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Abstract

The present thesis sought to explore the role of emotions and reason in ethical decision-making. To explain why and how individuals engage in unethical behavior I also investigated the mediating effects of moral disengagement. In addition, I measured the decision-making style of participants to better understand the impact it might have on ethical decision-making. Primarily the hypothesized model described the relationship such that deliberate decision-making mode would lead to more unethical decision-making, mediated by moral disengagement. To put my hypotheses to the test, using a between-subjects experimental design with two treatment groups, participants were presented with scenarios with an ethical dilemma and were instructed to use either their heart (affect) or brain (reason) when making decisions in the scenarios. The results show significant differences between the affect and reason treatment, in support of affect yielding more ethical decision-making than the reason treatment. However, the mediation model did not yield significant results, although a significant relationship between moral disengagement and ethical decision-making was found. Lastly, decision-making style conditionally interacted with the manipulation such that the deliberate decision-makers were more ethical than the intuitive ones, but only in the affect treatment. The findings in this thesis contribute to the field of judgment and decision-making, painting a potentially more nuanced picture of ethical decision-making. Furthermore, I hope the results here can be a catalyst for future research integrating the role of moral disengagement into the debate of emotional or reasoned ethics.

1.0 Introduction

A number of corporate scandals the last couple of decades has sparked an interest in how and why seemingly normal people engage in unethical behavior. The financial crisis of 2008 was a great example of how rational self-interest can spiral out of control and cause a great number of individuals to behave in what many might consider very unethical behavior. Some argued that the global financial crisis was in part due to corporate psychopaths who display a lack of conscience, few emotions, and an inability for empathy towards others (Boddy, 2011). Researchers have conducted a number of thorough investigations to explain the determinants and processes of unethical decisions (J. J. Kish-Gephart et al., 2010; Tenbrunsel & Smith-Crowe, 2008; Treviño et al., 2006). However, still much remains unclear about how and why we behave unethically. So, why is it that seemingly ordinary people make decisions that they know are unethical, and can differences in how individuals make decisions explain why some engage in more unethical decisions than others?

When it comes to decision making, the standard normative theory of intelligent choices involves deliberate and conscious analysis as the key to making the best choices (Kahneman, 2012). When it comes to moral psychology and ethical decision-making, this has been the prevailing idea as well (Kohlberg, 1963a; Piaget & Gabain, 1965; Turiel, 1983). Throughout history, philosophy and the worship of reason have been tightly linked (Haidt, 2001). The Scottish philosopher Hume, was one of few who opposed reason as the sole and chief guide to moral judgment, and proposed instead that morality was akin to aesthetics in that it was based on an "immediate feeling and finer internal sense" (Hume, 1777, p. 4). Nonetheless, German philosopher Kant (1959/1785), refuted Hume's emotivist perspective, and Kant's theory has been the most dominant with a much more significant impact than that of Hume, namely the rationalist ethical theory (Kant, 1959/1785).

More recent studies by researchers whose stance was within the rationalist perspective on ethical decision-making found evidence for the exact opposite, that it was in fact, emotions and impulses which drove ethical decision-making (J. J. Kish-Gephart et al., 2010; Zhong et al., 2010). Although Zhong et al.'s (2010)

hypotheses were in support of a rationalist perspective, such that more deliberation should yield more ethical decision-making, they actually found that

more deliberation on ethical dilemmas led to less ethical decisions. To follow up his finding in 2010, Zhong (2011) did a study where participants were primed to make decisions based on deliberation or intuition. Zhong (2011) found that a deliberate and analytical mindset in decision-making, as opposed to a more intuitive decision-making mindset, led to more unethical behavior. This indicates that there can be ethical dangers of deliberate and analytical decision-making.

So, how do individuals make judgments and decisions when faced with dilemmas of ethics and morality? The prevailing narrative has been that ethical decisions are made through a deliberate and rational decision-making process. Despite that, Haidt (2001) proposed a social intuitionist model of moral judgment as an alternative to rationalist models. In contrast to most prior models of ethical decision-making, Haidt proposed that moral judgment is an intuitive and automatic process of reaching a judgment, which is then followed by post hoc reasoning seeking to justify the intuitive judgment that is already made. In addition to taking the stance that moral judgment is a result of intuition and post hoc reasoning, the model also emphasizes social and cultural influences on our moral judgment (Haidt, 2001). Nevertheless Haidt's (2001) approach represents a different perspective to the prevailing one in ethical decision-making, namely one that emphasizes affect and intuition in ethical decision-making as opposed to reasoning.

In a similar vein, but with a different approach, Damasio (1994) discovered, by studying patients with damage to the ventromedial prefrontal cortex (VMPFC), that emotional centers of the brain play an important role in individuals' ability to make value-based decisions, including decisions of morality and ethics. To explain the role emotions, have in our decision-making, Damasio (1994) provided the somatic marker hypothesis, which emphasizes the important signals our emotions represent for decision-making. There is no doubt that emotions can negatively influence our decision-making with the many biases that exist in how we perceive, judge, and make decisions (Kahneman, 2012). However, the absence of emotions turns out to be potentially just as dangerous (Damasio, 1994).

Thus, emotions seem to play an important role in ethical decision-making as they can represent signals of right and wrong. Exploring this relation further is the key focus of the present study. By looking at the effect of emotional versus

rational approaches to ethical decision-making, I hope to gain further understanding of the potential importance of emotions when it comes to morality and ethics.

Though there are some studies suggesting that operating rationally and deliberately can lead to more unethical decisions, few, if any, studies have explored precisely why rational decision-making can produce more unethical behavior. One of the ways researchers have explained unethical behavior among seemingly ordinary people is through the use of rationalizations. More specifically, it has been shown that unethical behavior can be enabled by moral disengagement (Detert et al., 2008), a cognitive mechanism that decouples our internal moral standards from how we construe our behavior, which renders said standards ineffective (C. Moore, 2015). Moral disengagement can therefore explain why and how otherwise good people can end up engaging in unethical behavior (Bandura, 1999). Newman et al. (2020) reviewed the relation between moral disengagement and the many corporate scandals that have been researched in the past decades, illustrating that the phenomenon potentially explains how we can engage in unethical behavior without feeling distressed. Considering moral disengagement as a form of rationalization, it would be interesting to see whether there is a greater tendency to engage in moral disengagement when a more rational and deliberate decision-making mode is active.

2.0 Research Question

To investigate the effect of different decision-making approaches, on ethical behavior, and the role of rationalization processes such as moral disengagement, the research question is formulated as the following, “What is the relationship between the way we make decisions, through affect or reason, the use of moral disengagement, and ethical decision-making (Ethicality)?”

This research question should allow me to investigate the relationship between the way people make decisions, whether its deliberate or affective, and the extent to which they engage more or less in moral disengagement and consequently whether they behave ethically or not.

3.0 Literature Review

In this section I will review relevant literature primarily concerning ethics, ethical decisions-making, and moral disengagement.

3.1 Ethics

Discussing ethical decision-making, requires a foundation of ethics in general to better understand the perspectives, how they interact with moral dilemmas, and how they might connect to modern psychology.

3.1.1 Moral Philosophy & psychology

In moral philosophy, we can generally distinguish between utilitarian and deontological approaches to normative ethics. Utilitarianism considers the moral choice the one that maximizes utility or pleasure (Kvalnes, 2019). Utilitarianism is also distinguished by impartiality and agent-neutrality, so the good "I" experience counts the same as anyone else's (Driver, 2014). Deontology, however, determines what is morally right by checking the qualities of the actions against certain rules which then constrain your potential actions (Bartels, 2008). The best way to illustrate the differences between these two schools of moral philosophy is through moral dilemmas. The most famous of which is arguably the trolley dilemma (Foot, 1967), wherein you have to decide to flip a switch or not, where flipping the switch means you save five people, but your action kills one person. Flipping the switch would create the most amount of good (the utilitarian choice) since five people are saved while one person is killed. The other option is to refrain from action out of principle (the deontological choice), which means five people die and one survives. In the footbridge problem (Thomson, 1985), however, the only way to save the 5 people is to push a fat man down from a bridge and onto the railway. People tend to think that flipping a switch to save five people, but killing one is acceptable, but that pushing a man from the bridge to his death is wrong (Bartels, 2008). Deontologically speaking, killing someone in both dilemmas is wrong, but from a utilitarian perspective, the morally right thing to do is to kill one person to save five in both scenarios. Though most would have a hard time admitting that pushing a man from a bridge is the morally right thing to do.

Moral dilemmas that create conflict between these deontological and utilitarian perspectives can often come up in our professional as well as in our personal lives. An example of such a conflict could be a manager having to fire an employee, a situation wherein the manager does not want to cause harm, but also wants to serve the greater good of the company. In such situations, people will often appeal to utilitarian logic to justify harm done to others, known as "necessary evils" (Molinsky & Margolis, 2005). When carrying out those necessary evils, causing harm to another human being in the pursuit of a greater good, people tend to try to detach themselves emotionally and display behavior lacking in interpersonal sensitivity (Lee & Gino, 2015). Some studies have shown that people who engage in more deliberative thinking will make more utilitarian judgments (J. D. Greene et al., 2004). Furthermore, J. D. Greene et al. (2004) explain that their neuroimaging and behavior results indicate that emotional responses are what drives us to disapprove of personal moral violations and that deliberate thinking, in the form of cognitive control processes, can override those emotional responses in favor of personal moral violations if the benefits sufficiently outweigh the costs. Building on that, Lee & Gino (2015) found that utilitarian decisions were more frequent among participants who were asked to suppress their emotions as opposed to when they did not regulate their affect.

3.1.2 Defining Ethical Behavior

The biggest crux of ethical decision-making is perhaps the difficulty in defining what is ethical and what place making a definition has in social sciences (Tenbrunsel & Smith-Crowe, 2008). Several authors argue that it is beyond social science to make any definitions. Ferrell & Gresham (1985) are an example who explicitly stated that their concern was with examining determinants and contexts of ethical decision-making in the managerial process and not with advocating a moral doctrine. Tenbrunsel & Smith-Crowe (2008, p. 549) cited Warren and Smith-Crowe, who described the issue of defining ethics faced by researchers as the following. "… researchers only want to predict and describe ethical behavior, but in doing so, they must define what is ethical, and, therefore, they must be in some sense prescriptive" Nonetheless, there are those that venture to make such steps. Jones (1991) provided the following definitions: "An ethical decision is a

decision that is both legally and morally acceptable to the larger community. Conversely, an unethical decision is a decision that is either illegal or morally unacceptable to the larger community" (p. 367). Jones (1991) admits that this definition is imprecise and relativistic. Treviño et al., (2006) provided the following definition: "individual behavior that is subject to or judged according to generally accepted moral norms of behavior." (p. 952). This definition accounts for unethical behaviors, such as lying, cheating or stealing, as well as ethical behavior that reach a minimal moral standard such as honesty or obeying the law. The definition additionally comprises ethical behavior beyond a minimal standard, such behaviors as charitable giving and whistleblowing. In the quest for a definition one might seek guidance in moral philosophy, where Deontological theories could prove to be best suited for classifying a dependent variable, since right or wrong is defined *a priori,* and is thus a construct that remains constant across contexts (Kant, 1959; Rawls, 1999). Nevertheless, to make ethical decision-making easier to work with a general definition that can be used is "… general dishonesty, such as cheating or lying" (Dubois et al., 2015, p. 5). For the purposes of this study the unethical act of cheating will be the primary focus, which is coincidentally somewhat easier to establish and recognize as an unethical act.

3.1.2.1 Cheating

In the field of behavioral ethics the study of dishonest behavior in the form of cheating has seen increased interest (Bazerman & Gino, 2012; Gino & Shalvi, 2015; Mazar et al., 2008). Cheating can be defined as "behavior accruing benefits to the self that violates accepted standards or rules" (Shu et al., 2011; see Jones, 1991, for a similar definition). In the literature cheating and dishonest behavior or dishonest gain is usually discussed about somewhat interchangeably (J. D. Greene & Paxton, 2009; Mazar et al., 2008). Evidence suggests that a considerable proportion of individuals evaluate the potential gains and become more inclined to behave dishonestly as incentives increase (Hilbig & Thielmann, 2017). There are also various potential costs to cheating, such as sanctions and punishment as external costs (Becker, 1968). However, external costs and benefits do not accurately predict cheating behavior (Bazerman & Gino, 2012; Fischbacher & Föllmi-Heusi, 2013). Psychological approaches seem to paint a more accurate

picture by including the internal or psychological costs of cheating and dishonest behavior in the pursuit of personal gain (Bazerman & Gino, 2012).

Mazar et al. (2008) found that the decision to cheat incurs a threat to the moral self-image an individual has, thus people engage in cheating for profit, but only to a certain extent. This way they can retain a postive self-image and even regard themselves as equally honest as someone who did not engage in dishonest behavior at all. This phenomenon can likely be explained by processes for alleviating cognitive dissonance, which will be explained later on in the literature review. Regardless of the influence of external and internal costs on decisions to cheat, it has been shown that incentive size does matter for ethical decision-making (Hilbig & Thielmann, 2017). Thus, understanding the decision-making process might help in understanding how and why individuals come to behave unethically.

3.2. Ethical decision-making

Despite how widespread and prevalent unethical behavior is (C. Moore et al., 2012), individuals generally do care about behaving ethically (Aquino & Reed II, 2002). So, the question is primarily how and why it is that many still engage in unethical behavior. Moral and ethical decision-making has typically been viewed through the lens of rationality, assuming that people make a deliberate and conscious analysis when making decisions involving ethics (Tenbrunsel & Smith-Crowe, 2008). Deliberate decision-making has a very strong normative connotation to it, in that it is largely assumed to be the same as better decision-making (Zhong, 2011). Many pages are dedicated to helping people make better decisions by being more rational, systematic, and analytical (Kahneman, 2003; Tversky & Kahneman, 1974). The rational approach is rarely challenged and permeates the underlying assumption of decision models, namely that decision-makers ought to be deliberate and analytical (D. A. Moore & Flynn, 2008). However, researchers increasingly argue for emotion's in moral judgments and ethical decision-making (Damasio, 1994; Haidt, 2001; Teper et al., 2015).

