

The Slippery Slope: How Small Ethical Transgressions Pave the Way for Larger Future Transgressions

David T. Welsh
University of Washington

Lisa D. Ordóñez
University of Arizona

Deirdre G. Snyder and Michael S. Christian
University of North Carolina at Chapel Hill

Many recent corporate scandals have been described as resulting from a slippery slope in which a series of small infractions gradually increased over time (e.g., McLean & Elkind, 2003). However, behavioral ethics research has rarely considered how unethical behavior unfolds over time. In this study, we draw on theories of self-regulation to examine whether individuals engage in a slippery slope of increasingly unethical behavior. First, we extend Bandura's (1991, 1999) social-cognitive theory by demonstrating how the mechanism of moral disengagement can reduce ethicality over a series of gradually increasing indiscretions. Second, we draw from recent research connecting regulatory focus theory and behavioral ethics (Gino & Margolis, 2011) to demonstrate that inducing a prevention focus moderates this mediated relationship by reducing one's propensity to slide down the slippery slope. We find support for the developed model across 4 multiround studies.

Keywords: behavioral ethics, self-regulation, moral disengagement, regulatory focus

Well, you know what happens is, it starts out with you taking a little bit, maybe a few hundred, a few thousand. You get comfortable with that, and before you know it, it snowballs into something big.

—Bernard Madoff

Unethical behavior is widespread in the modern workplace (Ariely, 2008; McLean & Elkind, 2003). Financial advisor Bernard Madoff stole more than \$18 billion from investors (Kirchner, 2010), a single employee at the firm UBS racked up \$2.3 billion in trading losses (Secker, 2011), and reporters at the *News of the World* tabloid hacked into the personal information of individuals ranging from celebrities to crime victims (McGuire, 2012). In some cases, the origins of these and other egregious unethical behaviors have been speculatively traced to a series of smaller infractions that increased over time (e.g., Kirchner, 2010;

McGuire, 2012; Secker, 2011). In this article, we argue that committing small indiscretions over time may gradually lead people to commit larger unethical acts that they otherwise would have judged to be impermissible. We refer to this phenomenon as the slippery slope of unethical behavior.

The plausibility of a slippery slope of unethical behavior is widely discussed: Examples can be found in the popular press (e.g., *BBC Ethics Guide*, 2012; "The Slippery Slope of Situational Ethics," 2010; "Why Honesty Is the Best Policy," 2002), business ethics textbooks (e.g., Jennings, 2011), and theoretical articles in the field of behavioral ethics (e.g., Baack, Fogliasso, & Harris, 2000; Tenbrunsel & Messick, 2004). Fiction writer Quentin Rowan described a descent into gradually increasing unethicality as he plagiarized from other sources over a period of years (Cowan & Carras, 2012). Rowan began by replacing words in his manuscripts with more sophisticated synonyms from SAT preparation books. By the time he was caught several years later, he was publishing articles and books that included dozens of pages copied directly from other sources. Similarly, several major corporate scandals have been described as starting small and increasing over time. For example, according to McLean and Elkind (2003, p. 132), "the Enron scandal grew out of a steady accumulation of habits and values and actions that began years before and finally spiraled out of control." Bernard Madoff's Ponzi scheme (Kirchner, 2010), rogue trading at UBS (Secker, 2011), and phone hacking at the *News of the World* (McGuire, 2012) have been described in similar terms.

Despite these examples, almost no empirical research has examined the progression of unethical behavior over time. Although some research indicates that people are more accepting of others' unethical conduct when it occurs gradually rather than abruptly (Gino & Bazerman, 2009), the progression of one's own unethical

This article was published Online First May 26, 2014.

David T. Welsh, Michael G. Foster School of Business, University of Washington; Lisa D. Ordóñez, Eller College of Management, University of Arizona; Deirdre G. Snyder and Michael S. Christian, Kenan-Flagler Business School, University of North Carolina at Chapel Hill.

Deirdre G. Snyder is now at the Department of Management, Providence College.

This research was supported by funding from a National Science Foundation Grant from the Science of Organizations area; the Center for Leadership Ethics at the Eller College of Management, University of Arizona; and a Junior Faculty Development Award from the University of North Carolina at Chapel Hill Foundation. We thank Ann Tenbrunsel for helpful comments on the article.

Correspondence concerning this article should be addressed to David T. Welsh, University of Washington, Michael G. Foster School of Business, 574 Paccar Hall, Seattle, WA 98195. E-mail: davidtwelsh@hotmail.com

behavior over time has not been examined. In this study, we investigate whether this progression is largely due to unethical behavior producing incremental changes in individuals' self-regulation of their thoughts and actions. We seek to extend Bandura's (1991, 1999) social-cognitive theory of moral thought and action to propose that the slippery-slope effect may increase unethical behavior by facilitating one's propensity to morally disengage across a series of gradually changing ethical decisions. Moral disengagement—the deactivation of moral self-regulatory processes that normally prevent unethical behavior—can occur through a process of rationalization in which questionable conduct is justified through a cognitive misconstrual of its nature and consequences (Detert, Treviño, & Sweitzer, 2008). Because individuals more readily justify small indiscretions as opposed to major ethical violations (e.g., Mazar, Amir, & Ariely, 2008), moral disengagement is likely to occur when unethical behavior develops gradually over time rather than abruptly.

Just as moral disengagement reflects suboptimal self-regulatory processing, there may be a self-regulatory factor that could reduce susceptibility to the slippery-slope effect. We draw on recent research founded in self-regulation connecting regulatory focus theory and unethical behavior (Gino & Margolis, 2011) to argue that a prevention focus may prevent individuals from progressing down the slippery slope. According to regulatory focus theory, a prevention focus increases vigilance to avoid risky behaviors and mistakes. Recent research has found that inducing a prevention focus can reduce unethical behavior (Gino & Margolis, 2011). We extend this research by hypothesizing an interaction between moral disengagement and prevention focus on unethical behavior. The added regulatory vigilance associated with a prevention focus will reactivate the moral self-regulatory processing deficiency associated with moral disengagement, thus reducing minor forms of cheating that would otherwise have been rationalized or overlooked by those who are morally disengaged. Thus, a prevention focus may prevent individuals from starting down the slippery slope in the first place.

In this article, we hypothesize a slippery-slope effect in which gradual changes (as opposed to an abrupt change) across a series of ethical decisions facilitate moral disengagement and unethical behavior. Using three different tasks across four studies measuring unethical behavior at multiple points in time, we find evidence of the process through which the slippery-slope effect occurs. Study 1 suggests that individuals are more likely to be dishonest when the associated payouts are raised gradually versus abruptly. Study 2 extends Study 1 by demonstrating that the effect is mediated by moral disengagement and that it can occur with nonmonetary incentives. Study 3 provides further evidence of the slippery-slope effect and the mediating mechanism of moral disengagement using a different task and a nonstudent sample. Finally, Study 4 demonstrates that inducing a prevention focus moderates this mediated relationship by reducing one's propensity to go down the slippery slope.

Background of the Slippery-Slope Effect

In contrast to ethical theories rooted in the standard economic model of rational self-interest that merely considers incentives and probability of detection (e.g., Allingham & Sandmo, 1972; Becker, 1968), moral behavior is also shaped by psychological processes

(e.g., Bandura, 1999; Mazar et al., 2008). Research has demonstrated that individuals are motivated to view themselves in a positive manner that corresponds with their moral values (Mazar et al., 2008). People generally balance the tension between self-interest and their moral standards in ways that permit some instances of questionable behavior while allowing them to maintain a positive self-concept as ethical people.

Individuals tend to rationalize minor unethical acts so that they may derive some benefit without being forced to negatively update their self-concept (Gino, Ayal, & Ariely, 2009; Mazar et al., 2008; Shalvi, Handgraaf, & De Dreu, 2011). For example, a minor transgression such as taking a pen home from the office may seem permissible, whereas taking money out of the company cash drawer may more clearly be thought of as stealing (Ariely, 2008; Mazar et al., 2008). When unethical behavior becomes too egregious, the external rewards may be outweighed by the internal psychological cost of misconduct. For example, Mazar et al. (2008) found that participants paid to solve math problems within a time limit frequently overreported their performance when they were compensated \$0.10 or \$0.50 for each problem solved but rarely cheated when compensated \$2.50 or \$5.00 per problem solved. According to Mazar et al., taking an extra dime might have seemed trivial, whereas the severity of the act of pocketing an unearned \$5.00 bill may have forced individuals to recognize that taking unearned money is a form of stealing.

The research above suggests that people are prone to engage in minor indiscretions up to a certain threshold of severity in one-off experiments. Although studies of this type are informative about individual ethical decisions, important questions remain concerning how unethical behavior evolves over time. Until recently, the field relied primarily on a single-trial format by using cross-sectional studies of employees' self-reported unethical intentions (Kish-Gephart, Harrison, & Treviño, 2010). A new wave of research has built on the foundation laid by previous research and is beginning to focus on the observation of actual unethical behavior (see Kish-Gephart et al., 2010, for a review). However, most of these studies do not address the issue of time, measuring only a single instance of observed unethical behavior, which limits our understanding of how the effects of this behavior continue to evolve in the future (see Welsh & Ordóñez, 2014, for an exception). By considering the interdependence of ethical decisions that evolve over time, researchers may be better positioned to explain real-world ethical breaches.

