



# “It’s Just Business”: Understanding How Business Frames Differ from Ethical Frames and the Effect on Unethical Behavior

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## Abstract

Unfortunately, business is often associated with unethical behavior. While research has offered a number of explanations for why business might encourage unethical behavior, we argue that how a person frames a situation may provide important insight. Drawing on the decision frame literature, the goal of the current research is to identify the differences in cognitive processing associated with two decision frames dominant in the business ethics literature—business and ethical—and, with that knowledge, examine ways to mitigate the detrimental influence of frame on unethical behavior. We first demonstrate the causal link between frame and misrepresentation (Study 1), and then identify several differences in cognitive processing—cost–benefit analyses, concern for others, and construal level—that distinguish business and ethical frames, and investigate their effects on misrepresentation (Study 2). In our final set of studies (Studies 3a–c), we demonstrate that the influence of these frames on misrepresentation can be altered by manipulating these cognitive processes, both mitigating and exacerbating a decision maker’s engagement in misrepresentation. We conclude by summarizing our findings and their potential impact on unethical behavior more broadly.

**Keywords** Ethical decision-making frames · Cost–benefit analysis · Concern for others · Construal level

**Dr. Julian Bailes:** *I just kept sending them back out there.*

**Dr. Cyril Wecht:** *What the hell were you thinking?*

**Dr. Julian Bailes:** *You’ve got to be a part of it. You’ve got to be on the sidelines with them to understand. Whatever it takes to keep them in the game, to keep the whole thing going. Tape, needles, Vicodin, Toradol, Lidocaine, Percocet, Lexapro, Zoloft... have I left anything out? It’s tires and oil. Just mechanics trying to keep the cars on the racetrack.*

**Dr. Cyril Wecht:** *Yeah, well, it’s not medicine. I don’t know what it is.*

**Dr. Julian Bailes:** *It’s business.*

From the film *Concussion* (2015), Columbia Pictures

While not always the case, business is frequently associated with unethical behavior. A headline in *Fortune*, for example, declared that “Business executives get an ‘F’ in ethics, yet again” (Weinstein 2016). Further, empirical data suggest that the tie between business and unethical behavior has some merit, with business students exhibiting more unethical behavior than non-business students (Frank et al. 1993; Frank and Schulze 2000; Wang et al. 2011). While some of the explanations offered suggest that business students and leaders may be more unethical because they are different from people not educated in business or those not involved in business (Arieli et al. 2016; Lawson 2004; Li-Ping Tang et al. 2008; McCabe et al. 1991; McLean and Jones 1992). We take a different approach, examining unethical decisions from a cognitive perspective. Indeed, building on Tenbrunsel and Messick (1999), we believe that to fully understand how the business context might lead to unethical behavior we need to understand the decision frames that are evoked and the resulting cognitive processing at the time of

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decision-making, knowledge that is important if we want to affect the resulting behavior.

Decision frames, or the mental narratives that help shape meaning and understanding in daily events, are integral to the decision-making process (Goffman 1974). When presented with a decision, individuals first define the situation, a process that involves matching components of the presented situation with components of other situations that are similar and familiar (March 1994; Messick 1999; Weber et al. 2004). Decision frames facilitate this matching process as they help categorize situations and create schemas (Goffman 1974; March 1994; Messick 1999). Frames are influential because of individuals' tendencies to be "cognitive misers" (Fiske and Taylor 1991), seeking to minimize the time required to process a decision. Because we learn and adopt these frames early in life, they are instrumental in how we approach a variety of situations (Lakoff 2002). Importantly, decision frames are argued to influence behavior because of the different ways in which information is processed when decision makers view a decision through a particular decision frame (Goffman 1974; March and Olsen 2006; Messick 1999; Tenbrunsel and Messick 1999). This is certainly true in business, where frames are seen as the means by which organizational members sort through information (Walsh 1995).

Despite the influence of different frames on a person's behavior, individuals may at times be unaware of the effects of these frames. As Goffman (1974) states:

[A person] is likely to be unaware of such organized features as the framework has and unable to describe the framework with any completeness if asked, yet these handicaps are no bar to his easily and fully applying it. (p. 21)

This lack of awareness of what drives one's behavior is problematic in decision-making in general and in ethical decision-making more specifically (Messick and Bazerman 1996), increasing the likelihood that bounded ethicality (Chugh et al. 2005), and hence unethical behavior (Kern and Chugh 2009), will occur. Indeed, Tenbrunsel and Messick (1999) demonstrated that decision frames, namely business and ethical, can influence unethical behavior. In their signaling-processing framework, they argue that the context signals which frame is appropriate, and that the associated processing that occurs is specific to that frame.

Taking a cognitive approach, we build upon this research by comparing how business and ethical frames influence unethical behavior and identifying the specific cognitive processing associated with each frame. We argue that it is important to identify how a person processes a situation within each relevant frame, as the behavior resulting from a particular frame can potentially be altered by changing the associated processing (e.g., Baumer et al. 2017; Chwang

2016; Gerend and Cullen 2008; Keysar et al. 2012; Thomas and Millar 2011). We follow Jones (1991) in defining unethical behavior as "morally unacceptable to the larger community" (p. 367), but also agree with Tenbrunsel and Smith-Crowe (2008) in recognizing that this is a broad definition and highly context-dependent. In an effort to be more descriptive of unethical behavior, Treviño et al. (2006) highlighted that lying, cheating, and stealing are commonly considered to be unethical behaviors. Lying is considered an active form of misrepresentation (Crawford 2003), and is one of the most common variables examined in research on unethical behavior (Smith-Crowe and Zhang 2016). Thus, following Steinel and DeDreu (2004), we consider misrepresentation as a common and important operationalization of unethical behavior, and thus focus on it in the current research.

We draw on the work on decision frames (Goffman 1974; Lakoff 2002) and the Logic of Appropriateness Theory (March 1994; Messick 1999) to investigate the link between decision frames and misrepresentation, identify the underlying cognitive processes that are associated with each of these frames, and explore how to mitigate the behavior that results from a particular frame by changing these cognitive processes. Drawing on past research in the behavioral ethics literature that identified ethical and business frames as two of the dominant frames that influence ethical decision-making (Tenbrunsel and Messick 1999; Tenbrunsel and Smith-Crowe 2008), we examine the differential effect of these two frames on misrepresentation and the processes that distinguish them from one another. Business frames have been commonly linked to business-related concepts such as sanctions (Tenbrunsel and Messick 1999) and money (Kouchaki et al. 2013). Ethical frames have been linked to concepts such as values (Reynolds et al. 2010) and community norms or standards (Jones 1991; Reynolds 2006). Consistent with previous work arguing that frames help organize the cognitive processes a person utilizes (Goffman 1974; March and Olsen 2006; Messick 1999; Tenbrunsel and Messick 1999), we argue that these frames affect behavior by prioritizing certain cognitive processes. By comparing how business and ethical frames causally affect misrepresentation and identifying the different cognitive processes that are associated with each frame, we advance the literature that has previously focused only on business frames, and thus has not addressed how and why these frames are distinct from ethical frames or how to mitigate the detrimental effect a business frame has on a person's unethical behavior (e.g., Belmi and Pfeffer 2015; Kouchaki et al. 2013). We do so with the hope that such awareness may lead to strategies to decrease unethical behavior.

We begin by proposing that business frames lead to more misrepresentation than ethical frames. Although a seemingly intuitive investigation, we believe that establishing causality

between frames and unethical behavior and directly comparing business to ethical frames must occur before exploring the processing that is associated with each frame and how such processing can exacerbate or mitigate unethical behavior. We then investigate three cognitive processes that previous research has associated with the distinction between business and ethical decision-making: the use of a cost–benefit analysis, concern for others, and construal level. We measure these processes, investigating their roles in influencing individuals' decisions to misrepresent information to a counterpart. In line with researchers who argue that the effects of a frame can be mitigated by changing the associated cognitive processing (Baumer et al. 2017; Chwang 2016; Gerend and Cullen 2008; Keysar et al. 2012; Thomas and Millar 2011), we then investigate how the default behavior of each frame can be changed (i.e., decreasing misrepresentation in a business frame and increasing misrepresentation in an ethical frame) by encouraging the use of specific cognitive processes not typically associated with that frame.

## Decision Frames and Unethical Behavior

It is often the case that people fail to consider the ethicality of a decision, which can lead to deleterious consequences. Take the case of Volkswagen, which installed a “defeat device” in its “clean diesel” cars to cheat emissions testing, that when uncovered led to \$4.3 billion in criminal and civil penalties. The CEO, Matthias Mueller, characterized the situation as a technical problem, and could not grasp that others saw it as an ethical problem, stating “...it was an ethical problem? I cannot understand why you say that” (National Public Radio, January 11, 2016).

Adopting a perspective that helps individuals recognize ethical issues is central to making an ethical decision (Kohlberg 1969; Rest 1986). Unfortunately, individuals lack an understanding of the various lenses through which they view their decisions. We argue that research on decision frames is useful for providing individuals with this understanding. Goffman (1974) argued that people interpret their world through a taken-for-granted framework, which gives events meaning and subsequently guides action. The Logic of Appropriateness Theory extends these ideas (March 1994; March and Olsen 2006; Messick 1999), suggesting that the rules of appropriate behavior for a given situation become clearer once a frame through which to view the situation is adopted. Indeed, decision frames are argued to be the overarching cognitive processes that guide individuals' adoption of other underlying processes (Goffman 1974) that in turn influence decision-making (Prezenski et al. 2017). Consistent with this idea, in the ethical domain, researchers argue that decision

frames influence our ability to “see the ethics” in ethical dilemmas (e.g., Tenbrunsel and Messick 2004). Building on this idea, we argue that the frame one adopts may influence whether an individual recognizes the situation as an ethical one, affecting his or her decision to behave ethically.