3.2.1. Rational Decision-making

The rationalistic perspective on ethical decision-making assumes it is a process of rational deliberation. The weight of the rationalistic perspective on

ethical decision-making is said to be largely influenced by Kohlberg‘s (1963) model of moral development, where he sees morality as a function of reason and cognition (Haidt, 2001; Zhong, 2011). More specifically, he stated that “moral reasoning is the conscious process of using ordinary moral language” (Kohlberg et al., 1983). Building on Galotti‘s definition of reasoning, Haidt (2001) provided a definition of moral reasoning as the following: “conscious mental activity that consists of transforming given information about people in order to reach a moral judgment” (p. 818). Conscious process here means intentional, effortful, and controllable. Though Kohlberg saw ethical decision-making as a very conscious and non-affective process, he did account for emotions in his model, though emotions were seen as neither moral nor immoral, moral mechanisms were purely cognitive in nature (Kohlberg, 1971).

Kohlberg (1963) outlined three cognitive levels that indicate level of maturity in moral judgment, namely the pre-conventional, conventional, to the post-conventional level. The three levels can be described as the following. In the pre-conventional level moral reasoning is almost entirely egocentric and tends to judge morality based on physical (e.g., punishment) or hedonic consequences. At the conventional level morality is judged on the basis of societal views and expectations, here the influence of norms and societal conventions is strong. The post-conventional level of thinking (principled thinking) sees individuals as separate entities from society “who believe that laws should be obeyed not as rigid dictums but as ways to promote general social welfare” (Zhong, 2011, p.2). Moving from pre-conventional to post-conventional means you move from relying on personal reactions (e.g., fear of punishment) to judging based on abstract reasoning.

The rationalistic tone has pervaded in the research on ethical decision-making, where the process is seen as systematic and calculative (Treviño et al., 2006). Rest‘s (1986) model of moral judgment follows a similar pattern in that it requires moral awareness and intent in the process of reaching a moral decision. Though Kohlberg did acknowledge the role of emotion in early moral development, he considered post-conventional reasoning as the most sophisticated wherein an impartial point of view is assumed (Narvaez, 2010). However, the position of the rationalist approach to ethical decision-making has been questioned as more recent studies show that biases, as well as intuition and

emotion can have an impact on ethical decisions, which cannot easily be reconciled with the rationalist approach (Tenbrunsel & Smith-Crowe, 2008).

3.2.2. Biased Decision-making

Ethical decision-making like all other forms decision-making can be influenced by biases. Biases in our perception of the world cause us to make inaccurate judgments, ethnocentrism and stereotypes lead us to put too much weight on our own values and beliefs and judge them as superior to others. (Tenbrunsel & Smith-Crowe, 2008). Framing, for example, has been shown to have a demonstrated effect on ethical decision-making, in which "decision makers engaged in more unethical behavior if a decision was presented in a loss frame than if the decision was presented in gain frame" (Kern & Chugh, 2009). Trust in authority, stemming from an authority heuristic (Darley et al., 2001), can sometimes lead us astray and result in unethical behavior (Milgram, 1974). Illusions of superiority, self-serving perceptions of fairness, and overconfidence lead us to believe that we are more ethical than we are, think our assessments are more accurate than they might be and believe that the "fair" solution is the one that serves us the most (Tenbrunsel & Smith-Crowe, 2008). In sum, ethical thinking and behavior are prone to the same mental processes and pitfalls as our thinking and behavior outside the realm of ethics (Bazerman & Messick, 1996). As such, our understanding that the ethical decision-making process is a rational one is at the very least flawed. Even if we believe we are making rational choices, we could be influenced by a wide range of heuristics and biases.

3.2.3. Affective Decision-making

A growing body of literature challenges the fact that ethical decision-making is rational and proposes instead that it is affective, as claimed in Haidt's (2001) Social Intuitionist Model. The central claim of the model is that moral judgment is caused by quick moral intuitions, which is followed by ex post facto moral reasoning (Haidt, 2001). Haidt's (2001) model describes a process wherein the first step is an intuitive moral judgment that appears in consciousness automatically and effortlessly. This judgment is then followed by a post hoc moral reasoning, an effortful process that primarily searches for explanations for the

already made moral judgment. Later comes the stages of social and cultural emphasis as individuals will aim to justify their stance to others by verbalizing their reasoning. The last of the four primary stages of the model is concerned with social persuasion, wherein the influence of others on the individual is acknowledged.

Moral judgment is defined by Haidt (2001) as "evaluations of the actions or character of a person that are made with respect to a set of virtues held to be obligatory by a culture or subculture". Moral reasoning, as defined by Haidt (2001), is a conscious mental activity that, in accordance with Galotti's (1989) definition of reasoning, specifically excludes gut reactions, sudden flashes of insights, one-step mental processes, etc. Moral intuition, on the other hand, can be defined as "the sudden appearance in consciousness, or at the fringe of consciousness, of an evaluative feeling (like-dislike, good-bad) about a person or event without any conscious awareness of having gone through steps of weighing evidence, crafting evaluative arguments, or inferring a conclusion" (Haidt & Bjorklund, 2007, p.188).

Initial empirical support for the Social Intuitionist Model was based on scenarios that evoke feelings of disgust (Haidt et al., 1993). An interesting illustration of the link between morality and feelings was provided by Zhong & Liljenquist (2006) who found that moral transgressions "feel dirty", wherein being reminded of prior unethical behavior made participants feel a greater need to physically clean themselves. While Haidt (2001) simply states that the process of reaching moral judgment is an intuitive one, that is the limit of his proposal, he does not necessarily argue that affect makes you behave more ethically, though there are some who argue that emotion can lead to more ethical decision-making (Martineau et al., 2020; Zhong, 2011).

Damasio (1994) presented another approach to illustrate how emotions play an important role in decision-making through the study of patients who suffered from ventromedial prefrontal cortex (VMPFC) damage, which causes the loss of emotional responsiveness in a general sense. By studying patients with damage to the VMPFC, Damasio (1994) found that despite the patients showing no reduction in reasoning or knowledge about moral rules and norms, they showed no physiological response to pictures that would normally arouse strong

skin conductance in people without brain damage. Patients' response was similar how psychopaths respond to such experiments.

The loss in emotional responsiveness meant that although the patients had normal reasoning abilities, they were unable to make adaptive, value-based decisions in both practical and moral contexts and were thus more likely to display antisocial behaviors (Bechara et al., 1994, 1996; Damasio et al., 1990). When describing one of the patient's relation to decision-making, Damasio (1994, p. 51) stated: "I began to think that the cold-bloodedness of Elliot's reasoning prevented him from assigning values to different options and made his decision-making landscape hopelessly flat." Similarly, Greene & Haidt (2002) found that people who had suffered neurological damage to the parts of the brain that handle emotions had decreased abilities for moral reasoning.

In describing the role of emotion in decision-making, Damasio (1994) outlined his somatic marker hypothesis. According to this hypothesis, bodily signals represent important information about the right course of action. The signals themselves are based on learning, and emotional responses have been connected to predicted future scenarios associated with the given choices in the course of action. A somatic marker is essentially a sensation in our body, a feeling, that is associated with a given option and its related outcome. Those feelings have been connected to a predicted future outcome through learning. Thus, when juxtaposed to a future outcome, a negative somatic marker will function as an alarm bell, and a positive somatic marker will function as an incentive. Damasio (1994) saw the Somatic Marker Hypothesis as contrary to the "high reason" view on decision-making, which is that decision-making is best done through formal logic and rational processing that is separated from emotions. By listening to the signals from the somatic markers, Damasio (1994) argued one could increase the accuracy and efficiency of the decision process. Furthermore, Damasio (1994) stated that "somatic markers do not deliberate for us. They assist the deliberation by highlighting some options (either dangerous or favorable) and eliminating them rapidly from subsequent consideration." (p.174). By providing an automated detection of the most relevant aspects of a scenario, somatic markers reduce the need for us to sift through them in our own analysis. But more importantly, the research done by Damasio and his colleagues suggests the vital role that emotions play in making ethical decisions and how the lack of emotions

can produce more unethical behavior. A point that illustrates the critical difference different modes of decision-making can yield in ethics and morality.

There are some activities outside the realm of ethics where the involvement of intuitive processing produces better results than rationality and reason. Ambady & Rosenthal (1993) found that students can form accurate impressions of a teacher‘s skills and performance in half a minute, even if they cannot recognize or articulate what gave them their impressions. Sometimes our choices are made based on unconscious factors which are hard to articulate, and thus we might opt for a more recognizable explanation that is more readily available to us, such as the color of a product or its shape. Wilson & Schooler (1991) found that people who were asked to think more deliberately about their preferences opted for products of poorer quality than those who based their choice on intuition. The idea is that spending more time explaining why they like a particular choice may cause them to place too much value on nonoptimal criteria rather than the more important criteria, which are more immediately apparent. Zhong et al. (2010) found similar results for ethical decision-making, in that the more deliberation time participants had, the less ethical were the choices they made. Thus, our ability to make ethical choices might depend on criteria which are influenced by emotion and intuition rather than factors available through conscious deliberation (Haidt, 2001; Zhong, 2011).

3.2.4. Differences in Decision-making

The distinction between rationalistic ethical decision-making and more intuitive moral judgment corresponds with dual-processing models of reasoning such as thinking-conceptual-logical versus intuitive processing (Jung, 1968), extensional versus heuristic processing (Tversky & Kahneman, 1983) and System 1 and System 2 (Stanovich & West, 2000). These models distinguish between automatic, largely unconscious, quick, intuitive, and more emotionally charged processing (System 1 or Type 1 processing), with rational, slow, conscious, deliberate, analytical, rule-based processing, also known as System 2 or Type 2 processing (Stanovich & West, 2000; Zhong, 2011). The rule-based aspect of System 2 processing might explain why priming economic schema, wherein rational self-interest is a rule of conduct, produces less compassion (Molinsky et al., 2012). Some have induced intuitive decision-making with time pressure and

found that it increased cooperation (Tinghög et al., 2013). Similarly, Foerster et al. (2013) found that participants were more honest when they were asked to report a dice roll immediately as opposed to when they had more time.

In addition to different decision-making processes, there are individual differences in how much we rely on intuition and deliberation when making decisions (Gärtner et al., 2022). Individual differences describe a disposition in the individual (Allport & Odbert, 1936), which can interact with induced states (Betsch & Kunz, 2008). Decision-making style has been found to correlate with specific personality traits, underscoring the trait-like characteristics. Betsch (2004) found that a preference for deliberation was correlated with the personality trait conscientiousness, and intuition with extraversion and openness to experience.

Combining the previously mentioned differences in decision-making, Gärtner et al. (2022) sought to investigate the joint effect of induced decision processing (i.e., affect or reason) and individual differences in decision-making styles on prosocial behavior. Through a series of commonly used incentivized games (prisoner's dilemma game, public goods game, trust game, dictator game), Gärtner et al. (2022) found that the affective decision-making mode increased prosocial behavior. Decision-making style, however, did not impact prosocial behavior, nor did it have an interaction with decision-making mode.

3.4. Moral Disengagement

While the fact that relying on either emotional or rational modes of ethical decision-making can have an impact, it does not tell us much about why or how you can behave unethically whilst being rational. Although insight into the cognitive processes that happen during decision-making in ethics can explain how we make unethical choices, the connection to any specific mode of decision-making is not established. Here I will discuss the literature on a well-established cognitive process of rationalizing unethical behavior, namely moral disengagement.

Originally described by Albert Bandura in his social cognitive theory (Bandura, 1986), moral disengagement is a cognitive mechanism that decouples our internal moral standards from how we construe our behavior, rendering our internal standards ineffective and countering any self-sanctions that would have

occurred (Bandura, 1990; Bandura et al., 1996). The concept of moral disengagement builds heavily on prior work on rationalization (Cressey, 1953) and neutralization (Sykes & Matza, 1957), concepts that similarly illustrate how individuals can explain and justify their unethical behavior (Newman et al., 2020). The reason individuals may feel the need to rationalize is due to the discomfort they feel and that they seek to alleviate. This discomfort is due to experienced cognitive dissonance, a cognitive process that occurs when our beliefs about ourselves are at odds with our behavior (Shu et al., 2011). Cognitive dissonance can be defined as "an experience in which individuals encounter psychological discomfort when they simultaneously have thoughts that are in conflict with each other" (Atingdui, 2011, p. 380).

Moral disengagement refers to eight cognitive mechanisms which all facilitate unethical behavior without feeling distress (C. Moore, 2015). Specifically, the eight mechanisms are moral justification, euphemistic labeling, advantageous comparison, displacement of responsibility, diffusion of responsibility, disregard or distortion of consequences, dehumanization, and attribution of blame (Bandura, 1991, 1999; Bandura et al., 1996). These mechanisms overlap significantly with rationalization mechanisms highlighted in prior work on the concepts (Ashforth & Anand, 2003).

The eight mechanisms fit into four categories of "loci": Behavioral, agency, outcomes, and victim (Bandura, 1999) (See table 1 for an overview). In the behavioral locus, moral justification is the first of three, and "moral justification is the process by which immoral conduct is justified as being acceptable by the perpetrator, in that it serves a social or moral purpose" (Bandura, 1999). Next is, Euphemistic labeling, which is a form of verbal sanitization of the immoral act to make it more acceptable. An example provided by Bandura (1999) is how military operations frequently describe civilian deaths as "collateral damage". Advantageous comparison makes the immoral conduct seem more acceptable by comparing it to perceivably worse conduct (Newman et al., 2020). In the agency loci the perpetrator will rationalize the ways in which they make sense of their own choices and actions. Displacement of responsibility is one of these mechanisms, wherein the perpetrator will argue that they are not responsible for the immoral act and instead that an external force or someone higher up in the organizational hierarchy is to be blamed (Bandura, 1999).