One notable exception to the single-trial format is the work of Gino and Bazerman (2009). Across four studies, they placed participants in the role of an auditor who had to either accept or reject estimates made by a third party regarding the number of pennies contained in a jar. The auditors were financially incentivized to approve high estimates, even though they were required to check the estimate periodically. Using a multiround design, Gino and Bazerman found that people were more accepting of the unethical behavior of others when unethicality developed gradually rather than abruptly. In an organizational setting, this ethical erosion might be similar to an accountant performing an audit for a client who gradually skirts the generally accepted accounting principles rather than blatantly cooking the books. However, this research focused exclusively on acceptance of the unethical acts of others as opposed to one's own propensity to engage in a slippery slope of increasing unethicality. In our study, we build on these

findings to ask a different question: whether individuals themselves are prone to a slippery slope of increasingly unethical behavior.

The well-known work of Milgram (1974) also suggests the possibility of a slippery-slope effect. Across a series of infamous experiments, Milgram found that average people would administer a seemingly lethal shock to another human being (a confederate) when the directive came from a reputable authority figure. Although Milgram's main conclusion related to obedience to authority, it is notable that in these experiments the voltage of the administered shock was gradually increased over time. Some have speculated that a "feature of the situation Milgram created that most likely contributed to the high rates of obedience was the incremental nature of the task" (Burger, 2009, p. 3). Our theorizing suggests that if Milgram had abruptly increased the voltage from a minor shock to a life-threatening jolt, rather than following a more gradual trajectory, many more participants would have resisted this act. However, because Milgram ran only conditions with gradually increasing shocks and did not consider situations involving abrupt changes, it remains unclear whether the slippery-slope effect played a role in the participants' behavior. In the next section, we draw from Bandura's (1999) social-cognitive theory to consider how the mechanism of moral disengagement may lead to a slippery slope of unethical behavior over time.

Moral Disengagement

Moral disengagement involves a dissonance-reducing process of self-regulation through which an individual is "freed from the self-sanctions and the accompanying guilt that would ensue when behavior violates internal standards" (Detert et al., 2008, p. 375). Thus, moral disengagement is a form of moral self-deception that allows individuals to justify unethical behavior and avoid self-censure. Normally, people engage in ethical self-regulation to conform their behavior to moral standards. However, through moral disengagement, individuals rationalize questionable conduct, minimize their personal responsibility, and dehumanize potential victims (Bandura, 1999). For example, people may rationalize theft from a wealthy company as having little impact, redefine lies to a competitor as "strategic misrepresentation" (Safire, 1979, p. 13), and blame questionable decisions on teammates or superiors. Furthermore, recent research has shown that moral disengagement can facilitate motivated forgetting of ethical standards and can occur even when merely contemplating an unethical act (Shu, Gino, & Bazerman, 2011). In empirical studies, moral disengagement explains the propensity of ordinary individuals to engage in a variety of unethical behaviors including cheating (Detert et al., 2008), lying (Moore, Detert, Treviño, Baker, & Mayer, 2012), organizational corruption (Moore, 2008), aggression (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996), and terrorism (Bandura, 2004).¹

As one's degree of moral disengagement increases, so does one's sphere of permissible conduct. According to Tenbrunsel and Messick (2004, p. 229), individuals are prone to "incremental steps down the road of unethical behavior, due to the self-deception that occurs along the way." For example, former *New York Times* reporter Jayson Blair indicated that his descent into plagiarism and fabrication of news stories began when he published a quote

without attributing it to its source and suffered no consequence. According to Blair (Cowan & Carras, 2012, at 5:22),

It's kind of the slippery slope that starts to happen. I think once you realize that you can get away with something, once you cross over that line, you somehow have to rationalize how "I am a good person, and I did this, so somehow this has to be ok, I've got to make this ok." So then it becomes a lot easier to do it.

In hindsight, Blair readily recognized that his behavior was blatantly unethical. Yet, at the time of his acts, the process of moral disengagement allowed him to engage in self-deception by rationalizing his conduct.

Research has demonstrated that individuals are often prone to committing small indiscretions which can be easily justified but not major ethical violations that are more damaging to one's moral self-concept (Mazar et al., 2008). Given that past behavior serves as a guide for future ethical choices, moral disengagement may allow one who has committed small indiscretions to justify future unethical acts. Thus, gradual changes across a series of ethical decisions, as opposed to abrupt changes, may facilitate moral disengagement through an induction mechanism in which unethical conduct becomes routinized over time and is deemed acceptable without additional consideration. In sum, moral disengagement is a self-regulatory mechanism that may explain why people are prone to committing a series of unethical behaviors that increase gradually and are thus more easily rationalized than unethical conduct that increases abruptly. We hypothesize the following:

Hypothesis 1: Over a series of ethical decisions, people will be more likely to engage in unethical behavior during the final period when potential unethicality develops gradually over time rather than abruptly.

Hypothesis 2: Over a series of ethical decisions, people will become more morally disengaged when potential unethicality develops gradually over time rather than abruptly.

Hypothesis 3: Moral disengagement will increase unethical behavior during the final period.

Hypothesis 4: Moral disengagement will mediate the relationship between a series of ethical decisions in which potential unethicality develops gradually over time versus abruptly and unethical behavior during the final period.

Prevention Focus

We also consider a self-regulatory factor—prevention focus—that may reduce susceptibility to the slippery-slope effect. Recent

¹ Recent research has frequently taken a trait-based approach to moral disengagement by looking at one's propensity to morally disengage as a personality-related predictor of unethical behavior (e.g., Detert et al., 2008; Moore, Detert, Treviño, Baker, & Mayer, 2012). This approach to moral disengagement is reflective of research exploring predictors of a single instance of ethical behavior. However, social-cognitive theory identifies moral disengagement as a mechanism that causally explains how reduced self-regulation increases subsequent unethical behavior. In other words, the social-cognitive interpretation is that moral disengagement is a universal phenomenon that can be contextually influenced. Thus, we investigate state moral disengagement.

research links regulatory focus theory and unethical behavior (Gino & Margolis, 2011). According to regulatory focus theory, there are two different self-regulatory orientations: promotion focus and prevention focus (Higgins, 1987). A promotion focus involves an advancement orientation associated with greater risk-taking behavior and openness to change. In contrast, a prevention focus comprises a vigilance orientation intent on avoiding uncertainty, risk taking, and mistakes. This preference for safety and security leads decision makers to focus primarily on the avoidance of risky, potentially undesirable choices.

Recent research by Gino and Margolis (2011) demonstrated that having a prevention focus can reduce unethical behavior. Unethical behavior is often perceived to be risky and may pose both external risks associated with getting caught and internal threats to ethical self-perception. Across four studies, Gino and Margolis primed individuals to induce either a promotion or prevention orientation and found that those with a prevention focus were less risk seeking and engaged in fewer instances of unethical behavior. Those with a prevention focus were more cautious in accurately reporting their performance and thus were less likely to claim unearned compensation.

Extending this previous research, we hypothesize an interaction between moral disengagement and prevention focus. Prevention focus will activate self-regulatory processes, counteracting the processes deactivated by moral disengagement. Moral disengagement involves the deactivation of self-regulatory processes as ethical standards are loosened, whereas prevention focus involves the activation of self-regulatory processes associated with motivating vigilance to avoid risks such as unethical behavior. Normally, those who are morally disengaged can rationalize seemingly insignificant indiscretions and risk potentially justifiable ethical violations. However, those in a prevention orientation will be more cautious in their ethical decision making even when violations seem small (as in the case of gradual changes over time). This added vigilance will prevent people from overlooking the ethical nature of decisions and will thus reduce the tendency of those who are morally disengaged to easily overlook or justify unethical actions. When moral disengagement is low, the effect of prevention focus will not be needed to activate the self-regulatory processes that lead to low unethical behavior because morally engaged individuals already have vigilance when it comes to ethics. However, when moral disengagement is high, an induced preven-

tion focus will reduce unethical behavior compared to individuals who have not been induced. We hypothesize the following:

Hypothesis 5: Induced prevention focus will moderate the relationship between moral disengagement and unethical behavior. Specifically, the relationship between moral disengagement and unethical behavior during the final period will be attenuated when individuals have a prevention focus.

Hypothesis 6: Induced prevention focus will moderate the mediated relationship between a series of ethics-related decisions in which potential unethicality develops gradually over time versus abruptly, moral disengagement, and unethical behavior during the final period by attenuating this relationship.

Overview of Studies

The current studies were designed to examine the slippery-slope effect by adapting three widely used behavioral ethics tasks in order to measure unethical behavior at multiple points in time. In all four studies, the final round of the task was identical across conditions, but the rounds leading up to the final round changed either gradually or abruptly. Specifically, Study 1 extends recent single-round findings by Mazar et al. (2008) by using gradual versus abrupt increases in monetary incentives over multiple rounds to create a slippery slope. Study 2 used gradual versus abrupt changes in the difficulty of a task in which participants could cheat and measured moral disengagement as a mediator. Study 3 used monetary incentives combined with gradual versus abrupt changes in the task to test the slippery-slope effect and the mediating role of moral disengagement with a nonstudent sample. Study 4 extends Study 3 by demonstrating that inducing a prevention focus operates as a moderator that attenuates this mediated relationship. The hypothesized model is depicted in Figure 1.