Two frames—ethical and business—have been argued to be central to ethical decision-making (Tenbrunsel and Smith-Crowe 2008). For example, when participants were presented with a scenario involving potential legislation to limit the toxic gases emitted by a given industry, Tenbrunsel and Messick (1999) found that 96% of them chose either business or ethical frames as the type of decision with which they were faced, even though other frames (e.g., legal, environmental, personal, and other, which participants could fill in) were offered as relevant choices. Both business and ethical frames have been characterized in a variety of ways. For example, business frames have been conceptualized as “market pricing orientation” (Fiske 1992) and “economic decision frames” (Pillutla and Chen 1999). Kouchaki et al. (2013) argued that business frames themselves prioritize the monetization of social relationships. In contrast, ethical frames have been conceptualized as prioritizing the consideration of what is acceptable to a relevant group or community, or adhering to a set of agreed upon standards (Jones 1991; Reynolds 2006).

Theorists have debated whether or not individuals can simultaneously adopt both a business and ethical frame. Normative theorists argue that the simultaneous adoption of both business and ethical frames regularly occurs (Walsh et al. 2003) and that separating the two is harmful, meaningless, and impossible (Abela and Shea 2015; Harris and Freeman 2008). For instance, work on corporate social responsibility (CSR) asserts that leaders often make decisions based on the “triple bottom line,” including economic, social, and environmental issues (Aguinis 2011), suggesting that these leaders recognize economic, social, and ethical responsibilities to their shareholders (Aguinis 2011). Thus, this research suggests that individuals may have multiple frames through which they view decisions. However, others have argued that one frame will dominate a person's mindset (Duska 2000; Sandberg 2008; Weaver and Treviño 1994). Goffman (1974) suggests that both of these positions may be right: while an individual may actually apply several frames to a given situation, individuals tend to perceive situations through a primary framework.

Following Goffman (1974), we assume that a person generally adopts a primary frame in a decision, though we recognize that a person's primary frame can change over time and across situations. We begin by examining the unique effects of each frame on misrepresentation, drawing upon the research on unethical behavior. We then investigate the

cognitive processes that are associated with each frame and how they influence subsequent behavior.

### The Effects of Business Frame and Ethical Frame on Unethical Behavior

Frames have a significant effect on subsequent behavior (Goffman 1974). Previous research has offered evidence of this relationship as it pertains to business frames. For example, business-related concepts such as sanctions and money have been found to lead to a person adopting a business frame and engaging in more unethical behavior (Kouchaki et al. 2013; Tenbrunsel and Messick 1999). Research examining the effects of business-related strategies that may drive frame, such as developing and utilizing a network or other means of increasing one's leverage, has also shown a positive relationship with unethical behavior (e.g., Bennett et al. 2013; Malhotra and Gino 2011; Song and Zhong 2015). Similarly, environments that promote business concepts, such as competitive settings or business coursework, result in individuals who are more willing to engage in activities that violate ethical principles than in other environments (Ferraro et al. 2005; Ghoshal 2005).

Ethical frames emerge when the environment prompts a person to become aware of the ethical or value-based implications of their actions (Reynolds 2008; Tenbrunsel and Messick 2004). In their models of ethical decision-making, Jones (1991) and Rest (1986) argued that acknowledging the ethical implications of the decision is an important first step in engaging in ethical behavior or avoiding unethical behavior. Consistent with this notion, Tenbrunsel and Messick (1999) found that individuals cooperated more and engaged in more environmentally beneficial behavior if they reported making a decision using an ethical frame. Similarly, Butterfield et al. (2000) found that individuals were more likely to acknowledge ethical issues when they were aware of the moral implications of their decisions.

The above research suggests that business frames result in more unethical behavior, including misrepresentation, than ethical frames. Tenbrunsel and Messick (1999) concluded that individuals engaged in more unethical behavior when they reported viewing the decision through a business frame rather than an ethical frame; however, they acknowledged that not everyone who was in a business frame engaged in unethical behavior and not everyone in an ethical frame behaved ethically. Rather, they argued that overall, a business frame resulted in more unethical behavior. Consistent with such arguments, we hypothesize that the following generally occurs:

**Hypothesis 1** A business frame leads to more misrepresentation than an ethical frame.

### Cognitive Processing in Business Frames Versus Ethical Frames

The first hypothesis is foundational in nature, but essential to moving the literature forward, as previous investigations of decision frame have generally measured frame rather than manipulated it directly (e.g., Tenbrunsel and Messick 1999), and have not compared business and ethical frames (Kouchaki et al. 2013; Reynolds et al. 2010); thus, previous research offers relatively weak evidence of the causal relationship between frame and behavior. The primary motivation behind this paper, however, is to fully understand the effects of frames on ethical decision-making by identifying the cognitive processing that is associated with these frames, leading to the behaviors they do. Scholars have argued that once a decision is seen through a particular frame, the processing associated with this frame is unique (Goffman 1974; March and Olsen 2006; Messick 1999). As a result, it is important to understand the cognitive processes that are associated with a business frame, and how those differ from the processes associated with an ethical frame. Indeed, Kouchaki et al. (2013, p. 60) asked in a fairly direct manner, "what is it about a business frame that leads to more unethical behavior?"; likewise, it is important to understand what it is about an ethical frame that leads to less misrepresentation, and potentially less unethical behavior in general. We focus on three processes that previous research has identified as being distinct between business and ethical contexts: the extent to which a person (1) adopts a cost–benefit mindset (Tenbrunsel and Messick 1999), (2) is concerned about others' outcomes in the situation (Ghoshal 2005; Reynolds 2008),<sup>1</sup> and (3) processes information at a low versus high level of construal (Agerström and Björklund 2009a; Eyal and Liberman 2011).

#### Cost–Benefit Analysis

Business and ethical frames appear to differ in the extent to which individuals engage in cost–benefit analysis (Tenbrunsel et al. 2010; see also Kouchaki et al. 2013). Cost–benefit analysis grew in popularity when the Federal Navigation Act of 1936 required its use for project proposals and the Flood

<sup>1</sup> We included a hypothesis related to concern for self (e.g., that individuals also focused on themselves more in a business frame than an ethical frame) in previous versions of the manuscript. However, we found no support for this hypothesis in the earliest studies conducted for this paper (none of the studies in which we included this variable as a study measure are included in the current manuscript). As we have conducted new studies to address limitations of previous studies, we chose not to include the hypothesis of a relationship between frame and concern for the self in the final manuscript given the lack of effects.



Control Act of 1939 established such analysis as policy (Guess and Farnham 2000). Cost–benefit analysis entails weighing the advantages and disadvantages of a decision and comparing the costs a person must incur relative to the benefits he or she will derive in the situation (Miller 1999). If the personal benefits of the behavior outweigh the costs, a person typically engages in the behavior (Baird and Thomas 1985). This calculative, cost–benefit processing helps ensure individuals that their material outcomes will be maximized (Baird and Thomas 1985). Previous work has assumed that a person who has adopted a business frame likely engages in a cost–benefit analysis, as it is a cornerstone of economic and business teaching (Frank et al. 1993) and is often associated with other business-centered practices (Honig 2004). However, the argument that a business frame is associated specifically with cost–benefit analysis has not yet been empirically tested (see Kouchaki et al. 2013).

In contrast, ethical frames are argued to prioritize a person's own values over other considerations, thus involving a values-driven mindset (Tenbrunsel et al. 2010). Ethical frames encourage individuals to do the right thing regardless of the material costs, with ethical choices being the dominant and most likely response (Tenbrunsel and Messick 2004). While utilitarianism, one normative principle of ethics, suggests that ethical mindsets incorporate a calculation of harms versus benefits, we believe a cost–benefit analysis is more universally consistent within a business frame as it is so central to business teaching and business-centered practices (Frank et al. 1993; Honig 2004). Moreover, scholars have argued that when an ethical mindset is evoked, individuals are less likely to use calculative analyses as a strategy for ethical decision-making (Jones 1991; Kelly and Elm 2003). Thus, it is likely that those who have adopted an ethical frame are less likely to use a cost–benefit analysis than those who have adopted a business frame. Consistent with these arguments, we propose the following:

**Hypothesis 2** A cost–benefit analysis is associated more with a business frame than an ethical frame.

### Concern for Others

We also argue that processing within business and ethical frames differ in the extent to which they are associated with a concern for others. Business contexts have been argued to discourage a concern for others (Ghoshal 2005; Tenbrunsel and Messick 1999; Wang et al. 2014). Consistent with this argument, Ghoshal (2005) offered several examples of theories taught to MBA students (e.g., agency theory, transaction cost economics) that focus on the self often at the expense of others. Indeed, business frames encourage a person to impersonalize their relationships with others and exclude the consideration of the needs of those individuals

(Kouchaki et al. 2013). This may be a result of the increased distance that business-minded individuals create with others (Magee and Smith 2014), which reduces the connection these individuals feel toward others in the situation (Mogilner and Aaker 2009). We argue that in adopting a business frame, consideration of others' concerns falls outside of a person's awareness and is thus less likely to be considered when deciding how to behave in a situation.

