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Rationalize or Reappraise? How Envy and Cognitive Reappraisal Shape Unethical Contagion

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Abstract

Reducing unethical employee behavior is a complex challenge for organizations given that such behavior is often highly contagious. Yet, although many employees imitate the unethical behavior of their coworkers, some adhere to ethical standards in spite of their coworkers' unethical behavior. Drawing on social cognitive theory, we propose an expanded model of unethical social influence that sheds light on the processes and boundary conditions associated with unethical contagion within organizations. Specifically, we argue that

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observing others engage in unethical behavior evokes feelings of envy that, in turn, facilitate moral disengagement and unethicality. We then integrate research on cognitive reappraisal with the moral disengagement literature to propose that cognitive reappraisal attenuates the experience of envy in those who observe unethical behavior. Across two field studies and an experimental study, we build a model in which envy mediates the relationship between observed unethical behavior and moral disengagement with downstream consequences in the form of unethical behavior. Additionally, both cognitive reappraisal orientation (Studies 1 & 2) and cognitive reappraisal training (Study 3) attenuate this mediated effect. Given the substantial costs of unethical contagion within organizations, these findings have implications for both scholars and managers.

Keywords: social influence, envy, moral disengagement, cognitive reappraisal, unethical behavior

Rationalize or Reappraise?

How Envy and Cognitive Reappraisal Shape Unethical Contagion

Unethical employee behavior represents a significant problem for organizations, costing them billions of dollars on an annual basis (Association of Certified Fraud Examiners, 2014; National Retail Federation, 2016; Robinson & Bennett, 1995). Additionally, major ethical scandals have damaged the reputation and profitability of prominent organizations such as Wells Fargo, Volkswagen, General Motors, Toshiba, and Takata (Carroll, Brown, & Buchholtz, 2017; Sims, 2017). Preventing such unethicality is challenging, as behavioral ethics research has revealed that unethical behavior at work is widespread, rather than the product of a few “bad apples” (Kish-Gephart, Harrison, & Treviño, 2010; Mazar, Amir, & Ariely, 2008; Treviño, Den Nieuwenboer, & Kish-Gephart, 2014). Moreover, unethicality can be highly contagious (Gino, Ayal, & Ariely, 2009) as employees “tend to look up and around” when deciding how to act (Treviño & Brown, 2004, p. 72). Indeed, research suggests

that individuals tend to engage in deviance at work when surrounded by deviant coworkers (Dunlop & Lee, 2004; Jones & Kavanagh, 1996; Robinson & O’Leary-Kelly, 1998), lie when observing the deceptive behavior of others (Gino et al., 2009), and cheat when they see their peers cheating (McCabe & Treviño, 1993; O’Fallon & Butterfield, 2011, 2012).

However, it is also clear that many individuals adhere to ethical standards rather than copying the unethical acts they observe at work (Jackson et al., 2014; Shao, Aquino, & Freeman, 2008). Indeed, most people report having strong moral values and an ethical self-concept, which should deter unethical mimicry when activated (Bandura, 1991; Graham, Meindl, Koleva, Iyer, & Johnson, 2015; Mazar et al., 2008). Given this tension between observed unethicality and personal morality, why do some individuals imitate the unethical acts of others while others choose to act in accordance with their ethical standards? The answer may lie in explicating the underlying psychological processes and boundary conditions associated with unethical social influence. One common position within social influence research is that the imitation of unethical behavior results from social learning processes (Bandura & Walters, 1977) as individuals mirror the behavior of those with whom they associate. Yet, unlike other forms of social learning, unethical social influence typically involves behavior that violates the moral standards of the observer, thereby requiring such standards to be disengaged.

In this research, we seek to challenge and expand current understanding related to the dynamics of unethical social influence within organizations. First, we argue that the cognitively-driven social learning processes implicated in social influence research overlook important affective processes that may also play an important role in facilitating unethicality. Specifically, drawing upon Bandura’s (1986) social cognitive theory—a key extension of his earlier social learning theory—we theorize that observing coworkers engage in unethical behavior may lead to feelings of envy. A variety of studies have demonstrated that employees

feel envy when they perceive a coworker unfairly achieving an advantage over them (e.g., Duffy, Shaw, & Schaubroeck, 2008; Kim, O'Neill, & Cho, 2010; Vecchio, 2000, 2005), a phenomenon that may extend into the moral domain. For example, imagine how a Wells Fargo employee might have felt when coworkers received bonuses for generating unauthorized customer accounts (Glazer, 2016), or how a Sears Automotive technician might have felt when other employees achieved sales goals by overcharging customers (Fisher, 1992). Because many unethical workplace behaviors provide benefits to the perpetrators and go unpunished (DeConinck & Lewis, 1997; Desmet, Hoogervorst, & Van Dijke, 2015; Hoogervorst, De Cremer, & van Dijke, 2010; Wiltermuth & Flynn, 2013), observers may appraise these behaviors as providing an advantage to perpetrators and as a result experience envy.

Integrating the envy literature with social cognitive theory, we explore how such feelings of envy, in turn, facilitate a disassociation from ethical standards via moral disengagement. Moral disengagement involves a dissonance-reducing process through which individuals are freed from the self-regulatory processes associated with maintaining ethical standards (Detert, Treviño, & Sweitzer, 2008; Moore, Detert, Treviño, Baker, & Mayer, 2012). Although moral disengagement has often been conceptualized in terms of a dispositional propensity, recent research has highlighted that moral disengagement also operates as a state triggered by contextual factors such as affect (Huang, Greenbaum, Bonner, & Wang, 2019; Moore, 2015; Shu, Gino, & Bazerman, 2011; Welsh, Ordóñez, Snyder, & Christian, 2015). Indeed, Duffy, Scott, Shaw, Tepper, and Aquino (2012) argued that envy represents a notable antecedent of state moral disengagement by providing both the motivation and moral justification required to violate ethical standards. For example, it is easy to see how envious Wells Fargo employees might have felt motivated to justify engaging in questionable behavior given their coworkers' unethical conduct. As such, we

predict an indirect effect of observed unethical behavior on moral disengagement via envy. In turn, we expect that as employees become morally disengaged, they will be more likely to behave unethically.

Yet, why do some employees who observe unethical behavior decide not to act in a similar manner? Social cognitive theory emphasizes that behavior is “regulated by an interplay of self-generated and external sources of influence” (Bandura, 1991). In other words, there may be important individual factors that attenuate unethical social influence. Building on social cognitive theory, we suggest that cognitive reappraisal—an emotion regulation strategy involving the reinterpretation of affective events (Gross, 1998)—may represent a critical boundary condition in terms of the relationship between observed unethical behavior and envy. Since emotional reactions to social events “can affect action...by altering the nature and course of thinking” (Bandura, 1989, p. 1177), regulating emotion may be key to mitigating moral disengagement after observing unethicality. Cognitive reappraisal facilitates the regulation of emotion as individuals change their primary appraisal (Lazarus, 1991) of negative affective events (Gross, 2002; Gross & John, 2003). Specifically, we argue that cognitive reappraisal may attenuate the relationship between observed unethical behavior and envy by transforming the instinctual interpretation of observed unethicality. In turn, we contend that employees who are more (less) likely to reappraise the unethical behavior they have observed are less (more) likely to experience envy and subsequently disengage from their moral standards and engage in unethicality as a result.

Through this research, we make several contributions to the literature. First, we draw on social cognitive theory to expand current understanding of the processes through which unethical social influence leads to unethical behavior. Extending previous research, we argue that the imitation of unethical behavior is not merely driven by cognitive social learning

processes but rather can be triggered by affective reactions to observed unethicity. Second, our findings reveal a mediation model in which observed unethicity leads to moral disengagement, and ultimately unethical behavior, via envy. These findings shed new light on the contextual and affective antecedents that can lead to motivated moral reasoning and ultimately unethical conduct. Third, our developed moderated mediation model (see Figure 1) builds on social cognitive theory by identifying cognitive reappraisal as a critical boundary condition that buffers the effect of observed unethicity on envy via the reinterpretation of how such behavior is appraised. This finding addresses a central question within the social influence literature by explaining who will imitate observed unethicity and who will not. Finally, across both laboratory and field studies we find evidence that the benefits of cognitive reappraisal occur for both individuals with a cognitive reappraisal orientation as well as those who are trained to effectively apply cognitive reappraisal techniques in relevant situations. Given the importance of reducing moral disengagement and unethical behavior in the workplace, our findings also suggest a number of practical implications for organizations.