Study 1 Method

Participants and Design

Study 1 was conducted in a laboratory setting using 73 undergraduate students from a large public U.S. university. The median age of participants was 21 years; 53% were female. Participants

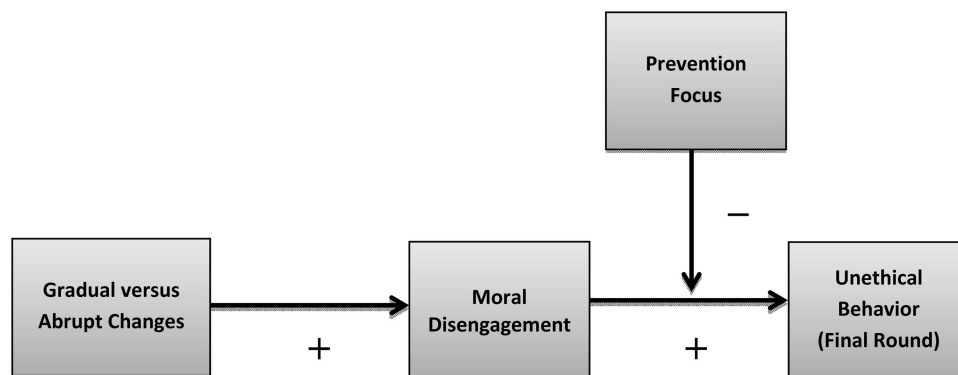


Figure 1. Theoretical diagram.

were randomly assigned to either the gradual-change condition or the abrupt-change condition. We later added a consistent maximum payment condition by recruiting participants from the same participant pool.² Participants received course credit as well as compensation based on their performance during three rounds of a problem-solving task adapted from Mazar et al. (2008). This task included a series of 20 matrices per round, each containing a set of 12 three-digit numbers (e.g., 4.73) and was identical across conditions. For each round, participants had 2 min to circle the two numbers in each matrix that added up to exactly 10. After each round, participants checked their work and recorded their performance on an answer sheet in their task packet.

All materials were identical across conditions for all three rounds. Additionally, compensation per matrix solved was the same in the third round across conditions (\$2.50 per matrix). However, in each condition, different compensation structures were used during the first two rounds. In the gradual-change condition, compensation for each matrix solved gradually increased across each of the three rounds. We specifically used the same payout amounts for this as Mazar et al. (2008), who found in a single-round study that many participants were willing to cheat when compensated \$0.25 for each matrix solved (a small amount that could easily be rationalized) but that few did so when paid \$2.50 per matrix (a larger amount that made dishonesty seem much more salient). Thus, in the gradual-change condition, we told participants that they would earn \$0.25 for each matrix solved correctly during Round 1, \$1.00 for each matrix solved correctly during Round 2, and \$2.50 for each matrix solved correctly during Round 3. In the abrupt-change condition, participants were told that they would not be compensated for their performance in Round 1 and Round 2 but would earn \$2.50 for each matrix solved correctly in Round 3. In the consistent maximum payment condition, participants were paid \$2.50 per matrix solved for all three rounds. In all conditions, participants paid themselves from an envelope in their carrel and left the remaining money in the envelope at the end of the experiment.

In accordance with previous experiments that used this problem-solving task (e.g., Gino, Norton, & Ariely, 2010; Mazar, Amir, & Ariely, 2008; Welsh & Ordóñez, in press), participants were told that they would throw away their worksheets for each round and would turn in only the task packet containing their answer sheet and any unearned money. Thus, participants believed their work would not be checked, and they could cheat by overstating their performance if they desired. Unbeknownst to participants, a unique coded number appeared on both the worksheets and task packets that enabled the two to be linked after participants had disposed of their materials and left the room (e.g., Gino et al., 2010; Schweitzer, Ordóñez, & Douma, 2004).

Measures

Performance. The worksheet and answer sheet were matched for each individual. Performance was measured as the actual number of matrices solved by the participant (which was not necessarily the same as the reported performance).

Unethical behavior. Similar to other studies (Gino et al., 2010; Mazar et al., 2008), the overreporting of correctly solved matrices in the problem-solving task was used to measure unethical behavior. In particular, we were interested in overreporting

during Round 3, in which participants in all three conditions were paid identically (\$2.50) for each matrix they reported having solved correctly. Matrix overreporting is a strong measure of unethical behavior because correct solutions are clear, legitimate mistakes are infrequent, and participants seldom underreport the number of matrices solved correctly (Mazar et al., 2008). The systematic pattern of overstatements across multiple rounds and conditions suggests that most instances of overreporting in our study were intentional.

Study 1 Results

Table 1 provides means, standard deviations, and correlations between Study 1 variables. As expected, there was a significant positive correlation between the gradual-change condition and overreporting. There was a positive correlation between overreporting behavior in Rounds 1, 2, and 3, suggesting that those who started cheating in one round were likely to continue cheating in later rounds. There was also a negative correlation between performance and overreporting, suggesting that those who performed poorly were the most likely to cheat. As depicted in Figure 2, across all rounds, participants cheated more in the gradual-change condition than in either the abrupt-change condition or the consistent maximum payment condition. Mean levels of overreporting are shown on the y-axis for the gradual-change condition, the abrupt-change condition, and the consistent maximum payment condition across all three rounds. Specifically, in the gradual-change condition, cheating levels increased with each successive round (means between 1.0 and 1.5), whereas cheating was lower and more constant in the abrupt-change condition (means between 0.2 and 0.5) and the consistent maximum payment condition (means between 0.5 and 0.6).

As predicted in Hypothesis 1, participants in the gradual-change condition overreported the number of matrices they solved in the final round significantly more than did participants in either the abrupt-change condition ($t_{55} = 2.61, p = .01, d = .70$) or the consistent maximum payment condition ($t_{44} = 2.51, p = .02, d = .76$), even though all participants had the same financial incentive of \$2.50 per matrix solved. We found that 60% of participants in the gradual-change condition cheated at least once in the final round, as compared to only 30% in the abrupt-change condition and 31% in the consistent maximum payment condition ($\chi^2 = 6.41, p = .01$). As expected, there was no significant difference in overreporting during the final round between the abrupt-change condition and the consistent maximum payment condition ($t_{41} = .06, p = .95$). Additionally, in the gradual-change condition, 57% of those who cheated in Round 1 also cheated in Round 2, and 78% of those who cheated in Round 2 later cheated in Round 3.

Study 1 Discussion

The results of Study 1 support Hypothesis 1 by providing evidence of a slippery slope of gradually increasing unethical behavior over time. Specifically, despite identical task materials and compensation per matrix solved during Round 3, participants in the gradual-change condition were approximately twice as

² We thank an anonymous reviewer for suggesting the addition of this condition.

Table 1
Means, Standard Deviations, and Correlations Among Study 1 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Abrupt vs. gradual ^a	0.53	0.50	—									
2. Maximum vs. gradual ^b	0.65	0.48	NR	—								
3. Performance (Round 1)	2.86	1.97	-.10	-.26	—							
4. Performance (Round 2)	3.30	2.20	-.05	-.06	.51**	—						
5. Performance (Round 3)	3.40	2.30	-.14	-.15	.52**	.48**	—					
6. Overreporting (Round 1)	0.66	1.20	.26*	.17	-.03	.08	.08	—				
7. Overreporting (Round 2)	0.70	1.67	.29*	.14	-.29*	-.44**	-.34**	.47**	—			
8. Overreporting (Round 3)	0.93	1.48	.32*	.30*	-.40**	-.34**	-.34**	.40*	.79**	—		
9. Gender ^c	0.45	0.50	.20	.18	-.15	-.04	-.11	.08	.20	.17	—	
10. Age	21.25	2.23	.18	.04	.13	-.06	-.02	.09	-.11	-.19	-.20	—

Note. Unless otherwise specified, $n = 73$. NR = not reported by SPSS software.

^a $n = 57$; coded as 0 = abrupt change, 1 = gradual change. ^b $n = 46$; coded as 0 = consistent maximum payment, 1 = gradual change. ^c Gender coded as 0 = male, 1 = female.

* $p < .05$. ** $p < .01$.

likely to overstate their performance in the final round as were participants in either the abrupt-change condition or the consistent maximum payment condition, and they also overstated their performance more severely. Study 1 extends the findings of Mazar et al.'s (2008) single-round studies using the same problem-solving task: They found that participants were more likely to cheat when the financial incentives were low (\$0.25) than when they were high (\$2.50). In our Study 1, most participants did not cheat in the abrupt-change and consistent maximum payment conditions when paid \$2.50 per matrix, and many cheated in the first round of the gradual-change condition when paid \$0.25 per matrix solved. However, over time, participants in the gradual-change condition who were willing to cheat to earn \$0.25 in Round 1 were increasingly likely to cheat to earn \$1.00 per matrix in Round 2 and even more likely to cheat to earn \$2.50 per matrix in Round 3. In contrast, in the consistent maximum payment condition where participants could earn \$2.50 per matrix across all three rounds, there was no evidence of a slippery slope occurring. Additionally,

testing the gradual-change condition against both the abrupt-change condition and the consistent maximum payment condition provides evidence against alternate explanations related to whether it matters if participants are paid during initial rounds, whether the ability to earn more money overall affects the results, and whether the slippery-slope effect associated with gradual changes differs from both an abrupt-change and a consistent high payment structure. Thus, Study 1 provides evidence of a slippery-slope effect over time and extends previous single-round behavioral ethics research arguing that people are tempted to cheat primarily in small amounts.