In contrast to business frames and contexts, an ethical frame appears to be associated with a greater concern for others. Moral behaviors are often defined by the norms of the group in which a person is a part (Jones 1991), making it essential to focus on others when considering what constitutes ethical and unethical behavior. Thus, ethical behavior often expresses a concern for others (Rest 1986; Treviño et al. 2006) with ethical thinking including a consideration of how one's actions will affect other individuals (Cushman et al. 2006; Graham et al. 2011; Haidt and Joseph 2004; Rai and Fiske 2010; Reynolds et al. 2010). Individuals engaging in ethical decision-making are often concerned about who besides themselves might be harmed by their decision (Gino et al. 2010; Haidt and Graham 2007). Such concern appears to encourage engagement in positive ethical behaviors toward individuals (e.g., Mikulincer et al. 2005; Small et al. 2006; van Leeuwen and Täuber 2012), but also to discourage unethical behaviors that may hurt individuals (e.g., Yip and Schweitzer 2016). Consistent with the patterns outlined above, we hypothesize the following:

**Hypothesis 3** Concern for others is associated less with a business frame than an ethical frame.

### Construal Level

Construal level is the level at which information is represented, wherein people's thinking is abstract (high-level construal) or concrete (low-level construal) (Trope and Liberman 2003, 2010). At a low-level construal, an individual's focus is on any detail that is useful in facilitating a person's immediate goal but may or may not reflect his or her values or identity (Trope and Liberman 2010). Because a low-level construal leads to an emphasis on the details of the situation, feasibility concerns, and the immediate situation, it is more likely that ethical principles get ignored and eventually lead to behavior that is inconsistent with the decision maker's values (e.g., Eyal and Liberman 2011; Fujita et al. 2006). In contrast, a high-level construal is associated with a focus on aspects of the situation, such as the purpose of the situation, that promote value-congruent behavior (e.g., Kristiansen and Hotte 1996). When individuals are at a high-level construal, they tend to focus on dimensions of the situation that are consistent with their core values, or the values that help define themselves (Kivetz and Tyler 2007). For example,

thinking about events in the future (thus adopting a high-level construal) promotes consistency between core values and behavioral intentions (Eyal et al. 2009).

We argue that business and ethical frames involve processing at different levels of construal. Individuals in business frames focus on achieving situation-specific and immediate goals (Kouchaki et al. 2013), which suggests that their mindset involves a low-level construal (Reyt and Wisenfeld 2015). In contrast, an ethical frame is associated with increased awareness of one's core values and purpose (Tenbrunsel and Messick 2004), suggesting an association to a high-level construal. Moral reasoning has been argued to encompass a set of abstract, generalizable rules that individuals use to guide their behavior (Tanner et al. 2008), making it likely that moral values will be more salient when an individual is processing the situation at a high-level (as opposed to a low-level) construal (Eyal and Liberman 2011). Indeed, research has found that when processing at a high-level construal, individuals are more likely to recognize the moral implications of an event (Eyal et al. 2008) and harshly judge those who engage in unethical behavior (Agerström and Björklund 2009b; Eyal et al. 2008), compared to individuals who are processing at a low-level construal. Together, the above evidence suggests the following:

**Hypothesis 4** A high-level (abstract) construal is associated less with a business frame than an ethical frame.

### The Relationship Between the Cognitive Processing Within Each Frame and Unethical Behavior

Cognitive framing theories suggest that once a person adopts a certain decision frame, the cognitive processing that is associated with that frame will affect that person's ultimate behavior (Goffman 1974; March and Olsen 2006; Messick 1999; Tenbrunsel and Messick 1999). Indeed, the Logic of Appropriateness Theory (March 1994; Messick 1999) suggests that the cognitive processes associated with an adopted frame will help a person determine the appropriate behavior for the situation, and thus make it more likely that they will engage in a certain, seemingly appropriate, behavior. In line with this argument, we contend that the above identified processes (cost–benefit analysis, concern for others, construal level), which we argue are differentially associated with each frame, will help explain the influence of frames on behavior.

Previous research has demonstrated that each of the cognitive processes that we identify above affect a person's subsequent (un)ethical behavior. Wang et al. (2014), for example, found that individuals who engaged in a calculative exercise (i.e., a lesson on Net Present Value) were greedier and less honest in a subsequent task than individuals who engaged in a non-calculative exercise prior to the task. Further, feelings of social connection have been

found to increase prosocial behaviors (Rai and Fiske 2011); when people consider those who will be affected by their actions, they regulate their ethical decision-making more to be sensitive to the needs of others (e.g., Galperin et al. 2011; Mulder et al. 2015). Similarly, when people are reminded of the potential harm caused to others, their moral disengagement and subsequent unethical behavior is mitigated (Kish-Gephart et al. 2014). Finally, when people make a decision using a high-level construal, they tend to behave consistently with their moral values (Agerström and Björklund 2009a). Based on the evidence outlined by the above cognitive theories, we extrapolate these patterns of behavior to misrepresentation and hypothesize the following:

**Hypothesis 5a** Cost–benefit analysis (which is associated more with a business frame than an ethical frame) is positively related to misrepresentation.

**Hypothesis 5b** Concern for others (which is associated more with an ethical frame than a business frame) is negatively related to misrepresentation.

**Hypothesis 5c** High-level construal (which is associated more with an ethical frame than a business frame) is negatively related to misrepresentation.

We assessed the above hypotheses in the first two studies. These studies aimed to understand the nature of the relationship between decision frame and unethical behavior by examining the causal relationship between frame and misrepresentation (Study 1), assessing the underlying cognitive processes that are associated with each frame, and assessing whether or not those processes are related to misrepresentation (Study 2). Given that it has been argued that the effects of a frame can be reduced by changing the associated cognitive processing (Baumer et al. 2017; Chwang 2016; Gerend and Cullen 2008; Keysar et al. 2012; Thomas and Millar 2011), in the remaining set of studies (Studies 3a–c), we examined how the relationship between frame and misrepresentation can be altered by manipulating the underlying cognitive processes that are normally associated with business and ethical frames.

As our primary interest is in understanding the causal nature of the relationship between frame, the processes that are involved in this relationship, and unethical behavior, we investigated our hypotheses in experimental settings. Utilizing experimental designs allowed us to both directly investigate the proposed causal relationships and utilize random assignment, an aspect we felt was important given research on the relationship between individual differences and unethical behavior (e.g., Gino and Pierce 2009; Li-Ping Tang et al. 2008). We chose to use a dictator game (explained below) to measure misrepresentation, not only because of its history

in the decision-making and experimental economics literature (i.e., Kahneman et al. 1986) and the high correlations between results of dictator games in the field and the lab (Anderson et al. 1999), but also because it has been successfully used in the study of moral reasoning and provides a direct measure of misrepresentation (Takezawa et al. 2006).

## Study 1

### Method

Two hundred and nineteen people (82 women) responded to an online study through Amazon's Mechanical Turk (MTurk). On average, participants were 37.5 years old ( $SD = 11.54$ ). 77% of participants identified as White/Caucasian, 7% identified as African-American, 8% identified as Asian, 1% identified as Hispanic, and 6% identified as "other." Only MTurk participants who had at least a 90% MTurk approval rating were eligible to complete the study. Participants who had previously completed studies related to the current study were excluded from recruitment processes through their MTurk ID. Following the study, IP addresses were checked to ensure duplicate addresses were not found across responses. Participants were paid \$0.60 for full completion of the study.

### Design and Procedure

Upon beginning the study, participants were presented with a series of tasks. The first task included a manipulation of decision frame. Four decision frame conditions were included in this study: business, ethical, general, and control (in which participants' frames were not manipulated). The general and control frames were included to provide not only comparison data but also to begin to understand the relationship among the frames. Participants in the business, ethical, and general decision frame conditions saw one of three commercials. The videos were selected because they were representations of our three different types of frame from the same company. This allowed us to present participants with videos of the same company, even though each commercial was promoting the company in a slightly different way. In addition, all three commercials were approximately the same length of time (1 min), were created during the same time period, and were similarly rated by participants on a question asking "how easily do you relate to this video?",  $F(2, 160) = 0.26$ ,  $p = 0.773$ . In the business-related commercial, participants viewed an advertisement for a large tablet screen which was argued to facilitate increased productivity in the workplace. The ethics-related commercial provided a demonstration of a woman using technology to help advance children's communication, encouraging viewers to think

about what they can do to have a positive impact on others. The general commercial showed participants using their smartphones in a variety of social settings. Participants in the control condition, which purposefully did not elicit any frame, were only presented with the second task (described below) and not presented with a video.

The second task asked participants to complete a dictator game in which they acted as the allocator of a pot of money that was to be divided between themselves and a recipient. When participants were told their roles, they were also told that this game, including its payouts and other players, was hypothetical. Participants were told that the rules of this game meant that recipients had to accept whatever offer they received from the allocators. The allocator knew that the size of the pot was \$87, but also knew that the recipient had only been informed that the pot was between \$5 and \$90. On the offer form, the participant specified how much he or she was giving the recipient along with the size of the pot. This latter variable allowed participants to misrepresent their information in the study, which represented our dependent variable of interest.

Following the dictator game, participants who watched a video answered a manipulation check question that asked them, "what type of mindset did you adopt as a result of watching the video?" Participants could select from business, ethical, personal, legal, or other (in which they were asked to insert the mindset they believed they had adopted). To conclude, participants filled out the moral identity scale (Aquino and Reed 2002), and answered demographic questions.<sup>2</sup>

## Results and Discussion

Our manipulation check showed that participants adopted the frame they were assigned,  $\chi^2(8, N = 210) = 117.96$ ,  $p < 0.001$ , with 95% who viewed the business commercial reporting that they had adopted a business mindset, and 91% who viewed the ethical commercial reporting that they had adopted an ethical mindset. Those who viewed the general commercial (one of our control comparison conditions) did not dominantly select one frame over another.