Diffusion of responsibility is another mechanism where the perpetrator is unwilling to take on responsibility for the immoral behavior of a group by virtue of the perpetrator not feeling personally responsible. The loci of outcomes include one associated mechanism, namely disregard or distortion of consequences. The perpetrator will simply choose to ignore the harm that they have caused, make it out to be less severe than it actually is, or contend that there was no harm done at all (Bandura, 1999). The last locus focuses on how the perpetrator addresses the victim of the immoral act. Bandura (1999) refers to dehumanization as the perpetrator treating the victim as being worthy of harm or being less human than others. The second mechanism in this locus is attribution of blame, which allows the perpetrator to relieve themselves of responsibility by casting blame onto others, typically the victim, for the immoral act.

Bandura proposes that the mechanisms occur in a specific order, a linear process wherein one can only get to the last loci and the associated mechanisms by progressing through the others, however, this has not been confirmed or disconfirmed by research (Newman et al., 2020).

Locus of disengagement	Associated mechanisms
Behavioral	1. Moral justification
	2. Euphemistic labeling
	3. Advantageous comparison
Agency	4. Displacement of responsibility
	5. Diffusion of responsibility
Outcomes	6. Disregard or distortion of consequences
Victim	7. Dehumanization
	8. Attribution of blame

Table 1. *Loci and mechanisms of Moral Disengagement (Adapted from Newman et al., 2020).*

Bandura argued that moral disengagement could explain why seemingly ordinary people can engage in unethical behavior without apparent guilt or self-censure (Bandura, 2015). Broadly speaking, moral disengagement has been linked to unethical decision-making (for reviews, see Detert et al., 2008; Newman et al., 2020). Newman et al. (2020) reviewed the myriad of unfavorable outcomes at the organizational, group, and individual level of moral disengagement. Some of the

mentioned individual level outcomes in organizations were unethical pro-organizational behavior, cheating, social loafing, interpersonal deviance, delinquency, workplace harassment, and employee silence. There is also research illustrating some of the antecedents of moral disengagement, more specifically, empathy and moral identity are inversely related to moral disengagement, whereas trait cynicism and chance locus of control are positively related to moral disengagement (Detert et al., 2008). Interestingly organizational identification has also been found to be an antecedent of moral disengagement (Chen et al., 2016).

3.4.1. Recent Reconceptualization of Moral disengagement

In their recent article, Schaefer & Bouwmeester (2021) challenge how moral disengagement is now conceptualized, stating that initially, moral disengagement was conceptualized as a process through which people reconstrue unethical behaviors with the effect of deactivating self-sanctions, and thereby clearing the way for ethical transgressions. Although Bandura primarily discussed moral disengagement as a process, it is now usually conceptualized as a trait (C. Moore, 2015). This is a lack of consistency in conceptualization which has also been noted in a recent review (Newman et al., 2020).

As a trait moral disengagement represents a propensity to morally disengage. As described by Detert et al. (2008) "some people will be more predisposed to moral disengagement than others" (p. 374). Consistent with the social-cognitive perspective on personality (Cervone & Shoda, 1999), Bandura did view a tendency to morally disengage as a result of a "triadic reciprocal causation" (Bandura, 1986), wherein cognition, behavior, and environment interact and determine each other. Nonetheless, conceptualized as a trait it still goes against such an interaction because "as a trait, it does not operate selectively, but it represents a general and rather stable entity" (Schaefer & Bouwmeester, 2021). Specified further dispositional moral disengagement is a "relatively stable characteristic of a person—an attribute, enduring process, or disposition—which is consistently manifested to some degree when relevant, despite considerable variation in the range of settings and circumstances" (Messick, 1987, p. 5). Whereas as a process moral disengagement should be captured as a state variable

"conceptualized as temporary conditions of mentality or mood, transitory levels of arousal or drive, and currently evoked activity or process" (Messick, 1987, p. 6).

Ultimately, Schaefer & Bouwmeester (2021) posit that the literature is overly liberal and mixes two distinct constructs, process moral disengagement and the propensity to morally disengage (individual difference), thus creating ambiguity in the findings. The authors (2021) also state that the current definition is too conservative in that it perpetuates defining moral disengagement through eight psychological mechanisms, which narrows our understanding of the phenomenon. They argue that we should be open to the idea that there might be more mechanisms than just the eight. To address the problems, Schaefer & Bouwmeester (2021) states:

> We propose to define process moral disengagement intentionally (specifying the necessary and sufficient conditions for correct application of the term) as intrapsychic cognitive reasoning processes through which people selectively reconstrue a moral judgment "behavior B by actor A is morally wrong" and shift it toward becoming "behavior B is not morally wrong" or "actor A is not responsible for behavior B."

Schaefer & Bouwmeester (2021) present a two-dimensional graphical representation of process moral disengagement as seen in Figure 1, where one dimension is reconstruing morality and the other is reconstruing agency.

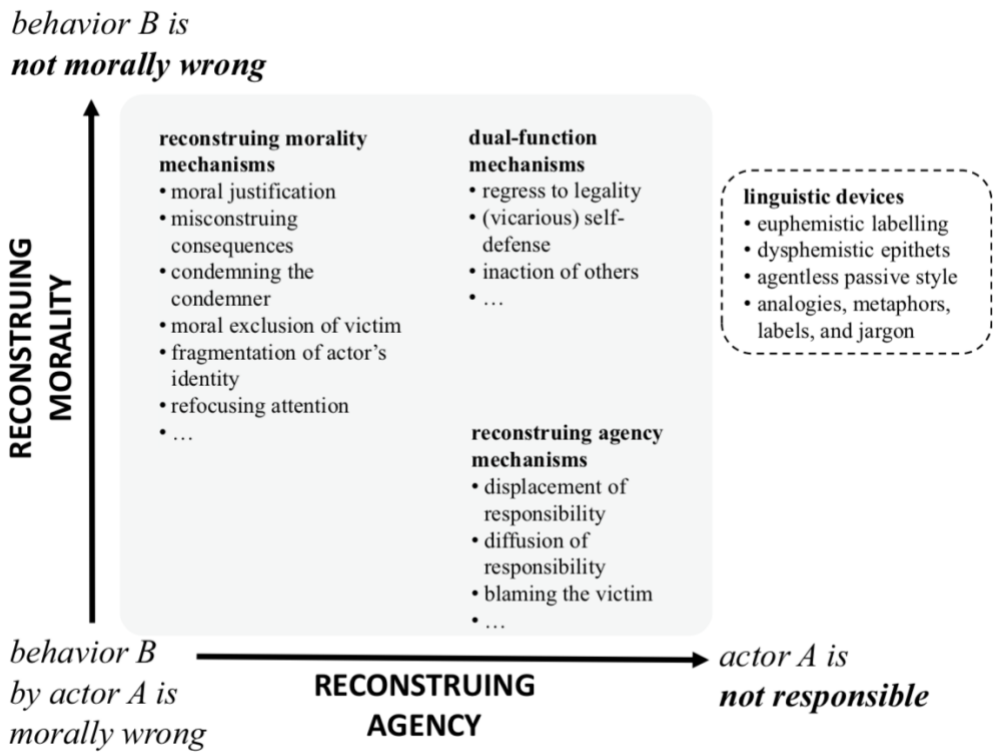

Figure 1. *Process moral Disengagement (open inventory) (adapted from Schaefer & Bouwmeester (2021)).*

3.5. Research gap

The important role of emotion and intuition, and the potential pitfalls of deliberation in ethical decision-making are topics that have increasingly been presented in research over the last decade (Martineau et al., 2020; Teper et al., 2015; Zhong, 2011; Zhong et al., 2010). However, little research has been done to illustrate the role of moral disengagement in the discussion of rational versus affective ethical decision-making. Moral disengagement has been shown to be related to unethical decision-making (Newman et al., 2020), but the link between decision-making mode and moral disengagement is not clear.

4.0 Methodology

In this chapter, I will discuss the methods and research approach used in this thesis. From describing the overall design, the hypotheses, manipulating the independent variable, different measures used, and data analysis.

4.1. Research Design

A quantitative method approach was used to test the hypotheses and gather data. Quantitative research is informed by objectivist epistemology, and it emphasizes the measurement of causal relationships between isolated variables based on *a priori* theory and deductive reasoning (Bell et al., 2018; Yilmaz, 2013). Given that this study seeks to determine the relationship between predictors, mediator, moderator, and a dependent variable, this research approach seems most appropriate.

In order to establish a cause-and-effect relationship, this study utilized an experimental design (Trochim & Donnelly, 2001). More specifically, this study utilized a between-subjects experimental design with two treatment groups, one with affective decision-making mode manipulated and the other with rational decision-making mode manipulated.

All the materials were taken from published research on ethical decision-making (Gärtner et al., 2022; Zhong et al., 2010) and moral disengagement (Shu et al., 2011), and were used in their original form with the exception of vignette 1, which was altered slightly to explain the meaning of the word "cramming" as most respondents would not be native English speakers (See Appendix D for alteration).

As stated previously the research question for this thesis was "What is the relationship between the way we make decisions, through affect or reason, the use of moral disengagement, and ethical decision-making (Ethicality)?" This research question should guide the investigation of how different decision-making modes relate to moral disengagement and ethical decision-making, along with the influence of individual differences in decision-making styles. To investigate the research question, the following hypotheses were formulated:

Hypothesis 1. Manipulation induced Decision-making mode (i.e., being instructed to rely on one's "Heart" or on one's "Brain") will influence the Ethicality of decision-making

> *Hypothesis 1a. Deliberative ("brain" condition) decision-making mode will produce less ethical choices relative to the affective ("heart" condition) decision-making mode.*

Hypothesis 2. The relationship between Rational decision-making mode and Ethicality will be mediated by moral disengagement.

Hypothesis 3. Moral disengagement will have a negative relationship with Ethicality.

Hypothesis 4. Individual differences in decision-making style (tendencies for more intuitive vs. more deliberative thinking) will not interact with the manipulation ("heart" vs. "brain" condition).

Decision-making mode refers to the different ways we make decisions, as discussed in the literature review, one being affective and the other rational. Ethicality refers to the score of how ethical or unethical the decision participants make in given scenarios are. This will be explained further later in the chapter.

4.2. Participants & Sampling

For this study non-probability sampling in the form of convenience sampling was utilized. Although not ideal (Bell et al., 2018), this sampling method was used due to limited resources for more appropriate sampling methods. Participants were reached through social media posts and direct messages. The study was titled "Decision-making and Decision-making style" with a general description of the study that did not explicate the specific purpose of the study. *A priori* the goal for this study was to have a sample of 250 participants. A total of 248 participants accessed and started the survey. However, only 162 participants finished the survey in its entirety. As a measure to improve data quality, the survey included an attention check at the end of the survey, which would filter out participants based on whether they read the attention check question thoroughly. 14 participants did not pass the attention check and were thus removed from the dataset, leaving the dataset with 148 participants. The subjects of the study were 50% male (N= 74), and 50% female (N= 74). The age range was 18 – 84, with a mean age of 28.9 years (SD= 9.66) and most participants were highly educated, holding a Bachelor's Degree (N=69), Master's Degree (N=64), PhD or higher (N=1), with the rest holding degrees from Middle School (N=1), High School

(N=9), and Trade School (N=4), with the mode among participants being to hold a Bachelor‘s Degree.

4.3. Experimental Design

I designed an online survey using the questionnaire software Qualtrics. In a between subjects design, subjects were randomly assigned into the two treatments, either affective- or rational decision-making mode, which instructed participants to make their decisions based on affect or reason with direct instructions intervention (Horstmann et al., 2010). The Ethicality of participants' decision-making was measured through their answers to vignettes. I also included self-report measures of moral disengagement and individual differences in decision-making style.

4.4. Manipulation

Originally adapted from Levine et al. (2018), I used an identical instruction for inducing specific decision modes as those used by Gärtner et al. (2022). To induce the desired decision-making mode, the affect treatment instructed participants to rely on their emotions (but not their reasoning) when making decisions in the scenarios, while the reason treatment instructed participants to rely on reason (but not their emotions). Participants in the affect [reason] treatment received the following instructions.

«Sometimes people make decisions by using reason and relying on their brains. Other times, people make decisions by using emotion and relying on their hearts.

Many people believe that the heart [brain] is the part of our body that is most connected with good decision-making. When we feel with our hearts [think with our brains], rather than think with our brains [feel with our hearts], we make emotionally [rationally] satisfying decisions.

In this part of the experiment, please make your decisions by relying on your heart [brain], rather than your brain [heart].»

The last sentence of the manipulation was repeated after each scenario text, right above the four choice options, to remind participants of the instructed decision-making mode right before making a decision.

4.5. Measures

4.5.1. Vignettes

Research in business ethics generally relies on one of two methods, direct questions or vignette-related questions (Hyman & Steiner, 1996). Though vignettes or scenarios are a useful way to examine how people make decisions, there is an issue of generalizability as certain choice scenarios may be unrealistic (Weber, 1992). However, in comparison with direct questions, vignettes offer some advantages for researching ethical behavior. Hyman & Steiner (1996) explain that vignettes provide greater realism by offering contextual factors that approximate real-life decision-making and furthermore provide standardized stimuli to all participants, something which enhances internal validity, measurement reliability, and replication possibilities. On the basis of what has been discussed, this study will therefore utilize vignettes as a method for investigating ethical decision-making.