Theoretical Development

A large literature on social influence has established that individuals often imitate the behaviors of others in their social environment (Cialdini, 2001, 2004). In a series of classic social learning studies, Bandura and colleagues (Bandura, 1965; Bandura, Ross, & Ross, 1961, 1963) found that children mirrored the aggressive behaviors they observed when interacting with others. A growing body of research has found a similar pattern of observation and imitation within the moral domain. For example, Gino and colleagues (2009) found that observing an in-group member engage in cheating subsequently led to higher levels of cheating from observers (see also O'Fallon & Butterfield, 2012). Similarly, employees have been found to mirror a variety of undesirable behaviors such as littering (Kallgren, Reno, & Cialdini, 2000), unethical pro-organizational behavior (Shu, 2015),

earnings management (Chiu, Teoh, & Tian, 2012), and tax evasion (Wenzel, 2004). Recent research has further suggested that peers can influence moral disengagement processes that lead to questionable conduct (Caravita, Sijtsma, Rambaran, & Gini, 2014; Dodge, Dishion, & Lansford, 2006). Yet, the focus on external forces within some social influence scholarship provides less insight into the dynamic interplay between individual and contextual factors in shaping unethical behavior.

Highlighting the importance of both external social cues and individual self-regulation, social cognitive theory (Bandura, 1986) reveals a more nuanced process through which social influence shapes employee behavior. Social cognitive theory grew out of Bandura's earlier work in order to provide additional insight into social learning processes. According to social cognitive theory, although humans are social creatures who engage in vicarious learning of appropriate behavior through observation, they are also individual agents with the capacity to manage external influences (Bandura, 2001). Such regulation often occurs as individuals exert control over appraisals of the events they observe. As Bandura (2009, p. 267) noted, "cognitive factors partly determine which environmental events will be observed, what meaning will be conferred upon them, whether they will have any lasting effects, what emotional impact and motivating power they will have, and how the information they convey will be organized for future use." Thus, while the social influence literature often emphasizes the importance of contextual factors, social cognitive theory highlights the interaction between individual and contextual factors to clarify why individuals are not simply like "weathervanes, constantly shifting direction to conform to whatever momentary social influence happened to impinge upon them" (Bandura, 1991, p. 249). Below, we build on social cognitive theory to develop a model that provides novel insight both in terms of "why" unethical contagion occurs and "when" such effects will emerge.

Observed Unethicality and Envy

It is not uncommon to observe unethical behavior at work with nearly half of employees reporting that they have seen misconduct within their organization (McGregor, 2014). Unfortunately, such unethicality often goes unpunished (DeConinck & Lewis, 1997; Desmet et al., 2015; Hoogervorst et al., 2010; Wiltermuth & Flynn, 2013). As such, unethical behavior is often used by employees as a means to achieve difficult performance goals (Gino & Pierce, 2009; Schweitzer, Ordóñez, & Douma, 2004), enhance ratings of job performance (Templer, 2018), take advantage of ethical loopholes (Bauman, Tost, & Ong, 2016), or cut corners when completing assignments (Greenbaum, Mawritz, Bonner, Webster, & Kim, 2018; Parks, Ma, & Gallagher, 2010). For example, many employees at Wells Fargo used unethical tactics to achieve their goals such as signing up customers for unauthorized accounts, making up customer information, and failing to disclose information to customers (Kouchaki, 2016; Tippet, 2016). According to social cognitive theory, observing these types of behaviors may elicit strong affective reactions (Bandura, 2009).

As part of the self-regulatory process, individuals seek to understand if their actions will be valued relative to others by comparing their actions and associated outcomes to the actions and outcomes of others (Bandura, 1991). At work, unethical conduct is often thought of as a tool to generate an advantage for an individual or organization because it so often results in success (Baucus, Norton, Baucus, & Human, 2008). Moreover, cultural channels often portray unethical behavior as the means to success (Bandura, 2009). Thus, engaging in unethical conduct may sometimes be perceived as providing an advantage in valued outcomes (e.g., performance ratings, rewards, goal attainment). These potential advantages associated with unethical behavior subsequently shape employees' responses to observing such behavior in their work environment. The unethical conduct of one's colleagues invites social comparisons and raises questions about whether such behavior is conferring an unfair

advantage (Bandura, 2009). When a comparison is favorable (i.e., the playing field is level and the observer is doing well relative to the observed), people feel pleasure. However, when a comparison is unfavorable (i.e., the playing field is tilted against the observer and the observed is doing better), perceived differences become very salient to observers and negative affective reactions are likely to occur (Hogg, 2000).

Building on social cognitive theory, we expect that employees who observe their coworkers behave unethically may experience feelings of envy. Envy is elicited via social comparison when one appraises that they unfairly lack something desirable that another enjoys (Dunn & Schweitzer, 2006; Parrott & Smith, 1993; Smith, Parrott, Diener, Hoyle, & Kim, 1999). Envy is characterized by feelings of hostility, inferiority, resentment, and a sense of subjective injustice (Dunn & Schweitzer, 2006; Parrot & Smith, 1993; Smith & Kim, 2007). Because unethical behavior is often portrayed as advantageous and is used to obtain desired outcomes, those who observe unethical behavior are likely to feel envy. As a result, when employees observe their colleagues engaging in unethical conduct they may appraise such behavior as providing others with an unfair advantage that confers benefits that they would like to have. Thus, perceiving coworkers' observed unethical behavior in this way invites negative social comparisons leading to the elicitation of envy (Hogg, 2000; Parrott & Smith, 1993).

Hypothesis 1: Observed unethical behavior is positively related to envy.

Envy and Moral Disengagement

Envy is an undesirable emotion, thus "the goal of the envious person is to reduce his or her level of envy by reducing the gap between the envious and the envied" (Cohen-Charash & Mueller, 2007, p. 666). Yet, attempting to reduce this gap may have troubling implications. A number of studies have shown that envy can have a variety of negative consequences, including unethical behavior (e.g., Duffy et al., 2012; Cohen-Charash &

Mueller, 2007; Klein, 1957; Parks, Rumble, & Posey, 2002; Zizzo & Oswald, 2001). For example, Gino and Pierce (2009) found that feelings of envy led to unethical behaviors aimed at restoring equity between the envied and the envious. Yet, social cognitive theory observes that in order for an envious individual to engage in questionable conduct, internal moral standards that inhibit such behavior must first be disengaged (Bandura, 1986, 1989).

As Bandura (1999, 2002, 2014) notes, personal moral standards generally serve as guideposts for appropriate behavior. Normally, individuals self-regulate their behavior to align with these guideposts so as to avoid feelings of guilt and self-loathing. Yet, social cognitive theory further suggests that affective reactions to environmental events influence subsequent cognition and behavior (Bandura, 1989). Specifically, “one’s context can influence one’s tendency to morally disengage” (Moore, 2015, p. 2001). Moral disengagement is an extension of social cognitive theory in which individuals decouple their moral standards from their behavior (Bandura, 1986, 1989). Moreover, moral disengagement occurs through a set of eight cognitive mechanisms that involve re-construing unethical conduct, distorting the consequences, and devaluing the victims (Moore, 2015).

We argue that envy can link observed unethicality to moral disengagement in multiple ways. First, envy may cause observed unethicality to be rationalized as morally justifiable by re-construing such conduct and distorting the associated consequences. Envious individuals may be motivated to believe that the unethical behavior they observed is permissible in order to close the gap between themselves and their colleagues. As Duffy et al. (2012, p. 646) suggest, envy may lead individuals to euphemistically rationalize that they are “making things right” or “making things fair.” For example, an envious employee who observed coworkers receive praise and rewards for taking advantage of an ethical loophole might feel envious of these benefits and seek to morally justify engaging in similar behaviors. Relatedly, envy may also lead to a distorting of consequences associated with the unethical act. For

example, because committing unethical behavior often helps someone accomplish objectives in a shorter amount of time than an ethical route (Ordóñez, Schwietzer, Galinsky, & Bazerman, 2009), observing unethical behavior may lead envious individuals to classify such behaviors as efficient and effective rather than unethical. Consequently, rationalizing another's unethical behavior would allow the envious to engage in similar behavior without feeling guilt or shame.

Second, envy can facilitate moral disengagement through the devaluing of potential victims (Duffy et al., 2012; Huang et al., 2019). This is because envy can involve not only pulling oneself up to the level of others but also pulling others down in order to level the playing field (Duffy et al., 2012; Tai, Narayanan, & McAllister, 2012). Indeed, those experiencing envy have a tendency to devalue and disrespect others (Dunn & Schweitzer, 2006; Smith et al., 1999; Cohen-Charash & Larson, 2016; Schaubroeck & Lam, 2004). Devaluation allows individuals to blame and minimize the worth of others making room for rationalizations that others are undeserving of fair and respectful treatment (Bandura, 1986; Detert et al., 2008). Such rationalizations allow for hostile and antisocial behavior typically inhibited by moral standards (Brief, Buttram, & Dukerich, 2001; Duffy et al., 2012). For example, an employee whose colleagues have acted unethically may feel more justified in passing undeserved blame onto them or taking undeserved credit for their work. Additionally, moral disengagement may be driven not only by the specific individuals engaging in unethicity but by the organization more generally for enabling such conduct to occur. Research suggests that the ill will and antisocial behaviors associated with envy are often directed at a wider audience around the envied individual (Duffy et al., 20012; Tai et al., 2012; van Dijk, Ouwerkerk, Goslinga, Nieweg, & Gallucci, 2006). For instance, it would be easy for an employee whose colleagues have been rewarded by management for their unethicity to devalue management and employees within the organization thereby freeing

them up to engage in unethicity that might harm the organization. Thus, envy plays an important role in the aftermath of observed unethicity in terms of facilitating moral disengagement via re-construal of unethical conduct, distortion of consequences, and devaluing of victims.