To test Hypothesis 1, we conducted a one-way ANOVA with planned contrasts comparing those in the business

<sup>2</sup> We did not include control variables in our analyses. We did, however, conduct additional analyses controlling for moral identity, gender, and age as exploratory analyses given that previous research has demonstrated that these individual characteristics are often associated with unethical behavior (O'Fallon and Butterfield 2005; Shao et al. 2008). Across all studies, moral identity and gender were not significantly related with our dependent variable of interest, magnitude of misrepresentation. Age was significantly associated with misrepresentation only in Study 1, but did not affect the significance of the relationship between decision frame and misrepresentation.

frame condition to those in the ethical frame condition. As predicted, those in the business frame condition misrepresented the size of the pot to a greater extent ( $M = \$15.25$ ,  $SD = \$27.54$ ) relative to those in the ethical frame condition ( $M = \$5.76$ ,  $SD = \$17.95$ ),  $F(1, 110) = 4.70$ ,  $p = 0.03$ , supporting Hypothesis 1.

Exploratory analyses also showed that misrepresentation in the general decision frame ( $M = \$19.25$ ,  $SD = \$28.30$ ) and control ( $M = \$16.09$ ,  $SD = \$27.37$ ) conditions was not different from misrepresentation in the business frame condition,  $F(1, 150) = 0.28$ ,  $p = 0.600$ , but was higher than misrepresentation in the ethical frame condition,  $F(1, 158) = 8.82$ ,  $p = 0.003$ . We also found that those in the ethical frame condition engaged in less misrepresentation than those in all other frame conditions,  $F(1, 209) = 8.24$ ,  $p = 0.005$ .

These results demonstrate the causal nature of the relationship between decision frame and misrepresentation, supporting Hypothesis 1. Study 2 addresses the primary focus of the current research by examining the proposed cognitive processes associated with each frame.

## Study 2

### Method

Two hundred and two participants (91 women) at a Southern U.S. university completed this study in person for course credit. On average, participants were 20.2 years old ( $SD = 0.91$ ). 78% of participants identified as White/Caucasian, 2% identified as African-American, 6% identified as Asian, 13% identified as Hispanic, and 1% identified as “other.”

### Design and Procedure

In Study 2, we explored business, ethical, and general frames; although our primary focus was on the comparison between business and ethical frames, we included a general frame as an additional point of reference. To increase the robustness of our findings, we used different manipulations of frame than those used in Study 1, focusing on manipulations that have been used previously in the literature.<sup>3</sup> Participants were randomly assigned to one of the three frame conditions. Participants were first shown a picture and were given 1 min to describe what they saw. Following

<sup>3</sup> In addition to showing the link between externally manipulated frames and their respective cognitive processes, we also have an additional study showing that when people generate their own characterization of decisions made in a given frame, they associate the proposed cognitive processes with each respective frame. For more information about these findings, please contact the first author.

research using the same manipulations, we used an image of a stack of money to manipulate a business frame (Kouchaki et al. 2013), an image of the Ten Commandments tablets to manipulate an ethical frame (Mazar et al. 2008), and an image of a fish to manipulate a neutral frame (Vohs et al. 2006). Following the manipulation of frame, participants played the dictator game described in Study 1. As in Study 1, our dependent variable was measured using participants' report of the pot size to the recipient.

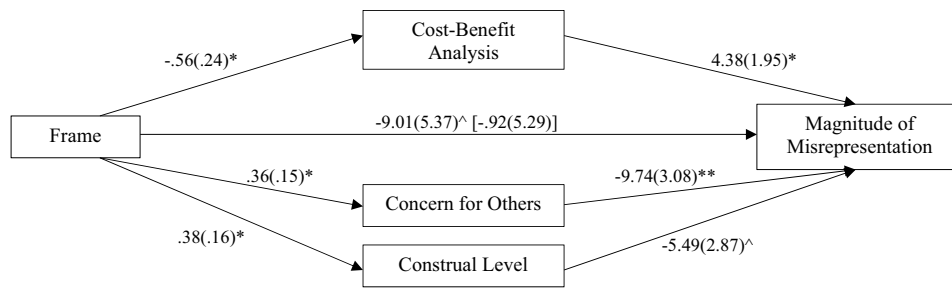
Following the dictator game, participants were asked several questions pertaining to the allocation exercise (e.g., Belmi and Pfeffer 2015). These measures were made up of multiple scales that assessed the psychological processes—cost–benefit analysis, concern for others, and construal level—that we argue are associated with each frame. An attention check, which asked participants to select the “somewhat agree” option, was embedded in these measures. We excluded any participants who failed this check. Participants also answered two manipulation check questions, asking the extent to which they felt the allocation decision they just made primarily reflected a business decision (question 1) or an ethical decision (question 2). Participants responded using a 1 (not at all) to 7 (to a great extent) scale. These manipulation checks allowed us to determine how participants perceived the decisions they made to determine the effectiveness of our frame manipulation on their decision. As in Study 1, they then answered questions pertaining to the moral identity scale and demographic questions.

### Measures

To assess participants' use of cost–benefit analyses in their decision-making, we used Belmi and Pfeffer's (2015) pre-established measure of calculative mindset. A calculative mindset encompasses a consideration of the benefits one may receive from a given situation relative to what they have to put into the situation, suggesting a strong assessment of one's own costs versus benefits when trying to reach an outcome. More specifically, participants were asked to rate whether the decision would increase their chances of being successful and whether the decision would benefit their own interests on a 7-point scale [1 (strongly disagree); 7 (strongly agree),  $r = 0.73$ ].

In following the characteristics of concern for others as described in the ethical decision-making literature, we used De Dreu et al. (2001) measure of yielding behavior, which was designed to assess one's concern for others. We adapted the measure to accommodate the context of the dictator game. Participants were asked to rate on a 1 (not at all) to 7 (very much) scale the extent to which they were willing to consider the following in their allocation decision: giving into the wishes and desires of the recipient, accommodating the recipient in the game, considering the recipient's goals





**Fig. 1** Direct and indirect effects of frame and the associated cognitive processes on magnitude of misrepresentation (Study 2).  $^{\wedge}p < .10$ ,  $^*p < .05$ ,  $^{**}p < .01$ . Note frame is coded 1 = Ethical frame, 0 = Business frame.

Values within round brackets represent the standard errors for each effect. Values within square brackets show the direct effect once mediators have been included in the model

and interests, and concurring with the recipient’s perspective. To improve the reliability of the scale items, the last question in the original scale, which infers communication between the allocator and recipient, was dropped from the analysis ( $\alpha = 0.82$ ).

Finally, participants’ construal level was measured with two items adapted from the *Rating of a Life Event* measure (Burrus and Roesse 2006), which is commonly used as a measure of construal (Burgoon et al. 2013; Reyt et al. 2016). Consistent with previous research utilizing this measure (Reyt et al. 2016), we selected the two items of the scale that tap into the processing relevant to our specific task and reworded them to highlight the abstract (high construal) end of the measure. Specifically, we asked participants to rate the extent to which they were thinking about the following during their decision, “why you were making this allocation,” which reflected the item highlighting why things get done from the *Rating of a Life Event* measure, and “the high priority aspects of this allocation,” which reflected the item highlighting high priority events in the *Rating of a Life Event* measure (Burrus and Roesse 2006). Participants were asked to what extent they were thinking about these aspects of the allocation using a 1 (not at all) to 7 (very much) scale ( $r = 0.25$ ).

**Results and Discussion**

21 Participants were removed from the study who failed to pass the attention check embedded in the survey or who wrote irrelevant or incoherent responses to the open-ended question about the picture they saw ( $N = 179$ ). We conducted a one-way ANOVA with planned contrasts to assess the effectiveness of our manipulation of frame. Overall, the results revealed a significant difference across frames for both the question about business decisions,  $F(2, 176) = 3.23$ ,  $p = 0.042$ , and the question about ethical decisions,  $F(2, 177) = 4.51$ ,  $p = 0.012$ .

To assess our hypotheses, we used bootstrapping analyses, which allowed us to examine whether the cognitive

processes we proposed were related to frame simultaneously in the same model. Further, we relied upon these analyses to explore the potential that each cognitive process we proposed mediated the link between frame and misrepresentation. We used the PROCESS macro in SPSS recommended by Hayes (2009, 2013). Given the categorical nature of our independent variable, we created two dummy variables to generate categorical comparisons across our variables. Business frame was used as the indicator variable. The first dummy variable distinguished ethical frame (coded as 1) from business frame (coded as 0), while the second variable distinguished general/neutral frame (coded as 1) from business frame (coded as 0). Given our hypotheses, we were interested in the first dummy variable (business versus ethical frame), which we report in detail below, after which we explore how business and general decision frames compare.

Figure 1 summarizes the results testing Hypotheses 1–5c. Hypothesis 1 suggests that those in a business frame will misrepresent the pot size more than those in an ethical frame. Unlike in Study 1, we found only a marginal relationship between business and ethical decision frames and the magnitude to which participants misrepresented the pot size in this study. The relationship between frame and misrepresentation was in the predicted direction, with participants in the business frame misrepresenting more than those in the ethical frame.

