Strength in Numbers: The Moral Antecedent and Consequence of Consumer Conformity

by

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Abstract

Consumers often encounter moral violations in their daily life, from every day transgressions such as adultery and tax evasion to infamous company frauds. News reports about immoral behaviors of one type or another have become regular features on TV programs, radio stations, and social media websites. Previous research has mainly focused on how exposure to others’ moral violations can influence one’s own behaviors in a personal setting. However, we know very little about how moral violations may affect the way consumers relate to others. To fill this gap, my dissertation focuses on understanding the social nature of morality by exploring the moral antecedent (Essay 1) and consequence (Essay 2) of consumer conformity.

Essay 1 investigates the moral antecedent of consumer conformity. By synthesizing insights from research on social order and conformity, I propose that exposure to others’ immoral behaviors can heighten the perceived threat to social order, which may increase consumers’ endorsement of conformist attitudes and hence their preferences for majority-endorsed choices in subsequently unrelated consumption situations. Moreover, I show that the effect disappears (a) when the moral violator has already been punished by third parties (Study 4) and (b) when the majority-endorsed option is perceived as immoral and therefore may be viewed as being complicit with the moral violators (Study 5).
Essay 2 examines the moral consequence of consumer conformity. Extending the results of Essay 1, I propose and demonstrate that perceptions of being in the majority (vs. minority) group, even in a completely unrelated domain (e.g., consumption), can induce perceptions of being in the moral majority and signal social order to consumers, which has important downstream consequences on consumers’ moral judgments such as reducing their concerns about condemning and punishing moral transgressors. Three studies provide support for these propositions.

By advancing our understanding of the moral antecedent and consequence of consumer conformity, this dissertation adds to a growing research stream showing that moral concerns can affect consumer behavior by exploring (a) how moral principles could serve as a basis for consumers’ preferences and choices and (b) how consumption conformity can buffer moral threats.
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CHAPTER ONE

INTRODUCTION

Consumers often encounter moral violations in their daily life. News reports about unethical behaviors of one type or another have become a regular feature on TV, radio channels, and social media websites. Consumers are constantly exposed to news articles describing financial scandals, credit card fraud, child labor, illegal disposal of toxic wastes, marketing scams, and so on. Additionally, they frequently witness everyday transgressions such as cheating, stealing, tax evasion, and adultery. Given the prevalence of moral violations, previous literature has mainly explored the effects of witnessing moral violations on consumers’ personal judgments and behaviors including their evaluation toward the violator (Bhattacharjee, Berman, and Reed 2013), the amount of food and drinks consumed while being exposed to moral violations (Chan et al. 2014), and the likelihood of engaging in unethical behaviors themselves (Gino, Ayal, and Ariely 2009). However, prior research remains silent about whether exposure to others’ immoral behaviors would shift interpersonal dynamics – that is, how exposure to moral violations would change the way consumers relate to others and therefore shape their consumption preferences in relation to other consumers’ preferences. This gap is glaring, given that morality underlies the fundamental expectations consumers have about how they interact with others and moral principles often guide how individuals interpret the behaviors of others around them and could serve as a basis for important consumer decisions (Grayson 2014). To fill this gap, my dissertation focuses on understanding the social nature of morality by exploring (a) how consumers’ moral considerations may impact their conformity tendency in consumption (Essay 1), and (b) how consumption conformity might, in turn, affect consumers’ judgments of others’ moral violations (Essay 2).
The first essay, “Witnessing Moral Violations Increases Conformity in Consumption,” investigates a novel antecedent of consumer conformity based on consumers’ moral considerations. Specifically, it investigates whether, when, and how exposure to moral violations would influence consumers’ motivation to conform to the majority others’ preference and choice by choosing majority-endorsed (vs. minority-endorsed) options (cf. Berger and Heath 2007, 2008; Dong, Dai, and Wyer 2014; Huang, Dong, Mukhopay 2014). Drawing on the existing literature on conformity and social order, I predict that witnessing moral violations could induce perceived threat to social order and thus activate a desire for consumers to restore the balance of social order by conforming to social norms. In the consumption domain, this desire to conform to social norm may be reflected in consumers’ greater preferences and choices of the majority- (vs. minority)-endorsed options. Five experiments were conducted to test this hypothesis and its boundary conditions. Theoretical contributions and managerial implications are also discussed.

The second essay, “Cross-Domain Influences of Consumption Conformity on Moral Judgments,” investigates how being in the majority group, even symbolically through consumers’ product choice, would influence the way consumers view the world and therefore affect their moral judgments. I hypothesize that perceiving the self as being in the majority (vs. minority) group, even in a completely unrelated (consumption) domain, can induce perceptions of being in the moral majority and signal social order to consumers, which has important downstream consequences on moral judgments such as reducing consumers’ tendency to condemn and punish moral transgressors. Three experiments provided evidence for my hypothesis.

The remainder of this thesis is organized in the following way. I will begin with the first essay (chapter two), followed by the second essay (chapter three). I will conclude with a brief discussion of both essays (chapter four).
CHAPTER TWO: ESSAY ONE

WITNESSING MORAL VIOLATIONS INCREASES CONFORMITY IN CONSUMPTION

You are at a grocery store and craving for a soft drink. It comes down to two brands that you equally like. One of the two brands is more popular than the other. Would the coincident that you just read the morning paper’s report describing bank frauds in a financial scandal sway your choice of the beverage? The first essay of my dissertation explores whether, when, and how observing others’ immoral behaviors can affect consumers’ subsequent preference for popular products in unrelated consumption domains.

News reports of unethical behaviors have become a regular feature on TV programs, newspapers, radio stations, and websites. Consumers are constantly exposed to moral violations, from infamous fraud by such companies as Enron, Lehman Brothers, and, more recently, Volkswagen to everyday transgressions such as tax evasion and adultery. Such unethical behaviors violate established moral codes and principles held by the majority of the society (Haidt 2012) and are usually recognized as breaches of social order. Despite the prevalence of moral violations, little is known about how witnessing them may affect consumer choice.

The current research highlights a novel influence of witnessing moral violations on consumers’ preference for majority-endorsed (vs. minority-endorsed) options. We propose that moral violations pose a threat to social order and that mere exposure to them could heighten individuals’ endorsement of conformist attitudes by inducing a desire to correct wrongs (e.g.,

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punishing the moral transgressors) and prevent future transgressions (e.g., adhering to social norms). In the domain of consumption, the heightened conformist attitudes could manifest symbolically through one’s preference for majority-endorsed (vs. minority-endorsed) products or brands (Berger and Heath 2007). Although endorsing a majority product obviously brings no repercussion to the original transgressor and does little to actually restore the balance of social order for consumers, the feeling that they belong to a majority group may nevertheless signal social order and attenuate consumers’ concern about condemning and punishing the moral violators.

In what follows, I develop a theoretical rationale for how witnessing moral violations can increase consumers’ conformity tendency in subsequent consumption contexts, and describe five studies that tested my predictions.

**THEORETICAL BACKGROUND**

**Determinants of Conformity**

Seldom do consumers make decisions in a social vacuum. Instead, they are often influenced by others’ choices (e.g., Bearden, Netemeyer, and Teel 1989; Burnkrant and Cousineau 1975), and others’ choices can often become the default choice (Huh, Vosgerau, and Morewedge 2014). Conformity refers to the process whereby individuals adjust their beliefs or behaviors to resemble those of real or imagined others (Cialdini and Goldstein 2004). Stemming from the seminal study by Asch (1946), research on conformity has revealed two main drives of conformity (Kelman 1953): (a) a desire to receive social approval (or to avoid social disapproval; normative motive) and (b) a desire to make objectively correct judgments and decisions.
(informative motive). Subsequently, a great amount of attention has been directed to investigating the causes of conformity. Much of previous research has shown that personality factors such as need to belong could increase conformity (Leary et al. 2013). Further, conformity tendency is generally lower in purchase contexts for products that symbolize personal identity, such as music and clothing (Berger and Heath 2007).

Moreover, recent advancements in conformity research have shown that conformity tendency can be influenced not only by relatively stable factors such as personality traits and product categories but also by more situational factors including physical and emotional experiences. For instance, jointly engaging in synchronous activities can activate a general “copying others” mindset, resulting in increased conformity tendency in subsequently unrelated consumption contexts (Dong, Dai, and Wyer 2015). Similarly, circular seating arrangements can increase consumers’ liking of majority-endorsed products by elevating their need to belong (Zhu and Argo 2013). Moreover, incidental emotions such as fear have been shown to increase conformity in consumers by heightening the desire for self-protection (Griskevicius et al. 2009).

**Moral Violations Threaten Social Order and Activate Conformity**

In line with the above findings showing that conformity tendency can be triggered by situational, transient factors, the current paper explores the role of exposure to moral violations in determining consumers’ subsequent conformity. The conjecture that witnessing moral violations may activate conformity builds upon research on social order and the psychological functions of conformity. Past research suggests that people have a general desire for social order—“the effective and efficient functioning of a society” (Lin, Dahl, and Argo 2013, p. 64; see also Hechter and Horne 2009; Kay et al. 2009). Thus, individuals are motivated to restore the
balance of social order when it is disrupted (Lin et al. 2013; Sampson 2009). For instance, when consumers perceive disruptions to social order by a norm violator (e.g., another customer cutting in line), they try to restore it by punishing him or her (Lin et al. 2013). Mere exposure to visual signs of disorder (e.g., litter, graffiti, abandoned cars) inspires collective efforts to restore order through both correcting past violations (e.g., by cleaning up the neighborhood) and preventing future violations (e.g., by implementing a neighborhood watch program; Sampson 2009). I posit that because moral violations are often recognized as breaches of social order, mere exposure to them can lead to perceived threat to social order (Rucker et al. 2004) and thus activate thoughts about the importance of correcting wrongs and preventing future violations (e.g., through social-norm adherence), which are precisely what conformist attitudes entail (Murray and Schaller 2012). Although the linkage between witnessing moral violations and conformity has never been directly demonstrated, this prediction is consistent with prior literature showing that conformity could serve both a defensive function against the occurrence of moral transgression and a reparative function signaling social order.

On the defensive side, although there are disadvantages associated with conformism (e.g., inhibiting creativity) and too much conformity can be detrimental to a society, conformity is an essential element for communities and societies to function (Bocchiaro and Zamperini 2012; Hechter and Horne 2009). This is because conformity plays a critical role in preventing threats posed by norm violations. Without conformity, societies would fall into chaos and disorder (Bocchiaro and Zamperini 2012). For social order to arise, people must be able to coordinate their actions and cooperate to attain common goals (Hechter and Horne 2009). Conformity facilitates both coordination and cooperation by setting stable expectations for social interactions. Indeed, individuals express stronger conformist attitudes when they feel vulnerable to risks and
hazards posed by deviance from societal norms. For instance, the salience of infectious-disease threat, which often occurs as a result of violations of norms regarding hygiene and food preparation, induces conformist attitudes and behaviors (Beall, Hofer, and Schaller 2016; Murray and Schaller 2012). Moreover, belief that the world is a dangerous place has also been shown to be positively linked to preference for the status quo and social conservatism (Altemeyer 1988). If conformity indeed serves a defense function against norm violations, it follows that the perceived threat of immoral behaviors to social order should exert a powerful influence on conformist attitudes, motivating people to follow social norms (to prevent violations) and to correct wrongs.