Hypothesis 2: Observed unethical behavior has a positive indirect effect on moral disengagement through envy.

Moral disengagement, in turn, facilitates unethical conduct that would normally be prevented by internal moral standards (Bandura, 1986, 1990, 1999). This well-established connection between moral disengagement and unethical behavior highlights the implications associated with the contagious spread of unethical behavior in the workplace. A substantial body of research has connected moral disengagement to a variety of unethical behaviors, including lying, cheating, stealing, criminality, aggression, and bullying (see Moore, 2015 for a review). These findings make sense given that moral disengagement involves the deactivation of standards that prevent individuals from engaging in such behaviors. Though not everyone who observes unethical behavior will respond in the same way, those who morally disengage are highly likely to engage in subsequent unethical behavior (e.g., Duffy et al., 2012; Huang et al., 2019, Moore et al., 2012). Through this process of observing unethical behavior, experiencing envy, and morally disengaging, employees become unencumbered by moral self-regulation and feel free to mimic the unethical behavior they observe others engage in. As a result, employees may adopt unethical tactics in order to obtain desired outcomes for themselves, just as they have seen those around them do.

Hypothesis 3: Observed unethical behavior has a positive serial indirect effect on unethical behavior through envy and moral disengagement.

The Moderating Effect of Cognitive Reappraisal

Although unethical behavior is highly contagious, it is clear that not everyone who observes unethicity behaves unethically as a result. Social cognitive theory's extension of earlier social learning frameworks highlights the interactive nature of external forces and internal characteristics in shaping cognition and behavior (Bandura, 1986). Individuals develop beliefs and skills that shape what environmental events they attend to, how they interpret and react to those events, and the extent to which those events influence their subsequent thinking (Bandura, 1989, 1991, 2009). As a result, individuals have the agentic capacity to regulate external influence (Bandura, 1986).

Yet, how do individuals regulate unethical social influence? Building on social cognitive theory, we suggest that emotion regulation plays a key role in shaping unethical contagion given the influence of emotion (Bandura, 1989). Emotion regulation refers to the strategies individuals use to modulate emotional responses to affective events (Gross, 1998). An emotional response unfolds through a two-step appraisal process (Gross, 1998; Lazarus, 1991) whereby one judges the importance and meaning of an affective event (primary appraisal), experiences emotional response tendencies—automatic, instinctual cognition about how to respond—if the event is judged as important, and determines how to respond to the event (secondary appraisal). Accordingly, emotional responses are not fixed and multiple responses may result from the same event (Gross, 1998; Frijda, 1986). The initial emotional response tendencies one experiences can be modulated through emotion regulation and one's ultimate emotional response is the result of whether modulation occurred or not (Gross, 1998; Lazarus, 1991). Whereas unethical behavior may be stereotyped as a way to gain advantage, it is likely that people would instinctively respond to observing unethicity with thoughts and feelings that shape envy. However, those who regulate their emotion may be able to successfully modulate such tendencies.

Among the numerous emotion regulation strategies that scholars have identified (see Gross, 1998 and Koole, 2009 for reviews) one that appears particularly relevant for modulating envy from observed unethicity is cognitive reappraisal. Cognitive reappraisal involves the deliberate, effortful reinterpretation of an emotional event to change its meaning and, thus, modulates emotional responses by altering the primary appraisal and triggered emotions (Gross, 1998). Accordingly, cognitive reappraisal is useful for regulating emotion in situations where the emotion-evoking event was not avoided or attended to in a neutral way. Whereas avoiding affective events or pre-empting them in a way that allows for neutral processing is difficult in day-to-day life because it requires foreknowledge (John & Gross, 2007), cognitive reappraisal has received a great deal of attention both as an orientation that predisposes individuals to use it for regulating emotions and as a trained approach (Ochsner & Gross, 2007). Reappraisal research confirms that it is a particularly effective strategy for reducing negative emotions over short (Goldin, McRae, Ramel, & Gross, 2008; Gross & John, 2003; John & Gross, 2004; Mauss, Cook, Cheng, & Gross, 2007; Woud, Holmes, Postma, Dalgleish, & Mackintosh, 2012) and long periods of time (Denny & Ochsner, 2014) regardless of whether these effects were accomplished naturally via an orientation to cognitively reappraise or induced via cognitive reappraisal training. Cognitive reappraisal unfolds as areas in the prefrontal cortex are activated while concurrently the amygdala and other emotional centers in the brain that contribute to instinctual emotional and subsequent behavioral responses are deactivated (Goldin et al., 2008; Ochsner & Gross, 2008). Thus, it may be useful for helping individuals who observe negative events and instinctively lean toward a negative response to ultimately respond in a more controlled, sustainable way. Indeed, research has shown that cognitive reappraisal helps individuals deal with stress in positive ways (Troy, Wilhelm, Shallcross, & Mauss, 2010), cultivate self-esteem, realize

personal growth, and develop positive interpersonal relationships (Garnefski, Kraaij, & Spinhoven, 2001; Gross & John, 2003; John & Gross, 2004).

Integrating cognitive reappraisal research with social cognitive theory, we argue that cognitive reappraisal may play a key role in mitigating negative affective responses to observed unethicity. Given its norm-breaking nature and potential for significant consequences (Bandura, 2009; Lindenmeier, Schleer, & Pricl, 2012), it is unlikely that another's observed unethical behavior could be ignored or processed in a neutral way. Instead, one is likely to make a primary appraisal that such an event is important and thus activate the emotion formation process (Lazarus, 1991). Cognitive reappraisal has been repeatedly shown to be a particularly effective strategy for modulating negative emotional response tendencies at this stage and ultimately responding in positive ways (Goldin et al., 2008; Gross & John, 2003; Ochsner & Gross, 2005, 2008). By modulating negative emotional response tendencies, cognitive reappraisal helps individuals respond to external stimuli in goal-oriented ways (Koole, 2009). For example, Duffy, Shaw, Hoobler, and Tepper (2010) argued that employees who engage in strategies such as cognitive reappraisal are less likely to engage in deviance when faced with environmental events that could motivate such behaviors. Those who observe unethical behavior are likely to respond with envy for multiple reasons but ultimately may have another, more regulated emotional response if they change the meaning of what they observe through cognitive reappraisal. As such, we expect that cognitive reappraisal will inhibit envy in response to observed unethicity, thereby attenuating downstream effects on moral disengagement and unethical behavior.

Hypothesis 4: Cognitive reappraisal will attenuate the positive effect of observed unethical behavior on envy.

Hypothesis 5: The positive indirect effect of observed unethical behavior on moral disengagement through envy will be weaker at high levels of cognitive reappraisal.

Hypothesis 6: The positive serial indirect effect of observed unethical behavior on unethical behavior through envy and moral disengagement will be weaker at high levels of cognitive reappraisal.

Overview of Studies

We tested our hypotheses across multiple studies employing complementary methodologies. These studies included a multi-wave field study (Study 1), a multi-wave, multi-source field study with employee-coworker dyads (Study 2), and a laboratory experiment manipulating observed unethicality and cognitive reappraisal (Study 3). The field studies provide support for the developed model in an organizational environment and enhance generalizability. The experimental study provides a controlled test of the causal mechanisms on a behavioral outcome via the manipulation of observed unethical behavior and cognitive reappraisal. Additionally, these studies examine the interactive effects of both cognitive reappraisal orientation (Study 1 and Study 2) and cognitive reappraisal training (Study 3). Together, these studies replicate our model while addressing potential limitations and alternate explanations.

Study 1

Sample & Procedure

Participants for this study were recruited from a large manufacturing organization located in India in 2019. Participants were 94% male, with an average age of 39.20 years ($SD = 8.54$), and an average organizational tenure of 13.70 years ($SD = 8.82$). Participants were technical staff officers who worked on the manufacturing floor during 12 hour shifts and dealt directly with various aspects of the manufacturing process in the organization. Their responsibilities included working as a technical expert within an assigned unit as part of the manufacturing process, dealing with the manufacturing technology, troubleshooting issues related to the manufacturing process, working with other units in the manufacturing line, and

coordinating with other teams such as engineering, sales, and logistics. The study design involved two employee surveys with a one month lag between them. The surveys were conducted online and in English. At Time 1, we received 434 employee responses. At Time 2, we received 164 complete responses with a response rate of 37.37%.

Measures

Observed unethical behavior. At Time 1, employees reported the frequency with which they observed their coworkers in general engaging in unethical behaviors in their work environment over the past month using Akaah's (1996) 16-item workplace unethical behavior scale (1 = *Never* to 7 = *All the time*; $\alpha = .95$). Sample items include, "Took home company materials and supplies for personal use" and "Falsified time/quality/quantity reports".