We next tested Hypotheses 2–4, examining more closely the processes we argue to be associated with business and ethical frames. Consistent with Hypothesis 2, there was a significant difference between those in business and ethical frames regarding the extent to which participants claimed to use cost–benefit analyses in their decision-making, such that those in the business frame condition used cost–benefit analyses more than those in the ethical frame condition. Consistent with Hypothesis 3, there was a significant difference between those adopting business and ethical frames such that participants in the ethical frame condition considered the effect of their allocation decision on others more than those in the business frame condition. And, consistent with

Hypothesis 4, there was a significant difference between those in business and ethical frames regarding their reported adoption of a high construal level in thinking about the allocation decision, such that those in the ethical frame condition adopted a higher construal than those in the business frame condition.

Finally, we aimed to assess Hypotheses 5a–c, which examine the link between the cognitive processes we proposed and participants' engagement in misrepresentation. Consistent with Hypothesis 5a, a cost–benefit analysis was significantly positively related with the extent to which participants misrepresented the pot size. Consistent with Hypothesis 5b, there was a significant negative relationship between concern for others and the extent to which participants misrepresented the pot size. Finally, offering some support for Hypothesis 5c, there was a marginally significant negative relationship between high construal and the magnitude to which participants misrepresented the pot size.

To offer further insight into Hypotheses 5a–c, we chose to also examine mediation effects of our psychological processes on the relationship between decision frame and misrepresentation. We included all the variables associated with our proposed cognitive processes simultaneously in the model to determine the effect of each process while accounting for the others. Results revealed that in addition to cost–benefit analysis significantly affecting misrepresentation, cost–benefit analysis appeared to mediate the relationship between decision frames and misrepresentation, effect =  $-2.49$ , 95% CI [ $-7.19, -0.18$ ]. Participants' concern for others also significantly mediated the relationship between business and ethical frames and misrepresentation, effect =  $-3.53$ , 95% CI [ $-8.89, -0.57$ ], offering further evidence of the important role concern for others plays in the relationship between decision frame and unethical behavior. Participants' construal level, however, did not significantly mediate the relationship between frame and misrepresentation, effect =  $-2.06$ , 95% CI [ $-6.98, 0.17$ ], suggesting that although construal level is a process that is associated with decision frame, it may have a weak relationship with participants' subsequent behavior.

In each step of the mediation, our second dummy variable, which compared differences between business frame and general frame, was not significant. More specifically, there was not a significant difference between these frames on participants' misrepresentation,  $b = -5.66$ ,  $SE = 5.58$ ,  $p = 0.313$ , 95% CI [ $-16.72, 5.40$ ]. Further, there were no differences between these frames and the cognitive processes we hypothesized to be associated with each frame (cost–benefit analysis:  $b = -0.22$ ,  $SE = 0.23$ ,  $p = 0.345$ , 95% CI [ $-0.70, 0.25$ ]; concern for others:  $b = 0.18$ ,  $SE = 0.16$ ,  $p = 0.243$ , 95% CI [ $-0.13, 0.49$ ]; construal level:  $b = 0.10$ ,  $SE = 0.17$ ,  $p = 0.546$ , 95% CI [ $-0.23, 0.44$ ]). Given the above results, it was no surprise that there were no significant

mediation effects (cost–benefit analysis: effect =  $-0.68$ , 95% CI [ $-3.71, 0.58$ ]; concern for others: effect =  $2.37$ , 95% CI [ $-7.65, 1.30$ ]; construal level: effect =  $-0.13$ , 95% CI [ $-2.36, 0.61$ ]). Thus, it appears that the primary frame adopted by decision makers in the general frame was closely aligned with a business frame.

The results of Study 2 suggest that business and ethical frames differ across the three proposed cognitive processes—cost–benefit analyses, concern for others, and construal level—and that these processes are related to misrepresentation. Taking this into consideration, we next examine whether the default behavior of a frame can be altered by examining how unethical behavior may be affected when these cognitive processes are changed within each frame.

## Changing the Default Behavior of Decision Frames

The significant influence of frames on behaviors has motivated research on mitigating the deleterious effects of frames (e.g., Fu et al. 2018; Hodgkinson et al. 2002; Sieck and Yates 1997). Given the centrality of cognitive processing in understanding frames, changing the cognitive processing that typically occurs within a frame offers a potentially effective tool by which the behavior evoked by that frame can be mitigated. Indeed, Thomas and Millar (2011) found that by encouraging the use of specific types of cognitive processes, gain/loss framing effects were reduced. Similarly, Gerend and Cullen (2008) showed that changing the timeframe in which a person thought about a situation changed the behavior generally associated with a specific frame. In line with such previous findings, we argue that by encouraging processing typically associated with a business frame (i.e., cost–benefit processing), unethical behavior will increase for those who initially adopted an ethical frame; likewise, by encouraging processing associated with an ethical frame (i.e., high construal and consideration of others), unethical behavior will decrease for those who initially adopted a business frame.

As we have demonstrated, cost–benefit analyses are typically associated with a business frame and encourage misrepresentation; thus, encouraging a person in an ethical frame to engage in such processing may result in more misrepresentation. A cost–benefit analysis may encourage unethical behaviors because such processing tends to dehumanize others, resulting in individuals morally disengaging from the situation (Bandura 1999). The Ford Pinto case is an example of such dehumanization. Ford engaged in a cost–benefit analysis that converted deaths into dollars (e.g., 180 deaths at \$200,000 each), an analysis that arguably produced a “bloodless abstraction,” resulting in hundreds of avoidable deaths or severe burns

(Ashforth and Anand 2003, p. 20). Because a cost–benefit analysis is more systemic to business than ethical frames, encouraging the use of such an analysis should have a more pronounced effect for those who have adopted an ethical versus business frame. Consistent with this idea, we hypothesize the following:

**Hypothesis 6a** A cost–benefit analysis exacerbates engagement in misrepresentation in an ethical frame to a greater extent than in a business frame.

If altering the cognitive processes associated with a business frame can encourage misrepresentation from individuals who have adopted an ethical frame, it might also be possible that altering the cognitive processes associated with an ethical frame—concern for others and construal level—could mitigate misrepresentation from those who have adopted a business frame. Consistent with the idea that a concern for others might discourage misrepresentation, Overbeck and Park (2001) found that employees who prioritized co-workers' needs over other organizational goals engaged in more prosocial behaviors than they otherwise would, even though it is likely that they had adopted a business frame as they were in an organizational setting (Ghoshal 2005). Similarly, Batson and Moran (1999) found that leading individuals to feel empathy for their counterpart in a prisoner's dilemma game mitigated the negative effect of framing the game as a "business transaction" on cooperation. In addition to this evidence, the results of Study 2 suggest a direct relationship between high levels of concern for others and the mitigation of misrepresentation. Thus, we hypothesize the following:

**Hypothesis 6b** Concern for others mitigates engagement in misrepresentation in a business frame to a greater extent than in an ethical frame.

Despite the weak relationship we found in Study 2 between construal level and the mitigation of misrepresentation, the relationship between decision frame and construal level was strong. Outside of the current research, there is evidence that direct manipulations that encourage a high construal level discourage unethical behavior. For example, Agerström and Björklund (2009a) found that individuals' engagement in prosocial behaviors was affected by changing construal level; when a high-level construal was elicited, individuals engaged in more prosocial behaviors than when a low-level construal was elicited, regardless of other situational constraints. Further, He et al. (2019) found that individuals who generally adopt a high, as opposed to a low, level of construal were less likely to engage in unethical behavior following the observance of others engaging in similar behavior. As such, we

believe that a high construal level will mitigate misrepresentation, and that this effect will be more pronounced in business than in ethical frames given that ethical frames are already characterized by a high level of construal. We thus hypothesize the following:

**Hypothesis 6c** High-level construal mitigates engagement in misrepresentation in a business frame to a greater extent than in an ethical frame.

## Studies 3a–c

Studies 3a–c examined Hypotheses 6a–c. These studies draw upon the results of the first two studies, and demonstrate how business and ethical frames can interact with independent encouragement of cost–benefit analyses (Study 3a), concern for others (Study 3b), and level of construal (Study 3c), in turn influencing participants' decisions to engage in misrepresentation.

## Study 3a

### Method

One hundred and thirty-seven people (71 women) responded to a paid online survey through MTurk. Participants' mean age was 34.2 years old ( $SD=9.52$ ). 81% of participants identified as White/Caucasian, 8% identified as African-American, 4% identified as Asian, 3% identified as Hispanic, and 3% identified as "other." Participant criteria were the same as in Study 1, including exclusion criteria.

### Design and procedure

Given that results from Studies 1 and 2 showed that those adopting business frames did not differ from those adopting general frames, we turned our focus to the comparison

between business and ethical frames in all studies moving forward. A 2 (business frame, ethical frame)  $\times$  2 (no encouragement to engage in a cost–benefit analysis, encouragement to engage in a cost–benefit analysis) factorial design was used in this study. Participants began the study with a two-part manipulation of frame that began with asking participants to think about and write down the process involved in making a business or ethical decision.<sup>4</sup> Specifically, participants saw the following prompt:

The first task in this study involves thinking about the process involved in making a [business decision/ethical decision]. Please think about making a [business decision/ethical decision] and write a description of the different aspects that should be considered in making a [business decision/ethical decision].

Following this initial manipulation, participants were presented with an additional manipulation of frame, which was comprised of a word completion task in which three of the six words were neutral and three of the six words were designed to elicit the same frame as in the first task (business decision words: profit, market, business; ethical decision words: moral, ethical, virtue). This manipulation is similar to that used by Vohs et al. (2006), which had participants descramble sentences rather than words, and a measure used by Kouchaki et al. (2013), which measured participants' adopted frames using a similar word descrambling task. Participants were asked to complete this additional exercise to reinforce the frame they were assigned and to minimize variation within condition.