On the reparative side, conformity could serve a symbolic, reparative function signaling to people that things are in order and where they should be. This is because belonging to a majority (vs. minority) group affords many advantages, making individuals feel safer, more recognized, and more validated, whereas being in the minority can be threatening (Cialdini 1993). For example, in the seminal conformity experiment conducted by Asch in 1951, participants who were in the minority seriously doubted the validity of their own judgment and conformed to the opinions of the majority (confederates). Moreover, in the consumption context, it has been shown that socially excluded or lonely individuals tend to prefer majority-endorsed (vs. minority-endorsed) products to avoid negative evaluations from others (Mead et al. 2011; Wang, Zhu, and Shiv 2012). Because conformity provides social validation and may signal social order to people, it could help buffer the negative consequences of moral violations.

The Current Research: Witnessing Moral Violations Can Increase Conformity in Consumption
I build on the above reasoning to make the novel prediction that mere exposure to moral violations could lead to greater perceived threat to social order, which may in turn enhance conformist attitudes and behaviors. Moreover, the motivation to conform is just like other motivational forces, which rarely stay within the domain where they are originally induced and instead spill over to influence other domains (e.g., Xu, Schwarz and Wyer 2015; see Kruglanski et al. 2002 for a discussion on the goal generalization theory). Even though the need to be in the majority following exposure to moral violations is induced in the moral domain, it may spill over to affect preferences in other domains. Given that consumers are known to use possessions to signal their identity and values (Berger and Heath 2007) and strategically seek products in the service of group affiliation (Mead et al. 2011), I propose that an enhanced need for conformity could be expressed as a greater desire for products endorsed by the majority (vs. minority), in line with previous research (e.g., Dong at al. 2015; Huang, Dong, and Mukhopadhyay 2014; Wan, Xu, and Ding 2014; Zhu and Argo 2013). Formally:

**H1:** Exposure to moral violations increases consumers’ subsequent conformity tendency reflected in greater preference for majority-endorsed products.

**H2:** The relationship between exposure to moral violations and preference for majority-endorsed products is mediated by consumers’ heightened conformist attitudes, which is induced by greater perceived threat to social order.

**Qualifications**

I further propose that the effect of exposure to moral violations on consumers’ conformity tendency should be attenuated or eliminated under two conditions. First, as noted earlier, the desire to be associated with the majority after witnessing moral violations stems from the need to restore the balance of social order. Punishment has been recognized as a critical means of correcting violations and restoring social order. For instance, when consumers perceive
disruptions to social order by a norm violator (e.g., another customer messing up a store display), they punish the violator by refusing to provide assistance to him or her when help is needed (Lin et al. 2013). Further, people punish norm violators even when it is costly to punish and the punishment yields no material gain for them personally (Fehr and Gächter 2002; Fehr and Fischbacher 2003). Drawing on these findings, I expect that if the moral violator has already been punished by third parties, the need to restore social order should be fulfilled and hence the desire to conform to the majority should be lessened.

Second, if the proposed moral violation effect is driven by heightened desire to restore social order, then the effect should not hold if conforming to the majority-endorsed option is viewed as being complicit with the moral violation, which might create further imbalance in social order. In other words, consumers exposed to moral violations should not conform to immoral majorities. These qualifications not only allowed us to test the conditions under which the moral violation effect on conformity holds but also shed light on the underlying processes. Formally:

**H3:** The effect of exposure to moral violations on conformity will be attenuated or eliminated (a) when the violator has (vs. has not) already been punished by third parties and (b) when the majority-endorsed option is perceived as immoral.

**OVERVIEW OF THE PRESENT RESEARCH**

Five studies tested these hypotheses. Study 1 showed that exposure to a moral violation (financial scandal) increased consumers’ conformity tendency in real product choice. Moreover, the effect was specific to moral violations and could not generalize to other negative events (e.g., natural disaster). Study 2 generalized the finding to a different product category and offered mediation evidence that the observed effect was driven by consumers’ heightened endorsement
of conformist attitudes. Study 3 replicated the effects with a behavioral manipulation of moral violation and demonstrated that the effect was comparable for direct victims and observers of moral violations. Study 4 further tested the process, showing that the effect disappeared when the moral violator had already been punished by third parties. Moreover, it provided direct evidence, through a multistage mediation model, that exposure to moral violations induced greater perceptions of disruption to the social order, which increased consumers’ endorsement of conformist attitudes and hence conformity in consumption. Finally, Study 5 provided more evidence to the underlying process of maintaining social order by showing that consumers exposed to moral violations will not conform to immoral majorities.

**STUDY 1: FINANCIAL SCANDAL AND PRODUCT CHOICE**

In Study 1, I set out to test the basic premise that exposure to others’ immoral behaviors (in this case, financial scandal) could increase consumers’ subsequent conformity tendency. I induced exposure to moral violations through a news comprehension task in which participants read a news report about a real financial scandal (i.e., the London Interbank Offered Rate [LIBOR] scandal). In a control condition, the LIBOR incident was described as an innocent error, thus attenuating the perceived immorality of the bankers’ behaviors. Moreover, to examine whether the effect is specific to moral violations or can generalize to any negative events that potentially threaten one’s feelings of security, I added a second control condition wherein the destructive influence of a natural disaster on economic development was highlighted.

**Method**
Participants and Design. Two hundred ten undergraduate students (68 males; $M_{age} = 19.64$ years, $SD = 1.48$) from University of Toronto took part in this experiment for course credit. The experiment followed a one-factor, three-level (news article condition: moral violation vs. innocent error vs. natural disaster) between-subjects design. Participants took part in the study in groups of 4 to 6.

Procedure. The study consisted of two parts involving ostensibly unrelated tasks. The first part, comprising the manipulation, was titled “News Comprehension Study.” Participants were instructed that the researchers were interested in students’ ability to comprehend news articles and were given an article to read. They were randomly assigned to one of three conditions. In the moral violation condition, participants were told that they would read a financial news article, purportedly taken from *The New Yorker*, that described the recent LIBOR scandal (i.e., banks were described as “engaging in fraudulent activities to manipulate interest rates”; Chan et al. 2014, p. 384) and how it would harm the development of the global financial system and worldwide economy. In the innocent error condition, participants read a similar financial news article about the LIBOR incident that was revised to describe bankers’ actions as an innocent error, thus attenuating the perceived immorality of their behaviors (Chan et al. 2014). In the natural disaster condition, participants read a news article also allegedly taken from *The New Yorker* describing the increased frequency of natural disasters and how they can potentially damage economic development (Robinson 2014; see the Appendix for the articles). To ensure that they read the article, participants in all three conditions were asked to think of a title for it and briefly summarize the conveyed message.

Afterward, the experimenter escorted participants individually to a different room for a second task. Before entering the second room, participants were told that they could have a free
office magnet as a small token of appreciation for their participation in the first task. An experimenter who was blind to the hypothesis presented participants (individually, to avoid social pressure) with two boxes of magnets—one full box of white (or yellow) magnets and one one-quarter-full box of yellow (or white) magnets (the two colors of magnets were counterbalanced). In each case, participants were told that the boxes of magnets had both initially been full, but participants from prior sessions had taken more of the yellow (or white) magnets. To eliminate scarcity concern, participants were assured that we had enough magnets of both colors for all participants in their session. Participants’ choice of magnet constituted the dependent measure. Choosing from the one-quarter-full box rather than from the full box of magnets indicated greater conformity tendency.

After making their choice, all participants proceeded to an ostensibly unrelated second study titled “About Yourself,” in which they answered additional questions regarding the experiment. As manipulation checks, participants rated to what extent they perceived that the bankers described in the news report had done something immoral, unfair, or harmful and to what extent they had deceived their clients (1 = not at all; 9 = a great deal; \( \alpha = .87 \), averaged to provide a moral violation index; these items were omitted for participants in the natural disaster condition); to what extent the event described in the news article would hurt the economy (1 = not at all; 9 = to a great extent); how realistic the article was (1 = not at all; 9 = very realistic); and how involved, engaged, and interested they had been in reading it (1 = not at all; 9 = very involved/engaged/interested; \( \alpha = .88 \), averaged to provide an involvement index). Participants also rated the perceived masculinity (1 = very feminine; 9 = very masculine), attractiveness (1 = not at all, 9 = very attractive), and quality (1 = very low; 9 = very high) of the two types of magnets and how much they liked them (1 = dislike very much; 9 = like very much). No
significant differences were observed in participants’ evaluations of the two colored magnets along these dimensions ($p$s > .12). Finally, participants provided demographic information and were thanked and funnel debriefed. No participants correctly guessed the purpose of the study.

**Results and Discussion**

*Manipulation Check and Controls.* As expected, participants in the moral violation condition ($M = 7.00, SD = 1.18$) indeed perceived bankers’ behaviors as more immoral than did those in the innocent error condition ($M = 5.37, SD = 1.35$; $F(1, 139) = 58.05, p < .001$). Moreover, participants who read about the LIBOR incident and participants who read about the natural disaster perceived that those respective events would damage the economy to a similar extent ($M_{moral\_violation} = 6.14, SD = 1.61$; $M_{innocent\_error} = 5.56, SD = 1.63$; $M_{natural\_disaster} = 5.90, SD = 1.80$; $F(2, 207) = 2.19, p > .11$). Also, all participants perceived the news article to be realistic, given that all the realism ratings were significantly higher than the scale midpoint ($M_{moral\_violation} = 6.48, SD = 1.71$, $t_{moral\_violation\_vs.\_midpoint} (68) = 7.17, p < .001$; $M_{innocent\_error} = 5.53, SD = 1.48$, $t_{innocent\_error\_vs.\_midpoint} (71) = 3.02, p = .003$; $M_{natural\_disaster} = 6.80, SD = 1.30$, $t_{natural\_disaster\_vs.\_midpoint} (68) = 11.47, p < .001$). Although participants rated the innocent error article as slightly less realistic than the other two articles ($p$s < .05), this pattern of realism ratings is different from, and hence cannot explain the observed pattern of magnet choice. No significant difference was observed in participants’ level of involvement in reading the news article ($M_{moral\_violation} = 6.28, SD = 1.66$; $M_{innocent\_error} = 5.84, SD = 1.47$; $M_{natural\_disaster} = 6.39, SD = 1.36$, $F(2, 207) = 2.63, p = .075$).