Cognitive reappraisal. At Time 1, employees provided ratings of their cognitive reappraisal orientation using an adapted version of Gross and John's (2003) 6-item scale that specifically referenced observed unethicality (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .94$). Sample items included, "When I observe my coworkers do something unethical, I change the way I interpret the situation to feel differently about it" and "When I observe my coworkers do something unethical, I manage how I feel about it by changing how I think about it."

Envy. At Time 2, employees reported feelings of envy toward coworkers at work over the past month using an adapted version of Moran and Schweitzer's (2008) 4-item scale that referenced coworkers rather than experimental participants (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .79$). Sample items include, "I am envious of my coworkers" and "I feel resentful of my coworkers because they have many advantages over me".

Moral disengagement. At Time 2, employees also rated their level of state moral disengagement over the past month, using a modified version of Moore and colleagues' (2012) 8-item scale (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .87$). Similar to other

research examining state moral disengagement (e.g., Shu et al., 2011; Welsh et al., 2015), we modified items from Moore et al.'s (2012) dispositionally-oriented moral disengagement scale to capture state moral disengagement specifically referencing employee moral disengagement levels during the past month (see Appendix A).

Study 1 Results

Descriptive statistics and correlations for all study variables are reported in Table 1. We used the PROCESS Macro in SPSS (Hayes, 2013) to test our hypotheses. PROCESS uses 5,000 bootstraps to generate estimates and bias-corrected 95% confidence intervals (CI). We mean centered the interaction variables. We conducted a confirmatory factor analysis (CFA) to compare the expected four-factor model—observed unethical behavior (UB), envy, reappraisal, and moral disengagement—with several alternative models. Using maximum likelihood estimation and randomly created item parcels (Floyd & Widaman, 1995; Landis, Beal, & Tesluk, 2000) for scales with eight or more items, we examined the fit indices for the four-factor model and found good fit ($\chi^2 (129) = 268.46$; CFI = .93, TLI = .91, RMSEA = .08, SRMR = .06). Next we compared the four-factor model to a three-factor model (where envy and moral disengagement were loaded on one factor, and observed unethical behavior and reappraisal were loaded on two separate factors), a second three-factor model (where envy and reappraisal were loaded on one factor, and observed unethical behavior and moral disengagement were loaded on two separate factors), a two-factor model (where envy, moral disengagement, and reappraisal were loaded on one factor, and observed unethical behavior was loaded on a second factor), and a one-factor model (where all items were loaded on a single factor). Using chi-squared difference tests, results revealed that the four-factor model produced a significant improvement in chi-square over the first three-factor ($\Delta\chi^2 = 219.65$, $\Delta_{df} = 3$, $p < .001$), the second three-factor ($\Delta\chi^2 = 411.56$, $\Delta_{df} = 3$, $p < .001$), the two-factor ($\Delta\chi^2 = 649.35$, $\Delta_{df} = 5$, $p < .001$), and the single-factor ($\Delta\chi^2 = 1123.85$, $\Delta_{df} = 6$, $p < .001$) models.

We used the PROCESS Macro in SPSS to test our study hypotheses (Hayes, 2013).

We mean centered the interaction variables. The results are reported in Table 2. Using Model 7 in PROCESS, we first examined the direct effect of observed unethical behavior on envy (*H1*). The results showed that observed unethical behavior in one's work environment was positively related to envy ($b = .52$, $SE = .11$, $p < .001$), supporting Hypothesis 1. We then tested the indirect effect of observed unethical behavior on moral disengagement via envy (*H2*), using the mean level of the moderator in Model 7. We found that the indirect effect was significant ($b = .21$, $SE = .06$, 95% CI [.109, .349]), supporting Hypothesis 2.

We then examined the interactive effect between observed unethical behavior and cognitive reappraisal on envy (*H4*). As expected, we found a significant interaction between observed unethical behavior and cognitive reappraisal on envy ($b = -.17$, $SE = .07$, $p = .02$), supporting Hypothesis 4. We then conducted a simple slopes test (Aiken & West, 1991) to test whether the effects were in the expected direction. As expected, when cognitive reappraisal was low (-1 SD), the relationship between observed unethical behavior and envy was positive and significantly different from zero (*simple slope* = .69, $t = 4.48$, $p < .001$).

When cognitive reappraisal was high (+1 SD), the relationship between observed unethical behavior and envy was still positive and significant but the slope was weaker (*simple slope* = .35, $t = 2.99$, $p < .01$). This interaction is shown in Figure 2. We further examined the interactive effect of cognitive reappraisal on the indirect effect of observed unethicality on moral disengagement through envy (*H5*). As expected, we found that when cognitive reappraisal was low (-1 SD), the conditional indirect effect was statistically significant ($b = .32$, $SE = .09$, 95% CI [.175, .533]), but when cognitive reappraisal was high (+1SD) the conditional indirect effect was no longer significant ($b = .09$, $SE = .06$, 95% CI [-.006, .252]). Furthermore, the index of moderated mediation was significant ($b = -.07$, $SE = .03$, 95% CI [-.133, -.018]), supporting Hypothesis 5.

Study 1 Discussion

The results of Study 1 provide initial support for our hypothesized model. Observed unethicity increased moral disengagement through envy. Additionally, this indirect effect was attenuated by cognitive reappraisal. The use of an organizational sample with temporal separation helped to strengthen the design of this study. Nevertheless, this study has a number of limitations that we sought to address in subsequent studies. First, our sample consisted of primarily male employees in a single organization in India raising questions about the generalizability of these results. Second, it is possible that having a single source provide ratings of observed unethicity, envy, and moral disengagement could open the door to social desirability or self-serving biases influencing our results. In Study 2 and Study 3, we sought to address each of these points. Specifically, in Study 2 we sought to replicate and extend our findings using multi-source data from an alumni sample in the United States representing a diverse set of occupations and industries.

Study 2

Sample & Procedure

Participants for this study were recruited using a university alumni database from a Midwestern University in 2019.¹ We contacted employees in this database inviting them to participate in a research study about their workplace and to recruit a coworker who worked in the same work environment and with whom they regularly interacted. For their participation, employees and coworkers were given a \$5 Amazon gift card for each completed survey. The final sample consisted of 195 employee-coworker dyads.² Employees were 71% female, with an average age of 35.51 years ($SD = 10.55$), and were 93% Caucasian with an average organizational tenure of 6.29 years ($SD = 7.03$). Coworkers were 73% female, with an

¹ The University of Wyoming's Institutional Review Board approved the data collections here referred to as Studies 2 and 3 under the protocol title "Reactions to Cheating Behavior" (Approval #20190326CT02343).

² We excluded 2 dyads that reported that the employee and coworker did not actually interact with each other. We also excluded 8 dyads in which participants failed multiple quality control checks (e.g., responding to prompts to select "strongly disagree" in response to a question).

average age of 35.84 years ($SD = 10.56$) and were 91% Caucasian with an average organizational tenure of 6.41 years ($SD = 6.92$). Our sample spanned a wide variety of industries including finance, education, government, and customer service. At Time 1, coworkers reported the level of unethical behavior in the work environment during the past month and employees reported their level of cognitive reappraisal. At Time 2, employees reported their levels of envy and moral disengagement during the past month.

Measures

Observed unethical behavior. In Study 1, employees reported both the level of coworker unethical behavior they observed and also their levels of envy and moral disengagement. However, it is possible that relying on the same individual for these ratings could raise questions about social desirability, self-serving biases, and reverse causality. Thus, in Study 2, to examine observed unethical behavior, we employed a multi-source design by having a coworker rate the frequency with which they observed others engage in unethical behavior at work over the past month using an other-focused version of Akaah's (1996) 16-item workplace unethical behavior scale (1 = *Never* to 7 = *All the time*; $\alpha = .93$).

Cognitive reappraisal. At Time 1, employees provided ratings of their cognitive reappraisal orientation using Gross and John's (2003) 6-item scale (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .91$). Because coworkers provided ratings of observed unethical behavior in this study rather than employees, we did not adapt the employee measure of cognitive reappraisal to specifically reference unethical behavior as we did in Study 1.

Envy. At Time 2, employees reported feelings of envy at work using Cohen-Charash's (2009) 9-item scale. Sample items for the scale include, "I feel resentment towards my coworkers" and "My coworkers have it better than I do". Participants responded to these items on a 7-point response scale (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .93$).

Moral disengagement. At Time 2, employees rated their level of state moral disengagement over the past month, using the same measure as in Study 1, a modified version of Moore and colleagues' (2012) 8-item scale that specifically referenced employees' state moral disengagement during the past month (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .93$).