The slippery-slope effect shown in Study 1 may have organizational parallels, such as employees who gradually start overreporting the hours they have worked, increasingly exaggerate aspects of their job performance over time, or progressively overstate the positive attributes of a product to potential clients. However, a limitation of Study 1 is that it focused on a slippery-slope effect related specifically to a gradual increase in monetary incentives and also did not test the mechanisms through which this effect occurred. Study 2 extends Study 1 by demonstrating the slippery-slope effect using a different task without monetary compensation. The slippery-slope effect may not be limited to contexts involving increasing incentives but might also apply to situations in which individuals are increasingly willing to cut corners to complete a task. For example, the previously described examples of a slippery slope of plagiarism did not involve increased monetary incentives but rather the propensity to increasingly take unethical shortcuts by copying from others to complete a story rather than putting forth the effort to generate original content. Thus, Study 2 examines the slippery-slope effect in a context where individuals can cut corners in order to more easily complete a task and also provides evidence that this process is facilitated by increased moral disengagement.

Study 2 Method

Participants and Design

Study 2 was conducted in a laboratory setting using 115 undergraduate students from a large public U.S. university who were randomly assigned to one of two conditions: the gradual-change

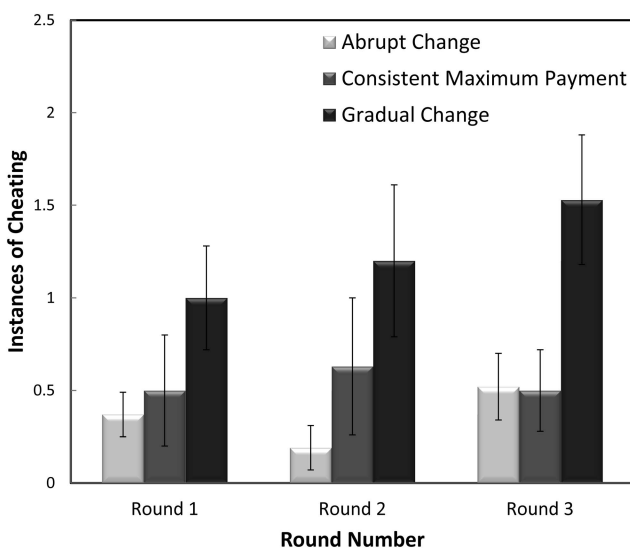


Figure 2. Mean instances of cheating in Study 1 across Rounds 1–3. Error bars represent ± 1 standard error.

condition or the abrupt-change condition. The median age of participants was 21 years, and 53% were female. Participants received course credit for their participation. Each participant worked in a separate carrel and completed a number of computerized filler tasks that were unrelated to the experiment for approximately 30 min. The filler tasks were designed to disguise the true, ethics-related purpose of the experiment.

After completing the filler tasks, participants were led to believe that the main portion of the study had finished. They were then asked to complete one additional computerized task that was described as an analytical task currently being designed and piloted for use in future research studies. The task, adapted from von Hippel, Lakin, and Shakarchi (2005), required participants to solve a series of 10 math problems, each consisting of a string of 10 numbers (e.g., $4 + 3 - 2 + 5 - 1 + 7 + 2 + 3 - 4 + 1 = ?$). Participants were told that after a few seconds, the computer program was designed to provide a pop-up displaying the correct answer so that they would be able to check their work. They were also specifically told to solve all problems without the assistance of the pop-up answer. To disable the pop-up answer, participants were instructed to press the space bar as soon as each problem appeared on the screen. Following other studies using adapted versions of this task (e.g., Jordan, Mullen, & Murnighan, 2011), we gave participants an ample period of 3.5 s to press the space bar to prevent the answer from appearing.

Whereas Study 1 manipulated monetary incentives either gradually or abruptly, Study 2 manipulated the difficulty of the rounds themselves either gradually or abruptly. Thus, in Study 2, participants' incentive to cheat was in taking a shortcut through which they could more easily finish the experiment without detection. Participants in both the gradual-change and abrupt-change conditions were presented with the same initial problem in Round 1 and the same final problem in Round 10. In Round 1, the 10 numbers to be added and subtracted were between 1 and 5. In Round 10, the range of the 10 numbers to be added and subtracted grew to between 1 and 20. However, in the gradual-change condition, the problems gradually increased in difficulty across rounds, whereas, in the abrupt-change condition, the difficulty level increased abruptly in the final round. A between-subjects test of these two conditions with a separate group of participants revealed that participants in the gradual-change condition expressed a higher level of agreement (on a 7-point scale ranging from *strongly disagree* to *strongly agree*) with the statement "This task was very difficult" ($M = 3.96$, $SD = 1.75$) than participants in the abrupt-change condition ($M = 2.76$, $SD = 1.43$, $t_{55} = 2.85$, $p < .01$). To ensure that all participants understood that they were supposed to press the space bar immediately after each problem appeared, the experimenter repeated all instructions twice, and the instructions were also displayed to participants on the computer screen. Because of the importance of correctly understanding these instructions, only native English speakers were used for this study.

Measures

Moral disengagement. We measured moral disengagement immediately following Round 10 with two items adapted from Moore et al. (2012). We adapted these items to specifically refer to moral disengagement regarding the problem-solving task. For example, the first item capturing moral justification was adapted

from "It is ok to spread rumors to defend those you care about" to "It is ok if someone didn't hit the space bar as long as they had a good reason for not doing so." The second item was "Not hitting the space bar is okay, as long as you still tried to solve the problem on your own." Participants responded to these items on a 7-point scale ranging from *strongly disagree* to *strongly agree*. The Spearman-Brown coefficient was .72, and Cronbach's alpha was .70.

Unethical behavior. The experiment was designed to suggest to participants they were helping to test a task under development and that the experimenter would not be able to detect a failure to press the space bar. However, unbeknown to participants, the computer program kept track of whether they hit the space bar during each round. Additionally, following Jordan et al. (2011), the answer that popped up was not the correct answer but rather the correct answer minus one. This allowed us to separate participants who accidentally forgot to press the space bar and solved the problem on their own from participants who deliberately chose not to push the space bar. We used a conservative measure of unethical behavior by dichotomously counting only participants who both failed to press the space bar and also reported an incorrect answer.

Study 2 Results

Table 2 provides means, standard deviations, and correlations between Study 2 variables. As expected, the gradual-change condition, moral disengagement, and unethical behavior were all positively correlated with one another. Hypothesis 1 predicted that participants would engage in more unethical behavior during the final round in the gradual-change condition than in the abrupt-change condition. As depicted in Figure 3, the same percentage of participants in both conditions (9%) cheated in Round 1. In Round 10, the percentage of participants who cheated in the abrupt-change condition increased only slightly to 10%, whereas 25% of participants cheated in the gradual-change condition. Supporting Hypothesis 1, this difference was statistically significant ($\chi^2 = 4.13$, $p = .04$, $d = .39$).

Hypothesis 2 predicted that participants would become more morally disengaged in the gradual-change condition than in the abrupt-change condition. Supporting Hypothesis 2, mean moral disengagement was significantly higher in the gradual-change condition ($M = 3.04$, $SD = 1.42$) than in the abrupt-change condition ($M = 2.41$, $SD = 1.42$, $t_{113} = 2.34$, $p = .02$, $d = .44$).

Table 2
Means, Standard Deviations, and Correlations Among
Study 2 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Gradual change ^a	0.50	0.50	—				
2. Moral disengagement	2.72	1.45	.22*	—			
3. Unethical behavior	0.17	0.38	.19*	.24**	—		
4. Gender ^b	0.47	0.50	-.03	-.21*	-.23*	—	
5. Age	20.98	2.27	-.22*	-.15	-.11	-.03	—

Note. $n = 115$.

^a Coded as 0 = abrupt change, 1 = gradual change. ^b Gender coded as 0 = male, 1 = female.

* $p < .05$. ** $p < .01$.

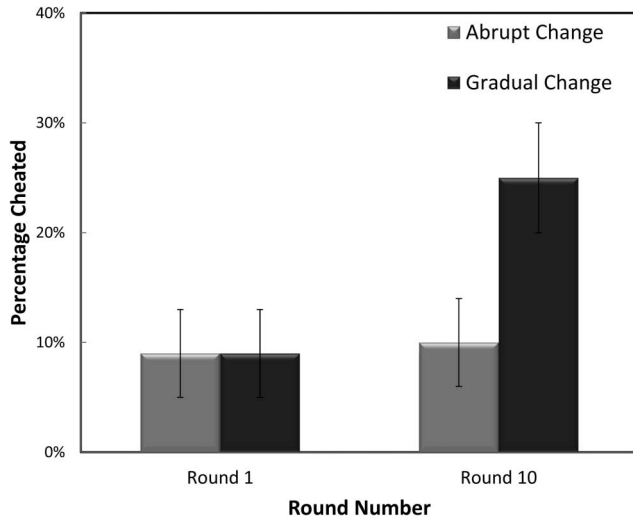


Figure 3. Percentage of participants who cheated in Study 2 in Rounds 1 and 10. Error bars represent ± 1 standard error.