Consistent with recommendations, this study utilized already developed and tested scenarios (Weber, 1992). In order to examine the effects of reasoning on ethical choices, I used vignettes created by Zhong et al. (2010). The original set of vignettes included a wide variety of different situations relating to behaviors that serve individuals' own self-interest. The remaining scenarios described situations wherein individuals could take advantage of others' benevolence, while some had the focus on individual's responses to unexpected opportunities for gains or losses (Zhong et al., 2010). The ones utilized in this study may be best categorized as measuring individuals' responses to adventitious gains or losses in an organizational context. Stated differently, participants were given an opportunity to cheat for their own gain. One of the vignettes used describes the following scenario:

> *You work for a large high tech company that has been segmented into similar but competing depart- ments. Two teams from your company are working independently on the same project. In order to motivate the teams, the CEO will give the team that finishes first a substantial monetary bonus. Your team is almost finished, but you've hit some pro- gramming difficulties and have made little progress for a week. While sitting at a*

nearby café, you overhear some people discussing your programming conundrum. It occurs to you that this is the other team and that they have just solved a similar problem. You realize that your team could really use what you are now hearing without the other team knowing. What do you do? (Zhong et al., 2010, p. 336).

The scenarios include four choices which are ranked according to how much they benefit the respondent decision-maker at other‘s cost (i.e., Ethicality). For instance, in the scenario above, participants were given the following four options ((score 1 – 4), 4 being the highest/most ethical): take notes and use them (1), take no notes, but listen carefully and use what you remember (2), ignore their conversation (3), or leave without listening any further (4). The Ethicality rankings were validated in a pretest done by Zhong et al., (2010), which also provided average (normative) Ethicality ratings for the behavioral options. Consequently, the ethical ranking of the choice options in the scenarios is pre-defined and the same ranking will be used for the analysis. The ranking will be used for the operationalization of Ethicality, which will be the accumulated sum gathered from the value (1-4) of the choices made by participants. Although Zhong et al., (2010), had a scale of 1-7 for each choice, I will be using a scale of 1-4 as participants are not ranking all choice options as done in the study by Zhong et al (2010), but rather choosing one single option. As such, the relative distance between the options will not be captured when only one option is chosen. In any case, the greater the sum, the more ethical a participant’s responses are.

Zhong et al. (2010) provide a total of 12 vignettes, but for this study 2 vignettes was used to reduce the length of the survey as too many scenarios can have a negative effect on participant‘s completion of the survey (Weber, 1992). Order of choice options were randomized, although previous research did not find any impact of ordering of ethical choices versus unethical choices (Zhong et al., 2010). The vignettes used were chosen based on the prevalence of cheating in the scenarios, based on the fact that the measure for moral disengagement was contextualized to cheating.

4.5.2 Moral Disengagement Measure

For this study, moral disengagement will be measured to aim to explain how much it mediates the relationship between the independent variable (decision-making mode) and the dependent variable ((un)ethical behavior). The decision to treat it as a mediator is informed by C. Moore (2015, p. 201), who states, "if moral disengagement is a process; it should be studied as a mediator. If moral disengagement is a trait, it should be studied as a moderator." I expect moral disengagement to be aroused during the process of making a decision wherein the individual will try to justify an unethical choice. A process that can be described as "theoretically and conceptually, a mediator should be a responsive variable that changes within a person" (Wu & Zumbo, 2008, p. 373).

Process moral disengagement helps us understand how people choose unethically and live with themselves (Bandura, 2015). In the case of this study, the aim is to measure moral disengagement as a cognitive process occurring during their engagement with the scenarios. As such, in this study moral disengagement is conceptualized as a process, and thus must be studied as a mediator (C. Moore, 2015). Studying moral disengagement as a process requires the use of context specific scales (Schaefer & Bouwmeester, 2021). Thus to achieve conceptual accuracy, this study utilized a Moral Disengagement Cheating Scale (Shu et al., 2011) to measure moral disengagement in participants when responding to two ethical scenarios related to cheating. This scale includes 6 questions, where participants are asked to state to what extent they agree or disagree with statements like "sometimes getting ahead of the curve is more important than adhering to rules". The goal being to better understand how ordinary people justify their unethical behavior (cheating) through the use of moral disengagement and whether there will be a connection between decision mode and moral disengagement.

4.5.3. Measurement of Individual Differences in Decision-Making Style

Individual differences in processing or decision-making style were measured with the Unified Scale to Assess Individual Differences in Intuition and Deliberation (USID, Pachur & Spaar, 2015). This measure is said to address some of the weaknesses of other measures, such as the Preference for Intuition and

Deliberation scale (PID, Betsch, 2004), and the Rational-Experiential Inventory (REI, Pacini & Epstein 1999) (Gärtner et al., 2022). The participants were asked to rate 32 statements on a 5-point Likert Scale according to how well the items describe how they make decisions in life in general. The statements are divided into four categories: intuitive, spontaneous, reasoned, and knowledge-based decision-making. The measure was used to construct three different scores of decision-making styles. First, was the score of a tendency to rely on intuition. Second, was the score of a tendency to rely on deliberation.

By combining the intuition and deliberation score, one can compute the last score, which was a measure of decision-making style. Taking the score of a tendency to rely on intuition and subtracting the score of a tendency to rely deliberation gives a variable ranging from 4 (maximally intuitive) to –4 (maximally deliberative). The order of items in the USID were randomized. See Appendix B for the USID.

4.5.4. Control Variables

A selection of control variables was also included in the survey, among which age was included as it has been shown to be positively associated with Ethicality (Moberg, 2001; Zhong et al., 2010). Gender was also a control variable. While results are mixed as to whether there is a significant relationship between gender and Ethicality (Tenbrunsel & Smith-Crowe, 2008), some studies have found that female subjects show slightly more ethical action and moral reasoning (Detert et al., 2008). Level of education will also be measured as a control variable since it has been speculated to reduce unethical decisions as education supports general cognitive and social development (Thoma & Rest, 1986). However, more recently, researchers failed to find a significant relationship between education and Ethicality (J. J. Kish-Gephart et al., 2010).

4.5.5. Manipulation Check

I included a number of manipulation checks to validate whether the manipulation successfully induced the desired decision-making mode. Similar to Gärtner et al. (2022), a total of 5 questions asked participants to rate on a 5-point Likert scale to what extent they relied on their emotions, intuition, reason, and

analytical thinking. An additional question asked to what extent the instructions made them pay attention to how they made their decisions. The questions can be found in appendix E.

4.6. Procedure and Ethical Considerations

The participants were informed that the study is looking at how people behave in social situations without explicating the specific goal of study as this might influence the results. All data collected was confidential and only used for research practices. The participants were informed about the procedure, their anonymity, the option to withdraw their response, as well as the possibility of having more information regarding the study. The participants were informed about the purpose of the study in a debrief sheet received after completion of the study survey form.

4.7. Data Analysis

To investigate the hypotheses of this thesis, various analytical methods were used, which all were done using SPSS. Hypothesis 1 was tested using primarily independent sample T-test to investigate if there were significant differences in Ethicality scores between the two manipulation groups (affective versus reason). Hypothesis 2, 3, and 4 were tested using a conditional process modeling program, PROCESS, that employs an ordinary least-squares path analytical framework to test direct and indirect effects (Hayes, 2012). Specifically, PROCESS Models 1 (simple moderation) and 4 (simple mediation) were used. The process macro allows for bootstrapping to create bootstrap confidence intervals for the indirect effect while simultaneously testing the whole mediation model (Baron & Kenny, 1986). Extensive simulations of these methods have led to the recommendation of bootstrapping over the Sobel test or the causal step approach due to the increase in power and decent control over type 1 error (MacKinnon et al., 2002, 2004). The indirect effects were investigated with 5000 bootstrap samples and 95% confidence intervals. The statistical significance of the mediation is determined by the significance of X to M (path a), and M to Y (path b), both these need to be significant for there to be mediation (MacKinnon et al., 2007). Generally, the indirect effect is considered significant if zero falls outside

the upper and lower bound of the bootstrap confidence interval (Preacher & Hayes, 2008).

4.7.1. Mediation and Moderation

For hypothesis 2 PROCESS model 4 (Simple mediation) was used. In this model, the manipulation ("Heart" vs. "Brain") was the independent variable X, along with the control variables age, gender, and education as covariates. The Mediator variable (M) was Moral disengagement, and the dependent variable (Y) was Ethicality. See Figure 2 for illustration.

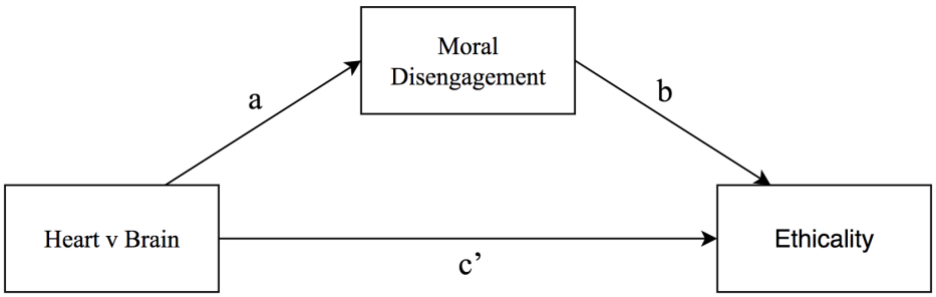

Figure 2. Mediation model

Hypothesis 4 was tested using PROCESS model 1 (moderation analysis). In this model, the manipulation ("Heart" vs. "Brain") was the independent variable (X), along with the control variables age, gender, and education as covariates. The moderator variable (M) was Decision-making style, and the dependent variable (Y) was Ethicality. The model was used specifically to investigate whether there would be an interaction between the manipulation (decision-making mode) and decision-making style. See figure 3 for illustration.

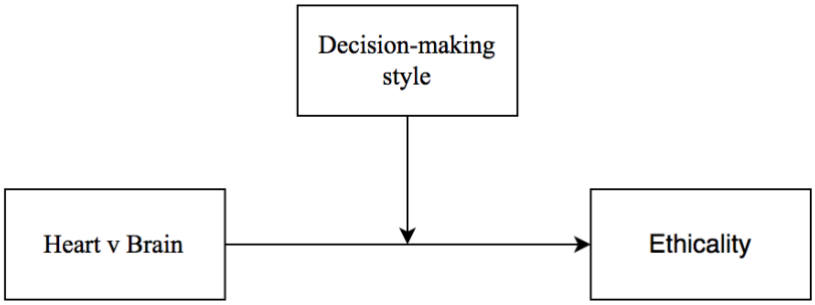

Figure 3. Moderation model

5.0. Results

For all statistical tests and analyses normality, equal variance, homoscedasticity, and multicollinearity assumptions were met.

5.1. Manipulation Checks

	Treatments		Difference			
	Affect		Reason		Affect vs. Reason	
	Mean	SD	Mean	SD	P-values	Cohen's d
Relied on Emotions	3.76	1.013	2.31	1.052	P= 0.000	1.407
Relied on Intuition	3.94	.974	3.56	1.052	P= 0.045	.375
Relied on Reason	3.13	1.117	4.20	.671	P= 0.000	-1.476
Relied on Analytic Thinking	3.00	1.212	3.81	.871	P= 0.003	-1.089
Paying Attention	3.64	1.002	3.66	1.116	P= 0.226	-.338

Note: Averages were estimated using full sample. The p-values are of two-sided t-tests.

Table 2. Means, standard error mean, and t-tests with corresponding p-values and effect size (Cohen's d) for manipulation checks in two conditions

To investigate whether manipulations were successful, independent sample t-tests were used to check for differences in means between the Affect ("heart") and Reason ("brain") manipulation groups. Table 2 shows the results of the manipulation checks. Participants reported higher levels of reliance on emotions and intuition in the affect (heart) condition, compared to participants in the reason (brain) condition, who reported higher levels of reliance on reason and analytical thinking. All differences were significant with p-values < 0.05, except

for the manipulation check asking participants to state whether they agree or disagree (5-point Likert scale) with the statement “the instructions made me pay attention to how I made my decisions”. The lack of difference on this item indicates that the manipulation did not have an effect on how participants responded to this item. Based on these results I conclude that the instructional treatment successfully manipulated decision-making mode in participants.

5.2. Independent Sample T-test

As explained in the data analysis chapter, I conducted an independent sample t-test to investigate my first hypothesis. The first hypothesis posits that the manipulation induced decision-making mode, will influence the Ethicality of the decisions made in the scenarios, such that the affective mode (“Heart” condition) will produce more ethical decision-making than the rational mode (“Brain” condition). The mean of the Heart condition (N = 84, M = 2.65, SD = 0.70) is significantly different to the mean of the Brain condition (N = 64, M = 2.35, SD = 0.63) with t = 2.59 and p = 0.01. The effect size is Cohen‘s d = 0.67, which is between a medium and large effect.

Note that the alternatives on the given scenarios had a score of 1 to 4, 4 being most ethical and 1 being least ethical. As such, the difference in means indicates that participants in the Heart condition act more ethically in the given scenarios than those in the Brain condition. Performing a non-parametric test (independent sample Mann-Whitney U test) yield similar results with a significant difference between the heart and brain condition in line with the hypothesis. In other words, I found support for Hypothesis 1 and 1a using both parametric and non-parametric tests.

5.3. Reliability (Internal Consistency of Scales)

Before conducting any analysis using the constructs measured by scales, I investigated the internal consistency of the scales in the survey using Cronbach‘s Alpha. The reliability analysis for the Moral Disengagement Cheating Scale produced a Cronbach‘s Alpha of 0.68 with 6 items, which is questionable, albeit acceptable. The intuition scale and the deliberation scale had a Cronbach‘s Alpha of 0.83 and 0.85, respectively, with both having 16 items each. This is considered

a high internal consistency (Nunnally & Bernstein, 1994). All in all, no substantial issues detected from the reliability analysis.