*Choice of Magnets.* A binary logistic regression model with dummy-coded conditions (Dummy 1 = innocent error; Dummy 2 = natural disaster) suggested a greater tendency for participants to choose the majority magnet in the moral violation condition (55.1%) compared to
the innocent error condition (33.3%; Dummy 1: \(b = -0.90, SE = 0.35, Wald = 6.64, p = .010\))
and the natural disaster condition (37.7%, Dummy 2: \(b = -0.71, SE = 0.35, Wald = 4.15, p = .042\)). These results provided support for my prediction that exposure to moral violations
would increase consumers’ conformity tendency in product choice.

Discussion. Study 1 provides evidence that exposure to a moral violation (in this case, a
financial scandal) increased consumers’ preference for majority-endorsed (vs. minority-endorsed)
products using a real choice measure. Moreover, the null effect of the natural disaster condition
suggests that threats from nonsocial sources could not produce the same effect as moral
violations.

STUDY 2: BOOK CLUB MEMBERSHIP CHOICE

Study 2 was designed to replicate the basic finding that exposure to moral violations
leads to a preference for majority-endorsed (vs. minority-endorsed) options in a different product
category and also to offer mediation evidence. My central hypothesis is that witnessing moral
violations should heighten conformist attitudes and therefore enhance consumers’ conformity
tendency in consumption.

Method

Participants and Design. Two hundred ninety participants recruited from Amazon’s
Mechanical Turk online panel (125 males; \(M_{age} = 37.48\) years, \(SD = 12.60\)) took part in this study
for payment (US$1). They were randomly assigned to conditions of a one-factor, three-level
(moral violation vs. innocent error vs. natural disaster) between-subjects design. Nineteen
participants were excluded from further analysis for failing to pass an attention check (final \( N = 271 \)).

Procedure. After providing consent, participants were instructed that they would be completing surveys for three unrelated studies. In the first study, titled “News Article Comprehension Study,” I followed exactly the same procedure as in Study 1 except that participants read the news article online. To ensure that participants actually read the article, they could proceed to the next page, which included two probe questions (Question 1: “Please think of and write down a title of the article”; and Question 2: “Please summarize the main theme of the article using your own words”) to check their understanding of the article, only after 2 minutes had elapsed. The average time participants spent reading the article was 163.21 seconds and was similar across conditions (\( p > .58 \)).

Afterward, all participants proceeded to the second, purportedly unrelated study, titled “Book Club Membership Choice.” Specifically, participants were asked to imagine that they had been looking to join a local book club and had finally narrowed down their choice to two book clubs. They were then presented with information about the two book clubs in counterbalanced order. One book club with 513 current members (i.e., the majority book club) emphasized popularity: The tagline was “Read to Belong, Are You One of Us?” The other with 43 current members (i.e., the minority book club) stressed uniqueness: The tagline was “Read to Stand Out From the Crowd” (see the Appendix for details). Participants indicated which book club they preferred to join and rated their likelihood of joining each of the two book clubs along a scale from 1 (very unlikely) to 9 (very likely).

Then, participants proceeded to the third study, titled “About Yourself,” in which they were instructed that the researchers were interested in understanding people’s opinions on
various topics. Participants responded to the conformist attitudes scale (Murray and Schaller 2012), which captures people’s desire to enforce punishment and social-norm adherence. Sample items include “Imposing tough laws and punishments, even to minor crimes, is an effective way to preserve the fiber of a society” and “Constantly breaking social norms often has harmful, unintended consequences”; all items are rated along a scale from 1 (strongly disagree) to 9 (strongly agree). Finally, participants completed a short manipulation-check questionnaire using exactly the same items as used in Study 1 and reported demographic details.

Results and Discussion

Manipulation Checks and Controls. As expected, participants in the moral violation condition ($M = 8.09, SD = 1.13$) perceived bankers described in the news article as more immoral than did those in the innocent error condition ($M = 5.86, SD = 2.00; F(1, 177) = 86.55, p < .001$). Moreover, all participants perceived that the incident described in the news article would damage the economy to a similar extent ($M_{\text{moral violation}} = 5.79, SD = 2.21; M_{\text{innocent error}} = 5.46, SD = 1.95; M_{\text{natural disaster}} = 5.88, SD = 1.66; F(2, 268) = 1.09, p > .33$). In addition, all participants perceived the news article to be realistic: All realism ratings were significantly higher than the scale midpoint ($M_{\text{moral violation}} = 6.93, SD = 1.84, t_{\text{moral violation vs. midpoint}} (94) = 10.23, p < .001; M_{\text{innocent error}} = 6.40, SD = 2.20, t_{\text{innocent error vs. midpoint}} (83) = 5.85, p < .001; M_{\text{natural disaster}} = 6.55, SD = 1.87, t_{\text{natural disaster vs. midpoint}} (91) = 7.97, p < .001$) and were comparable across conditions ($F(2, 268) = 1.69, p > .18$). No significant difference was observed in participants’ involvement across conditions ($M_{\text{violation}} = 7.88, SD = 1.45; M_{\text{innocent error}} = 7.65, SD = 1.64; M_{\text{natural disaster}} = 7.89, SD = 1.35; F(2, 268) = .71, p > .48$).
**Book Club Choice.** Replicating the findings from Study 1, a binary logistic regression model with dummy-coded conditions (Dummy 1 = innocent error; Dummy 2 = natural disaster) as predictors of book club choice suggested a greater tendency for participants to choose the majority book club in the moral violation condition (56.8%) compared to both the innocent error condition (38.1%; Dummy 1: $b = -0.76$, $SE = 0.31$, Wald = 6.20, $p = .013$) and the natural disaster condition (41.3%, Dummy 2: $b = -0.63$, $SE = 0.30$, Wald = 4.48, $p = .034$).

Similarly, analyses of the difference between the participants’ estimates of the likelihood of joining each of the book club indicated that participants expressed a stronger preference for the majority book club in the moral violation condition ($M = 1.13$, $SD = 4.34$) than in the innocent error ($M = -.98$, $SD = 4.41$; $F(1, 268) = 11.11$, $p = .001$) or the natural disaster condition ($M = -.20$, $SD = 3.88$; $F(1, 268) = 4.61$, $p = .033$). The main effect of condition on relative preference for joining the majority book club was significant ($F(2, 268) = 5.75$, $p = .004$).

**Underlying Process.** Exposure to a moral violation also had a positive effect on conformist attitudes ($\alpha = .86$; exploratory factor analysis confirmed that only one factor was extracted; $M_{\text{moral violation}} = 5.04$, $SD = 1.72$; $M_{\text{innocent error}} = 4.58$, $SD = 1.75$; $M_{\text{natural disaster}} = 4.41$, $SD = 1.66$; $F(2, 268) = 3.41$, $p = .035$).

To test the mediating role of participants’ conformist attitudes on the relationship between the moral violation conditions and book club choice, I followed Hayes and Preacher (2014)’s suggestion regarding mediation analyses with multicategorical independent variables by first constructing two dummy variables, X1 and X2, representing the innocent error and natural disaster conditions, respectively. Because there were three conditions, there are two indirect effects: (a) the indirect effect of innocent error versus moral violation on book club choice through conformist attitudes and (b) the indirect effect of natural disaster versus moral violation
on book club choice through conformist attitudes. I followed Hayes’s recommended procedure by running PROCESS Model 4 twice, once with X1 as the independent variable and X2 as the covariate and once with X2 as the independent variable and X1 as the covariate, in order to recover each indirect effect. Results revealed that the indirect effect of innocent error versus moral violation \((b = -0.1009, SE = 0.0693, 90\% CI = [-0.2455, -0.0145])\) through conformist attitudes was marginally significant, and the indirect effect of natural disaster versus moral violation \((b = -0.1388, SE = 0.0760, 95\% CI = [-0.3356, -0.0272])\) through conformist attitudes was significant. These results suggest that the effect of exposure to moral violations on book club choice is mediated by conformist attitudes. Using relative preference for the majority (vs. minority) book club as the dependent variable yielded the same pattern of results. All mediation analyses reported in this research were conducted based on 5,000 bootstrap resamples.

Discussion. The results of Study 2 thus provided additional evidence for the proposition that mere exposure to a moral violation leads to a heightened preference for majority-endorsed (vs. minority-endorsed) options in a different domain (in this case, book club membership choice). The null effect of the natural disaster condition further implied that exposure to threat in general could not produce the same effect. Moreover, the mediation analyses revealed that the effect was driven by a greater endorsement of conformist attitudes.

**STUDY 3: CHEATING AND REAL PRODUCT CHOICE**

Study 3 extended the investigation in the following three ways. First, I intended to replicate the findings in Study 2 by further testing the role of conformist attitudes in mediating the effect of exposure to cheating on conformity. Second, rather than manipulating exposure to
moral violations using an article comprehension task, I exposed participants to a real, behavioral violation (i.e., cheating). Third, although prior research has shown that both direct victims and observers of norm violations express a desire to punish the norm violators (Carpenter and Matthews 2012; Fehr and Fischbacher 2004), it is unclear whether the effect of exposure to moral violations on conformity would equally hold for both groups. Study 3 empirically investigated this question.

Method

Participants and Design. One hundred eighty-six undergraduate students (69 males; $M_{\text{age}} = 19.94$ years, $SD = 1.78$) from University of Toronto took part in the study for course credit. Participants were randomly assigned to conditions of a 2 (exposure to cheating: cheater present vs. cheater absent) × 2 (incentive structure: observer vs. victim) between-subjects design. Each experimental session involved 4 people in total (3 participants and 1 confederate).

Procedure. Upon arrival, participants were instructed that this session consisted of several unrelated tasks. In the first task, titled “Verbal Ability Test,” participants were told that we were collaborating with researchers from the linguistics department to test students’ verbal ability. Participants were then asked to take an English synonym test as part of the assessment (10 questions in total). Participants were further told that we would offer them a cash reward, benefited through research funding, based on their performance on the test. To manipulate exposure to a moral violation, in the cheater-present conditions, the confederate cheated by checking his phone three times (around Questions 2, 5, and 8). Each time he cheated, the confederate took his phone from his pocket, unlocked it with sound, put the phone on the desk, and searched the word on Dictionary.com, which was salient from each participant’s visual angle.
To manipulate the perceived harm of the confederate’s cheating behavior on participants’ payoff, I varied the incentive structure in the observer and direct victim conditions. In the observer conditions, participants were told that all participants would be paid based on their individual performance (i.e., $0.50 per correct answer). In the direct victim conditions, participants were told that only the participant who got the highest score in that session would get a cash reward ($10). A pretest with 30 participants (10 males; $M_{age} = 19.8$ years) from the same participant pool verified that on average, participants answered 4.53 (out of 10) questions correctly, which translated to an individual payment of $2.27 (i.e., $0.50 \times 4.53$). Based on the pretest results, the expected payment in the direct victim condition was $9.08 (i.e., $2.27 \times 4$). I rounded off the payment to $10 in the main study. Thus, the expected individual payment in both conditions was kept about the same (i.e., $2.50$). After reminding participants that to ensure accuracy of assessment, they were not allowed to look up answers on their electronic devices or discuss with each other, the experimenter left the room. The experimenter then monitored the test room from the lab control room via a video camera and went back to the room after all participants had finished the test to collect their test papers and escort them individually to a different lab for the second task. Before entering the second room, while standing in the corridor, each participant was invited individually to choose one magnet as an additional reward for his or her participation in the study. We followed exactly the same procedures used in Study 1 to implement this choice task.