Study 2 Results

Descriptive statistics and correlations for all study variables are reported in Table 3. We again conducted a confirmatory factor analysis (CFA), using the same procedure as in Study 1, to compare the expected four-factor model with the same alternative models tested in Study 1. Again, we found good fit for the expected model ($\chi^2(113) = 259.10$; CFI = .94, TLI = .93, RMSEA = .08, SRMR = .05) and that the expected model had a better fit than the alternative models. Results from chi-squared difference tests revealed that the four-factor model (where each variable was loaded onto a separate factor) produced a significant improvement in chi-square over the first three-factor (where envy and moral disengagement were loaded on one factor, and observed unethical behavior and reappraisal were loaded on two separate factors) ($\Delta\chi^2 = 497.34$, $\Delta df = 3$, $p < .001$), the second three-factor (where envy and reappraisal were loaded on one factor, and observed unethical behavior and moral disengagement were loaded on two separate factors) ($\Delta\chi^2 = 453.71$, $\Delta df = 3$, $p < .001$), the two-factor (where envy, moral disengagement, and reappraisal were loaded on one factor, and observed unethical behavior was loaded on a second factor) ($\Delta\chi^2 = 1031.57$, $\Delta df = 5$, $p < .001$), and the single-factor (where all items were loaded on a single factor) ($\Delta\chi^2 = 1540.87$, $\Delta df = 6$, $p < .001$) models.

As in Study 1, we used the PROCESS Macro in SPSS to test our study hypotheses (Hayes, 2013)³. We again mean centered the interaction variables. The results are reported in Table 4. Using Process Model 7, we first examined the direct effect of observed unethical behavior on envy (*H1*). The results showed that observed unethical behavior was positively related to employee feelings of envy ($b = .26$, $SE = .10$, $p = .01$), supporting Hypothesis 1. We then tested the indirect effect of observed unethical behavior on moral disengagement via envy (*H2*). We found that the indirect effect was significant at mean levels of reappraisal ($b = .09$, $SE = .04$, 95% CI [.018, .187]), supporting Hypothesis 2.

We then examined the interactive effect between observed unethical behavior and cognitive reappraisal on envy and on the indirect effect between observed unethical behavior and moral disengagement through envy (*H4* and *H5*, respectively). As expected, we found a significant interaction between observed unethical behavior and cognitive reappraisal on envy ($b = -.27$, $SE = .10$, $p = .01$), supporting Hypothesis 4. A simple slopes test (Aiken & West, 1991) revealed that the effects were in the expected direction. When cognitive reappraisal was low (-1 SD), the relationship between observed unethical behavior and envy was positive and significantly different from zero (*simple slope* = $.53$, $t = 4.29$, $p < .001$). Conversely, when cognitive reappraisal was high ($+1$ SD), the relationship between observed unethical behavior and envy was negative and not significantly different from zero (*simple slope* = $-.01$, $t = -.06$, $p = .95$). This interaction is shown in Figure 3. We also found that when cognitive reappraisal was low (-1 SD), the conditional indirect effect of observed unethical

³ We tested our model with and without the inclusion of relevant control variables and found the pattern of results were largely consistent with the reported results. Thus, following recommended practices we report model estimates without controls included (Becker, 2005; Bernerth & Aguinis, 2016; Carlson & Wu, 2012). The control variables we tested were moral identity and suppression orientation. We captured moral identity as a control variable at Time 1 because research has suggested that moral identity may represent an individual difference relevant to the effects of unethical social influence (O'Fallon & Butterfield, 2011). We assessed moral identity using Aquino and Reed's (2002) 5-item moral identity internalization subscale ($\alpha = .95$). We captured suppression as a control variable at Time 1 because it represents a distinct form of emotion regulation that is sometimes assessed alongside cognitive reappraisal (Gross & John, 2003). We measured suppression using Gross and John's (2003) 4-item scale ($\alpha = .80$).

behavior on moral disengagement via envy was statistically significant ($b = .18$, $SE = .07$, 95% CI [.069, .333]), but when cognitive reappraisal was high (+1SD) the conditional indirect effect was no longer significant ($b = .00$, $SE = .05$, 95% CI [-.099, .123]).

Furthermore, the index of moderated mediation was significant providing evidence of moderated mediation ($b = -.09$, $SE = .04$, 95% CI [-.197, -.022]). Thus, Hypothesis 5 was supported.

Study 2 Discussion

Replicating the findings of Study 1, we found that the unethical behavior of others increased employees' moral disengagement via envy. Once again, cognitive reappraisal represented a critical boundary condition of this indirect effect. Specifically, when cognitive reappraisal was high, the indirect effect of observed unethical behavior on moral disengagement via envy was not significant. Study 2 also addresses some of the limitations of Study 1 by using a multi-wave, multi-source design of employee-coworker dyads from a variety of organizations. Nevertheless, field studies possess certain limitations in terms of establishing causality and ruling out alternative explanations. Building on Study 1 and Study 2, Study 3 examines our hypothesized model using an experimental design. Additionally, this methodology allowed us to manipulate levels of cognitive reappraisal via cognitive reappraisal training. Finally, although the relationship between moral disengagement and unethical behavior has been well-established, the controlled environment allowed us to capture actual unethical behavior as an outcome while avoiding limitations associated with self-reported unethicality.

Study 3 Method

Sample & Procedure

For Study 3, we conducted a computerized experiment with 243 adults recruited through the survey panel company Prolific Academic for payment equivalent to

\$10.00/hour.⁴ We administered the experiment on a single day in 2019 and limited participation to U.S. adults. Participants were 51% male, 70% Caucasian, and had an average age of 32.01 ($SD = 11.00$) years. After obtaining consent from participants, we informed them that they would be participating in “online competitions.” Specifically, they would be competing against other Prolific participants in a series of online competitions for bonus payments equivalent to 5% (\$.50) of their hourly pay. However, unknown to participants, we controlled the competition outcomes and all participants received the same bonus payment. After receiving general study instructions, we told participants that because the study involved competitive tasks we would like them to first watch a video presentation about how to effectively react during the tasks.

There were two training conditions—cognitive reappraisal and control—which both included a video presentation lasting approximately 5 minutes as well as a writing exercise. Our design was based on other studies showing that computerized cognitive reappraisal trainings involving videos can be effective (e.g., Woud et al., 2012). Approximately half of participants were assigned to each condition (Reappraisal = 123, Control = 120). The cognitive reappraisal video began with an introduction to cognitive reappraisal based on Gross’ (1998) conceptualization, followed by 3-step instructions outlined by Barlow and colleagues (2017) for how to effectively cognitively reappraise. Specifically, these instructions included: 1) reflecting on the emotion-evoking event, 2) labeling the discrete emotion(s) experienced, and 3) reinterpreting the emotion-evoking event in a different way. We also provided participants with examples for each of these steps in the context of reappraising observed unethical behavior. For example, in delivering the instructions for Step 1, we suggested that someone who observed a coworker take yet another extra-long lunch

⁴ To ensure high data quality and that participants were attentive to the cognitive reappraisal training that they received, we excluded 13 participants who failed multiple attention checks from the 256 participants we recruited leaving a final sample size of 243.

break without punishment could reflect that they responded affectively because the person violated important norms and rules that ensure fairness and productivity. Following the video presentation, participants were prompted with an example of an affective event involving unethical behavior and asked to follow the trained steps and reappraise the event, and then to record their reappraisal.

Participants in the control condition were trained on how to recognize their emotions. This training was equal in length and involved both a video presentation and a writing exercise. Specifically, through the video presentation, we trained participants to reflect on emotion-evoking events and to label the emotions they experienced, without providing the crucial third-step of reinterpreting the emotion-evoking event. As with the reappraisal training, we provided participants with examples of where unethical behavior was observed in illustrating how to complete the training steps. By training both groups in emotion recognition, we ensured that one would not be more primed to consider their emotional experience than the other. Moreover, in providing real-world examples of affective events, we mentioned the same emotional states in this training as we did in the emotion regulation training including anger, frustration, upset, jealous, and envy. To check that this manipulation was effective, we asked participants to answer three multiple-choice questions about their respective training's content. Those in the cognitive reappraisal condition were asked about the definition of cognitive reappraisal, to identify correct response steps when engaging in cognitive reappraisal, and to identify reasons for cognitively reappraising as described in the training. Approximately 90% of those in the reappraisal condition successfully answered all three questions. Those in the control condition were asked the name of the training they had just received, to identify one of the two steps in emotion recognition, and to report one of the mentioned benefits of emotion recognition. Approximately 96% of those in the control condition successful answered all three questions.

After their respective trainings, we introduced the competitive element to the study—a dice-rolling game in which participants used a six-sided dice-roll simulator to try to roll the highest overall number total across three rounds, which has been used in previous research for similar purposes (Wakeman & Moore, 2018). Participants were informed that they had been matched with four competitors and that the player who scored the highest would receive a bonus payment of \$.25. Unknown to participants, these competitors were all computer-simulated and were not actual participants. We instructed participants to report accurate dice rolls and informed them that the probability of rolling the same number twice (2.8%) and five times in a row (.000000000002%) were low to very low, respectively. The “competition” then commenced and participants recorded their rolls in the survey across three rounds. To let participants know how well they did against their competitors, we presented them with a table showing both their own reported rolls and their fellow competitors’ computer-generated rolls after each round.