5.4. Mediation Analysis

To investigate hypotheses 2 and 3, I conducted a simple mediation analysis using PROCESS v4.1 by (Hayes, 2022) model 4. The outcome variable was Ethicality. The predictor variable for this analysis was the Heart Versus Brain manipulation (Heart=0), and the covariates were age, gender (1=Male, 2=Female), and education. The mediating variable was Moral Disengagement. Hypothesis 2 predicted that the manipulation would have an effect on Ethicality scores, and that this relationship would be mediated by moral disengagement. As seen in table 3, in step 1 of the analysis, none of the independent variables had a significant effect on the mediator variable Moral Disengagement (MDC). In step 2 shown in table 4, the manipulation variable (Heart vs. Brain) had a significant negative relationship with the outcome variable Ethicality (β = - 0.22, *SE* = 0.18, *p* = 0.02). Additionally, in support of hypothesis 3, Moral Disengagement had a significant negative relationship with Ethicality (β = - 0.32, *SE* = 0.04, *p* = 0.00). Furthermore, Gender also had a significant relationship with the outcome variable Ethicality (β = 0.20, *SE* = 0.09, *p* = 0.03), which was unexpected, but not unheard of in the literature (Detert et al., 2008). Neither Age nor Education had any significant effects. The absence of a relationship between age and Ethicality in these results could be explained by the skewed age in the sample. The mode for age being 26 years of age, and 60% of the sample was 26 years old or younger.

Ultimately, the indirect effect of the independent variable, Heart versus Brain condition, on Ethicality through moral disengagement was not found to be statistically significant as the confidence interval passes through the value 0 (effect = - 0.07, 95% C.I. (-0.18, 0.05). Figure 3 illustrates the path coefficients and significance thereof.

	Outcome MDC	
IV	b	SE
HvB	- 0.2145	0.1809
Age	- 0.0127	0.0095
Gender	- 0.2487	0.1805
Education	- 0.0435	0.1180

Note. * p< 0.05. ** p< 0.01. *** p < 0.001

Table 3. Mediation output step 1 (IV = Independent Variable)

	Outcome Ethicality	
IV	b	SE
HvB	- 0.2205*	0.0944
MDC	- 0.3198***	0.0435
Age	0.0032	0.0049
Gender	0.2070*	0.0944
Education	- 0.0017	0.0613

Indirect Effect			LLCI	ULCI
MDC	- 0.0686	0.0581	-0.1833	0.0456

Note. * p< 0.05. ** p< 0.01. *** p < 0.001

Table 4. Mediation output (step 2)

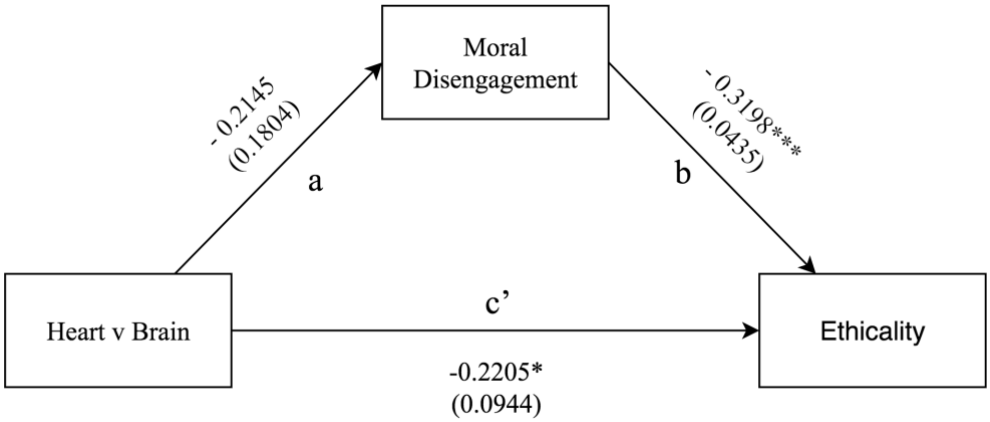

*Figure 4. Mediation path diagram with unstandardized coefficients and standard errors (in parentheses) for path a, path b, and direct effect of decision-making mode on Ethicality (p>.05; *p<.05; **p<.01; ***p<.001.)*

5.5. Moderation

In line with earlier literature (Gärtner et al., 2022), I also wanted to test for an interaction effect between the manipulation of decision-making mode, and decision-making style. Similar to previous findings (Gärtner et al., 2022), the moderation analysis overall was not significant, albeit near the significance level F = 2.7869, p = 0.0973, R^2 = 0.0171. To further investigate this result, I examined the conditional effects at the different values of the moderating variable decision-making style.

Conditional effects of the focal predictor at values of the moderator DvI Difference

	Value	b	SE	LLCI	ULCI
Low*	-.3750	-.4424	.1490	-.7369	-.1480
Medium*	-.6563	-.2867	.1089	-.5020	-.0714
High	.3850	-.0610	.1667	-.3905	.2684

Note * p < 0.05

Table 5: Conditional effects of the focal predictor (heart vs. brain) at different (low, medium, high) values of the moderator Decision-making Style (Intuition style mean score minus Deliberation style mean score).

As illustrated in table 5, the (overall non-significant) interaction is due to the effect of the predictor being significant at the low and medium, but not high values of the moderator. As explained earlier, the moderating variable decision-making style is calculated by taking the mean intuition score minus the mean deliberation score. The “low” values of the moderator are the values in which deliberation is highest relative to intuition, and the “high” values are the values in which deliberation is lowest relative to intuition. The visualization data for the conditional effect provided by the PROCESS v.4.1.

The visualization in figure 5 shows that there is a difference between the manipulation groups as I observe the full line for the Heart condition is higher up on the Ethicality score than the dotted line for the Brain condition. However, as the value for decision-making style increases towards more intuitive decision-making style, there is a decrease in Ethicality among those in the Heart condition. This indicates that participants that state their decision-style to be more deliberate than intuitive, who are instructed to make affective decisions, choose more ethically in the given scenarios. This is an interesting and unexpected pattern of results. It is, however, important to not overinterpret this effect given that the interaction in itself is not statistically significant.

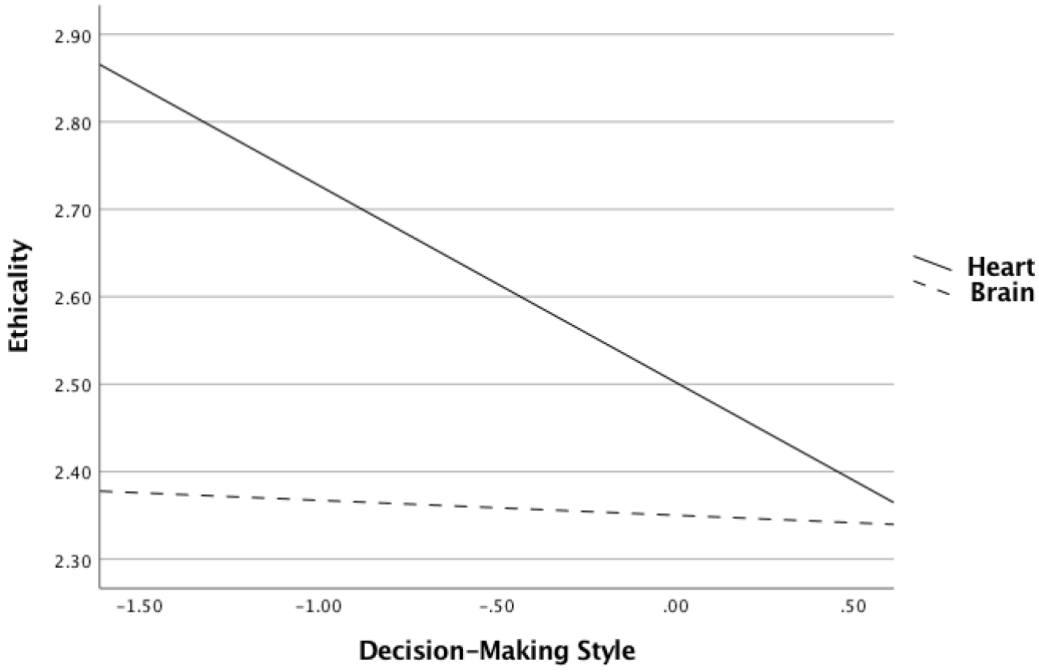

Figure 5. Conditional interaction effect

5.6. Correlations

An overview of the correlations between all study variables are illustrated in table 6 and table 7, with table 6 showing correlations for the heart condition, and table 7 showing the brain condition. In order to get meaningful correlations, it was important to split them up. This is also helpful to further explore the conditional interaction effect found in the moderation analysis. The mean score for intuitive style and deliberation style were included in addition to the overall decision-making style capturing both (intuition less deliberation). This was in order to see if any of the two individual tendencies was the driver for any correlation observed with the decision-making style.

As expected, Moral disengagement had a strong negative correlation with Ethicality in both conditions. Unexpectedly however, in the correlations, I also observed that in the affect condition, moral disengagement correlated positively with tendency for intuitive decision-making (0.244*), and negatively with deliberation (-0.252*). Decision-making style, which captures both scales, had a correlation of 0.336 at the significance level of $p<0.01$ (2-tailed). However, this was only in the affect (“heart”) manipulation group. No such correlations were found in the reason (“brain”) manipulation group.

In relation to the conditional interaction from the moderation analysis, there are some supporting results in the correlations. In the Affect condition, deliberation has a significant positive correlation with Ethicality. This is, of course, in contrast with some of the hypothesized relations with respect to rational decision-making and Ethicality. In the Reason condition, however, there is no correlation between Ethicality and decision-making style. Additionally, in the Affect manipulation group, the decision-making style has a negative and significant correlation (-0.252*) with Ethicality. Indicating that the more intuitive decision-making style produce less ethical decisions, and the more deliberate decision-making style yield more ethical decisions.

Correlations[a]

	1	2	3	4	5
1. Intuition	-				
2. Deliberation	-.089	-			
3. Decision-making Style	.693**	-.780**	-		
4. Ethicality	-.086	.274*	-.252*	-	
5. Moral Disengagement	.244*	-.252*	.336**	-.517**	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

a. HvB = Heart

Table 6. Correlations in the Heart manipulation group

Correlations[a]

	1	2	3	4	5
1. Intuition	-				
2. Deliberation	-.277*	-			
3. Decision-making Style	.804**	-.794**	-		
4. Ethicality	.045	.085	-.024	-	
5. Moral Disengagement	-.012	-.023	.007	-.571**	-

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

a. HvB = Brain

Table 7. Correlations in the Brain manipulation group.

6.0. Discussion

The aim of this study was to investigate the effect of decision-making mode on ethical decision-making, whether the mode was more affective ("Heart) or rational ("Brain"). Furthermore, I wanted to explore the role of moral disengagement in facilitating unethical decision-making and whether it is linked to affective or rational decision-making. Additionally, in order to control for the effect of participants' decision-making style, this was also measured and tested for interactions with the manipulation of decision-mode.

6.1. Heart vs. Brain Manipulation and Ethicality

Hypothesis 1 predicted that the instruction-induced decision-making mode would have an effect on Ethicality. Hypothesis 1a and 1b predicted that this effect would happen in a way where inducing more affective decision-making will have

a positive relationship with Ethicality (1a). This hypothesis was supported, as instructing participants to "rely on their hearts" produced significantly higher levels of Ethicality in the given scenarios, compared with those that were instructed to make decisions by "relying on their brains". However, due to the absence of a control group, it is not clear which of the decision-making modes that is driving the effect due to the absence of a control group. Thus, all that can be said with confidence is that there is a significant difference between the decision-making modes and their associated Ethicality, with more ethical decisions in the affect condition than in the reason condition. However, it is worth noting that a similar and recent study found that both the affect and reason treatment had an effect in comparison with the control group (Gärtner et al., 2022), although inducing deliberative decision-making mode produced the largest part of the difference between the Affect and Reason treatments.

Nonetheless, the finding of differences in Ethicality and decision-making mode is line with some previous research which has shown that damage to areas of the brain that are associated with handling emotions led to reduced value-based- and moral reasoning (Greene & Haidt, 2002). Behavioral choices concerned with ethics and morality are usually accompanied by different somatic markers reflecting our values regarding the available options (Damasio, 1994). Therefore, navigating in situations that are ethically loaded can be difficult without using our emotions for guidance. Our sense of rightness and wrongness, determined by affective factors in the form of somatic experiences and emotions can be overshadowed by a rational decision-making mode (J. D. Greene et al., 2004; Zhong, 2011). In line with the above literature, inducing rational decision-making made the participants choose in a way that goes against their moral convictions for their own personal benefit. This could mean that cognitive control processes overrode the emotional responses that would make them disapprove of making the unethical decisions (J. D. Greene et al., 2004). Suppressing emotions has been shown to produce more utilitarian choices (Lee & Gino, 2015). An emphasis on being rational as opposed to affective, could have increased the salience of the adventitious personal gain in the scenarios. Thus, promoting a utilitarian thinking wherein the focus is on maximizing benefits as opposed to following a deontological principle of "cheating is wrong", which led them to make more self-serving but unethical decisions. As such, the findings suggest that

it can be important to be attentive to our emotional signals when faced with ethically charged dilemmas in order to choose more ethically.

That said, it is essential to review the validity of these findings. The manipulation by instruction method is not infallible. The effects I found could also be due to the fact that following one's emotions has a potential double meaning. The instruction could be perceived as to follow your "gut-feeling", your intuition, but it could also be to follow empathy as a concern for others, akin to experimenter's demand (Gärtner et al., 2022). Similarly, research in the field of ethics, using self-reported measures are especially susceptible to social desirability bias (Chung & Monroe, 2003). However, considering the motivation for social desirability would be equally present in both manipulation groups ("Brain" and "Heart"), one could argue that it would not affect the findings in a significant manner.