Afterward, participants proceeded to an ostensibly unrelated second task titled “About Yourself,” in which they completed the same conformist attitudes scale used in Study 2 ($\alpha = .77$). Finally, participants reported demographic information and were funnel debriefed. As noted by the experimenter, 2 participants (in the cheater-present conditions) cheated by checking the
words in the test on their phone. Post-experiment probing revealed that 4 other participants in the cheater-present conditions did not notice the confederate’s cheating behavior. Thus, I excluded these 6 participants from further analysis (final $N = 180$).

**Results and Discussion**

*Choice of Magnets.* Binary logistic regression analyses with magnet choice (i.e., $1 =$ majority-chosen magnet vs. $0 =$ minority chosen magnet) as the dependent variable, and exposure to cheating ($1 =$ cheater present; $-1 =$ cheater absent), incentive structure ($1 =$ victim; $-1 =$ observer), and their interaction as the independent variables revealed only a significant main effect of exposure to cheating on magnet choice ($b = 0.47$, $SE = 0.16$, Wald $= 9.12$, $p = .003$). Consistent with the effects observed in Studies 1 and 2, participants who were exposed to someone else’s cheating behavior were more likely to pick the majority-chosen (vs. minority-chosen) magnet than those who were not exposed to cheating behavior ($M_{\text{cheater_present}} = 56.0\%$ vs. $M_{\text{cheater_absent}} = 33.7\%$, $\chi^2(1) = 9.07$, $p = .003$), regardless of whether they were observers ($M_{\text{cheater_present}} = 54.0\%$ vs. $M_{\text{cheater_absent}} = 31.7\%$, $\chi^2(1) = 4.55$, $p = .033$), or were direct victims ($M_{\text{cheater_present}} = 58.5\%$ vs. $M_{\text{cheater_absent}} = 35.4\%$, $\chi^2(1) = 4.76$, $p = .029$), of the cheating behavior. The results thus provided further support for the hypothesis that exposure to immoral behaviors (e.g., cheating) promotes individuals’ tendency to choose majority-endorsed (vs. minority-endorsed) products. Moreover, the effect is comparable for direct victims and observers of others’ unethical behaviors.

*Underlying Process.* As in Study 2, exposure to a moral violation also had a positive effect on participants’ conformist attitudes measuring their endorsement of enforcing strict punishment and adhering to social norms. An ANOVA with conformist attitudes as the
dependent variable, exposure to cheating and incentive structure conditions as the independent variables yielded only a significant main effect of exposure to cheating \( F(1, 176) = 5.23, p = .023 \). Specifically, exposure to (vs. not) someone else’s cheating behavior increased participants’ conformist attitudes \((M_{\text{cheater present}} = 5.20, SD = 1.29; M_{\text{cheater absent}} = 4.76, SD = 1.30)\).

To test whether participants’ self-reported conformist attitudes mediated the effects of exposure to cheating behavior on participants’ magnet choice \((1 = \text{majority-chosen magnet}; 0 = \text{minority chosen magnet})\), I performed a series of regression analyses as well as a bootstrapping procedure. Replicating my findings in Study 2, regression analyses again revealed that exposure to cheating \((1 = \text{cheater present}; -1 = \text{cheater absent})\) increased choice likelihood of the majority-endorsed magnet \(b = 0.46, SE = 0.15, \text{Wald} = 8.91, p = .003\). In addition, exposure to cheating increased conformist attitudes, \(b = .22, SE = .10, t = 2.27, p = .025\), which in turn increased participants’ choice of majority-endorsed magnet, \(b = .43, SE = .13, \text{Wald} = 11.26, p = .001\).

Using bootstrapping procedures (Hayes 2013), I next examined whether the indirect effect through the conformist attitude was significant. These procedures generated a 95% confidence interval that excluded zero \((b = 0.0846, SE = 0.0549, 95\% \text{ CI} = [0.0081, 0.2282])\), suggesting significant mediation.

**Discussion.** Taken together, the results of Study 3 corroborated the findings from Study 2 by showing that exposure to actual immoral behavior (cheating) increased consumers’ conformity in their subsequent product choice, an effect driven by a greater endorsement of conformist attitudes. Moreover, this pattern was comparable for direct victims and observers and persisted across a different manipulation of exposure to moral violations.
STUDY 4: CORRUPTION AND BRAND PREFERENCE

The results of the first three studies were consistent with my hypothesis that witnessing moral violations should increase consumers’ subsequent conformity tendency in unrelated domains. Study 4 was designed with the following three aims in mind. First, as noted earlier, this increase in conformity tendency occurs because the temporary salience of moral violations induces greater perceptions of social order disruption. I predict that it is the increased perceived threat to social order that causes individuals exposed to moral violations to endorse heightened conformist attitudes. Thus, I directly tested whether perceived threat to social order is the precursor of heightened conformist attitudes through a multistage mediation model in Study 4. Second, I hypothesize that if the increase in conformity tendency caused by exposure to moral violations is indeed driven by a heightened desire to restore social order, then subsequent desire to conform should be attenuated or eliminated if the violator has already been punished by third parties and social order has thus been restored. Therefore, in addition to a no-transgression baseline condition, I included a condition wherein the violation (corruption) occurred but was later corrected through the punishment of the transgressor. If moral violations induce a desire to restore social order, then we should observe that exposure to a moral violation leads to stronger preferences for majority options only if the violator goes unpunished. Finally, to further gauge the generalizability of the observed effect, I used a different manipulation of moral violation and a different measure of conformity tendency in Study 4.

Before conducting the main Study 4, I conducted a pretest to verify the assumption that witnessing moral violations would lead to perceived threat to social order, which would in turn increase consumers’ endorsement of conformist attitudes (see the Appendix for details).
Method

Participants and Design. Two hundred fifty participants (112 males; \( M_{\text{age}} = 35.92 \) years, \( SD = 11.24 \)) from Amazon’s Mechanical Turk completed the study for payment (US$1). Twelve participants did not pass the attention check and were eliminated from further analysis (final \( N = 238 \)). The study was advertised as a survey on social issues and consumption preferences.

Procedure. After providing consent, participants were instructed that the study consisted of three parts. In the first task, participants were told that the researchers were interested in people’s impression formation and evaluation of others. They were randomly assigned to conditions of a one-factor, three-level (unpunished corrupt CEO, punished corrupt CEO, and control) between-subjects design. Participants in the unpunished-corrupt-CEO condition read a story in which a CEO, “despite his poor managerial performance and reckless spending of shareholders’ money toward his luxurious lifestyle, was awarded a large sum of bonus by the company’s board” (Zhu 2014, p. 38), thus representing a violation of the moral principle of justice. Participants in the punished-corrupt-CEO condition read the same story except that the corrupt CEO was eventually fired for his poor performance and sued by the company’s board, and justice was thus upheld. Those in the control condition read about a typical daily experience of a CEO (Nikumb 2013; see the Appendix for the articles). To ensure the effectiveness of the manipulation, following Zhu (2014), participants were told that the story was based on a real event with identifying information removed. As in Study 2, to ensure that participants actually read the story, they could proceed to the next page, which included questions to check their understanding of the article (participants were asked to briefly summarize the story and to indicate how involved, interested, and engaged they had been in reading the story, using a scale
from 1 = not at all to 9 = very much; α = .95, averaged to form an index of involvement), after 100 seconds had elapsed. The average time participants spent reading the article was 131.48 seconds and was similar across conditions ($M_{\text{unpunished corrupt CEO}} = 129.16$, $SD = 44.20$; $M_{\text{punished corrupt CEO}} = 131.66$, $SD = 41.72$; $M_{\text{control}} = 133.69$, $SD = 46.30$; $F < 1$).

Next, participants proceeded to an ostensibly unrelated second study titled “Consumption Preference Survey,” in which participants performed a brand preference task using a measure similar to that employed in prior research (Berger and Heath 2007; Dong et al. 2015). Participants were told that the researchers were interested in surveying people’s brand preferences across several product categories. They were then asked to indicate their preference for each of five product categories based on market share information (ostensibly taken from a recent consumer survey). Specifically, they were asked to choose one of three brands in each of five different product categories (bike lights, remote controls, sofas, home stereo systems, and digital picture frames). The alternatives varied in terms of market share. In a typical item, for example, one brand was preferred by around 70% of consumers, the second by around 20%, and the third by around 10%. Participants’ choices were coded as 1 (the lowest market share option), 2 (the middle market share option), or 3 (the highest market share option). These choices were summed across the five categories to form a conformity-tendency score with a possible range from 5 to 15. Higher numbers indicated greater tendency to conform to others’ preferences.

Afterwards, participants indicated perceived threat to social order (adapted from Fischer et al. 2007). Specifically, they were asked to think back to the moment when reading the CEO’s story and indicate to what extent they perceived the CEO’s behavior would threaten the order of society, to what extent corruption would harm the order of society, to what extent the corruption situation in current society is threatening, and to what extent the current corruption situation is
problematic for society, all along a scale from 1 (not at all) to 9 (very much). A factor analysis of these items yielded only one factor with an eigenvalue greater than 1, so responses were averaged into a composite index of perceived threat to social order ($\alpha = .95$). They also responded to the same conformist attitudes scale ($\alpha = .85$) used in Studies 2 and 3 (the order of presenting these two scales was counterbalanced).

Lastly, participants completed a short manipulation-check questionnaire titled “Additional Questions Regarding the CEO’s Story” (Question 1: “How do you think of the CEO described in the story?,” rated from 1 = moral/honest/upright/helpful to his company to 9 = immoral/corrupt/deceptive/harmful to his company; $\alpha = .98$, averaged to provide an index of perceived immorality of the CEO’s behavior; Question 2: “I think the CEO should be punished for what he has done,” rated from 1 = strongly disagree to 9 = strongly agree; Question 3: “Based on the story, the CEO has received _____ punishment for his actions,” rated from 1 = little to 9 = adequate; the last two questions were omitted for the control condition). Participants then reported demographic details.