Hypothesis 3 predicted that moral disengagement would increase unethical behavior. Supporting Hypothesis 3, we found a significant correlation between moral disengagement and unethical behavior ($r = .24, p < .01$).

Hypothesis 4 predicted that the slippery-slope effect of gradual versus abrupt changes on increased unethical behavior would be mediated by moral disengagement. We tested the significance of the indirect effect of the gradual- versus abrupt-change conditions on unethical behavior through moral disengagement using bootstrapping (Preacher & Hayes, 2008). As Preacher and Hayes (2008) recommended, we estimated the indirect effect using unstandardized coefficients and utilized bootstrapping procedures with 1,000 resamples. Bootstrapping provides evidence of mediation if the bias-corrected confidence interval excludes zero for indirect effects. Supporting Hypothesis 4, we found a significant indirect effect of gradual versus abrupt changes on unethical behavior in Round 10 through moral disengagement (coefficient = .21, 95% CI [.01, .69]).

Study 2 Discussion

The results of Study 2 support Hypotheses 1–4 by providing evidence of the slippery-slope effect and the mediating mechanism of moral disengagement. Study 2 also extends Study 1 by demonstrating the slippery-slope effect in a different context without monetary incentives, where participants in the gradual-change condition were nevertheless increasingly likely to cut corners and misrepresent their efforts in solving the problems without assistance. However, a limitation of Studies 1 and 2 is that both rely on a student sample within a laboratory setting. Study 3 addresses this limitation and extends Study 2 using a different task and a non-student sample with considerable work experience.

Study 3 Method

Participants and Design

Study 3 was conducted as an online experiment using 92 adult U.S. residents recruited through Amazon Mechanical Turk

(mTurk) who were randomly assigned to either the gradual-change or abrupt-change condition. The median age of participants was 35 years, and 48% were female. Participants had an average of 13 years of work experience, and 28.3% worked full-time, 18.5% worked part-time, 21.7% were self-employed, and 31.5% were currently unemployed.

Participants first completed an ethics task adapted from Gino et al. (2010) that was described to participants as a visual perception task. For this task, participants were presented with a square divided into two triangles containing a total of 20 green dots distributed between them. During each round, the dots appeared for only 1 s and then disappeared.³ Participants were told that their task was to correctly identify whether there were more dots on the left side of the square or more dots on the right side of the square after each round and to be as accurate as possible. However, participants were also told (falsely) that most people could more easily perceive dots on the right side of the square, the dominant side of their visual field; consequently, they were told, they would earn \$0.01 for selecting more dots on the right side and \$0.05 for selecting more dots on the left side. This payment structure induced a motivation to report more dots on the left side of the square, regardless as to the actual distribution of dots in the square.

To make sure that participants understood the task and payment system, they were required to correctly complete a manipulation check containing four questions regarding their instructions for each round, the number of rounds, the purpose of the task as described in the instructions, and how they would be compensated for each round. Participants also completed a set of five practice rounds in which they were informed after each round what their payment would have been for that round. We adapted this task from Gino et al. (2010) in order to create gradual versus abrupt changes across successive rounds. We used 10 sets of five rounds for a total of 50 rounds. During the first set of five rounds of the task, the rounds were the same for both conditions, and there were always clearly more dots on the left side than the right side. In the abrupt-change condition, this pattern with more dots clearly on the left side continued until the final set beginning in Round 46. In the gradual-change condition, the pattern started to change across rounds after the first set of rounds. During the second set of five rounds, one of the rounds clearly had more dots on the right side. In the third set of five rounds, two rounds clearly had more dots on the right side. This pattern of gradually increasing the number of rounds with more dots clearly on the right side continued until the final set of rounds beginning in Round 46. The final set of rounds (Rounds 46–50) was identical across the gradual-change and abrupt-change conditions. In all of these rounds, there were clearly more dots on the right side than the left side.

Measures

Moral disengagement. We measured moral disengagement immediately before the final set of rounds in the visual perception task. As in Study 2, moral disengagement was measured by adapt-

³ It is possible that a particularly slow Internet connection could delay the refresh speed of the individual participant's browser, and we cannot be sure exactly how long each participant saw each figure. However, participants were randomly assigned to conditions, and we can assume that this variance was distributed evenly across participants and conditions.

ing items from Moore et al. (2012) to specifically refer to moral disengagement related to the visual perception task. We adapted four items from Moore et al. These items included “It’s ok if someone selected the side with fewer dots as long as they had a good reason for doing so,” “Considering the ways that people grossly misrepresent themselves, it’s not a big deal to occasionally select the wrong side,” “Selecting the side with fewer dots is okay as long as you tried,” and “People shouldn’t be held accountable for not selecting the correct side with more dots given how quickly the dots disappeared.” The reliability of the scale was .72. Additionally, we found a significant correlation between these adapted items and our later measurement of the full moral disengagement scale from Moore et al. at the end of the experiment ($r = .37, p < .001$).

Unethical behavior. The final set of rounds (Rounds 46–50) was identical across the gradual-change and abrupt-change conditions. Additionally, in each of the rounds in this set, there were clearly more dots on the right side than the left side. Because of the differential payout for the left (\$0.05) versus right (\$0.01) sides, if participants cheated and misreported the side with more dots, they would earn more money. Thus, we measured unethical behavior in terms of the number of times that participants misreported the correct side during this final set of rounds.

Study 3 Results

Table 3 provides means, standard deviations, and correlations between Study 3 variables. Hypothesis 1 predicted that during the final rounds, participants would engage in more unethical behavior in the gradual-change condition than in the abrupt-change condition. As depicted in Figure 4, participants in the gradual-change condition more frequently misreported their performance during the final five rounds of the visual perception task ($M = 1.78, SD = 2.04$) than participants in the abrupt-change condition ($M = .65, SD = 1.36, t_{90} = 3.12, p < .01, d = .66$). Thus, Hypothesis 1 was supported.

Hypothesis 2 predicted that participants would become more morally disengaged in the gradual-change condition than in the abrupt-change condition. Consistent with Hypothesis 2, mean moral disengagement was higher in the gradual-change condition ($M = 3.92, SD = 1.24$) than in the abrupt-change condition although this difference was only marginally significant ($M = 3.45, SD = 3.45, t_{90} = 1.88, p = .06, d = .40$).

Table 3
Means, Standard Deviations, and Correlations Among Study 3 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Gradual change ^a	0.50	0.50	—				
2. Moral disengagement	3.69	1.24	.19	—			
3. Unethical behavior	1.21	1.82	.31**	.40**	—		
4. Gender ^b	0.48	0.50	-.09	-.29**	.06	—	
5. Age	34.67	12.37	.04	-.06	-.11	.19	—

Note. $n = 92$.

^a Coded as 0 = abrupt change, 1 = gradual change. ^b Gender coded as 0 = male, 1 = female.

** $p < .01$.

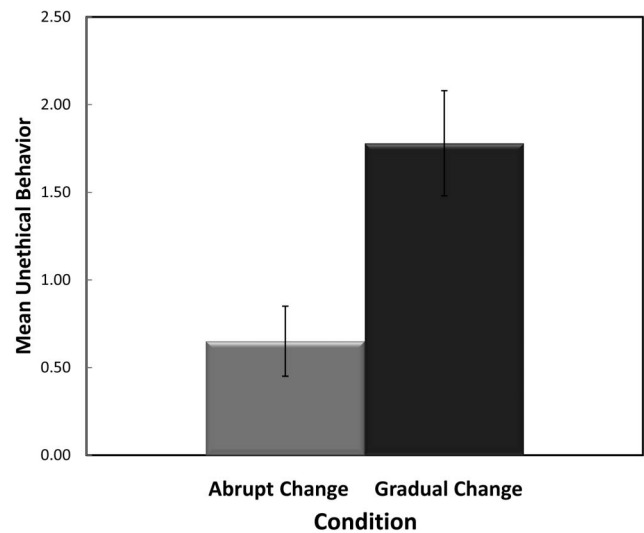


Figure 4. Mean unethical behavior during the final set of rounds in Study 3. Error bars represent ± 1 standard error.

Hypothesis 3 predicted that moral disengagement would increase unethical behavior. Supporting Hypothesis 3, we found a significant correlation between moral disengagement and unethical behavior ($r = .40, p < .001$).

Hypothesis 4 predicted that the slippery-slope effect of gradual versus abrupt changes on increased unethical behavior would be mediated by moral disengagement. As in Study 2, we tested the significance of the indirect effect of the slippery slope on unethical behavior through moral disengagement using bootstrapping procedures with 1,000 resamples (Preacher & Hayes, 2008). Supporting Hypothesis 4, we found a significant indirect effect of gradual versus abrupt changes on unethical behavior during the final rounds through moral disengagement (coefficient = .24, 95% CI [.02, .57]).