6.2. Mediation of Moral Disengagement

The simple mediation analysis did not yield a significant indirect effect. However, from the analysis, there were some significant relationships between the variables. In line with earlier literature moral disengagement had a significant negative relationship with Ethicality (Detert et al., 2008; Newman et al., 2020). However, the mediation in this study failed on path a, between the manipulation variable ("Heart vs. Brain" condition) and moral disengagement. This suggests that induced decision-making mode did not have an effect on level of moral disengagement, even if it did have an effect on Ethicality. So, while being instructed to choose more rationally had a negative effect on Ethicality, it was not as a result of increased moral disengagement, even though moral disengagement and un-Ethicality were strongly correlated. It is possible that the moral disengagement scale used in this study measured a dispositional trait rather than a process despite using a contextualized scale. If that is the case, it would explain the failure in finding a mediation as "theoretically and conceptually, a mediator should be a responsive variable that changes within a person" (Wu & Zumbo, 2008, p. 373).

In any case, in this study, behaving unethically did not seem to necessitate any moral disengagement process, this being the case despite Bandura positing that moral disengagement precedes unethical behavior as "people do not

ordinarily engage in reprehensible conduct until they have justified to themselves the rightness of their actions" (Bandura et al., 1996), p. 335). Still, there have been findings that moral disengagement mediated the relationship between various traits (empathy, cynicism, chance locus of control, moral identity) and unethical decision-making (Detert et al., 2008). However, some researchers argue that processes similar to that of moral disengagement can happen retrospectively (Anand et al., 2005), an argument that is more in line with the social intuitionist model of moral judgment (Haidt, 2001). Shu et al. (2011) found that moral disengagement is a consequence of behavior rather than a necessary condition leading to un-Ethicality. And thus, proposed that moral disengagement reduces cognitive dissonance and alleviates guilt after cheating (Shu et al., 2011). A similar process could be happening here, although seemingly irrespective of induced decision-making mode.

6.3. Conditional Interaction effect & Correlations

As mentioned in the results, the moderation overall was not significant. However, it was close to the significance level. Investigating this non-significant conditional interaction effect further showed that in the heart (affect) manipulation group, the stronger the preference for deliberation, the more ethical the decision-making. Furthermore, as a preference for deliberation decreases and a preference for intuition increases, the difference between the manipulation groups decreases. Thus, the intuitive individuals in the heart condition were more unethical than the deliberate ones in the same condition, and in the brain (reason) condition, both intuitive and deliberate decision-making styles were equally unethical. This finding was quite counterintuitive as one might expect that the intuitive individuals would be equally if not more ethical than the deliberate individuals given the theoretical foundation for the influence of emotions on ethical decision-making (Damasio, 1994; Haidt, 2001).

Though this conditional interaction was puzzling at first, by reviewing the literature I can find a somewhat similar interaction, although the similarity to the one I found is speculative. Kish-Gephart et al. (2014) found that the level of personal gain in situations had an effect on situational moral disengagement, however, the effect was only present in participants low in the personality trait conscientiousness. Conscientiousness moderated the relationship between

personal gain opportunity in scenarios and situational moral disengagement. As such, participants that were low as opposed to high in conscientiousness exhibited higher levels of situational moral disengagement in scenarios with enhanced personal gain as opposed to a baseline level of personal gain. Conscientiousness is also known to be negatively associated with moral disengagement (C. Moore, 2015).

The scenarios I presented to the participants were situations wherein there was an opportunity for personal gain (cheating), described originally by the authors as "responses to adventitious gains or losses" (Zhong et al., 2010). Thus, the interaction between decision-making style and the manipulation could be due to a decreased relative salience of personal gain when participants are asked to make affective as opposed to rational decisions. By asking participants to be affective, the salience of emotional signals (i.e., somatic markers) increases and are paid more attention to, but primarily by deliberate decision-makers, or potentially, the more "conscientious" of the bunch. As mentioned in the literature, there are certain personality traits that are associated with decision-making style (Betsch, 2004). The close to significant interaction could be explained by more conscientious people being less susceptible to be influenced by personal gain to go against their morals to begin with (J. Kish-Gephart et al., 2014). Consequently, the heart condition tipped them over to the point of making ethical decisions, whereas for more intuitive participants, the salience of personal gain was too strong and led them to cheat. The former speculation could also be considered consistent with trait activation theory, which states that personality traits and situational contexts can be the cause of behavioral variance (Kenrick & Funder, 1988; Newman et al., 2020).

One could further argue that, since self-interest is seen as automatic, viscerally compelling, and often unconscious (D. A. Moore & Loewenstein, 2004), there could be two competing intuitive responses that arrive when participants are engaging with the scenarios in this study. One being the self-interest and the other being anticipated guilt or shame for behaving unethically. When it comes to students, those who tend to turn moral failings inwards typically cheat less as they anticipate the self-imposed negative consequences (Rettinger, 2017). In line with the earlier discussion and speculation on the role of conscientiousness in relation to personal gain opportunities, a more detailed

explanation could be that intuitive individuals were more likely to follow the viscerally compelling self-interest as opposed to guilt or shame, which have a more negative valence. It is possible that a different scenario not involving personal gain could have less counterintuitive results with respect to decision-making mode and style.

Another explanation for the counterintuitive finding and interaction is that decisions of an ethical nature are not necessarily best felt or thought, but rather in line with evidence presented by Greene et al. (2004), which suggests a more synthetic view of moral judgment and decision-making, as judgment and decision-making may not be as dichotomous as indicated by some earlier literature (Kahneman, 2012). The synthetic view is also more or less in line with Haidt's (2001) Social Intuitionist model, where moral reasoning comes after moral judgment, but both play an important role. However, Haidt argues that the moral reasoning simply aims to find supporting arguments after having reached a moral judgment based on intuition. Given that the intuitive and deliberate decision-makers in my study reached different conclusions in terms of their decisions, it suggests that the process is more nuanced than the linear process described by Haidt (2001). Damasio's (1994) Somatic Marker hypothesis might fit even better as emotional signals are described as assisting deliberation. The synthesis between both affect and reason in ethical decision-making might be most aptly and rather ironically explained by the implication that Kantian "rationalist" ethical theory in moral philosophy is, psychologically speaking, not grounded in pure reason but rather in a set of emotional responses followed by post hoc rationalizations (J. D. Greene et al., 2004).

6.3.1. Moral Disengagement Correlations

Given that I observed correlations suggesting that a more intuitive decision-making style increases moral disengagement and Ethicality in the heart condition, it would seem that intuitive decision-makers, when urged to make decisions based on their affect, are more likely to morally disengage and cheat than deliberate decision-makers. Whether moral disengagement happens before or after the unethical decision is not easy to say. Although moral disengagement was originally theorized to happen prior to unethical behavior (Bandura et al., 1996), it

has also been found to be a coping mechanism after committing an unethical act (Tillman et al., 2018). The latter would certainly be more in line with the social intuitionist model of moral judgment (Haidt, 2001) where decision-making happens based on affect, and the rationalizations come after. Moral disengagement has been found to be reduced by the use of critical thinking interventions (Bustamante & Chaux, 2014). A deliberate decision-making style seems more in line with a critical thinking approach to decision-making than intuitive decision-making. Thus, together with the previous discussion on conscientiousness and personal gain salience, this might in part explain the correlation between decision-making style and moral disengagement.

7.0. Practical Implications

Ethical challenges and dilemmas are commonplace in both professional and personal contexts. Being rational is almost synonymous with superior decision-making, as opposed to more emotional decision-making (Kahneman, 2012). However, along with some recent studies, the present findings suggest that while being rational can be beneficial, it can also lead to making more unethical decisions than being more affective. Similarly, others have found the value of affect in organizations beyond just ethical decision-making. M. Jones et al. (2021) studied start-ups and found that affect (moods and emotions), regardless of valence, represents useful information, but that it can be blurred or lost if not appropriately regulated. Thus, giving space to affect and treating our emotions as resources can be an important step towards more ethical decision-making in organizations, as the presence of opportunities for personal gain that conflict with morality and ethics can be many in the professional context (J. Kish-Gephart et al., 2014). The findings presented in this thesis suggest that organizations may benefit from encouraging employees to be attentive to their emotional signals regarding ethical issues in the workplace. This may be achieved through simple encouragement, cultural initiatives, or employees may be trained to be more attentive to their emotions when they face ethical dilemmas in the workplace. Relating to culture, the focus on emotions could be an extension of previous findings on the positive impact of an ethical culture (Kaptein, 2011).

The finding of the conditional interaction between decision-making style and decision-making mode suggests that individuals with a tendency for deliberate

decision-making style, may be more suited for roles with more frequent conflicts between personal gain and Ethicality. As such, organizations may benefit from weighting traits like deliberate decision-making style, or conscientiousness, when hiring for such roles (J. Kish-Gephart et al., 2014).

While this study did not find a relationship between the manipulation, decision-making mode, and moral disengagement, there was a significant relationship between moral disengagement and Ethicality. Additionally, moral disengagement had an inverse relationship with deliberate decision-making style. Thus, the same argument about hiring based on decision-making style and associated traits can be beneficial in roles that are particularly susceptible for moral disengagement, and thus unethical behavior. (McAlister, 2001) found that a simple intervention to reduce moral disengagement was to outline the process of moral disengagement so that individuals are made aware of it. In an organizational context, (Barsky, 2011) found that increased participation in setting performance goals reduced the moral disengagement mechanisms of moral justification and displacement of responsibility. Thus, there are various methods that practitioners can adopt to reduce moral disengagement.

8.0. Limitations

The present thesis has several limitations. The first of which is related to the sample size, as the sample is not particularly large, nor representative of a general population, which decreases the generalizability of the findings (Bell et al., 2018; Yilmaz, 2013). Additionally, as previously discussed experimenter‘s demand could be a factor in producing ethical behavior in an affect manipulation where it might be perceived as making the most empathetic and thus “ethically right choice” (Gärtner et al., 2022). Social desirability is also of especially high risk in the research field of ethics (Chung & Monroe, 2003), though it should be balanced out as it should have an effect on both manipulation groups. Additionally, participants were informed of the anonymity of participation in the study. Thus, social desirability, although being a risk, was hopefully not a significant factor in the results.

Though an effect was found regarding the manipulation and ethicality, it is not clear what is driving the effect, whether it is the heart or brain condition. This

is something that would be possible to determine with the inclusion of a control group, the absence of which is a limitation of this study.

The moral disengagement scale was contextualized to the scenarios in the vignettes as both were related to cheating. This was to ensure it was operationalized as a process and not a trait (Schaefer & Bouwmeester, 2021). However, the scale showed questionable reliability with a Cronbach's Alpha of 0.68 and was measured after the scenarios so as to not prime participants to make more or less ethical choices upon seeing the items in the moral disengagement scale (Appendix A). Furthermore, as mentioned briefly in the discussion, it is not entirely clear whether the scale measures a trait or a process. Despite following the recommendations in the literature in order to measure moral disengagement as a process (C. Moore, 2015; Schaefer & Bouwmeester, 2021), the scale could be measuring a disposition for moral disengagement in the form of general attitudes and beliefs.

For this study I used vignettes to emulate situations where one is faced with a particular dilemma involving Ethicality of choices. The vignettes contained very specific scenarios, which reduces the generalizability of the findings (Weber, 1992). The vignettes only included moderately serious ethical choices with temptations that could be considered quite normal for everyday life (Zhong et al., 2010). Therefore, future research could benefit from expanding to scenarios involving more minor as well as more major ethical choices, as well as a more diverse set of scenarios.

It is unclear to what extent the construct of deliberate decision-making style and the personality trait conscientiousness overlap. Deliberate decision-making style and conscientiousness do correlate (Betsch, 2004). In the unified scale for assessing individual differences in intuition and deliberation (USID), one of the two facets of deliberation is called "planning". Planning is an important facet of Conscientiousness (MacCann et al., 2009; McCrae & Costa, 1987). Consequently, it raises the question of the construct validity of deliberate decision-making style in relation to conscientiousness, and whether it is actually capturing a unique and separate construct. As mentioned in the discussion, what is captured in the deliberate decision-making items of the USID scale, and subsequent interaction with decision-making mode and effect on moral disengagement and Ethicality, could be an expression of the personality trait

conscientiousness. This would be in line with previous findings wherein conscientious individuals were more able to resist opportunities for personal gain going against morality (J. Kish-Gephart et al., 2014). Therefore, future research could benefit from including relevant personality traits as well as decision-making styles to clarify the relationships. Additionally, testing for interaction of decision-making style and decision-making mode in more diverse scenarios with and without opportunities for personal gain.

9.0. Conclusion

The idea that emotions play an important role in how we make moral and ethical decisions is getting increasing support in the literature. Even though it goes against the hitherto dominant and prevailing narrative that reason unencumbered by emotion is the manner in which we make more ethical decisions. Consistent with the recent literature in support of the role of emotions in ethical decision-making, I found that there was a significant difference between affect and reason when making ethical decisions, such that participants instructed to make decisions based on affect behaved more ethically than those instructed to use reason. Future research might benefit from the use of a control group to understand better which condition is driving the effect.

Nonetheless, despite emotions gaining traction as a key factor in ethical decision-making, the role of moral disengagement in explaining these differences in ethical decision-making has not yet been explored to my knowledge. The present study did, however, not find a mediating effect of moral disengagement. Although moral disengagement did have a significant relationship with Ethicality, underscoring the established relationship that moral disengagement has with ethical decision-making. Though moral disengagement as a rationalization process could still be a factor in explaining unethical behavior, the issue remains with proper conceptualization and operationalization as discussed in the literature chapter.

Some of the more curious findings in this study were those that illustrated an association between deliberate decision-making style and Ethicality, but only in the heart (affect) condition. Thus, intuitive individuals were more unethical in the affect condition, than more deliberate individuals, which is somewhat puzzling. Nonetheless, it points to a few key considerations. First and foremost,

decision-making is more nuanced and complex than some prior literature may suggest. Secondly, it suggests a more synthetic view of moral judgment and decision-making, which acknowledges the role of both affect and reason in ethical decisions. Third, point being that decision-making styles may regulate how we respond to certain external factors (personal gain) and interact with decision-modes. Thus, these points and the overall findings presented in this thesis provide some interesting insights into ethical decision-making and the interplay between different decision-making processes. Hopefully this thesis can serve as stimulant for further research connecting decision-making mode, moral disengagement, and ethical decision-making.