**Results and Discussion**

*Manipulation Checks.* As expected, participants who read the story of a corrupt CEO rated the CEO as more immoral than did those who read about the typical daily experience of a CEO ($M_{\text{unpunished corrupt CEO}} = 8.08$, $SD = 1.35$; $M_{\text{punished corrupt CEO}} = 8.37$, $SD = .86$; $M_{\text{control}} = 3.16$, $SD = 1.51$; $F(2, 235) = 419.18$, $p < .001$). No significant difference was observed for the two corrupt-CEO conditions ($F(1, 235) = 2.04$, $p > .15$). Moreover, while participants in the two corrupt-CEO conditions believed that the CEO should be punished to the same extent ($M_{\text{unpunished corrupt CEO}} = 7.74$, $SD = 1.63$; $M_{\text{punished corrupt CEO}} = 8.05$, $SD = 1.63$; $F(1, 157) = 1.45$, $p > .23$), those
in the unpunished- (vs. punished-) corrupt-CEO condition reported that the CEO did not receive adequate punishment for his bad deeds ($M_{unpunished \text{ corrupt CEO}} = 1.52, SD = 1.33; M_{punished \text{ corrupt CEO}} = 4.28, SD = 2.59; F(1, 157) = 72.41, p < .001$), confirming the success of the manipulation of punishment. Also, participants did not differ in terms of involvement ($M_{unpunished \text{ corrupt CEO}} = 7.77, SD = 1.51; M_{punished \text{ corrupt CEO}} = 7.99, SD = 1.50; M_{control} = 7.59, SD = 1.44; F(2, 235) = 1.41, p > .24$).

*Brand Preference.* As predicted, participants who read the story describing a corrupt CEO who went unpunished ($M = 14.21, SD = 1.38$) were more likely to prefer brands with larger market share, compared with those who read a similar story describing the same corrupt CEO being punished and sued ($M = 13.50, SD = 2.23; F(1, 235) = 5.06, p = .025$) or those who read about a CEO’s daily life ($M = 13.46, SD = 2.25; F(1, 235) = 5.75, p = .017$). No significant difference was observed between the latter two conditions ($p > .88$). The main effect of condition on participants’ subsequent conformity tendency was significant ($F(2, 235) = 3.63, p = .028$). Ordered logit regression with consumers’ coded choice of the majority (coded as “3”), middle (coded as “2”), and minority (coded as “1”) option yielded the same conclusion (see the Appendix for details).

*Perceived Threat to Social Order.* Exposure to unpunished corruption also had a positive effect on participants’ perceived threat to social order ($F(2, 235) = 44.91, p < .001$). Participants in the unpunished-corrupt-CEO condition expressed a higher perceived threat to social order ($M = 6.76, SD = 1.88$) than did those in the punished-corrupt-CEO ($M = 5.71, SD = 2.07; F(1, 235) = 10.18, p = .002$) or the control condition ($M = 3.71, SD = 2.25; F(1, 235) = 87.21, p < .001$).

*Conformist Attitudes.* Replicating Studies 2 and 3, I found a significant effect of exposure to moral violations on conformist attitudes ($F(2, 235) = 5.79, p = .004$). Specifically, participants
who were exposed to unpunished corruption \((M = 5.21, SD = 1.42)\) endorsed conformist attitudes
to a greater extent than did those exposed to punished corruption \((M = 4.59, SD = 1.36); F(1, 235)
= 6.75, p = .010\) or those unexposed to corruption \((M = 4.45, SD = 1.76); F(1, 235) = 10.17, p
= .002\).

**Multistage Mediation.** I expected that exposure to moral violations should increase
conformity by enhancing perceived threat to social order, which in turn should boost participants’
dendorsement of conformist attitudes. To verify this prediction, a multistage mediation model
(Hayes 2013) was conducted. Similar as Study 2, following Hayes and Preacher (2014)’s
uggestion regarding mediation analyses with multicategorical independent variables, I first
structed two dummy variables, X1 and X2, representing the punished-corrupt-CEO condition
and the control condition, respectively. The first contrast compared the unpunished-corrupt-CEO
condition (coded as “0”) to the punished-corrupt-CEO condition (coded as “1”). The second
contrast compared the unpunished-corrupt-CEO condition (coded as “0”) to the control condition
(coded as “1”). As hypothesized, exposure to unpunished (vs. punished) corruption heightened
the perceived threat to social order, which increased conformist attitudes, leading to greater
conformity tendency \((b = -0.0274, SE = 0.0191; 95\% CI = [-0.0881, -0.0038])\). Similarly, the
multistage mediation model was also supported for the effect of the second contrast (unpunished
corrupt CEO vs. control) on conformity tendency \((b = -0.0800, SE = 0.0518; 95\% CI = [-0.2224,
-0.0071])\).

**Discussion.** In summary, the results of Study 4 extended our understanding of the
observed phenomena by showing that exposure to a moral violation increased consumers’
conformity tendency in consumption by heightening perceived threat to social order and hence
increasing their endorsement of conformist attitudes. Also important, this study provided
additional evidence for the proposed mechanism by showing that once the need to restore social order was eliminated (i.e., when the moral violator had already been punished), consumers’ tendency to conform was reduced to its baseline level.

**STUDY 5 WHEN THE MAJORITY IS PERCEIVED AS IMMORAL**

Study 5 sought to further test my proposed underlying process by using a moderation-by-process design (Spencer, Zanna, and Fong 2005). The logic here is that if the majority-endorsed option is viewed as being complicit with the immoral others and may create further imbalance in social order, consumers would not conform to the majority. In other words, the immorality of the majority option should mitigate the observed moral violation effect.

**Method**

*Participants and Design.* Three hundred twenty-four participants recruited from Amazon’s Mechanical Turk online panel (177 males; \( M_{\text{age}} = 36.65 \) years, \( SD = 12.25 \) took part in this study for payment (US$0.5). They were randomly assigned to conditions of a 2 (exposure to: moral violation vs. innocent error) \( \times \) 2 (majority morality: immoral vs. control) between-subjects design.

*Procedure.* To manipulate exposure to moral violations, I followed exactly the same procedures as in Study 2 except that I only included the moral violation and innocent error conditions, as the effect was restricted to moral violations and could not generalize to any negative threats such as natural disaster (Studies 1 and 2). After reading the assigned news article, participants answered the same two questions intended for checking their understanding of the
article. The average time participants spent reading the article was 166.38 seconds and was similar across conditions ($M_{\text{moral\_violation}} = 166.58, SD = 90.18; M_{\text{innocent\_error}} = 166.17, SD = 86.45; F < 1$).

Next, all participants proceeded to the second, ostensibly unrelated study, titled “Book Club Membership Choice.” In the majority control conditions, participants were presented with exactly the same book club choice task as used in Study 2. In the immoral majority conditions, I explicitly pitted the perceived morality of the book clubs against the perceived popularity by providing different information about the occupation of members in the two book clubs. Specifically, participants were told that most members of the majority book club were financial industry employees, whereas most members of the minority book club were nonprofit organization employees. In all conditions, participants were asked to indicate which book club they preferred to join and rated their likelihood of joining each of the two book clubs along the same scale (1 = very unlikely; 9 = very likely), as in Study 2. I chose financial industry workers to manipulate immoral majority because they are commonly perceived to be unethical and opportunistic (Alton 2015; Federwisch 2015). Indeed, a pretest with 50 participants (22 males; $M_{\text{age}} = 34.54$ years) from the same participant pool verified that financial industry employees ($M = 4.98, SD = 1.67; F(1, 49) = 6.16, p = .017$) were rated less moral than the general population ($M = 5.64, SD = 1.56$), which was in turn rated less moral than nonprofit organization employees ($M = 6.92, SD = 1.55; F(1, 49) = 28.25, p < .001$) (along a scale from 1 very immoral to 9 very moral).

Lastly, participants indicated to what extent they thought employees of the financial industry and those of the nonprofit organizations mentioned in the book club manipulation were moral or immoral along a scale from 1 (very immoral) to 9 (very moral) as a manipulation check.
Participants then reported their demographic details and were thanked and funnel debriefed. No participant correctly guessed the purpose of this study. Prior to analysis, sixteen participants were excluded for failing to pass an attention check. Moreover, post-experimental probe revealed that nine participants in the immoral majority conditions were unaware of the occupation information of most members for each book club (which manipulated the perceived morality of each book club) and the data of these participants were excluded from further analysis. Screening based on these two exclusion criteria left us a final sample of 302.

Results and Discussion

Manipulation Check. As expected, participants in the moral violation condition ($M = 8.06, SD = 1.25$) perceived bankers involved in the LIBOR incident as more immoral (averaged 4-item scale; see Study 1 for the items; $\alpha = .95$) than did those in the innocent error condition ($M = 5.98, SD = 2.15; F(1, 300) = 107.59, p < .001$). Moreover, all participants perceived that the LIBOR incident described in the news article would damage the economy to a similar extent ($M_{\text{moral violation}} = 5.96, SD = 2.03; M_{\text{innocent error}} = 5.56, SD = 2.03; F(1, 300) = 2.92, p > .08$). In addition, all participants perceived the news article to be realistic since the realism ratings were significantly higher than the scale midpoint ($M_{\text{moral violation}} = 6.95, SD = 1.80, t_{\text{moral violation vs. midpoint}} (157) = 13.63, p < .001; M_{\text{innocent error}} = 6.58, SD = 1.97, t_{\text{innocent error vs. midpoint}} (143) = 9.60, p < .001$) and were comparable across conditions ($F(1, 300) = 2.96, p > .08$). No significant difference was observed in participants’ involvement (averaged 3-item scale; see Study 1 for the items; $\alpha = .94$) across the two conditions ($M_{\text{moral violation}} = 7.80, SD = 1.56; M_{\text{innocent error}} = 7.52, SD = 1.60; F(1, 300) = 2.32, p > .12$). Finally, for majority morality manipulation check, participants
indeed rated employees of financial industry ($M = 4.27, SD = 1.76$) as less moral than those of nonprofit organizations ($M = 6.83, SD = 1.66; F(1, 301) = 372.12, p < .001$).

Since I used financial industry employees to manipulate immoral majority, it is possible that there might be some nonindependence between the moral violation manipulation and the majority morality manipulation. In other words, participants might perceive financial industry employees in the book club manipulation to be more immoral in the moral violation condition than the innocent error condition. To rule out that possibility, I compared participants’ morality rating of financial industry employees between the moral violation and innocent error conditions and found no difference ($4.26$ vs. $4.22$; $F < 1$). This suggests that the morality majority manipulation was successful and was independent of the moral violation manipulation. Despite this result, we conducted a conceptual replication of the study by using another manipulation of immoral majority and reported the results in the Appendix. The conclusions still hold with a different manipulation of immoral majority which is not related to the initial moral violation.

**Book Club Choice.** A binary logistic regression model with moral violation ($1 = $ moral violation; $-1 =$ innocent error), majority morality ($1 =$ immoral; $-1 =$ control), and their interaction as predictors of book club choice ($1 =$ choosing the majority book club; $0 =$ choosing the minority book club) yielded a significant main effect of majority morality ($b = -0.34, SE = 0.13, \text{Wald} = 6.20, p = .013$) and a significant moral violation $\times$ majority morality interaction effect ($b = -0.28, SE = 0.13, \text{Wald} = 4.35, p = .037$). Planned contrast revealed that exposure to a moral violation (vs. an innocent error) increased preference for the majority book club ($44.7\%$ vs. $25.4\%$; $\chi^2(1) = 6.06, p = .014$) for those in the majority control conditions. In the immoral majority conditions, participants had relatively lower preferences for the majority book club and their preferences did not significantly differ between the moral violation and innocent error
conditions (19.2% vs. 23.4%, respectively; $\chi^2(1) = .39; p > .53$). Using participants’ relative preference for the majority (vs. minority) book club yielded the same conclusion (see the Appendix).

