solutions (M = 3.35, SD = 1.15) as more creative than should mindset solutions (M = 3.07, SD = 1.15), t(307) = 2.21, p = .03, d = .25.

Moral attentiveness. Employees in the could mindset condition (M = 4.40, SD = 1.15) did not score higher on the moral attentiveness scale than did those in the should mindset condition (M = 4.49, SD = 1.16), t(307) = .71, p = .48, d = .08. Because moral attentiveness did not differ by condition, we also tested it as a moderator of having a could mindset. An OLS regression with averaged standardized scores of moral insight as the dependent variable and being in a could mindset, moral attentiveness, and the interaction of mindset and attentiveness as the independent variables revealed only a main effect of mindset, β = .20, t = 3.52, p < .001. We did not find any other significant effects, ts < .72, ps > .47.

Mediation analyses. We examined whether divergent thinking mediates the effect of adopting a could mindset on the propensity to find moral insight solutions based on whether employees provided solutions beyond simply accepting or declining the offer (Baron & Kenny, 1986). Adopting a could mindset was positively associated with divergent thinking (β = .41, t = 2.48, p = .01). When controlling for divergent thinking, the effect of adopting a could mindset was significantly reduced (from β = .33, t = 3.36, p < .001 to β = .27, t = 2.79, p = .006), and divergent thinking predicted the likelihood of proposing a moral insight solution (β = .15, t = 4.56, p < .001). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (.009, .07), suggesting a significant indirect effect (MacKinnon et al., 2007).

We conducted a similar analysis with the dependent variable as whether judges categorized the solution as honoring both ethical imperatives. When controlling for divergent thinking, the effect of adopting a could mindset was significantly reduced (from β = .28, t = 2.46, p = .01 to β = .23, t = 2.03, p = .04), and divergent thinking predicted the likelihood of proposing a solution honoring both objectives (β = .12, t = 3.15, p = .002). A bootstrap analysis indicated that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (.006, .05), suggesting a significant indirect effect (MacKinnon et al., 2007).

Study 3

Perceived creativity of solution. Participants in the could mindset rated their own solutions as more creative (M = 3.61, SD = 1.78) than those in the should mindset (M = 2.84, SD = 1.74), t(199) = 3.10, p = .002, d = .44.

Perceived incompatibility of objectives. After providing their solution, participants rated the extent to...
which “maintaining the confidentiality agreement with your roommate” and “informing your boss about the news” were incompatible (1 = “It is definitely possible to do both at the same time;” 2 = “It is possible to do both at the same time;” 3 = “It is not possible to do both at the same time;” 4 = “It is definitely not possible to do both at the same time”).

Participants in the “could” mindset rated the objectives in this dilemma as less incompatible ($M = 1.44, SD = .86$) than those in the should mindset ($M = 1.76, SD = .88$), $t(199) = 2.57, p = .01, d = .36$.

**Thoughtfulness of solutions.** Two independent coders blind to the hypotheses also rated the thoughtfulness of each solution (1 = “Not at all” to 7 = “Extremely”). Since the two raters achieved moderate reliability ($ICC_2 = .55, p < .001$), we averaged the two coder’s ratings to obtain a single measure of thoughtfulness.

Could solutions were rated as more thoughtful ($M = 3.90, SD = 1.32$) than should solutions ($M = 3.33, SD = 1.51$), $t(197) = 2.86, p = .005, d = .41$.

**Study 4**

**Time spent on task.** An ordinary least squares (OLS) regression time spent on the brainstorming as the dependent variable and mindset intervention, type of dilemma, and the interaction of the conditions as the independent variable did not reveal any significant effects of dilemma type, mindset, or the interaction of the two, $ts < 1.42, ps > .16$. 

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