To manipulate observed unethical behavior, we varied the computer-generated competitor dice rolls presented to participants as real dice rolls after each round. To those in the high observed unethical behavior condition ($n = 123$), we presented computer-generated competitor dice rolls that were high and had very low probabilities of actually occurring (e.g., consecutive sixes). To those in the low observed unethical behavior condition ($n = 120$), we presented dice rolls that were much lower and appeared to be more realistic (i.e., the result of actual dice rolls). To check that this manipulation worked as intended, we asked participants to respond “yes” or “no” at the conclusion of the study to the question of whether they thought their fellow competitors accurately reported their rolls. In the high other unethical behavior condition, 96% of participants did not believe that their fellow competitors accurately reported their roles whereas only 16% of those in the low unethical behavior condition did not believe that their fellow competitors accurately reported their roles ($T =$

21.26, $p < .001$). After the three rounds of this task, participants completed a measure of envy related to their competitors.

Upon completing the dice game, we told participants that they would compete against the same participants on one additional task—a matrix problem-solving task adapted from Mazar and colleagues (2008). Participants were presented with 20 matrices containing 12 three-digit numbers (e.g., 3.14) and told that they had three minutes to identify the two numbers in each matrix that added up to exactly 10.0. Participants were instructed to check a box next to each matrix they solved. After the three minutes were over, they were told to self-report the number of matrices they correctly solved. Furthermore, we told participants that the player who solved the highest number of matrices would receive an additional bonus payment of \$.25. Prior to completing the matrix task, but after receiving instructions on the task and completing a practice problem, participants completed a state measure of moral disengagement. Unknown to the participants, six of the 20 matrices we presented them were unsolvable, allowing participants the opportunity to cheat by over-reporting their actual performance by checking the box next to unsolvable matrices (e.g., Welsh, Bush, Thiel, & Bonner, 2019).

Measures

Envy. As in Study 2, we measured envy using an adapted version of Cohen-Charash's (2009) 9-item scale specifically referencing their fellow study competitors. Items included "I feel resentment toward the other payers" and "I desire what the other players have." Participants responded to these items on a 7-point scale (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .94$).

Moral disengagement. We measured moral disengagement with an adapted version of Moore and colleagues' (2012) 8-item scale. The scale was modified to capture participants' level of state moral disengagement relative to the second and final competitive

study task—the matrix task (see Shu et al., 2011 and Welsh et al., 2015 for similar examples).

Sample items include “It is okay if someone over-reports the number of matrices that they solved correctly as long as they have a good reason for doing so,” (moral justification)

“Considering the ways that people grossly misrepresent themselves, it’s not a big deal if someone claims to have solved an extra matrix or two,” (advantageous comparison) and

“Since this task is designed to allow over-reporting, it is the designer’s fault if people cheat” (displacement of responsibility). Participants responded to these items on a 7-point scale (1 = *Strongly disagree* to 7 = *Strongly agree*; $\alpha = .87$).

Unethical behavior. Following similar studies that use over-reporting of performance as a proxy for unethical behavior (e.g., Gino et al., 2010; Mazar et al., 2008; Welsh et al., 2019), we measured unethical behavior of each participant as the number of unsolvable matrices participants reported that they had solved. Participant scores ranged from 0 (no over-reporting) to 6 (over-reporting on all six unsolvable matrices).

Study 3 Results

Descriptive statistics and correlations for all study variables are reported in Table 5.

As in Studies 1 and 2, to test Hypotheses 1, 2, 4 and 5 we used the conditional moderated mediation PROCESS Macro 7 in SPSS (Hayes, 2013). Then, with the addition of participant unethical behavior as an outcome variable in this study, to test the full conditional serial mediation model (Hypotheses 3 and 6) we used PROCESS Macro 83 in SPSS (Hayes, 2013).⁵ We report the results for the full model from Macro 83 in Table 6.

We first tested the direct effect of observed unethical behavior on envy (*H1*). As predicted, we found that observed unethical behavior was positively related to feelings of

⁵ Although random assignment to conditions in experimental studies helps to address concerns about individual difference variables, as in Study 2 we ran supplemental analyses controlling for suppression and the internalization component of moral identity using the same Gross and John (2002; $\alpha = .86$) and Aquino and Reed (2002; $\alpha = .93$) scales, respectively. In addition, we collected reappraisal using Gross and John’s (2002; $\alpha = .95$) scale to control for the possible confound that more of the participants in the reappraisal condition possessed a natural inclination to reappraise. The inclusion of controls did not change the pattern of effects thus, we report model estimates without controls.

envy ($b = 1.62$, $SE = .21$, $p < .001$), supporting Hypothesis 1. We also found that the indirect effect between observed unethical behavior and moral disengagement through envy was significant in both the reappraisal ($b = .15$, $SE = .07$, 95% CI [.031, .291]) and control ($b = .25$, $SE = .10$, 95% CI [.055, .469]) conditions, supporting Hypothesis 2. We then examined the interactive effect between observed unethical behavior and cognitive reappraisal directly on envy ($H4$) and on the indirect effect between observed unethical behavior and moral disengagement through envy ($H5$). As expected, we found that the interaction between observed unethical behavior and training type was negative and significant ($b = -.66$, $SE = .30$, $p = .03$), supporting Hypothesis 4. As with Studies 1 and 2, a simple slopes test (Aiken & West, 1991) revealed that the effects were in the expected direction. In the control condition (-1 SD), the relationship between observed unethical behavior and envy was positive and significantly different from zero (*simple slope* = 2.28, $t = 4.83$, $p < .001$). The relationship between observed unethical behavior and envy was still positive and significant in the reappraisal training condition (+1 SD) but the slope was weaker (*simple slope* = .96, $t = 4.60$, $p < .001$). This interaction is presented as Figure 4. Thus, those trained to reappraise were significantly less likely to experience envy after observing unethical behavior. The indirect effect was significant in both the reappraisal and control training conditions, respectively ($b = .15$, $SE = .07$, 95% CI [.031, .291] and $b = .25$, $SE = .11$, 95% CI [.055, .469]), but the effect was stronger in the control condition ($b = -.10$, $SE = .06$, 95% CI [-.244, -.003]), supporting Hypothesis 5. Also supporting Hypothesis 5, the index of moderated mediation was significant ($b = -.10$, $SE = .06$, 95% CI [-.237, -.003]).

Using PROCESS Macros 83, we then tested the full serial mediation model ($H3$). Our results revealed that the indirect effect was also significant in both the reappraisal ($b = .06$, $SE = .04$, 95% CI [.008, .149]) and control ($b = .10$, $SE = .06$, 95% CI [.013, .249]) conditions, supporting Hypothesis 3. These results also support Hypothesis 6, as they show

that the indirect effect between observed and committed unethical behavior through envy and moral disengagement was significantly smaller for those participants trained in cognitive reappraisal as opposed to those who were in the control training condition ($b = -.04$, $SE = .03$, 95% CI $[-.124, -.001]$). Also supporting Hypothesis 6, the index of moderated mediation was significant ($b = -.04$, $SE = .03$, 95% CI $[-.126, -.001]$).

Study 3 Discussion

The results of Study 3 provide support for our hypotheses in an experimental setting. Using an experimental design, we manipulated observing others' unethical behavior and found that this led participants to engage in higher levels of unethical behavior through increased envy and, in turn, moral disengagement. We also found evidence of a conditional indirect effect in which this indirect effect was attenuated when participants were trained to cognitively reappraise. The laboratory setting allowed us to examine causality, minimize alternative explanations, manipulate cognitive reappraisal via training, and capture actual unethical behavior. Thus, Study 3 replicates and extends the findings of the previous studies.

General Discussion

In many prominent ethical scandals there is evidence of widespread unethical contagion. For example, Wells Fargo fired over 5,000 employees in 2016 for opening fraudulent customer accounts and issuing unauthorized credit cards (Glazer, 2016). Yet, Wells Fargo had over 250,000 employees in 2016 and many of these employees chose not to behave unethically in spite of the questionable conduct of their coworkers (Glazer, 2016). Although the phenomenon of unethical social influence is well-established, what is less understood are the processes through which these effects occur and how such processes can be mitigated. As the case of Wells Fargo reveals, understanding and preventing unethical contagion is critical within organizations so that instances of employee unethicality do not spiral into major organizational scandals.

Extending previous research, we investigated when and why observing unethical behavior causes employees to act unethically. The role of affective processes has been largely absent in cognitively-driven approaches to social influence. Thus, our research contributes to the unethical social influence literature by demonstrating that envy plays a key role in unethical contagion. Whereas existing unethical social influence studies have often emphasized social learning processes (e.g., O'Fallon & Butterfield, 2011, 2012; Robinson & O'Leary-Kelly, 1998), our research draws on social cognitive theory to show that envy facilitates moral disengagement, and, in turn, unethical behavior. In doing so, our findings contribute to a growing body of work showing that affective reactions have ethical consequences in terms of employee behavior (Eisenberg, 2000; Haidt, 2001; Huang et al., 2019).