Discussion. The results of this study demonstrate the critical role of the morality of the majority—exposure to moral violations does not always increase conformity tendency in consumption, rather, individuals conform only as a function of the morality of the majority. These results thereby provide further support for my argument that the effect of exposure to moral violations on conformity is driven by a heightened desire to restore social order. When choosing the majority-endorsed option is viewed as being complicit with the immoral others and may therefore further disrupt the balance of social order, the effect disappeared.

GENERAL DISCUSSION

Taken together, the results of five studies provide converging evidence that exposure to moral violations leads to increased preference for majority-endorsed (vs. minority-endorsed) options in domains different from where the moral violation occurred. I demonstrated that exposure to moral violations heightens consumers’ perceived threat to social order, which increases their endorsement of conformist attitudes and therefore leads to greater conformity tendency in consumption. Critically, the effect of exposure to moral violations on conformity disappears (a) when the moral violator has already been punished by third parties (Study 4), and (b) when the majority option is viewed as being complicit with the moral violation (Study 5).

Importantly, I observed consistent effects across studies despite variations in study contexts and materials. For instance, I found the predicted effect of exposure to moral violations in both laboratory (Studies 1 and 3) and online settings (Studies 2, 4, and 5). I found it using
different manipulations of exposure to moral violations, involving news articles describing a financial scandal (Studies 1, 2, and 5), stories about a corrupt CEO (Study 4), and actual cheating behavior (Study 3). I also found evidence for the effect across different product categories and across different measures of conformity—both self-reported preferences (Studies 2, 4, and 5) and real choices (Studies 1 and 3).

These results rule out a number of alternative interpretations. For example, the effect cannot be attributed to a mere heightened motivation to protect oneself and cannot be generalized to any events that elicit threats or negative affect. If that were the case, people who were exposed to a natural disaster threat should also have been more inclined to choose majority-endorsed (vs. minority-endorsed) options, which did not happen (Studies 1 and 2). In addition, neither moral emotions (additional measures of Studies 2 through 4; see the Appendix) nor desire for power, control, or status (additional measures of Study 1; see the Appendix) could account for the effect.

**Theoretical Contributions of the Research**

The conceptualization of these effects intersects with theory and research in three different areas, involving (a) the psychological consequences of witnessing moral violations, (b) the psychological functions of conformity, and (c) the power of symbolic consumption in coping with negative feelings and experiences, and thus contributes to each of these research areas.

First, this research extends current literature on the psychological consequences of witnessing moral violations by documenting a novel effect of witnessing moral violations on consumer choice. These results offer a new mechanism through which exposure to moral violations can influence consumer choice. Whereas extant research has primarily focused on how witnessing moral violations leads to moral disgust (e.g., Chapman et al. 2009, Chan et al. 2014),
which intensifies disgust reactions toward gustatory and olfactory stimuli (Skarlicki et al. 2013) and reduces consumers’ consumption of food and drinks (Chan et al. 2014), we instead bring to light the influence of witnessing moral violations on consumers’ preference for consumption choice options that are endorsed by the majority (vs. minority). This research suggests that when actions aimed at directly condemning and punishing moral violations are not immediately available, consumers have a tendency to conform to the majority. This tendency is driven by a generalized desire for maintaining social order after being exposed to moral violations, and it manifests symbolically in consumers’ greater preference for majority-endorsed (vs. minority-endorsed) choice options (e.g., brands with larger vs. smaller market share).

Second, by identifying a novel antecedent of conformity, this research contributes to the conformity literature by documenting another important psychological function of conformity, in addition to normative and informative functions (i.e., obtaining social acceptance and making the right judgments and decisions, respectively). The present research suggests that a potential third motive for conforming to others’ preferences and behaviors is to symbolically build up a moral majority—the feeling that one is accompanied by many on the same moral ground—which signals social order. Although endorsing or choosing a majority-endorsed product in an unrelated domain may not exert any real repercussions for the moral transgressor personally, being in the majority (vs. minority) group may nevertheless signal social order to those exposed to moral transgressions and attenuate their concern about condemning and punishing moral violators.

Third, this research contributes to the increasing body of literature examining how consumers may symbolically cope with negative feelings and experiences through consumption (e.g., Cutright et al. 2011; Dong, Huang, and Wyer 2013; Gao, Wheeler, and Shiv 2009; Kay et al. 2009). Moreover, the current investigation highlights the role of moral values and their
associated motivational responses in driving actions aimed at coping with the negative consequences of witnessing moral violations. Similarly, system justification theory suggests that individuals are motivated to view the social system they live in as fair, justifiable, valid, and legitimate and to justify and defend the status quo when they are threatened (Jost and Banaji 1994; Kay and Zanna 2009). These results suggest that acquiring majority-endorsed (vs. minority-endorsed) products can be one symbolic strategy used by consumers to cope with the negative consequences associated with moral violations and to restore their confidence in the system.

Relation to Previous Research and Opportunities for Future Research

Political Ideology. Although my current theorizing does not incorporate individuals’ political ideology, the chronic differences in the preference for common and unique choice alternatives as a function of one’s political ideology should be noted. Extant literature has shown that political conservatism is associated with a systematic preference for established national brands (vs. their generic substitutes) and with a lower tendency to buy new products (Khan, Misra, and Singh 2013). More broadly, conservative ideology has been shown to be associated with a preference for tradition and the status quo (Jost et al. 2003), skepticism about new experiences (McCrae 1996), and greater conformist attitudes (Murray and Schaller 2012). These ideology-based differences could have an influence on the disposition to conform to majority preferences independently of the factors I investigated. On the other hand, it is possible that the effect I observed is more pronounced among individuals who gravitate toward conservative (vs. liberal) ideology, because two factors (i.e., exposure to moral violations and trait-level high
conservatism) directing to the same consequence (i.e., greater conformity tendency) might exert an even stronger motivational force. This possibility may be worth examining in future studies.

*Group Dynamics.* The positive effect of witnessing moral violations on individuals’ tendency to conform to the majority (vs. minority) group’s preferences and behaviors is noteworthy in the context of research on the social nature of morality more generally, which largely emphasizes group competition (Haidt 2012). For instance, prior research has demonstrated that unethical behaviors of out-group (vs. in-group) members are more likely to be perceived as breaches of social norms (Gino, Ayal, and Ariely 2009) and, as a result, violations by out-group (vs. in-group) members may elicit a stronger perceived threat to social order and thus greater conformist attitudes and behavior. Future research could examine whether the effect I found would be attenuated for violations by in-group members. Moreover, another important question concerning group competition is whether moral behaviors may sometimes provoke conformity. For instance, although moral rebels may be embraced by uninvolved third parties, they are often rejected by their peers who feel that such rebellion implicitly calls their own behavior into question (Monin, Sawyer, and Marquez 2008). Thus, people’s conformity tendency after observing moral rebels may be largely determined by their self-perception of their own moral standing, such that they may tend to conform if they are uninvolved third-party observers of immoral behavior but choose to stand out if they are involved in immoral behavior that is rejected by the moral rebel. In this sense, it is not moral violation, per se, but the perceived threat to social order that causes conformist attitudes and choices. While witnessing moral violations is one of the most prevalent experiences of threat to social order, it is important to recognize that social order can also be challenged by moral acts. Future research could fruitfully investigate the
premise that moral standards are often specific to the social groups and contexts (Rai and Fiske 2011) and its potential implications on consumer moral decision making.

**Types of Violations.** In the current set of studies, I have looked into three types of moral violations, concerning financial scandals, cheating, and corruption. Based on the typology of the Moral Foundations Theory (Haidt 2012), these violations can be categorized as breaches of the moral principles of fairness and loyalty. Future research could examine whether the observed effect generalizes to violations of other types of moral principles (e.g., care, sanctity, liberty).

**The Role of Severity of Moral Violations.** Future research could also seek to improve our understanding of the relationship between the severity of moral violations and desire for conformity. One possibility is that there is an inverted U-shaped relationship whereby moderately severe moral violations trigger actions toward conforming to the majority but extremely severe violations can be depleting and daunting. Indeed, Rucker et al. (2004) showed that when people perceived threats to social order (vs. no threats), they expressed a greater tendency to punish the transgressors, but “only when the perceived severity of the transgression or crime was relatively moderate” (p. 673). Therefore, I expect that the effect I observed might also be more likely to occur for violations that are relatively moderate in terms of their perceived severity. Another possibility is that the relationship between exposure to moral violations and conformity follows a step function, such that the effect will occur as long as people perceive social order being disrupted, regardless of how severe the transgression is. The results from Study 3 appear to be more in line with the step-function hypothesis because the effect was comparable in magnitude for both direct victims (for whom the perceived severity of cheating behavior might be higher) and third-party observers. Future research could explicitly manipulate
the severity of moral violations and test whether the magnitude of the effect varies as a function of severity.

Cultural Differences. Given that the experiments were run exclusively with North American samples, future research could examine potential cultural influences on the observed effect. For example, one relevant cultural-difference dimension pertains to the “tightness” versus “looseness” distinction (Gelfand et al. 2011). It is possible that the effect may be stronger in tight (vs. loose) cultures, in which the tolerance of morally deviant behaviors tends to be lower (vs. higher).

Nature of Products. I used neutral products in all the current studies. Future research could explore whether the effect disappears or even reverses for products that are perceived as immoral (e.g., counterfeit products). Endorsing immoral products that are owned by the majority may be perceived as further disrupting the already imbalanced social order, which may activate strong aversive reactions to the majority-endorsed (vs. minority-endorsed) products, thus attenuating or even reversing the effect I observed (cf. Study 5).

Subsequent Actions. Finally, one interesting question surrounds whether choosing the majority (vs. minority) endorsed product may affect consumers’ subsequent contributions to the initial moral cause. It is possible that consumers may view this choice behavior as a symbolic, token support of the moral cause, and therefore may reduce their subsequent (actual) contributions to the cause, especially if the initial token support is made in a public (vs. private) environment (Kristofferson, White, and Peloza 2014).

Practical Implications
Practically, this research has important managerial implications for marketers. With the advent of online retailing, direct marketing communications targeting different consumers has become easier than ever. Marketers can therefore make use of this research to tailor their marketing communications in different countries or regions where residents have varying chances of observing unethical behaviors. For instance, in areas with high crime rates or countries with higher perceived corruption levels, marketers may consider employing advertising messages stressing the popularity (vs. uniqueness) of their products to strategically manage the selling traffic of majority versus minority brands. Future research could investigate the relationship between news coverage of moral violations at the local level (e.g., local political scandals) and consumers’ tendency to buy popular products from brands with larger market share) with real purchase data.