After participants had completed the frame manipulation, they were either encouraged to engage in a cost–benefit analysis or they simply moved to the next part of the study. Participants who were encouraged to engage in a cost–benefit analysis saw the following:

Before you make an offer and report a pot size to the recipient, take a moment to conduct a cost–benefit analysis in which you compare the costs and benefits to you in relation to the offer you plan to make. Please write your thoughts in a few sentences below.

<sup>4</sup> We pretested this manipulation in a sample of 100 participants on Amazon's Mechanical Turk. Participants' responses were content coded by two coders for each of the three cognitive processes argued to be associated with business and ethical frames. A value of 1 represented no discussion of the process and a value of 7 represented the response being dominated by the cognitive process. Findings showed that those who adopted a business frame discussed cost–benefit analyses more than those in an ethical frame,  $F(1, 96) = 20.94$ ,  $p < .001$ . The content coding also revealed that those in an ethical frame discussed more concern for others,  $F(1, 96) = 18.56$ ,  $p < .001$ , and adopted a higher construal level,  $F(1, 96) = 28.88$ ,  $p < .001$ , than those in a business frame. For more information about these findings, please contact the first author.

Following the manipulations, participants acted as the allocator in a dictator game. As in the previous studies, participants allocated a hypothetical pot of \$87 to the recipient and reported the pot size to the recipient. Then participants concluded the study by answering a manipulation check question that asked, "at the beginning of the study, what kind of decision were you asked to describe?" Participants could then select the type of decision—business, ethical, or other—that they were asked to describe. Participants also answered a manipulation check for engagement in a cost–benefit analysis that asked them to rate the extent to which they maximized the material benefits of the dictator game over the costs (1 = not at all, 7 = to a great extent). Finally, participants completed questions assessing moral identity and demographic information.

## Results and Discussion

The manipulation check for decision frame showed that participants who were assigned to the business frame condition indicated that they were asked to describe a business decision (97%), while those who were assigned to the ethical frame condition indicated they were asked to describe an ethical decision (96%),  $\chi^2(6, N = 137) = 101.02$ ,  $p < 0.001$ . Similarly, the cost–benefit analysis manipulation check suggested that this manipulation worked,  $F(1, 136) = 4.62$ ,  $p = 0.03$ : those who were encouraged to engage in a cost–benefit analysis claimed that they attempted to do so to a greater extent ( $M = 5.25$ ,  $SD = 1.44$ ) than those who were not encouraged to engage in such an analysis ( $M = 4.65$ ,  $SD = 1.82$ ).

A 2 (business frame, ethical frame)  $\times$  2 (no encouragement to engage in a cost–benefit analysis, encouragement to engage in a cost–benefit analysis) between-subjects ANOVA was used to assess Hypothesis 6a. For the dependent variable, we again used the extent to which participants misrepresented the pot size. A significant interaction between frame and engagement in a cost–benefit analysis emerged,  $F(1, 135) = 6.19$ ,  $p = 0.01$ , supporting Hypothesis 6a: those in an ethical frame who were presented with the cost–benefit manipulation engaged in more misrepresentation than those who did not engage in such analyses,  $F(1, 64) = 7.21$ ,  $p < 0.001$ ; in contrast, the cost–benefit manipulation did not significantly affect behavior for those participants in a business frame,  $F(1, 70) = 0.73$ ,  $p = 0.40$  (see Fig. 2).

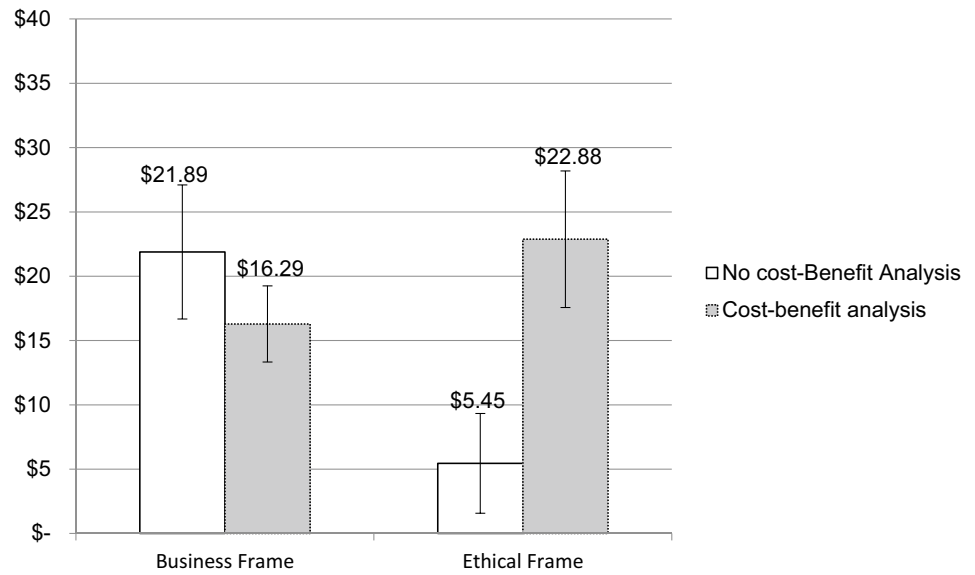
## Study 3b

### Method

One hundred and fifty-one people (81 women) responded to a paid online survey via MTurk. Participants' mean age



**Fig. 2** Interaction between decision frame and engagement in a cost-benefit analysis on the magnitude of misrepresentation (Study 3a)



was 34.9 years old ( $SD = 12.66$ ). 74% of participants identified as White/Caucasian, 7% identified as African-American, 10% identified as Asian, 3% identified as Hispanic, and 6% identified as “other.” Participant criteria were the same as in Study 1, including exclusion criteria.

**Design and Procedure**

This study used a 2 (business frame, ethical frame)  $\times$  2 (concern for self, concern for others) factorial design. Study 3b was identical to Study 3a, except we manipulated concern for others rather than a cost-benefit analysis. To hold concern for the self constant so that it did not inadvertently influence our results, participants were asked to consider how their decisions would affect the self (concern for self condition) or the self and others (concern for others condition). More specifically, participants in the self (others) condition saw the following at the end of the dictator game:

Before you make an offer and report a pot size to the recipient, please take a moment to think about how your decisions will affect you (both you and the recipient) in this exercise and write your thoughts in a few sentences below.

After reading the decision frame manipulation and writing about how their decision would affect only themselves or also others, participants engaged in the dictator game described in Study 1 and answered manipulation check, moral identity, and demographic questions. The frame manipulation check was the same as in Study 3a. For the concern for others manipulation check, participants reported the extent to which their decision reflected

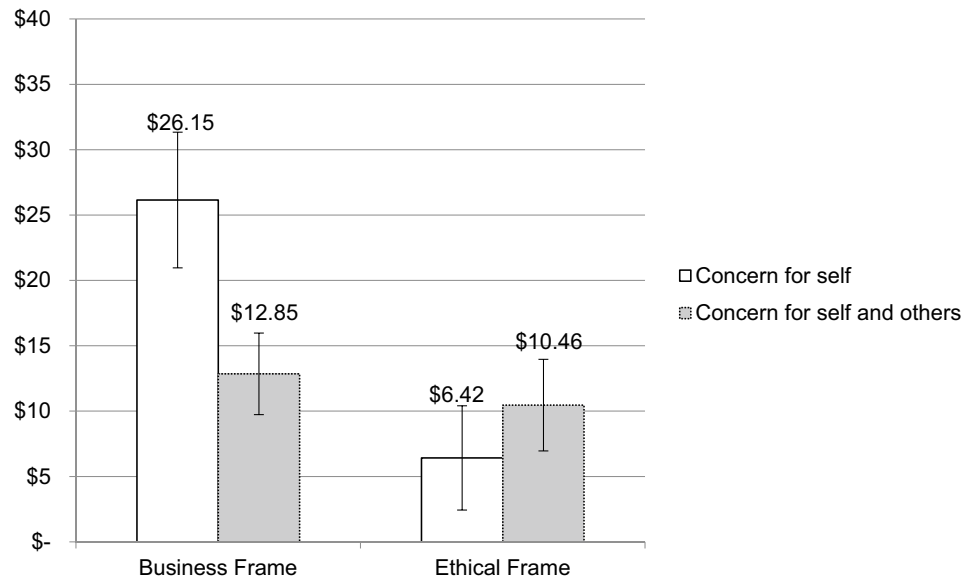
benefits to both themselves and others (1 = not at all, 7 = to a great extent).

**Results and Discussion**

The manipulation check for decision frame in this study demonstrated that participants who were assigned to the business frame condition indicated that they were asked to describe a business decision (95%), while those who were assigned to the ethical frame condition indicated they were asked to describe an ethical decision (98%),  $\chi^2(4, N = 151) = 117.52, p < 0.001$ . The concern for others manipulation check showed that those asked to think about others when making their decision reported a higher concern for others ( $M = 5.06, SD = 1.98$ ) than those asked to think only about themselves ( $M = 3.87, SD = 2.20$ ),  $F(1, 149) = 11.62, p < 0.001$ .

A 2 (business frame, ethical frame)  $\times$  2 (concern for self, concern for others) between-subjects ANOVA was used to assess Hypothesis 6b. The extent to which participants misrepresented the pot size was used as the dependent variable. Consistent with Hypothesis 6b, the interaction between participants’ frame condition and the target of their concern was significant,  $F(1, 147) = 4.55, p = 0.03$ . Specifically, when participants adopted a business frame, they engaged in less misrepresentation when they were prompted to also think about others than when they were only concerned for themselves,  $F(1, 72) = 4.24, p = 0.04$ ; however, the concern for self/others did not significantly affect misrepresentation for participants who adopted an ethical frame,  $F(1, 77) = 0.65, p = 0.42$  (see Fig. 3).