Given the substantial body of evidence connecting moral disengagement and unethical behavior, it is critical to understand the antecedents that lead employees to become morally disengaged. Yet, as Moore (2015, p.200) notes in a review of the moral disengagement literature, "[t]here is still little empirical evidence showing how moral disengagement is initiated." This oversight is problematic both in terms of understanding why moral disengagement processes are triggered and how such processes can be attenuated. Drawing on social cognitive theory, our findings reveal that an unethical social context can trigger moral disengagement by eliciting feelings of envy. When an employee believes that the questionable conduct of coworkers is providing them with an unfair advantage, it is easy to see how engaging in similar behaviors might be rationalized and morally justified in order to re-balance the scales.

Our model also advances the unethical social influence literature by explaining why some employees imitate observed unethical behavior and others do not. Bandura (1986) argued that individuals are not simply "weathervanes" who shift to conform to apparent

social norms, but are agents with capacity to regulate social influence even when it involves immoral conduct. Integrating this premise of social cognitive theory and emotion regulation research, our results suggest that those who cognitively reappraise observed unethical behavior in their environment experience low levels of envy and, thus, do not disengage from their moral standards in order to engage in similar unethical behavior. Thus, mitigating affective reactions to observed unethical behavior shapes subsequent cognitions related to moral disengagement.

Given the importance of employee ethicality, how can organizations reduce unethical contagion in the workplace? Our integration of social cognitive theory with the emotion regulation literature suggests a number of insights and remedies for organizations seeking to minimize the harmful effects of unethical social influence. When employees see their colleagues behave unethically, they are likely to feel envious if this unethicality is giving others an advantage over them. For example, an employee who sees coworkers cheating in order to meet performance goals may feel envious of this potentially unfair advantage. Managers who intervene early to punish unethical behavior and ensure a level playing field may help to ensure that employees do not perceive unethicality as potentially rewarding.

Unfortunately, employees will likely observe unethical behavior at work even if their organization has a code of conduct that managers seek to enforce. Our findings identify cognitive reappraisal as an important technique that can be used to inhibit the spread of unethical behavior. By cognitively reappraising observed unethical behavior, employees may be able to reinterpret such behavior in a way that will prevent them from feeling envious and, thus, motivated to act in a similar manner. We found cognitive reappraisal to be effective both in terms of an orientation to reappraise as well as via cognitive reappraisal training. Thus, cognitive reappraisal training represents a potential managerial tool that may be effective in terms of shaping affective reactions to unethical behavior. For example, formal

cognitive reappraisal training could be part of new employee orientation or could be done in more informal ways such as demonstrating how to reappraise unethical behavior when unethicality is observed by the manager. Implementing cognitive reappraisal training might be especially relevant when employees work in environments featuring high levels of social influence. In sum, managers can take steps to train employees on how to effectively reappraise negative behaviors they witness (Denny & Ochsner, 2014; Woud et al., 2012), thereby helping to reduce the spread of unethical behavior.

In addition to promoting cognitive reappraisal, our research highlights key antecedents and consequences of state moral disengagement that are relevant to managers. When employees become morally disengaged, they are more likely to engage in unethical behavior as a result. Yet, our results reveal potential warning signs that managers should watch out for. Specifically, employees who appear envious of those who are engaging in questionable behavior, cutting corners, or taking advantage of loopholes may be likely to morally disengage. Phrases such as “everybody’s doing it” or “this is probably no big deal” can be considered potential red flags signaling that moral disengagement may be occurring. In addition to vigilance, managers should also educate employees on the warning signs of moral disengagement as a way to disrupt underlying rationalization processes. Having these conversations may also help employees more readily identify instances in which they may be more susceptible to moral disengagement.

Limitations and Directions for Future Research

This research has a number of limitations and provides several directions for future research. Study 3 used an experimental design with random assignment to test the hypothesized causal mechanisms and rule out alternate explanations. Although we used a simulated game to manipulate unethical behavior, drew on established procedures to train cognitive reappraisal, and captured unethical behavior objectively, the relatively low stakes

and short duration of this study raises questions related to generalizability. We sought to address these limitations with two field studies using both a multi-wave design in Study 1 and a multi-wave, multi-source design in Study 2. To further increase generalizability, in Study 2 we recruited employees from a variety of organizations and industries. Overall, we believe that by employing a multi-method approach (Shadish, Cook, & Campbell, 2002) to assess observing others' unethical behavior, we have addressed some of the limitations associated with each approach.

One strength of this research is that we found a consistent pattern of results associated with both measured cognitive reappraisal orientation and a training manipulating cognitive reappraisal. However, the short duration of the experimental study in which cognitive reappraisal was manipulated does not provide evidence regarding how long the effects associated with cognitive reappraisal training will last. It may be that reappraisal wears off over time or that those who have to continually reappraise might feel depleted as a result (Duffy et al., 2010). Thus, we encourage future research to examine the ethical effects of cognitive reappraisal training over an extended period of time.

Our field studies employed a multi-wave design to reduce concerns related to common method variance (Podsakoff, MacKenzie, & Podsakoff, 2012). However, this research does not speak directly to whether the dynamic relationship between observing another's unethical behavior and engaging in similar behavior oneself may be different over a longer period of time. For example, repeated exposure to unethical social influence for an extended period may be more influential than exposure to a particular instance of unethicality at a given point in time. Future research should consider not only the temporal aspects of the observed unethical behavior but also how the observer responded during this period.

Additionally, future research could consider a longitudinal design in which variables such as observed unethical behavior, envy, and moral disengagement are collected at multiple points

in time and changes in these variables are examined. Such an approach could help to unravel questions about attraction, selection, and attrition such as the degree to which morally disengaged individuals might self-select into organizations where unethical behavior is prevalent.

Acknowledging that the environment may influence both emotion and also emotion regulation processes, future research may also benefit from considering contextual factors influencing one's ability to engage in cognitive reappraisal. It may be that cognitive reappraisal techniques are applied less frequently in situations where stress or external pressure are high since individuals will have less of an opportunity to stop and reflect. Conversely, inducing cognitive reappraisal in demanding environments might be especially helpful given the high accompanying susceptibility to harmful emotions. Moreover, individuals may develop an orientation to cognitively reappraise affective events, including unethical behavior, if their peers exhibit this tendency. In addition to various forms of cognitive reappraisal training, future research should also consider whether more subtle manipulations of cognitive reappraisal are possible. For example, those with a cognitive reappraisal orientation or who have received cognitive reappraisal training in the past might be nudged to remember to cognitively reappraise in a given situation.

We also encourage future research to further unravel the effects of cognitive reappraisal within the moral domain. On the one hand, it is possible that cognitive reappraisal might be beneficial not only in mitigating unethical behavior but also in terms of facilitating ethical behaviors related to whistleblowing or ethical voice. On the other hand, it is possible that in some cases cognitive reappraisal might have an unanticipated dark side in terms of dampening emotional reactions that facilitate ethical behavior. For example, cognitive reappraisal could be used to attenuate moral emotions such as guilt or shame following one's own unethical conduct. Finally, in one of our three studies we observed a significant positive

relationship between cognitive reappraisal and moral disengagement. Given that research has suggested that cognitive deliberation can sometimes facilitate unethical behavior (e.g., Moore & Tenbrunsel, 2014; Zhong, 2011), we encourage future research to further unpack the effects and boundary conditions associated with cognitive reappraisal within the moral domain.

In this research, we have focused on envy as a key emotional response to observed unethicality because past research has found that employees feel envy when they perceive that others have gained an unfair advantage over them (e.g., Duffy et al., 2008; Kim et al., 2010), an advantage that unethical behavior can provide. Yet, multiple emotions play an important role in individual moral decisions (Horberg, Oveis, & Keltner, 2011). Thus, there may be other theoretically-relevant emotional response associated with observing unethical behavior. Indeed, witnessing others engage in moral violations may also activate negative emotions directed toward those who have committed moral violations, such as other-condemning moral emotions (i.e., anger, contempt, disgust; Greenbaum, Bonner, Grey, & Mawritz, in press). For example, employees may experience contempt when subjected to unfair treatment (e.g., Ford, Agosta, Huang, & Shannon, 2018). We encourage future research to advance current understanding of unethical social influence by examining additional emotions that may be relevant to observing unethical behavior. Additionally, there may be features of the context and/or the observer that will interact to trigger particular emotions. For instance, employees who greatly value ethics and ethical behavior (e.g., high moral identity; Aquino & Reed, 2002), might be more likely to experience anger, disgust, or contempt toward peers who behave unethically.

Additionally, social cognitive theory suggests that affective reactions to environmental events can influence a number of cognitions and behaviors in addition to moral disengagement and unethical behavior (Bandura, 1989). Thus, the envy resulting from

observing unethical behavior likely influences a number of other cognitions and behaviors. For instance, envy has also been suggested and shown to influence cooperation tendencies (Parks et al., 2002), subjective justice beliefs (Smith & Kim, 2007), decision-making (Beckman, Formby, Smith, & Zheng, 2002; Hoelzl & Loewenstein, 2005), attention and memory (Hill, DelPriore, & Vaughan, 2011), self-efficacy (Duffy & Shaw, 2000), and actions intended to improve one's social standing (Cohen-Charash, 2009). Thus, we encourage future research to consider how feeling envious following observed ethicality might influence other organizationally-relevant cognitions and behaviors.