Moreover, this work has implications for managing consumers’ online search behavior. For instance, when searching on Amazon.com, consumers are typically provided with several options, including options to search by “Best Sellers,” “Hot New Releases,” “Most Wished For,” “Movers & Shakers” (i.e., biggest gainers in sales rank over the past 24 hours), average customer reviews, price, and relevance. Of relevance to my research is the search by “Best Sellers,” which displays the most popular products based on sales and is updated hourly. My findings suggest that to facilitate sales of popular products, marketers may consider changing the default search criteria to “Best Sellers” in markets where consumers have relatively high chances of witnessing moral violations.

Finally, the findings of this research carry practical implications for crowdfunding. On crowdfunding sites such as Kickstarter.com, project creators raise funds from potential buyers to start their ventures and offer products to the buyers in return. In light of my research showing
that mere exposure to moral violations can increase consumers’ desire to associate with a larger (vs. smaller) crowd of people, witnessing moral violations might increase consumers’ tendency to fund projects that set a higher (vs. lower) bar (e.g., the project will be effective only if 10,000 vs. 100 people agree to contribute). That is because once a project with a higher bar becomes effective, there will be more customers certain to own it, since consumers need to precommit and pledge money for the product. Moreover, I suspect that this effect might be more likely to occur for moderately desirable projects or ventures than for extremely desirable ones to which consumers are already highly committed (e.g., a new book by one’s favorite writer). Thus, creators of crowdfunding projects might consider launching higher-bar projects in countries or areas where consumers have relatively high chances of witnessing moral violations.
CHAPTER THREE: ESSAY TWO

CROSS-DOMAIN INFLUENCES OF CONSUMPTION CONFORMITY ON MORAL JUDGMENTS

The five studies discussed in Essay 1 consistently demonstrated that exposure to moral violations can increase consumers’ tendency to affiliate with the majority (vs. minority) in unrelated consumption situations, driven by a heightened desire to restore the balance of the social order. These findings suggest the possibility that an innocuous form of preference signaling—namely, choosing a popular rather than unique product—may signal to consumers that the world is in order, thereby reducing their concerns about condemning and punishing moral violators. In other words, being with a large number of others, even symbolically through product choice, may signal to consumers that the world is in order, which may reduce their perceived need to punish others engaged in moral wrongdoings.

In Essay 2, I focus on investigating the idea of “strength in numbers”—namely, that even an irrelevant choice of majority-endorsed (vs. minority-endorsed) products can have profound consequences on how people form their moral judgments toward others and how they view the social world. Specifically, I examine three research questions: Will perceived majority (vs. minority) in product choice increase consumers’ belief that they are also in the moral majority (i.e., the perception that one shares the same moral judgment with the majority others)? Will perceived majority (vs. minority) in product choice alleviate consumers’ perceived need (as well as their intention) to punish moral transgressors? If so, will the perception of the moral majority
and the perception of social order account for the effect of perceived majority (vs. minority) in consumption on consumers’ perceived need and intention to punish moral transgressors?

In what follows, I develop a theoretical rationale for whether and why perceiving the self as being in the majority (vs. minority) group in the consumption domain may affect consumers’ moral perception and judgments. I then describe three lab experiments that tested my predictions.

THEORETICAL FRAMEWORK

Malleability in Social Perception

Prior research examining social perception suggests that people are often unable to accurately perceive what a social norm is. People are known to be “intuitive psychologists” such that our social judgments of others’ attitudes and preferences are often biased and inaccurate (Jones 1979; Nisbett and Ross 1980; Ross 1977). Such an inaccuracy has been demonstrated in social perception research, as evident in the false consensus effect, whereby individuals tend to overestimate the degree to which others share their attitudes and behaviors (Bauman and Geher 2002; Gershoff, Mukherjee, and Mukhopadhyay 2008; Gilovich 1990; Hoch 1987; Marks and Miller 1987; Ross, Greene, and House 1977). For instance, people who preferred older films tended to estimate that a larger proportion of their peers also preferred older films, compared to those who preferred more recent (vs. older) films (Gilovich 1990). Researchers have explained the false consensus effect based on both motivational (i.e., the desire to see one’s own attitudes, beliefs, and behaviors as being shared by the majority others rather than minority others; Sherman, Presson, and Chassin 1984) and cognitive (i.e., the availability heuristic that it is typically easier for individuals to think of occasions or reasons that are consistent with their own
opinions as opposed to competing opinions) accounts. In addition to the false consensus effect, the pluralistic ignorance effect documents a different error in which people privately disapprove, but publicly advocate what appears to be the majority view (regarding a specific belief), when the majority, in fact, shares their (private) disapproval (Katz and Allport 1931; Krech and Crutchfield 1948; Prentice and Miller 1993).

Despite the abundance of research in this area showing that people’s perception of a social norm is often inaccurate and biased, several questions have not been addressed. For example, does perceiving oneself as being in the majority (vs. minority) in one domain (e.g., product choice) affect consumers’ perceived majority (vs. minority) status in a completely different domain (e.g., morality)? Furthermore, does perceiving oneself as being in the majority (vs. minority) in one domain affect consumers’ judgments and behaviors in a completely unrelated domain? In particular, this research explores whether and why the perception of being in a morality-unrelated majority (vs. minority) group can shift consumers’ moral perceptions and judgments.

**Perceived Group Status and Its Psychological Consequences**

Human beings are social, and they naturally seek social connections with others. With the advent of online social platforms, consumers nowadays may belong to more social groups than ever before. In any given intergroup context, the social groups to which consumers belong often differ in group size. I define the majority (vs. minority) group as the social group consisting of the most members. Previous research has documented that relative group size matters for individuals’ social perceptions. Compared to members of a majority group, members of a minority group tend to be more self-focused (Mullen 1991), perceiving the in-group as more
homogenous and stable (Mullen 1991) but the out-group as more variable and less predictable (Simon and Pettigrew 1990) as well as more likely to favor their in-group members (Mullen, Brown, and Smith 1992). Moreover, the perceived majority (vs. minority) status in social groups can affect individuals’ information-processing style such that members of a minority group tend to perceive having less control over the outcomes, engage in more interpretative reasoning, rely less on factual information, and make more dispositional judgments about others, compared to their counterparts from a majority group (Guinote, Brown, and Fiske 2006). In a similar vein, more recent research has demonstrated that the majority (vs. minority) status of the information source can affect the extent to which recipients of the information are confident in their thoughts as well as the extent to which they process the information. Specifically, when the information regarding source status preceded the message, the majority (vs. minority) sources validated the advocated position, thereby reducing people’s processing of the message. However, when the information regarding source status followed the message, the majority (vs. minority) sources increased people’s processing of the message and amplified the impact of the argument quality on judgment (i.e., more positive thoughts toward strong arguments and more negative thoughts toward weak arguments; Horcajo, Petty, and Briñol 2010).

Of particular relevance to the current investigation are the findings showing that conforming to, or being a member of, the majority (vs. minority) often brings various psychological benefits such as social acceptance and validation (Cialdini and Goldstein 2004), whereas non-conformity, or being a member of the minority, can be threatening and costly, often leading to negative social consequences (e.g., social rejection and even punishment; Anderson et al. 2006; Marques et al. 2001; Miller and Anderson 1979). For instance, participants in the minority group seriously doubted the validity of their own judgments and sought to conform to
the opinions of the majority (confederates) to avoid the potential negative consequences of going against the majority others’ opinions (Asch 1951). Even just making the ethnic majority group aware of the possibility that they might become the minority group in the future can make the majority feel threatened, causing them to express more negative racial attitudes and emotions (Craig and Richeson 2014a; Outten, Schmitt, Miller, and Garcia 2012) and become more conservative in their political attitudes (Craig and Richeson 2014b). In the context of consumer behavior, research has shown that consumers who feel socially excluded or lonely (Mead et al. 2011; Wang, Zhu, and Shiv 2012) tend to conform to the majority (vs. minority) others by choosing products endorsed by the majority (vs. minority) in order to avoid the potential negative evaluations from others. Taken together, this research stream suggests that being in the majority (vs. minority) can afford many psychological advantages, making individuals feel more socially validated and recognized.

The Current Research: Being in the Consumption Majority Reduces the Need to Punish Moral Violators

Drawing on the findings presented thus far, I propose that belonging to the consumption majority (vs. minority) may signal to consumers that things are in order and where they should be. If that were the case, belonging to the consumption majority (vs. minority) could have important consequences on consumers’ out-of-domain judgments. In the current research, I focus on examining the impact of consumption majority (vs. minority) on consumers’ moral judgments, particularly their perceived need to punish moral transgressors, for two reasons. First, although I demonstrated in Essay 1 that exposure to moral violations increases consumers’ conformity tendency in unrelated consumption contexts, it remains unclear whether (and why) being in a
majority (vs. minority) group in the consumption domain would attenuate consumers’ concerns about condemning and punishing moral violations. Second, punishment has been recognized as a critical means of maintaining and restoring social order (Fehr and Gächter 2002; Lin, Dahl, and Argo 2013), yet little research has been conducted to examine the potential situational factors that may enhance or reduce people’s punishment tendency toward moral transgressors. If being in the consumption majority, even in a completely unrelated domain (e.g., consumption), could signal to people that they are in the moral majority (i.e., the perception that one shares the same moral judgment with the majority others) and that the social order is being well maintained by the majority, then consumers should have a lower perceived need to punish the moral violators. In doing so, this investigation also responds to the call for more research on the burgeoning literature related to third-party punishment (Carpenter and Matthews 2012).

In the following discussion, I spell out the theoretical links explaining why being in the majority group in morality-unrelated domains (e.g., the consumption domain) may attenuate consumers’ subsequent tendency to punish moral violations. I draw on research on punishment, social order, and group status to build my hypotheses.

First, being in the consumption majority (vs. minority) group may signal to individuals that they are in the moral majority (vs. minority). This prediction is based on the social projection literature showing that people tend to overestimate the extent to which others share their attitudes, beliefs, and behaviors (Gershoff et al. 2008; Hoch 1987; Marks and Miller 1987; Ross et al. 1977). For instance, participants who indicated that they would vote for (or against) a given format for a class assignment (e.g., group versus individual papers) also rated that alternative as relatively more likely to be chosen (or rejected) by others (Ross et al. 1977). If that were the case, then people perceiving themselves to be in the consumption majority (vs.
minority), who feel that others share similar preferences in the consumption domain, may also tend to believe that others also share similar views with them in other domains such as morality, probably driven by both the cognitive (i.e., individuals may find it easier to think of individuals or reasons that are consistent with their own views rather than competing views) and motivational (i.e., individuals are motivated to see their own attitudes and beliefs as being in the majority rather than minority) forces.