Study 3 Discussion

The results of Study 3 support Hypotheses 1–4. As predicted, the results provide evidence consistent with a slippery-slope effect, such that gradual changes over time were associated with increased moral disengagement and higher levels of unethical behavior. By using a different task and a nonstudent sample, Study 3 provides additional evidence of the existence of the slippery-slope phenomenon and the mediating effect of moral disengagement. However, the existence of gradually increasing unethical behavior across three studies suggests a need to examine factors that may attenuate this effect. In Study 4, we build on Study 3 by examining prevention focus as a moderator of this mediated relationship.

Study 4 Method

Participants and Design

Study 4 was conducted as an online experiment using 207 adult U.S. residents recruited through Amazon mTurk. The design was 2 (gradual-change, abrupt-change) \times 2 (induced prevention focus, control) with random assignment. The median age of participants

was 34 years, 47% were female, and participants had an average of 15 years of work experience. At the beginning of the study, participants were randomly assigned to complete either a task inducing a prevention focus or a neutral task. Participants were then randomly assigned to the gradual-change or abrupt-change condition and were instructed to complete same visual perception task used in Study 3. Apart from the priming task at the beginning, all other materials and measures were identical to those used in Study 3.

Manipulations and Measures

Induced prevention focus. A prevention focus was induced at the beginning of the experiment prior to the visual perception task with a manipulation used in prior regulatory focus research (Higgins, Idson, Freitas, Spiegel, & Molden, 2003; Li et al., 2011). First, participants were presented with a word completion task containing words either related to prevention focus (e.g., *secure, vigilance, prevention*) or a control condition with neutral words (e.g., *newspaper, bulletin, pencil*). Second, participants were given a writing task that in the prevention focus condition instructed them to write down an outcome that they strongly wanted to avoid and to describe the strategies they planned to use to avoid this outcome, whereas in the control condition they were asked to generally describe their job, their boss, and a recent meeting they attended. We also used five manipulation check questions asking participants what they had been asked to write about and whether during the last few minutes they had been thinking about their fears and challenges (prevention focus) or their job and boss (control).

Moral disengagement. As in Study 3, we measured moral disengagement immediately before the final set of rounds for the visual perception task with four items adapted from Moore et al. (2012). The reliability of the scale was .79.

Unethical behavior. As in Study 3, the final set of five rounds (Rounds 46–50) was identical across the gradual-change and abrupt-change conditions, and we measured unethical behavior in terms of the number of times that participants misreported their performance during this final set of rounds.

Study 4 Results

Table 4 provides means, standard deviations, and correlations between Study 4 variables. Hypothesis 1 predicted that during the

final set of rounds, participants would engage in more unethical behavior in the gradual-change condition than in the abrupt-change condition. Supporting Hypothesis 1, participants in the gradual-change condition more frequently misreported their performance during the final set of rounds on the visual perception task ($M = 1.57, SD = 1.99$) than participants in the abrupt-change condition ($M = .93, SD = 1.68, t_{205} = 2.49, p = .01, d = .35$).

Hypothesis 2 predicted that participants would become more morally disengaged in the gradual-change condition than in the abrupt-change condition. Consistent with Hypothesis 2, mean moral disengagement was higher in the gradual-change condition ($M = 3.74, SD = 1.54$) than in the abrupt-change condition ($M = 3.34, SD = 1.44, t_{205} = 1.96, p = .05, d = .27$).

Hypothesis 3 predicted that moral disengagement would increase unethical behavior. Supporting Hypothesis 3, we found a significant correlation between moral disengagement and unethical behavior ($r = .42, p < .001$).

Hypothesis 4 predicted that the slippery-slope effect of gradual versus abrupt changes on increased unethical behavior would be mediated by moral disengagement. As in earlier studies, we tested the significance of the indirect effect of the slippery slope on unethical behavior through moral disengagement using bootstrapping procedures with 1,000 resamples (Preacher & Hayes, 2008). Supporting Hypothesis 4, we found a significant indirect effect of gradual versus abrupt changes on unethical behavior during the final set of rounds through moral disengagement (coefficient = .21, 95% CI [.01, .45]).

Hypothesis 5 predicted that prevention focus would moderate the effects of moral disengagement on unethical behavior during the final set of rounds by attenuating this relationship. As shown in Figure 5, there was little difference in unethical behavior among those with low moral disengagement; however, when morally disengaged, those with a prevention focus were less likely to behave unethically during the final set of rounds than those in the control condition. The slope of the effect of moral disengagement on unethical behavior was significant both when a prevention prime was induced (simple slope = .66, $t = 6.49, p < .001$) and in the control condition (simple slope = .35, $t = 3.00, p = .003$); however, the slope was less steep in the prevention focus condition. The results of a linear regression collapsing over the gradual- and abrupt-change conditions indicated a significant interactive effect between prevention focus and moral disengagement on

Table 4
Means, Standard Deviations, and Correlations Among Study 4 Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Gradual change ^a	0.48	0.50	—					
2. Prevention prime ^b	0.44	0.50	-.03	—				
3. Moral disengagement	3.53	1.50	.14	-.01	—			
4. Unethical behavior	1.23	1.86	.17*	-.19**	.42**	—		
5. Gender ^c	0.53	0.50	-.19**	.05	.07	-.03	—	
6. Age	34.03	12.13	.05	-.06	-.13	-.01	.21**	—

Note. $n = 207$.

^a Coded as 0 = abrupt change, 1 = gradual change. ^b Coded as 0 = neutral prime, 1 = prevention prime. ^c Gender coded as 0 = male, 1 = female. * $p < .05$. ** $p < .01$.

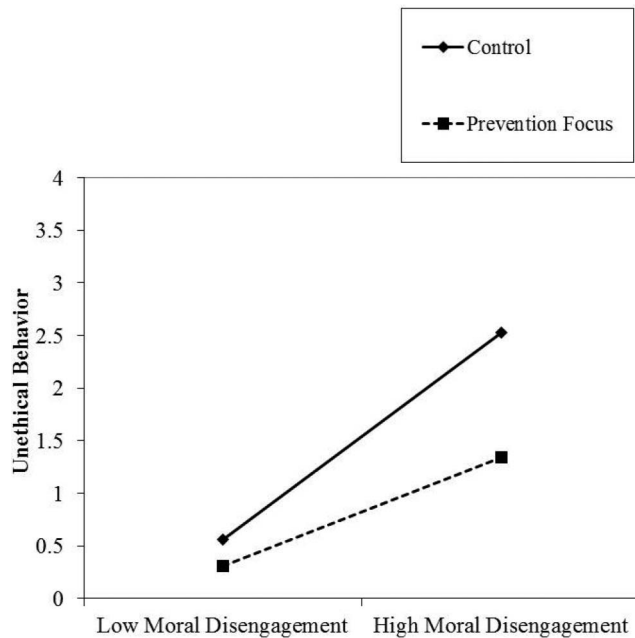


Figure 5. The effects of the interaction between moral disengagement and prevention focus on unethical behavior in Study 4.

unethical behavior ($t_{203} = -2.00, p = .047$). Therefore, Hypothesis 5 was supported.

Hypothesis 6 predicted that a prevention focus would moderate the mediated relationship between gradual versus abrupt changes, moral disengagement, and unethical behavior during the final period. To test Stage 2 moderated mediation as hypothesized in our theoretical diagram, we used Model 14 in SPSS Process (Hayes, 2013). We estimated the conditional indirect effect of gradual versus abrupt changes on unethical behavior through moral disengagement both with and without induced prevention focus using unstandardized coefficients and bootstrapping with 1,000 resamples to place 95% confidence intervals around estimates of the indirect effects. The indirect effect of gradual changes on unethical behavior through moral disengagement was significantly attenuated, though not entirely eliminated, when prevention focus was induced (coefficient = .13, 95% CI [.02, .36]) as compared to the control condition (coefficient = .26, 95% CI [.01, .60]), as indicated by the significant interaction between induced prevention focus and moral disengagement ($B = -.31, t = -2.05, p = .04$). Thus, Hypothesis 6 was supported.

General Discussion

The purpose of this research was to examine the slippery-slope effect and explore the process through which unethical behavior evolves over time. Although there are many anecdotes about the slippery slope in the business world, our results provide the first empirical evidence that we are aware of regarding susceptibility to increased unethical behavior over time. Additionally, we found strong effects using three different tasks and different measures of unethical behavior: Exposure to slippery-slope conditions more than doubled the rates of unethical behavior in our studies. The results also extend social-cognitive theory by demonstrating that

the slippery-slope effect increases unethical behavior through the mediating mechanism of moral disengagement and expand regulatory focus theory by suggesting that this effect can be attenuated by inducing a prevention focus.

Theoretical Implications

Our results extend current research in four ways. First, we provide empirical evidence of the slippery-slope effect in a controlled environment to provide novel insight into how unethical behavior develops over time. Recent behavioral ethics research has used single-round studies to conclude that people are prone to commit small indiscretions but not major unethical violations (e.g., Mazar et al., 2008). We add to these results by demonstrating that the magnitude of unethicality can be increased from smaller to larger indiscretions over a series of gradually changing ethics-related decisions. Our results suggest that previous conclusions from experiments relying on the assessment of unethical behavior at a single point in time may need to be reconsidered from a temporal perspective.