While one of the main goals of this thesis was to uncover the relation between decision-making mode and moral disengagement, surprisingly, no relation was found. Thus, the cognitive processes associated with making unethical decisions while being rational as opposed to affective are still unclear, at least in light of the present study. Hopefully this thesis can serve as stimulant for further research connecting decision-making mode, moral disengagement, and ethical decision-making.

References

Allport, G. W., & Odbert, H. S. (1936). Trait-names: A psycho-lexical study. *Psychological Monographs*, *47*(1), i.

Ambady, N., & Rosenthal, R. (1993). Half a minute: Predicting teacher evaluations from thin slices of nonverbal behavior and physical attractiveness. *Journal of Personality and Social Psychology*, *64*(3), 431–441. https://doi.org/10.1037/0022-3514.64.3.431

Anand, V., Ashforth, B., & Joshi, M. (2005). Business as usual: The acceptance and perpetuation of corruption in organizations. *Academy of Management Perspectives*, *19*(4), 9–23. https://doi.org/10.5465/AME.2005.19417904

Aquino, K., & Reed II, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, *83*(6), 1423. https://doi.org/10.1037/0022-3514.83.6.1423

Ashforth, B. E., & Anand, V. (2003). The normalization of corruption in organizations. *Research in Organizational Behavior*, *25*, 1–52. https://doi.org/10.1016/S0191-3085(03)25001-2

Atingdui, N. (2011). Cognitive Dissonance. In S. Goldstein & J. A. Naglieri (Eds.), *Encyclopedia of Child Behavior and Development* (pp. 380–381). Springer US. https://doi.org/10.1007/978-0-387-79061-9_599

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory* (pp. xiii, 617). Prentice-Hall, Inc.

Bandura, A. (1990). Selective Activation and Disengagement of Moral Control. *Journal of Social Issues*, *46*(1), 27–46. https://doi.org/10.1111/j.1540-4560.1990.tb00270.x

Bandura, A. (1991). Social cognitive theory of moral thought and action. In *Handbook of moral behavior and development, Vol. 1: Theory; Vol. 2: Research; Vol. 3: Application* (pp. 45–103). Lawrence Erlbaum Associates, Inc.

Bandura, A. (1999). Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review*, *3*(3), 193–209. https://doi.org/10.1207/s15327957pspr0303_3

Bandura, A. (2015). *Moral Disengagement: How People Do Harm and Live with Themselves* (1st ed. 2016 edition). Worth Publishers.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, *71*(2), 364. https://doi.org/10.1037/0022-3514.71.2.364

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Barsky, A. (2011). Investigating the Effects of Moral Disengagement and Participation on Unethical Work Behavior. *Journal of Business Ethics*, *104*(1), 59. https://doi.org/10.1007/s10551-011-0889-7

Bartels, D. M. (2008). Principled moral sentiment and the flexibility of moral judgment and decision making. *Cognition*, *108*(2), 381–417. https://doi.org/10.1016/j.cognition.2008.03.001

Bazerman, M. H., & Gino, F. (2012). Behavioral Ethics: Toward a Deeper Understanding of Moral Judgment and Dishonesty. *Annual Review of Law*

and Social Science, *8*(1), 85–104. https://doi.org/10.1146/annurev-lawsocsci-102811-173815

Bazerman, M. H., & Messick, D. M. (1996). Ethics for the 21st Century: A Decision Making Approach. *MIT Sloan Management Review*, *37*(2), 9–22.

Bechara, A., Damasio, A. R., Damasio, H., & Anderson, S. W. (1994). Insensitivity to future consequences following damage to human prefrontal cortex. *Cognition*, *50*(1), 7–15. https://doi.org/10.1016/0010-0277(94)90018-3

Bechara, A., Tranel, D., Damasio, H., & Damasio, A. R. (1996). Failure to Respond Autonomically to Anticipated Future Outcomes Following Damage to Prefrontal Cortex. *Cerebral Cortex*, *6*(2), 215–225. https://doi.org/10.1093/cercor/6.2.215

Becker, G. S. (1968). Crime and punishment: An economic approach. In *The economic dimensions of crime* (pp. 13–68). Springer.

Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*. Oxford university press.

Betsch, C. (2004). Präferenz für Intuition und Deliberation (PID). *Zeitschrift Für Differentielle Und Diagnostische Psychologie*, *25*(4), 179–197. https://doi.org/10.1024/0170-1789.25.4.179

Betsch, C., & Kunz, J. J. (2008). Individual strategy preferences and decisional fit. *Journal of Behavioral Decision Making*, *21*(5), 532–555. https://doi-org.ezproxy.library.bi.no/10.1002/bdm.600

Boddy, C. R. (2011). The Corporate Psychopaths Theory of the Global Financial Crisis. *Journal of Business Ethics*, *102*(2), 255–259. https://doi.org/10.1007/s10551-011-0810-4

Bustamante, A., & Chaux, E. (2014). Reducing Moral Disengagement Mechanisms: A Comparison of Two Interventions. *Journal of Latino/Latin American Studies*, *6*(1), 52–54. https://doi.org/10.18085/llas.6.1.123583644qq115t3

Cervone, D., & Shoda, Y. (Eds.). (1999). *The coherence of personality: Social-cognitive bases of consistency, variability, and organization*. Guilford Press.

Chen, M., Chen, C. C., & Sheldon, O. J. (2016). Relaxing moral reasoning to win: How organizational identification relates to unethical pro-organizational behavior. *Journal of Applied Psychology*, *101*(8), 1082–1096. https://doi.org/10.1037/apl0000111

Chung, J., & Monroe, G. S. (2003). Exploring social desirability bias. *Journal of Business Ethics*, *44*(4), 291–302.

Cressey, D. R. (1953). *Other people's money; a study of the social psychology of embezzlement* (p. 191). Free Press.

Damasio, A. R. (1994). Descartes' error and the future of human life. *Scientific American*, *271*(4), 144–144.

Damasio, A. R., Tranel, D., & Damasio, H. (1990). Face Agnosia and the Neural Substrates of Memory. *Annual Review of Neuroscience*, *13*(1), 89–109. https://doi.org/10.1146/annurev.ne.13.030190.000513

Darley, J. M., Messick, D. M., & Tyler, T. R. (2001). *Social influences on ethical behavior in organizations*. Psychology Press.

Detert, J. R., Treviño, L. K., & Sweitzer, V. L. (2008). Moral disengagement in ethical decision making: A study of antecedents and outcomes. *Journal of Applied Psychology*, *93*(2), 374–391. https://doi.org/10.1037/0021-9010.93.2.374

Driver, J. (2014). The History of Utilitarianism. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (Winter 2014). Metaphysics Research Lab, Stanford University. https://plato.stanford.edu/archives/win2014/entries/utilitarianism-history/

Dubois, D., Rucker, D. D., & Galinsky, A. D. (2015). Social class, power, and selfishness: When and why upper and lower class individuals behave unethically. *Journal of Personality and Social Psychology*, *108*(3), 436–449. https://doi.org/10.1037/pspi0000008

Ferrell, O. C., & Gresham, L. G. (1985). A Contingency Framework for Understanding Ethical Decision Making in Marketing. *Journal of Marketing*, *49*(3), 87–96. https://doi.org/10.1177/002224298504900308

Fischbacher, U., & Föllmi-Heusi, F. (2013). LIES IN DISGUISE-AN EXPERIMENTAL STUDY ON CHEATING: Lies In Disguise. *Journal of the European Economic Association*, *11*(3), 525–547. https://doi.org/10.1111/jeea.12014

Foerster, A., Pfister, R., Schmidts, C., Dignath, D., & Kunde, W. (2013). Honesty saves time (and justifications). *Frontiers in Psychology*, *4*. https://www.frontiersin.org/article/10.3389/fpsyg.2013.00473

Foot, P. (1967). *The problem of abortion and the doctrine of double effect*.

Galotti, K. M. (1989). Approaches to studying formal and everyday reasoning. *Psychological Bulletin*, *105*(3), 331.

Gärtner, M., Andersson, D., Västfjäll, D., & Tinghög, G. (2022). Affect and prosocial behavior: The role of decision mode and individual processing style. *Judgment and Decision Making*, *17*(1), 1–13.

Gino, F., & Shalvi, S. (2015). Editorial Overview: New Directions in the Study of Morality and Ethics. *Current Opinion in Psychology*, *6*, v–viii.

Greene, J. D., Nystrom, L. E., Engell, A. D., Darley, J. M., & Cohen, J. D. (2004). The Neural Bases of Cognitive Conflict and Control in Moral Judgment. *Neuron*, *44*(2), 389–400. https://doi.org/10.1016/j.neuron.2004.09.027

Greene, J. D., & Paxton, J. M. (2009). Patterns of neural activity associated with honest and dishonest moral decisions. *Proceedings of the National Academy of Sciences*, *106*(30), 12506–12511. https://doi.org/10.1073/pnas.0900152106

Greene, J., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in Cognitive Sciences*, *6*(12), 517–523. https://doi.org/10.1016/S1364-6613(02)02011-9

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, *108*(4), 814–834. https://doi.org/10.1037/0033-295x.108.4.814

Haidt, J., & Bjorklund, F. (2007). *Social Intuitionists Answer Six Questions About Morality* (SSRN Scholarly Paper No. 855164). https://papers.ssrn.com/abstract=855164

Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, *65*(4), 613–628. https://doi.org/10.1037/0022-3514.65.4.613

Hayes, A. F. (2012). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling*. University of Kansas, KS.

Hayes, A. F. (2022). *The PROCESS macro for SPSS, SAS, and R* (28.0.1.0 (142)) [The PROCESS macro for SPSS, SAS, and R]. http://processmacro.org/index.html

Hilbig, B. E., & Thielmann, I. (2017). Does everyone have a price? On the role of payoff magnitude for ethical decision making. *Cognition*, *163*, 15–25. https://doi.org/10.1016/j.cognition.2017.02.011

Horstmann, N., Hausmann, D., & Ryf, S. (2010). Methods for inducing intuitive and deliberate processing modes. In *Foundations for tracing intuition: Challenges and methods* (pp. 219–237). Psychology Press.

Hume, D. (1777). An enquiry concerning the principles of morals. *La Salle, IL: Open Court. Original Work Published.*

Hyman, M. R., & Steiner, S. D. (1996). The vignette method in business ethics research: Current uses, limitations, and recommendations. *Studies*, *20*(100.0), 74–100.

Jones, M., Norman, E., Sverdrup, T. E., & Schei, V. (2021). Don't Calm Down! Collective affect regulation in startups. *Academy of Management Proceedings*. https://doi.org/10.5465/AMBPP.2021.11339abstract

Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *Academy of Management Review*, *16*(2), 366–395.

Jung, C. G. (1968). *Analytical Psychology: Its Theory and Practice* (First American edition). Pantheon Books.

Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, *58*(9), 697–720. https://doi.org/10.1037/0003-066X.58.9.697

Kahneman, D. (2012). *Thinking, fast and slow*. Penguin Books.

Kant, I. (1959). *Foundations of the Metaphysics of Morals: And What is Enlightenment?* Liberal Arts Press.

Kaptein, M. (2011). From Inaction to External Whistleblowing: The Influence of the Ethical Culture of Organizations on Employee Responses to Observed

Wrongdoing. *Journal of Business Ethics*, *98*(3), 513–530. https://doi.org/10.1007/s10551-010-0591-1

Kenrick, D. T., & Funder, D. C. (1988). Profiting from controversy: Lessons from the person-situation debate. *American Psychologist*, *43*(1), 23–34. https://doi.org/10.1037/0003-066X.43.1.23

Kern, M. C., & Chugh, D. (2009). Bounded ethicality: The perils of loss framing. *Psychological Science*, *20*(3), 378–384.

Kish-Gephart, J., Detert, J., Treviño, L. K., Baker, V., & Martin, S. (2014). Situational Moral Disengagement: Can the Effects of Self-Interest be Mitigated? *Journal of Business Ethics*, *125*(2), 267–285. https://doi.org/10.1007/s10551-013-1909-6

Kish-Gephart, J. J., Harrison, D. A., & Treviño, L. K. (2010). Bad apples, bad cases, and bad barrels: Meta-analytic evidence about sources of unethical decisions at work. *Journal of Applied Psychology*, *95*(1), 1–31. https://doi.org/10.1037/a0017103

Kohlberg, L. (1963). Moral development and identification. In H. W. Stevenson, N. B. Henry, & H. G. Richey (Eds.), *Child psychology: The sixty-second yearbook of the National Society for the Study of Education, Part 1.* (pp. 277–332). National Society for the Study of Education. https://doi.org/10.1037/13101-008

Kohlberg, L. (1971). *From is to ought: How to commit the naturalistic fallacy and get away with*. https://doi.org/10.1016/B978-0-12-498640-4.50011-1

Kohlberg, L., Levine, C., & Hewer, A. (1983). *Moral stages: A current formulation and a response to critics.*

Kvalnes, Ø. (2019). *Moral Reasoning at Work: Rethinking Ethics in Organizations* (2nd ed.). Palgrave Pivot. https://doi.org/10.1007/978-3-030-15191-1

Lee, J. J., & Gino, F. (2015). Poker-faced morality: Concealing emotions leads to utilitarian decision making. *Organizational Behavior and Human Decision Processes*, *126*, 49–64. https://doi.org/10.1016/j.obhdp.2014.10.006

Levine, E. E., Barasch, A., Rand, D., Berman, J. Z., & Small, D. A. (2018). Signaling emotion and reason in cooperation. *Journal of Experimental Psychology: General*, *147*(5), 702–719. https://doi.org/10.1037/xge0000399

MacCann, C., Duckworth, A. L., & Roberts, R. D. (2009). Empirical identification of the major facets of Conscientiousness. *Learning and Individual Differences*, *19*(4), 451–458. https://doi.org/10.1016/j.lindif.2009.03.007

MacKinnon, D. P., Fairchild, A. J., & Fritz, M. S. (2007). Mediation Analysis. *Annual Review of Psychology*, *58*, 593. https://doi.org/10.1146/annurev.psych.58.110405.085542

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, *7*(1), 83–104. https://doi.org/10.1037/1082-989X.7.1.83

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, *39*(1), 99–128.