**Fig. 3** Interaction between decision frame and concern for self or self and others on the magnitude of misrepresentation (Study 3b)



## Study 3c

### Method

Two hundred and ten people (126 women) responded to a paid online survey via MTurk. Participants' mean age was 39.2 years ( $SD = 17.76$ ). 66% of participants identified as White/Caucasian, 12% identified as African-American, 5% identified as Asian, 4% identified as Hispanic, and 3% identified as "other." Participant criteria were the same as in Study 1, including exclusion criteria.

### Design and Procedure

The procedures for this study were the same as in Studies 3a, except that rather than manipulating whether or not participants engaged in a cost–benefit analysis, we manipulated participants' construal level.

Participants were first presented with the two-part manipulation of decision frame described in Study 3a. Construal level was then manipulated by having participants write a short paragraph describing the activities they might be involved in next Monday or a Monday 2 years from now. This temporal distance manipulation has previously been used as a manipulation of construal level, with the nearer time frame eliciting a low-level construal and more distant time frame eliciting a high-level construal (e.g., de Dreu et al. 2009; Förster et al. 2004).

Participants next completed the dictator game used in previous studies and allocated the assigned pot of money between themselves and the recipient, reported a pot size, and answered manipulation checks, moral identity, and demographic questions. The manipulation check for frame

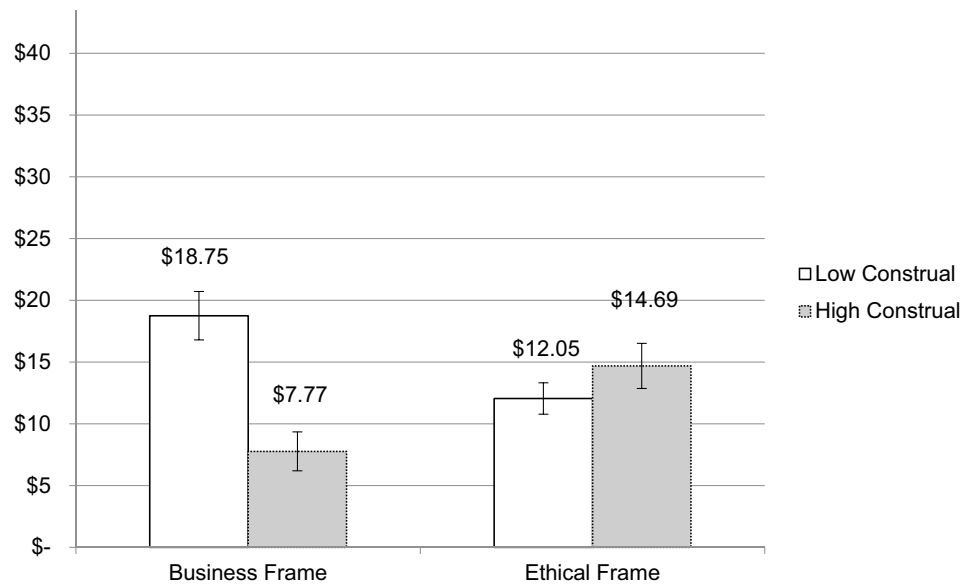
was the same as in Study 3a. The manipulation check for construal level asked participants to indicate which time period they were asked to write about: one in the near or distant future.

## Results and Discussion

As in previous studies, the manipulation check for decision frame revealed that participants who were assigned to the business frame condition indicated that they were asked to describe a business decision (97%), while those assigned to the ethical frame condition indicated they were asked to describe an ethical decision (99%),  $\chi^2(4, N = 210) = 183.31, p < 0.001$ . Participants who were asked to write about what they were involved in next Monday indicated that they were asked to write about the near future (98%), and participants who were asked to write about what they were involved in 2 years from now indicated that they were asked to write about the distant future (99%),  $\chi^2(1, N = 210) = 202.12, p < 0.001$ .

A 2 (business frame, ethical frame)  $\times$  2 (low-level construal, high-level construal) between-subjects ANOVA was used to assess Hypothesis 6c. There was a significant interaction between frame and construal level,  $F(1, 210) = 3.91, p = 0.04$ , supporting Hypothesis 6c. The interaction showed that those in a business frame who were in the high-level construal condition, compared to those in the low-level construal condition, engaged in less misrepresentation,  $F(1, 107) = 5.37, p = 0.02$ . In contrast, for those making decisions in an ethical frame, the manipulation of construal level had no effect on misrepresentation,  $F(1, 101) = 0.28, p = 0.60$  (see Fig. 4).

**Fig. 4** Interaction between decision frame and construal level on the magnitude of misrepresentation (Study 3c)



### General Discussion

Utilizing a cognitive perspective, the results of this research provide insight into how business versus ethical decision frames influence misrepresentation, and thus contribute to our understanding of unethical behavior. Study 1 demonstrated the causal relationship between decision frames and misrepresentation, and is the first, to our knowledge, that manipulated both business and ethical frames simultaneously and compared their effect on ethical decision-making. The results of Study 1 offer important support for arguments in the ethics literature suggesting that decision frame is a key antecedent to ethical decision-making (e.g., Jones 1991; Kohlberg 1969; Rest 1986; Tenbrunsel and Messick 1999). Study 2 demonstrated that business and ethical frames involve distinct decision-making processes: individuals in business decision frames utilized a cost–benefit analysis more, had a lower concern for others, and adopted a lower level (i.e., less abstract) construal than individuals in ethical decision frames. Further, Study 2 demonstrated the relationship between these processes and misrepresentation, and how these processes differentiate the frames from one another. Our results also demonstrate that cost–benefit analysis and concern for others mediate the relationship between frame and behavior. Contrary to our hypotheses, Study 2 showed that although construal level is associated with decision frame, the link between construal level and misrepresentation is weak.

Given that we found individuals in business and ethical frames process the situation differently and that this affected the extent to which they were willing to misrepresent information, we proposed that altering these processes could alter the behavior associated with that frame. Consistent with this proposition, Studies 3a–c demonstrated that a

cost–benefit analysis, concern for others, and high construal level affected misrepresentation differentially by frame: a cost–benefit analysis encouraged more misrepresentation in an ethical frame, while concern for others and a high-level construal discouraged such behavior in a business frame. These findings offer theoretical insights into the relationship between decision frame and unethical behavior and, from a practical perspective, illuminate how the default behavior associated with a given frame might be altered.

### Theoretical and Practical Contributions

This research offers several theoretical contributions. First, our findings demonstrate the link between decision frames and misrepresentation, illuminating the important role of business and ethical frames in ethical decision-making. By demonstrating the causal relationship between frames and misrepresentation, our work suggests that we need to go beyond the simple dichotomy of disposition or contextual effects on unethical behavior that has dominated the discussion of why unethical behavior occurs and consider the role of cognitive factors such as decision frames and their associated processes. In doing so, the results lend support to decision frame theories (Goffman 1974; March 1994; Messick 1999) and extend their implications to the ethical domain. While theoretical arguments have supported such an extension (Kohlberg 1969; Messick 1999), few studies have examined it empirically. Our study provides empirical evidence that supports these previous theoretical arguments. Further, we show that across a variety of manipulations of decision frame, we consistently find effects on individuals' misrepresentation.

More importantly, however, our research offers a deeper understanding of the ways in which individuals process

information and situations in business and ethical frames. As a result, we have moved beyond just examining the behavioral outcome of different frames by identifying three cognitive processes that differ between business and ethical frames—the use of a cost–benefit analysis, the extent to which decision makers are concerned about others, and the level of construal. The identification of the processes that are associated with each frame and their relationship to unethical decision-making is important as it has been argued that encouraging greater awareness of these cognitive processes is key to motivating value-centric behavior among individuals (Reynolds 2008). By promoting a greater understanding of how different frames affect unethical behavior and the cognitive processes associated with them, individuals’ awareness of the forces behind unethical actions may be increased, thereby helping to reduce bounded ethicality (Chugh et al. 2005).

The association between business frames and misrepresentation also has important pedagogical implications for business scholars, suggesting that we need to be mindful of how our pedagogy reinforces behaviors in ways most people and organizations may not intend or desire. As discussed previously, management scholarship and curriculum have been criticized for promoting a mindset associated with unethical behavior. Ghoshal (2005), Wang et al. (2011), Ferraro et al. (2005), and others provide examples of MBA concepts that help students achieve high performance but offer nothing to help them recognize the ethical implications of their actions. Similarly, our research, through its distinct identification of the cognitive processes associated with a business frame that promote unethical behaviors such as misrepresentation, should motivate us to understand which management theories cue these processes. Further, our results suggest that we should examine how we might promote high-level construal and concern for others in our teaching of business students and identify what it is about a cost–benefit analysis that leads to misrepresentation and other forms of unethical behavior. This is particularly important given that our results from Studies 1 and 2 imply a close alignment between business and general frames, suggesting that unless specifically prompted to view a decision through an ethical frame, individuals’ processing and behavior associated with a general frame look very similar to that of a business frame. These results are consistent with Ghoshal (2005) and Ferraro et al. (2005) who argued that business frames have become dominant in society, acting as a default for most people. Given the beneficial effects of an ethical frame in mitigating misrepresentation, efforts should also be undertaken to examine aspects of business concepts that could promote ethical frames and, hopefully, ethical behavior. As we explore these issues, we will have to decide whether we as educators should modify our existing pedagogical approaches or, as Ghoshal (2005) suggests, revamp

our theories and curriculum altogether. This is imperative for future management researchers and educators to consider.