Second, we extend social-cognitive theory through a consideration of how moral disengagement may influence unethical behavior over time. Although social-cognitive theory has been widely cited in the behavioral ethics literature, few studies have empirically considered the mediating role of moral disengagement in facilitating unethical behavior. We also provide a theoretical account of why gradual, but not abrupt, changes over a series of ethics-related decisions increase moral disengagement. Whereas many single-round studies have treated moral disengagement as a trait-based propensity, our results indicate that moral disengagement can be influenced by contextual factors across consecutive rounds. Across multiple studies with different tasks and populations, we found that the slippery-slope effect facilitated moral disengagement and increased unethical behavior.

Third, our consideration of moral disengagement as a mediating mechanism provides insight into why those who progress down the slippery slope continue to behave unethically instead of exhibiting morally compensatory behavior following an unethical act. Some recent research has suggested that the commission of an unethical act may damage one's moral self-concept and may require compensatory ethical conduct to reaffirm one's status as an ethical person (e.g., Cornelissen, Bashshur, Rode, & Le Menestrel, 2013; Merritt, Effron, & Monin, 2010; Monin & Jordan, 2009; Zhong, Ku, Lount, & Murnighan, 2010). We argue that the differences between our predictions and these studies may be reconciled by moral disengagement. A key assumption of compensatory ethics is that individuals recognize and appreciate the wrongness of their behavior. Without the acknowledgment of an ethical violation, there is no motive for morally compensatory behavior to occur. Thus, the justification of unethicality that occurs through moral disengagement may explain why morally disengaged individuals do not fully appreciate the wrongness of their actions and may continue behaving unethically.

Fourth, we build on research connecting regulatory focus theory with ethical behavior. Although previous research found a direct effect connecting a prevention focus with reduced unethical behavior, our results indicate that a prevention focus can also reduce susceptibility to the slippery slope of unethical behavior over time. Specifically, our results indicate an interaction between moral

disengagement and a prevention focus on unethical behavior in which the added vigilance associated with a prevention focus may reduce minor forms of cheating that would otherwise have been rationalized or overlooked by those who are morally disengaged. Thus, inducing a prevention focus provides a potential means for reducing unethical behavior even when temptations start to emerge and unethical justifications are readily available.

The work of Zhang, Cornwell, and Higgins (2014) extends this line of research by demonstrating a prevention-repetition effect in which those with a prevention focus tend to exhibit moral consistency over time. Across five studies, Zhang et al. observed that those with a prevention focus were more likely to repeat whichever behavior they first exhibited. Thus, those with either a measured or manipulated prevention focus who were initially ethical were more likely to continue making ethical choices, while those who were initially unethical were more likely to repeat their unethical choices. The authors suggested that maintaining the status quo created by the prior decision provided the motivation behind the repetition. However, because most individuals view themselves as good people and consider ethical conduct to represent the status quo (Mazar et al., 2008), a prevention focus should in general facilitate the maintenance of this status quo as shown by Gino and Margolis (2011) and the results of the current studies.

Managerial Implications

Given the many scandals that have plagued the business world in recent years, managers are looking for explanations regarding the possible origins and prevention of egregious unethicality. Business leaders have considered the possibility of a slippery-slope effect and ascribed it to corporate scandals ranging from Enron to Madoff. Contrary to the argument of some researchers that employees are prone to committing only minor indiscretions, our results suggest that small indiscretions may snowball into major violations over time if left unchecked. Our results confirm managerial intuition about a slippery-slope effect and provide insight into the mechanisms through which it operates.

Managers may want to consider whether their organization possesses a strong ethical culture in which misconduct is clearly defined and even small deviations are quickly addressed. Those who notice and address questionable employee conduct may be able to reduce the likelihood that minor indiscretions will escalate over time. Addressing minor instances of unethical behavior by a particular employee may also help curb the unethical behaviors of other employees. After all, employees who see their coworkers being called out for minor offenses may be less likely to rationalize their own potentially deviant behaviors. Doing so may also induce a prevention focus in which employees seek to avoid the types of unethical behaviors that have been made salient. In sum, managers may want to consider steps they can take to quickly address small instances of unethical behavior and create an environment in which employees are less likely to experience increased moral disengagement.

Many modern organizations encourage their employees to take risks and think outside the box. However, recent research has suggested that creative thinking can sometimes be associated with unethical behavior (Gino & Ariely, 2012). In this research, we demonstrate that inducing a prevention focus may prevent individuals from progressing down the slippery slope when they

encounter temptations. Employees will inevitably encounter opportunities to behave unethically in the workplace, and sometimes unethical acts may seem justifiable; however, our results indicate that a prevention focus can help to reduce unethical behavior even when people are morally disengaged. A prevention focus may be induced among employees by setting clear standards and openly delineating potential ethical pitfalls that must be avoided.

Similarly, managers may want to frame ethics-related tasks so as to encourage a prevention focus when employees are completing them. For example, more ethical behavior may result over time when employees are encouraged to be vigilant in identifying financial mistakes rather than creative in attempting to find new financial loopholes. Setting and maintaining an ethical status quo represent an important way in which employees may be prevented from starting down the slippery slope even in situations in which they might feel justified in doing so. Although a prevention focus may help to prevent individuals from progressing down the slippery slope, it might also have negative consequences that should be considered. For example, a prevention focus may inhibit behaviors aimed at changing the status quo such as risk taking, creative thinking, or challenge-oriented organizational citizenship behaviors like voice or personal initiative. Thus, managers may want to consider the tradeoffs associated with a prevention focus and consider options such as inducing a prevention focus primarily in contexts where employees face ethics-related decisions.

Limitations and Directions for Future Research

This research is not without limitations. For example, we found evidence of the slippery-slope effect using relatively low-stakes unethicality in a short time frame. Although our findings parallel the behaviors described by some former white-collar criminals over an extended time period, additional research is needed to explore the slippery-slope effect in an organizational environment with higher stakes. Generalizability is often cited as a concern in laboratory studies, but the purpose of this research is to provide the first empirical test of the slippery-slope effect in a controlled environment and the causal mechanisms through which it operates. Additionally, the slippery-slope effect is a general phenomenon common to all individuals. We operationalized the slippery slope in different ways across multiple studies and found effects using both student and nonstudent samples. Thus, we feel that the laboratory setting strengthened the potential contribution of this research by allowing us to assess causality in four multiround studies measuring unethical behavior over time.

Future research is needed to consider additional factors that may either exacerbate or attenuate the slippery-slope effect. For example, individual differences likely play an important role in addition to contextual factors. Individuals with a strong moral identity may be less susceptible to the slippery-slope effect, whereas those who are Machiavellian, utilitarian, or low in moral development may be particularly prone to it. Contextual factors such as ethical climate, a code of conduct, monitoring, and ethical priming may all reduce the slippery-slope effect or prevent it from occurring. Following ethics-related interventions, it would be interesting to see whether individuals start back at the top of the slippery slope with small indiscretions or if they instead pick up where they left off with violations of a larger magnitude. Additionally, research could explore how differences in terms of both content and severity

influence a series of ethics-related decisions over time. For example, there may be a threshold at which many people begin to perceive an ethics-related decision as significantly different from a previous decision and stop their progression down the slippery slope.

Future research could also explore whether a slippery slope of unethical behavior in one area spills over to unethical behavior in other areas. If an individual becomes morally disengaged in one context, it may also become easier to justify other questionable behaviors. For example, an employee who gradually begins to overreport his or her hours might become increasingly likely to commit seemingly unrelated unethical acts, such as taking home office supplies for personal use, surfing the Internet on company time, or deceiving potential clients to increase sales. Similarly, future research could explore whether growing indiscretions in an employee's personal life may spill over into deviant workplace behaviors.

Conclusion

Although the slippery-slope effect has often been described anecdotally by both scholars and practitioners, this research provides the first test of the effect in a controlled environment. Across four studies, our results extend social-cognitive theory by demonstrating that gradual changes can increase moral disengagement and unethical behavior over time. However, the effectiveness of a prevention focus in reducing unethical behavior suggests that there may be other important individual and contextual factors that influence one's susceptibility to this phenomenon. Whereas behavioral ethics theory to date suggests that individuals are prone to committing small indiscretions but not blatant unethicality, this research sheds light on the process through which small instances of unethical behavior may begin to snowball into larger violations. Given the lack of research exploring unethical behavior over time, we hope that these findings will encourage research exploring the temporal nature of unethicality.