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List of Figure Captions:

Figure 1. Theoretical Model.

Figure 2. Study 1 – Interactive Effect of Observed Unethical Behavior and Cognitive Reappraisal on Envy.

Note. UB = Unethical behavior

Figure 3. Study 2 – Interactive Effect of Observed Unethical Behavior and Cognitive Reappraisal on Envy.

Note. UB = Unethical behavior.

Figure 4. Study 3 – Interactive Effect of Observed Unethical Behavior and Cognitive Reappraisal on Envy.

Note. UB = Unethical behavior.

TABLE 1

Study 1: Descriptive Statistics and Intercorrelations for Study Variables

	<i>M</i>	<i>SD</i>	1	2	3	4
1. Coworker Unethical Behavior	2.02	.73	(.95)			
2. Reappraisal	4.35	1.68	.02	(.94)		
3. Envy	2.35	1.07	.30*	-.02	(.79)	
4. Moral Disengagement	2.53	1.06	.19*	.25*	.43*	(.87)

Note. *N* = 164. Alpha coefficients are presented along the diagonal.

**p* < .05. Two-tailed tests.

TABLE 2

Study 1: PROCESS Results (Model 7) – Unstandardized OLS Regression Coefficients with Confidence Intervals

	Envy		Moral Disengagement	
	Coefficient	95% CI	Coefficient	95% CI
Constant	2.35*** (.08)	2.194, 2.508	1.58*** (.19)	1.210, 1.955
Coworker UB	.52*** (.11)	.291, .743	.10 (.11)	-.118, .311
Envy			.40*** (.07)	.259, .550
Reappraisal	-.03 (.05)	-.124, .066		
Coworker UB x Reappraisal	-.17* (.07)	-.318, -.023		
	$R^2 = .118$		$R^2 = .188$	
	$F(3, 160) = 7.14, p < .001$		$F(2, 161) = 18.62, p < .001$	
<u>Reappraisal</u> Indirect effects of observed unethical behavior on moral disengagement (via envy) at low, medium, and high levels of reappraisal	Effect	SE	Boot LLCI	Boot ULCI
Low Cognitive Reappraisal (-1 SD)	.32	.09	.175	.533
Mean Cognitive Reappraisal	.21	.06	.109	.349
High Cognitive Reappraisal (+1 SD)	.09	.06	-.006	.252

Note. $N = 164$. Presented results are unstandardized effects. 95% Confidence Interval.

Bootstrap sample size = 5,000. CI = Confidence Interval. LLCI = Lower Level Confidence Interval. ULCI = Upper Level Confidence Interval. UB = Unethical Behavior.

* $p < .05$, *** $p < .001$. Two-tailed tests.

TABLE 3

Study 2: Descriptive Statistics and Intercorrelations for Study Variables

	<i>M</i>	<i>SD</i>	1	2	3	4
1. Coworker Unethical Behavior	2.11	.92	(.93)			
2. Reappraisal	5.34	.96	-.10	(.91)		
3. Envy	2.44	1.28	.24*	-.21*	(.93)	
4. Moral Disengagement	2.33	1.16	.14	-.03	.39*	(.93)

Note. $N = 195$. Alpha coefficients are presented along the diagonal.

* $p < .05$. Two-tailed tests.

TABLE 4

Study 2: PROCESS Results (Model 7) – Unstandardized OLS Regression Coefficients with Confidence Intervals

		Envy		Moral Disengagement	
		Coefficient	95% CI	Coefficient	95% CI
Constant		2.42*** (.09)	2.247, 2.589	1.48*** (.17)	1.150, 1.817
Coworker UB		.26** (.10)	.067, .449	.05 (.09)	-.116, .222
Envy				.35*** (.06)	.225, .469
Reappraisal		-.26** (.09)	-.437, -.081		
Coworker UB x Reappraisal		-.27** (.10)	-.467, -.066		
		$R^2 = .125$ $F(3, 191) = 9.09, p < .001$		$R^2 = .156$ $F(2, 192) = 17.78, p < .001$	
<u>Reappraisal</u> Indirect effects of observed unethical behavior on moral disengagement (via envy) at low, medium, and high levels of reappraisal		Effect	SE	Boot LLCI	Boot ULCI
Low Cognitive Reappraisal (-1 SD)		.18	.07	.069	.333
Mean Cognitive Reappraisal		.09	.04	.018	.187

High Cognitive Reappraisal (+1 <i>SD</i>)	.00	.05		-.099	.123
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Note. $N = 195$. Presented results are unstandardized effects. 95% Confidence Interval.

Bootstrap sample size = 5,000. CI = Confidence Interval. LLCI = Lower Level Confidence Interval. ULCI = Upper Level Confidence Interval. UB = Unethical Behavior.

* $p < .05$, ** $p < .01$, *** $p < .001$. Two-tailed tests.

TABLE 5

Study 3: Descriptive Statistics and Intercorrelations for Study Variables

	<i>M</i>	<i>SD</i>	1	2	3	4
1. Other Unethical Behavior	.51	.50				
2. Reappraisal	.51	.50	-.09			
3. Envy	2.20	1.38	.49*	-.27*	(.94)	
4. Moral Disengagement	2.32	1.18	-.03	.04	.12	(.87)
5. Unethical Behavior	.87	1.63	.00	.11	.02	.30*

Note. $N = 243$. Alpha coefficients are presented along the diagonal.

* $p < .05$. Two-tailed tests.

TABLE 6

Study 3: PROCESS Results (Model 83) – Unstandardized OLS Regression Coefficients with Confidence Intervals

	Envy		Moral Disengagement		Unethical Behavior	
	Coefficient	95% CI	Coefficient	95% CI	Coefficient	95% CI
Constant	1.68*** (.16)	1.374, 1.993	2.12*** (.14)	1.837, 2.403	-.04 (.27)	-.565, .477
Other UB	1.62*** (.21)	1.204, 2.039	-.27 (.17)	-.605, .075	.09 (.23)	-.364, .548
Envy			.15* (.06)	.029, .277	-.04 (.09)	-.209, .125
Moral Disengagement					.41*** (.09)	.245, .584
Reappraisal	-.29 (.21)	-.712, .123				

Other UB x Reappraisal	-.66* (.30)	-1.244, -.072					
$R^2 = .305$			$R^2 = .025$			$R^2 = .089$	
$F(3, 239) = 34.909, p < .001$			$F(2, 240) = 3.04, p < .05$			$F(3, 239) = 7.754, p < .001$	
Reappraisal							
Indirect effects of observed unethical behavior on committed unethical behavior (via envy and moral disengagement) at low and high levels of reappraisal				Effect	SE	Boot LLCI	Boot ULCI
No Reappraisal Training (-1 SD)				.10	.06	.013	.249
Reappraisal Training (+1 SD)				.06	.04	.008	.149

Note. $N = 243$. Presented results are unstandardized effects. 95% Confidence Interval.

Bootstrap sample size = 5,000. CI = Confidence Interval. LLCI = Lower Level Confidence Interval. ULCI = Upper Level Confidence Interval. UB = Unethical Behavior.

* $p < .05$, ** $p < .01$, *** $p < .001$. Two-tailed tests.

Appendix

State Moral Disengagement Measures

Studies 1 & 2 (Field Studies)

Thinking about how you have felt at work **during the past month**, please indicate the extent to which you agree with the following statements about your organization's rules, policies, and ethical standards:

I have felt that...

1. It is okay to violate company rules and guidelines from time-to-time as there is often a good reason for it.
2. Taking advantage of ethical loopholes is okay as long as you're just being strategic.
3. Considering the major business scandals perpetrated by some employees, trivial violations of company policy are hardly a sin.
4. Since many leaders quietly encourage behavior that violates company policies, employees shouldn't be held accountable for doing so.
5. Employees can't be blamed for doing things that are technically wrong when everyone else in the organization is doing the same thing.
6. Minor violations of ethical standards are often no big deal.
7. Some organizational rules are meant to be broken because they seem like they were designed by robots rather than humans.
8. If employees violate ethical standards, management is usually to blame for bringing this on themselves.

Study 3 (Experimental Study)

1. It is okay if someone over-reports the number of matrices that they solved correctly as long as they have a good reason for doing so.
2. Marking an unsolved matrix as solved is fine as long as one tries their hardest to solve it.
3. Considering the ways that people grossly misrepresent themselves, it's not a big deal if someone claims to have solved an extra matrix or two.
4. Given the time pressure on this task, it is understandable why some people might overstate their performance.
5. With all the major scandals in the business world, misreporting matrices on this task would be pretty trivial.
6. Since this task is designed to allow for over-reporting, it is the designer's fault if people cheat.
7. If people cheat on this task, the person who designed the study is to blame.
8. Marking an unsolved matrix is necessary to teach the designers of this task a lesson.

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