Our research also has important implications for changing behavior, suggesting that it is possible for organizations to promote or mitigate unethical behavior in the workplace. Study 3a suggested that encouraging individuals to make decisions using a cost–benefit analysis diminished the beneficial effects of an ethical frame. This offers a warning to organizations (such as business schools and workplaces) that regularly promote the use of a cost–benefit analysis over other decision-making strategies. Consistent with our warning, previous research argues that a calculative mindset (Tenbrunsel et al. 2010), rational thinking (Wang et al. 2014), or distance from the personal aspects of a decision (Jones 1991) can increase one’s willingness to engage in unethical behavior. Given our findings and related research, we suggest that organizations help employees understand the ethical implications of using a cost–benefit analysis and expand decision-making processes beyond this type of analysis, perhaps by encouraging a stronger acknowledgment of the people affected by the decision (Ashforth and Anand 2003).

On a more optimistic note, Studies 3b and 3c demonstrated that misrepresentation related to a business frame can be mitigated through promoting a concern for others or a high-level construal. Previous research offers suggestions on how organizations can encourage such cognitive processes. For example, promoting a greater concern for others can be accomplished by decreasing hierarchy (Tost et al. 2013), connecting employees and customers (Grant et al. 2007), inducing empathy in otherwise competitive contexts (Batson and Moran 1999), or ensuring that co-workers know one another (Gino et al. 2010). Supporting assertions that language contributes to ethical fading (Bandura 1999; Tenbrunsel and Messick 2004), we agree with Ferraro et al. (2005, p. 19) who suggest that changing the language used to describe the organization and its constituents may be important in promoting a concern for others:

The image of the firm as a “community” or a “family,” or even as a coalition of stakeholders, that was more prevalent in employment relationships in the United States in the immediate post World War II period has been replaced with a “market” metaphor, in which an employee is merely a commodity that can be acquired, dismissed, or even traded, for instance, in mergers and acquisitions, with little consideration for anything except presumed corporate profitability and shareholder wealth.

Thus, “re-personalizing” the workplace may increase the extent to which concern for others is triggered. Attention should also be paid to promoting a high-level construal. Other research has demonstrated that encouraging managers



to give abstract advice (Reyt et al. 2016) can encourage abstract thinking in employees. This may be especially relevant to ethical and unethical behavior, as it corroborates previous research suggesting that addressing unethical behavior with specific sanctions can encourage a business frame and discourage ethical behavior (Tenbrunsel and Messick 1999); instead, advising employees using abstract rules and guidelines may be more effective in encouraging ethical behavior in the future.

### Limitations and Future Research

Although this research offered several insights into how decision frames affect misrepresentation, it raises additional questions that should motivate future research. Perhaps the biggest limitation of our research is that across our studies, construal level offered mixed, and thus inconclusive, findings. Our research showed that construal level was differentially affected by business and ethical decision frames, but our studies were inconclusive regarding the effect of construal level on misrepresentation. More specifically, there was a notable divide across studies in which construal level was measured versus studies in which construal level was manipulated. In Study 2, where construal level was measured, it had a weak effect on misrepresentation. In contrast, in Study 3c, in which construal level was manipulated, there was a stronger effect of construal level on misrepresentation. There are a number of possible explanations for these differences across studies. First, in Study 2, we used the task-relevant items from the *Rating of a Life Event* measure (Burrus and Roesse 2006), which were weakly correlated and so raise the question of whether they were a reliable measure of construal. However, research on construal level has not converged on one dominant way in which to measure construal level (Trope et al. 2007), suggesting that measuring construal may be a challenge, and that results may vary based on the measure used. It could also be that, as we found in Study 3c, construal level affects misrepresentation only in individuals who adopted a business frame. Regardless of the explanation, this finding certainly warrants additional research on the topic.

Another limitation of our research is that we only focused on one form of unethical behavior, misrepresentation. Thus, the generalization of our pattern of findings to other unethical actions cannot be made without further research. Similarly, because it has been argued that more unethical behavior is not the same as less ethical behavior (Janoff-Bulman et al. 2009), the application of our findings to ethical behaviors also cannot be made without further research. Previous work, however, offers some evidence that our findings would generalize beyond misrepresentation. For example, Gino and Pierce (2009) found a positive relationship between concern for others (a process we found more associated with

an ethical frame than business frame) and prosocial behavior. Moreover, Yip et al. (2018) found that individuals were more willing to cheat when they had little concern for others. It is also important to recognize that individuals engage in misrepresentation for both deceptive and prosocial reasons (DePaulo and Kashy 1998; Levine and Schweitzer 2014), thus making it possible that misrepresentation arises when people have ethical or unethical intentions. Future research should examine a broader group of dependent variables (Smith-Crowe and Zhang 2016), which will allow for greater understanding of business and ethical frames on ethical and unethical decision-making.

Similar to the majority of behavioral ethics research, the current research utilizes experimental designs (Smith-Crowe and Zhang 2016), which allow for insight into causal relationships and cognitive processing. The use of experimental design allowed us to utilize random assignment as well as to isolate the effects of frame from other factors that may affect such outcomes. As a result, we were able to show a clear causal relationship between frame and misrepresentation as well as identify the differentiating processes that are associated with each frame. Nevertheless, we recognize the limited generalizability of experiments that comes at the cost of our efforts to manipulate decision frame explicitly and clearly.

Relatedly, while the dictator game has a rich history in the decision-making and experimental economics literature, beginning with Kahneman et al. (1986), and previous work has demonstrated high correlations between results in the field and the lab (Anderson et al. 1999), it nonetheless is a contrived context. Our dictator games were also hypothetical in nature, which meant that participants were not basing their decisions on real payouts. Although research has examined the differences in results between real and hypothetical dictator games, the conclusions regarding the effect of offering actual payouts remain inconclusive (see Levitt and List 2007 for a review). Many, however, argue that payouts themselves matter less than the social expectations that people place on themselves regarding how much they should allocate to their partner (Hoffman et al. 1994) and these social expectations are present in both real and hypothetical versions of the game. Future research that examines the impact of incentives and whether they would change participants' patterns of behavior would be useful in further interpreting our results.

Our examination of the differences in business versus ethical frames was not meant to be exhaustive; we focused on the cognitive processing elements in which business and ethical frames arguably differ. However, we believe that future research should investigate other frames that likely impact ethical and unethical behavior and other processes associated with business and ethical frames. Further, business and ethical frames may differ not only in the content of the processing, but also in the structure

of the processing. For example, while framing effects are argued to be the result of fast, intuitive processing (Guo et al. 2017), with interventions to reduce framing effects focused on effortful processing (Baumer et al. 2017), business and ethical frames may differ in the extent to which they are deliberative versus intuitive.

We have also followed Goffman's (1974) arguments, assuming that although a person may adopt several frames in a given situation, there is often a primary frame that drives decision-making. However, it is worth considering the circumstances in which multiple frames are used in a decision. Corporate social responsibility (CSR) may be such an example, as it suggests that a person adopts multiple frames simultaneously in order to achieve the "triple bottom line" expected of those engaging in CSR (Aguinis 2011). Better understanding of whether there is a primary frame or if multiple frames operate simultaneously to affect employee behaviors is an important consideration for future research. We believe that the psychological processes associated with each frame can greatly assist in better understanding such questions. Further, we believe that future research that addresses these questions can complement our work, and similar work, by examining such questions in more complex field research using employees in real world contexts such as CSR.

While we have argued that the cognitive processes (cost–benefit analysis, concern for others, and construal level) are associated with a particular decision frame (e.g., business or ethical), it could be that these processes are separate from, and thus result from, the frame itself. As Dunegan (1993) argues, frames "act as a catalyst for different modes of cognitive processing" (p. 491). The Signaling-Processing Model (Tenbrunsel and Messick 1999) further articulates that the environment, frame, and cognitive processing are three distinct inputs into a person's ultimate behavior. Studies 3a–c raise the question of whether changing one of the processes (e.g., cost–benefit analyses) associated with a given frame (e.g., business) will change the frame itself (suggesting the processes are part of the frame), or whether the frame will remain the same (suggesting the processes result from the frame). The current research was focused on the processes that encourage or discourage unethical behavior, rather than the processes that might change the frame. Given the foundation that the current work provides on the relationship between frames and cognitive processes, we believe that the field would benefit from future longitudinal research that examines whether by changing a process, the frame itself changes. We hope our research provides stimulus for such future work.

## Conclusion

The unethical behavior of doctors in the NFL and executives at Volkswagen may have been avoided if these decisions had been made through an ethical frame or these individuals had engaged in processes (e.g., concern for others) that mitigate the unethical behavior associated with a business frame. Frames have a substantial effect on behavior, but our lack of awareness of how they affect behavior hinders our ability to improve such behavior (Goffman 1974). For those people and organizations in business who want to be ethical, but who, through bounded ethicality processes, fail in their efforts to do so, we hope that our research illuminates the influence of frames and the associated processes on their decisions, knowledge which in turn can help them improve their behavior.

## Compliance with Ethical Standards

**Ethical Approval** All procedures in this research involving human participants were in accordance with the Ethical Standards of the Institutional and/or National Research Committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

**Informed Consent** Informed consent was obtained anonymously from all participants in accordance with the standards of the institution.

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