References

- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics*, *1*, 323–338. doi:10.1016/0047-2727(72)90010-2
- Ariely, D. (2008). *Predictably irrational: The hidden forces that shape our decisions*. New York, NY: HarperCollins.
- Baack, D., Fogliasso, C., & Harris, J. (2000). The personal impact of ethical decisions: A social penetration theory. *Journal of Business Ethics*, *24*, 39–49. doi:10.1023/A:1006016113319
- Bandura, A. (1991). Social cognitive theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development: Theory, research and applications* (Vol. 1, pp. 71–129). Hillsdale, NJ: Erlbaum.
- Bandura, A. (1999). Moral disengagement in the preparation of inhumanities. *Personality and Social Psychology Review*, *3*, 193–209. doi:10.1207/s15327957pspr0303_3
- Bandura, A. (2004). The role of selective moral disengagement in terrorism and counterterrorism. In F. M. Moghaddam & A. J. Marsella (Eds.), *Understanding terrorism: Psychosocial roots, consequences, and interventions* (pp. 121–150). Washington, DC: American Psychological Association.
- 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*, 364–374.
- Baron, R. A. (2004). The cognitive perspective: A valuable tool for answering entrepreneurship's basic "why" questions. *Journal of Business Venturing*, *19*, 221–239. doi:10.1016/S0883-9026(03)00008-9
- BBC ethics guide. (2012). Retrieved from <http://www.bbc.co.uk/ethics/introduction/slipperslope.shtml>
- Becker, G. S. (1968). Crime and punishment: An economic approach. *Journal of Political Economy*, *76*, 169–217. doi:10.1086/259394
- Burger, J. M. (2009). Replicating Milgram: Would people still obey today? *American Psychologist*, *64*, 1–11. doi:10.1037/a0010932
- Christian, M., & Ellis, A. (2011). Examining the effects of sleep deprivation on workplace deviance: A self-regulatory perspective. *Academy of Management Journal*, *54*, 913–934. doi:10.5465/amj.2010.0179
- Cornelissen, G., Bashshur, M. R., Rode, J., & Le Menestrel, M. (2013). Rules or consequences? The role of ethical mind-sets in moral dynamics. *Psychological Science*, *24*, 482–488. doi:10.1177/0956797612457376
- Cowan, L. (Reporter), & Carras, J. (Producer). (2012, October 21). The problem with plagiarism [Video file]. *CBS News*. Retrieved from <http://www.cbsnews.com/video/watch/?id=50133558n&tag>
- Detert, J. R., Treviño, L. K., & Sweitzer, V. L. (2008). Moral disengagement in ethical decision making. *Journal of Applied Psychology*, *93*, 374–391. doi:10.1037/0021-9010.93.2.374
- Gino, F., & Ariely, D. (2012). The dark side of creativity: Original thinkers can be more dishonest. *Journal of Personality and Social Psychology*, *102*, 445–459. doi:10.1037/a0026406
- Gino, F., Ayal, S., & Ariely, D. (2009). Contagion and differentiation in unethical behavior: The effect of one bad apple on the barrel. *Psychological Science*, *20*, 393–398. doi:10.1111/j.1467-9280.2009.02306.x
- Gino, F., & Bazerman, M. H. (2009). When misconduct goes unnoticed: The acceptability of gradual erosion in others' unethical behavior. *Journal of Experimental Social Psychology*, *45*, 708–719. doi:10.1016/j.jesp.2009.03.013
- Gino, F., & Margolis, J. D. (2011). Bringing ethics into focus: How regulatory focus and risk preferences influence (un)ethical behavior. *Organizational Behavior and Human Decision Processes*, *115*, 145–156. doi:10.1016/j.obhdp.2011.01.006
- Gino, F., Norton, M., & Ariely, D. (2010). The counterfeit self: The deceptive costs of faking it. *Psychological Science*, *21*, 712–720. doi:10.1177/0956797610366545
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Press.
- Herzenstein, M., Posavac, S. S., & Brakus, J. J. (2007). Adoption of new and really new products: The effects of self-regulation systems and risk salience. *Journal of Marketing Research*, *44*, 251–260. doi:10.1509/jmkr.44.2.251
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319–340. doi:10.1037/0033-295X.94.3.319
- Higgins, E. T., Idson, L. C., Freitas, A. L., Spiegel, S., & Molden, D. C. (2003). Transfer of value from fit. *Journal of Personality and Social Psychology*, *84*, 1140–1153. doi:10.1037/0022-3514.84.6.1140
- Jennings, M. M. (2011). *Business ethics: Case studies and selected readings*. Mason, OH: South-Western Cengage Learning.
- Jordan, J., Mullen, E., & Murnighan, J. K. (2011). Striving for the moral self: The effects of recalling past moral actions on future moral behavior. *Personality and Social Psychology Bulletin*, *37*, 701–713. doi:10.1177/0146167211400208
- Kirchner, B. (2010). *The Bernard Madoff investment scam*. Upper Saddle River, NJ: FT Press.
- 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*, 1–31. doi:10.1037/a0017103
- Li, A., Evans, J., Christian, M. S., Gilliland, S. W., Kausel, E. E., & Stein, J. H. (2011). The effects of managerial regulatory fit priming on reac-

- tions to explanations. *Organizational Behavior and Human Decision Processes*, 115, 268–282. doi:10.1016/j.obhdp.2011.01.003
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45, 633–644. doi:10.1509/jmkr.45.6.633
- McGuire, T. (2012, August 23). Lessons American journalists can learn from the Murdoch scandals. *McGuire on Media*. Retrieved from <http://cronkite.asu.edu/mcguireblog/?p=273>
- McLean, B., & Elkind, P. (2003). *The smartest guys in the room: The amazing rise and scandalous fall of Enron*. New York, NY: Penguin.
- Merritt, A. C., Effron, D. A., & Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. *Social and Personality Psychology Compass*, 4, 344–357. doi:10.1111/j.1751-9004.2010.00263.x
- Milgram, S. (1974). *Obedience to authority*. New York, NY: Harper & Row.
- Monin, B., & Jordan, A. H. (2009). The dynamic moral self: A social psychological perspective. In D. Narvaez & D. K. Lapsley (Eds.), *Personality, identity, and character: Explorations in moral psychology* (pp. 341–354). doi:10.1111/j.1751-9004.2010.00263.x
- Moore, C. (2008). Moral disengagement in processes of organizational corruption. *Journal of Business Ethics*, 80, 129–139.
- Moore, C., Detert, J. R., Treviño, L. K., Baker, V. L., & Mayer, D. M. (2012). Why employees do bad things: Moral disengagement and unethical organizational behavior. *Personnel Psychology*, 65, 1–48.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891. doi:10.3758/BRM.40.3.879
- Safire, W. (1979, May 13). The fine art of euphemism. *San Francisco Chronicle*, p. 13.
- Schweitzer, M. E., Ordóñez, L., & Douma, B. (2004). Goal setting as a motivator of unethical behavior. *Academy of Management Journal*, 47, 422–432. doi:10.2307/20159591
- Secker, G. (2011, September 28). Insider's view on UBS rogue trader Kweku Adoboli. *MyFinances.co.uk*. Retrieved from <http://www.myfinances.co.uk/investments/2011/09/28/insider-s-view-on-ubs-rogue-trader-kweku-adoboli>
- Shalvi, S. S., Handgraaf, M. J. J., & De Dreu, C. K. W. (2011). Ethical maneuvering: Why people avoid both major and minor lies. *British Journal of Management*, 22(Suppl. S1), S16–S27. doi:10.1111/j.1467-8551.2010.00709.x
- 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, 330–349. doi:10.1177/0146167211398138
- The slippery slope of situational ethics. (2010, June 16). *Marketplace*. Retrieved from <http://www.marketplace.org/topics/world/slippery-slope-situational-ethics>
- Tenbrunsel, A. E., & Messick, D. M. (2004). Ethical fading: The role of self-deception in unethical behavior. *Social Justice Research*, 17, 223–236. doi:10.1023/B:SORE.0000027411.35832.53
- von Hippel, W., Lakin, J. L., & Shakarchi, R. L. (2005). Individual differences in motivated social cognition: The case of self-serving information processing. *Personality and Social Psychology Bulletin*, 31, 1347–1357. doi:10.1177/0146167205274899
- Welsh, D. T., & Ordóñez, L. D. (2014). The dark side of consecutive high performance goals: Linking goal setting, depletion, and unethical behavior. *Organizational Behavior and Human Decision Processes*, 123, 79–89. doi:10.1016/j.obhdp.2013.07.006
- Welsh, D. T., & Ordóñez, L. D. (in press). Conscience without cognition: The effects of subconscious priming on ethical behavior. *Academy of Management Journal*.
- Why honesty is the best policy: Corporate deceit is a slippery slope. (2002, March 7). *The Economist*. Retrieved from <http://www.economist.com/node/1010298>
- Zhang, S., Cornwell, J. F., & Higgins, E. T. (2014). Repeating the past: Prevention focus motivates repetition, even for unethical decisions. *Psychological Science*, 25, 179–187. doi:10.1177/0956797613502363
- Zhong, C. B., Ku, G., Lount, R. B., & Murnighan, J. K. (2010). Compensatory ethics. *Journal of Business Ethics*, 92, 323–339. doi:10.1007/s10551-009-0161-6

Received February 16, 2013

Revision received April 11, 2014

Accepted April 15, 2014 ■

E-Mail Notification of Your Latest Issue Online!

Would you like to know when the next issue of your favorite APA journal will be available online? This service is now available to you. Sign up at <http://notify.apa.org/> and you will be notified by e-mail when issues of interest to you become available!