Martineau, J. T., Decety, J., & Racine, E. (2020). The Social Neuroscience of Empathy and Its Implication for Business Ethics. In J. T. Martineau & E.

Racine (Eds.), *Organizational Neuroethics: Reflections on the Contributions of Neuroscience to Management Theories and Business Practices* (pp. 167–189). Springer International Publishing. https://doi.org/10.1007/978-3-030-27177-0_12

Mazar, N., Amir, O., & Ariely, D. (2008). The Dishonesty of Honest People: A Theory of Self-Concept Maintenance. *Journal of Marketing Research*, *45*(6), 633–644. https://doi.org/10.1509/jmkr.45.6.633

McAlister, A. L. (2001). Moral Disengagement: Measurement and Modification. *Journal of Peace Research*, *38*(1), 87–99. https://doi.org/10.1177/0022343301038001005

McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*(1), 81.

Messick, S. (1987). Validity. *ETS Research Report Series*, *1987*(2), i–208.

Milgram, S. (1974). The dilemma of obedience. *The Phi Delta Kappan*, *55*(9), 603–606.

Moberg, D. J. (2001). The Aging Workforce: Implications for Ethical Practice. *Business and Society Review*, *106*(4), 315–329. https://doi.org/10.1111/0045-3609.00118

Molinsky, A., Grant, A. M., & Margolis, J. D. (2012). *The Bedside Manner of Homo Economicus*. https://www.hbs.edu/faculty/Pages/item.aspx?num=43009

Molinsky, A., & Margolis, J. (2005). Necessary Evils and Interpersonal Sensitivity in Organizations. *The Academy of Management Review*, *30*(2), 245–268. https://doi.org/10.2307/20159118

Moore, C. (2015). Moral disengagement. *Current Opinion in Psychology*, *6*, 199–204. https://doi.org/10.1016/j.copsyc.2015.07.018

Moore, C., Detert, J. R., Klebe Treviño, L., Baker, V. L., & Mayer, D. M. (2012). Why Employees Do Bad Things: Moral Disengagement and Unethical Organizational Behavior. *Personnel Psychology*, *65*(1), 1–48. https://doi.org/10.1111/j.1744-6570.2011.01237.x

Moore, D. A., & Flynn, F. J. (2008). 9 The Case for Behavioral Decision Research in Organizational Behavior. *Academy of Management Annals*, *2*(1), 399–431. https://doi.org/10.5465/19416520802211636

Moore, D. A., & Loewenstein, G. (2004). Self-Interest, Automaticity, and the Psychology of Conflict of Interest. *Social Justice Research*, *17*(2), 189–202. https://doi.org/10.1023/B:SORE.0000027409.88372.b4

Narvaez, D. (2010). Moral Complexity: The Fatal Attraction of Truthiness and the Importance of Mature Moral Functioning. *Perspectives on Psychological Science*, *5*(2), 163–181. https://doi.org/10.1177/1745691610362351

Newman, A., Le, H., North-Samardzic, A., & Cohen, M. (2020). Moral Disengagement at Work: A Review and Research Agenda. *Journal of Business Ethics*, *167*(3), 535–570. https://doi.org/10.1007/s10551-019-04173-0

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. McGraw-Hill.

Piaget, J., & Gabain, M. (1965). *The moral judgment of the child*. Free Press.

Rawls, J. (1999). *A Theory of Justice, Revised Edition*. Harvard University Press.

Rest, J. R. (1986). *Moral Development: Advances in Research and Theory*. Praeger.

Rettinger, D. A. (2017). The Role of Emotions and Attitudes in Causing and Preventing Cheating. *Theory Into Practice*, *56*(2), 103–110. https://doi.org/10.1080/00405841.2017.1308174

Schaefer, U., & Bouwmeester, O. (2021). Reconceptualizing Moral Disengagement as a Process: Transcending Overly Liberal and Overly Conservative Practice in the Field. *Journal of Business Ethics*, *172*(3), 525–543. https://doi.org/10.1007/s10551-020-04520-6

Shu, L. L., Gino, F., & Bazerman, M. H. (2011). Dishonest Deed, Clear Conscience: When Cheating Leads to Moral Disengagement and Motivated Forgetting. *Personality and Social Psychology Bulletin*, *37*(3), 330–349. https://doi.org/10.1177/0146167211398138

Stanovich, K. E., & West, R. F. (2000). Individual differences in reasoning: Implications for the rationality debate? *Behavioral and Brain Sciences*, *23*(5), 645–665. https://doi.org/10.1017/S0140525X00003435

Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, *22*(6), 664–670.

Tenbrunsel, A., & Smith-Crowe, K. (2008). Ethical decision making: Where we've been and where we're going. *The Academy of Management Annals*, *2*(1), 545–607. https://doi.org/10.1080/19416520802211677

Teper, R., Zhong, C.-B., & Inzlicht, M. (2015). How emotions shape moral behavior: Some answers (and questions) for the field of moral psychology. *Social and Personality Psychology Compass*, *9*(1), 1–14.

Thoma, S. J., & Rest, J. R. (1986). Moral judgment, behavior, decision making, and attitudes. *In J. R. Rest (Ed.), Moral Development: Advances in Research and Theory, New York, NY: Praeger.*, (pp. 133-175).

Thomson, J. J. (1985). The trolley problem. *The Yale Law Journal*, *94*(6), 1395–1415.

Tillman, C. J., Gonzalez, K., Whitman, M. V., Crawford, W. S., & Hood, A. C. (2018). A Multi-Functional View of Moral Disengagement: Exploring the Effects of Learning the Consequences. *Frontiers in Psychology*, *8*. https://www.frontiersin.org/article/10.3389/fpsyg.2017.02286

Tinghög, G., Andersson, D., Bonn, C., Böttiger, H., Josephson, C., Lundgren, G., Västfjäll, D., Kirchler, M., & Johannesson, M. (2013). Intuition and cooperation reconsidered. *Nature*, *498*(7452), E1–E2. https://doi.org/10.1038/nature12194

Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral Ethics in Organizations: A Review. *Journal of Management*, *32*(6), 951–990. https://doi.org/10.1177/0149206306294258

Trochim, W. M., & Donnelly, J. P. (2001). *Research methods knowledge base* (Vol. 2). Atomic Dog Publishing Cincinnati, OH.

Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge University Press.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, *185*(4157), 1124–1131.

Tversky, A., & Kahneman, D. (1983). Extensional versus intuitive reasoning: The conjunction fallacy in probability judgment. *Psychological Review*, *90*(4), 293.

Weber, J. (1992). Scenarios in business ethics research: Review, critical assessment, and recommendations. *Business Ethics Quarterly*, *2*(2), 137–160.

Wilson, T. D., & Schooler, J. W. (1991). Thinking too much: Introspection can reduce the quality of preferences and decisions. *Journal of Personality and Social Psychology*, *60*(2), 181–192. https://doi.org/10.1037/0022-3514.60.2.181

Wu, A. D., & Zumbo, B. D. (2008). Understanding and using mediators and moderators. *Social Indicators Research*, *87*(3), 367–392.

Yilmaz, K. (2013). Comparison of Quantitative and Qualitative Research Traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education*, *48*(2), 311–325. https://doi.org/10.1111/ejed.12014

Zhong, C.-B. (2011). The Ethical Dangers of Deliberative Decision Making. *Administrative Science Quarterly*, *56*(1), 1–25. https://doi.org/10.2189/asqu.2011.56.1.001

Zhong, C.-B., Ku, G., Lount, R. B., & Murnighan, J. K. (2010). Compensatory ethics. *Journal of Business Ethics*, *92*(3), 323–339.

Zhong, C.-B., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science*, *313*(5792), 1451–1452.

Appendices

Appendix A – Moral Disengagement Cheating Scale

Moral Disengagement About Cheating Scale Used in Studies 1–4 Please indicate the extent to which you agree with the following statements (–3 = Strongly Disagree, +3 = Strongly Agree):

1. Sometimes getting ahead of the curve is more important than adhering to rules.
2. Rules should be flexible enough to be adapted to different situations.
3. Cheating is appropriate behavior because no one gets hurt.
4. If others engage in cheating behavior, then the behavior is morally permissible.
5. It is appropriate to seek short-cuts as long as it is not at someone else's expense.
6. End results are more important than the means by which one pursues those results.

(Shu et al., 2011)

Appendix B – The Unified Scale to Assess Individual Differences in Intuition and Deliberation.

Preference for intuition

Affective

- When I make a decision, it is more important for me to feel the decisions is right than to have a rational reason for it.
- When I make a decision, I trust my inner feeling and reactions
- With most decisions it makes sense to completely rely on your feelings
- I prefer drawing conclusions based on my feelings, my knowledge of human nature, and my experience of life
- Using my gut feelings usually works well for me in figuring out problems in my life
- I believe in trusting my hunches
- I hardly ever go wrong when I listen to my deepest gut feelings to find an answer
- I tend to use my heart as a guide for my actions

Spontaneous

- I generally make snap decisions
- I make quick decisions
- I am often aware of how to decide even before I review all aspects
- I´ve had enough experience to just know what I need to do most of the time without trying to figure it out every time
- The right way to decide usually comes to mind almost immediately
- I typically figure out the way to decide swiftly
- I quickly do the right thing when deciding because I´ve often faced almost the same thing before
- I rarely need to mull things over; how to decide usually becomes quickly apparent

Preference for deliberation

Planning

- Developing a clear plan is very important to me
- I like detailed action plans

- I prefer well-prepared meetings with a clear agenda and strict time management
- I make definite engagements, and I follow up meticulously
- When I make decisions, I proceed step-by-step
- Before making decisions I usually think about the goals I want to achieve
- I prefer making detailed plans rather than leaving things to chance
- I usually have clear, explainable reasons for my decisions

Knowing

- I want to have a full understanding of all problems
- I like to analyze problems
- I study every problem until I understand the underlying logic
- I have no problem thinking things through carefully
- I enjoy intellectual challenges
- I enjoy solving problems that require hard thinking
- I prefer complex problems to simple problems
- I enjoy thinking in abstract terms

(Pachur & Spaar, 2015)

Appendix C - Manipulation

Manipulation – Instructions:

Subjects in the affect [reason] treatment read the following:

«Sometimes people make decisions by using reason and relying on their brains. Other times, people make decisions by using emotion and relying on their hearts.

Many people believe that the heart [brain] is the part of our body that is most connected with good decision-making. When we feel with our hearts [think with our brains], rather than think with our brains [feel with our hearts], we make emotionally [rationally] satisfying decisions.

In this part of the experiment, ***please make your decisions by relying on your heart [brain],*** *rather than your brain [heart].»*

(Gärtner et al., 2022).

Vignettes with original Ethicality score (1-7) as well as the one used for my study (1-4) next to each choice option.

Original unaltered Vignette 1 (Shu et al., 2011).

You work for a large corporation. Your company has recently hired a team of consultants to determine everyone's knowledge of the organization. You understand that it is for informational purposes only, so you do not bother preparing. On the scheduled morning, your boss tells you that the company will raise everyone's bonus by $1,000 for achieving 85% correct or better. You spend the next 2 h cramming, only to realize that you really don't know as much as you had hoped. As the exam is about to start, the consultant hands you your exam, but as he walks away, a piece of paper falls from his bag. It is the answer key for the exam. Nobody else saw the paper fall and no one knows that you can see it. What do you do?

Vignette 1

You work for a large corporation. Your company has recently hired a team of consultants to determine everyone's knowledge of the organization with an exam. You understand that it is for informational purposes only, so you do not bother preparing. On the scheduled morning, your boss tells you that the company will raise everyone's bonus by $1,000 for achieving 85% correct or better. You spend the next 2 hours cramming (studying very hard), only to realize that you really don't know as much as you had hoped. As the exam is about to start, the consultant hands you your exam, but as he walks away, a piece of paper falls from his bag. It is the answer key for the exam. Nobody else saw the paper fall and no one knows that you can see it. What do you do?

- Pick up the answer key and copy almost all of it to get a very high score (1.04) - (/1)
- Leave the answer key where it is but refer to it when you need an answer (1.92) - (/2)

- Leave the answer key where it is and do not look at it (5.46) - (/3)
- Immediately inform the consultant (7.00) - (/4)

Vignette 2

You work for a large high-tech company that has been segmented into similar but competing departments. Two teams from your company are working independently on the same project. In order to motivate the teams, the CEO will give the team that finishes first a substantial monetary bonus. Your team is almost finished, but you've hit some programming difficulties and have made little progress for a week. While sitting at a nearby café, you overhear some people discussing your programming conundrum. It occurs to you that this is the other team and that they have just solved a similar problem. You realize that your team could really use what you are now hearing without the other team knowing. What do you do?

- Take notes and use them (2.46) – (/1)
- Take no notes, but listen carefully and use what you remember (3.21) – (/2)
- Ignore their conversation (6.17) – (/3)
- Leave without listening any further (6.60) – (/4)

(Zhong et al., 2010).

Appendix E – Manipulation Check Items

The items were rated on a Likert Scale of 1-5.

«We would now like to ask you how you made the decisions in the two scenarios you just read.

Please indicate to what extent you agree or disagree with the following statements.»

- I relied on my emotions when responding to the scenarios (I used my heart)
- I relied on my intuition when responding to the scenarios
- I relied on my reason when responding to the scenarios (I used my brain)
- I relied on my analytic thinking when responding to the scenarios
- The instructions made me pay attention to how I made my decisions

(Inspired from Gärtner et al., 2022).