Second, the perception of being in the moral majority (vs. minority) may increase people’s perception of social order. Social order is a core issue in social sciences, as the problem of disorder often arises because of the very nature of humans as both individual and social beings. We desire to be connected with others, but we also desire a certain level of individuality and uniqueness as each of us has our own experiences, thoughts, feelings, and goals (Brewer 1991). Inevitably, certain social interactions could lead to interpersonal conflicts that disrupt the equilibrium of social order (Hechter and Horne 2009). An effective way to maintain and restore social order is to engage other people in also condemning and punishing the actions that may disrupt social order. In fact, that is precisely the functions of morality that enable most people within a cultural and social context to recognize certain actions as breaches of the code of conduct, thereby rallying them to condemn and punish such actions (Douglas 1966). Thus, if one perceives being in the moral majority and that one is with many on the same moral ground, it may also signal to the individual that s/he has the moral support from the majority others and that social order is well maintained by the majority.

Third, the perception of social order could reduce people’s tendency to condemn and punish moral violators. If being in the consumption majority signals to people that they are in the moral majority and that the social order is well maintained by the majority, people may feel that
a certain breach of norms is probably less threatening, which may alleviate their concerns for condemning the transgressors and consequently decrease their tendency to punish them. This prediction is consistent with the evidence showing that individuals expressed a lower (vs. greater) tendency to punish the offenders when they perceived the social order to be improving (vs. deteriorating; Singh et al. 2014). Similarly, it has been shown that the salience of the widespread nature of norm violations and the perceived threat to society can often activate anger-charged retributive goals, thereby increasing punishment tendency (Tetlock et al. 2007).

Taken together, I propose that being in a majority (vs. minority) group, even in an unrelated domain (e.g., consumption), could signal to people that they are in the moral majority (i.e., the perception that one shares the same moral judgment with the majority others) and that the social order is being well maintained by the majority. Thus, those who perceive themselves as belonging to a majority (vs. minority) group, even in a morality-unrelated domain, should express a lesser desire for condemning and punishing moral violators.

**Overview of Studies**

Three lab experiments were conducted to test these propositions. Study 1 showed that belonging to the majority (vs. minority), even in a morality-unrelated domain, can reduce the perceived need to punish the violators through its power in signaling one’s belongingness to the moral majority (vs. minority). Study 2 further demonstrated that perceiving the self as being in the consumption majority (vs. minority) after exposure to moral violations (e.g., financial scandal) reduced consumers’ tendency to punish the original moral violators. In Study 3, I directly measured the perceived moral majority and consumers’ confidence in the social order and showed that being in the consumption majority (vs. minority) increased the perceived moral
majority, which enhanced people’s confidence in the social order, thereby reducing their tendency to punish moral violators.

**STUDY 1: CONSUMPTION MAJORITY REDUCES THE NEED TO PUNISH MORAL VIOLATIONS IN GENERAL**

As noted earlier, I posit that belonging to even a morality-unrelated majority (vs. minority) may (a) signal to people that they are in the moral majority and (b) thus alleviate their concern for condemning and punishing moral violators. Study 1 empirically tested these predictions.

**Method**

*Participants and Design.* One hundred nineteen undergraduate students (29 males, $M_{age} = 19.04$ years, $SD = 1.49$) participated in this study for course credits. They were randomly assigned to two between-subjects conditions (false feedback: consumption majority vs. minority).

*Procedure.* Upon arrival at the lab, and after signing the consent form, participants were instructed that the experimental session consisted of several unrelated tasks. Under this guise, all participants proceeded to the first task entitled “Product Choice,” in which participants were told that the researchers were interested in understanding consumers’ preferences toward apparel products and that they would be provided with individual feedback on how their preferences compared to the general preference. Under this guise, participants indicated their choices for three pairs of products (see the Appendix for pictures of the products which varied according to participant’s gender). Afterward, half of the participants were provided with the following
feedback: “Based on the data we collected, your choices of the apparel products are the same as the choices of 86% of our previous participants. In other words, you share a preference with a majority of your fellow classmates.” The other half received similar feedback but were instead informed that their choices were the same as those of 14% of the previous participants and that they shared a preference with a minority of their fellow classmates.

Participants subsequently proceeded to the second unrelated task entitled “Social Experience Survey.” This task consisted of two parts, presented to participants in counterbalanced order. In one part, entitled “Value Assessment Survey,” participants were informed that the researchers were interested in understanding people’s judgments on various social issues. They were presented with six morally contested issues: abortion, alcoholism, pornography, casual sex, profane language, and smoking (Zhong, Strejcek, and Sivanathan 2010). For each issue, participants were asked to indicate whether they thought the issue was “wrong” or “not wrong.” Moreover, they were asked to estimate and indicate the percentage of their schoolmates who would share their views on these issues on a sliding scale ranging from 0% to 100%. I averaged participants’ estimation of the six issues to create a composite score of “perceived moral majority.”

In another part, entitled “Daily Life Experience Survey,” I measured participants’ perceived need to punish moral violators in various moral violation scenarios. Specifically, participants were instructed that the researchers were interested in people’s reactions toward events that they may encounter in their daily lives. Participants were presented with six scenarios taken from previous research (Clifford et al. 2015; see the Appendix for details). For each scenario, participants were asked to imagine witnessing the event happening as vividly as possible and indicate to what extent they thought the violator should be punished (1 = not at all;
9 = very much). Participants’ responses to the six scenarios were averaged into a composite “perceived need to punish” index.

Finally, participants completed a manipulation check question (“Based on the individual feedback of the product choice study, I learned that my choice pattern is the same as the ______ of my fellow classmates.” 1 = majority; 2 = minority; 3 = I am not sure). Participants then reported their mood (1 = sad; 9 = happy) and were funnel-debriefed. None of them guessed the purpose of the study correctly.

**Results and Discussion**

*Manipulation Check.* As expected, 79.7% (vs. 13.3%) of the participants in the consumption majority (vs. minority) condition reported that their choice pattern of the clothing items was the same as the majority ($Z = 7.26, p < .001$). Similarly, 75% (vs. 3.4%) of the participants in the minority (vs. majority) believed that their choice pattern was the same as the minority ($Z = 7.99, p < .001$). We recorded similar proportion of participants who reported “unsure” about their preferences (16.9% vs. 11.7%, $p > .41$), confirming the validity of the false feedback manipulation. Participants’ mood was not affected by the bogus feedback ($F < 1$).

*Main Results.* As predicted, participants who were led to believe that they belonged to the majority group ($M = 63.47\%, SD = 10.01\%$) in the product preference task believed that they were also in the moral majority as they estimated a larger percentage of their fellow students would share the same attitude as them on those various moral issues, compared to those in the minority condition ($M = 57.58\%, SD = 11.44\%; F(1, 117) = 8.93, p = .003$). They also expressed lower perceived need ($M = 6.37, SD = 1.07$) to punish the moral violators than those in the minority condition ($M = 6.80, SD = .96; F(1, 117) = 5.28, p = .023$). The results suggested that
being in a morality-unrelated (consumption) domain can (a) lead participants to perceive that they are with the moral majority and also (b) alleviate people’s concern about punishing the moral violations.

**Mediation Analyses.** As mentioned earlier, I posit that perceived majority (vs. minority) in the consumption domain (coded as 1 = majority; 0 = minority) can reduce the perceived need to punish moral violators, because it may elicit people’s belief that they are with the moral majority (vs. minority). Consistent with this prediction, results from a series of regression analyses revealed that participants’ perceived need to punish moral violators were associated with both consumption majority ($b = -0.43$, SE = 0.19, $t(117) = -2.30$, $p = .02$) and the perceived moral majority ($b = -0.02$, SE = 0.01, $t(117) = -2.90$, $p = .005$). However, when both variables were entered as predictors of participants’ perceived need to punish the moral violators, the effect of consumption majority was reduced to non-significance ($b = -0.31$, SE = 0.19, $t(116) = -1.63$, $p = .11$), but the effect of perceived moral majority remained significant ($b = -0.02$, SE = 0.01, $t(116) = -2.38$, $p < .05$). The mediation effect of perceived moral majority on the effect of consumption majority on participants’ perceived need to punish was confirmed using bootstrapping (based on 5,000 samples, 95% CI from -0.2935 to -0.0171; Hayes 2013). The alternative mediation model (being in the consumption majority $\rightarrow$ perceived need to punish $\rightarrow$ perceived moral majority) was not supported (95% CI: [-0.0169 to 2.4561]).

**Discussion.** Study 1 provided preliminary evidence for the prediction that even being in the morality-unrelated consumption majority can make people feel that they are with the moral majority, which in turn reduced their perceived need to punish the moral violators.
STUDY 2: CONSUMPTION MAJORITY REDUCES THE NEED TO PUNISH BANKERS IN A FINANCIAL SCANDAL

Study 2 extended the investigation by investigating whether being in the majority in a completely unrelated domain can attenuate the moral threat evoked from a previous exposure to moral violations (e.g., financial scandal). In this study, I first presented participants with either a news article depicting the London Interbank Offered Rate (LIBOR) financial scandal or a similar news article but depicting the LIBOR incident as an innocent error, as I did in Studies 1, 2, and 5 of Essay 1. Then in an ostensibly unrelated second product choice task, I provided false feedback to participants regarding their product choice, either reassuring them that their choices were the same as the majority of the participants or informing them that their choices were quite different from the majority others, following exactly the same procedures as in Study 1 (Essay 2). Next, I measured participants’ tendency to punish the bankers involved in the LIBOR incident. Following previous research on punishment (Neilson 2010; Skarlicki et al. 1998), I asked participants to report their intentions to protest against the banks and their desire for tightening the regulations of the financial sector. I expected that being in the consumption majority (vs. minority) could reduce participants’ intention to punish the bankers involved in the LIBOR incident.

Method

Participants and Design. Two hundred fifty-one undergraduate students (118 males, $M_{\text{age}} = 19.60$ years, $SD = 1.91$) from the University of Toronto participated in this study for course credits. They were randomly assigned to conditions of a 2 (moral violation vs. innocent error) × 2 (perceived majority vs. minority) between-subjects design.
Procedure. Upon arrival at the lab, and after signing the consent form, participants were seated in individual cubicles with computers. Participants were instructed that they would be completing two unrelated studies in this experimental session. In the first task, entitled “News Comprehension Task,” participants were given an article to read and comprehend. In the moral violation conditions, participants were told that they would read a financial news article taken from The New Yorker which described the recent LIBOR scandal. In the innocent error conditions, participants read a similar financial news article about LIBOR, purportedly also taken from The New Yorker, although words were changed to depict banks’ actions as an innocent and unintentional error (adapted from Chan et al. 2014). In both conditions, I used exactly the same materials as in Studies 1, 2 and 5 of Essay 1.

Afterward, all participants proceeded to the second unrelated task, entitled “Product Choice,” in which participants were instructed that the researchers were interested in understanding consumers’ opinions toward various apparel products, and that they would be provided with individual feedback on how their preferences compared to the general preference. Under this disguise, participants indicated their choices for the same three pairs of products as I used in Study 1 (Essay 2). After participants indicated their product choices, half of them were provided with feedback that “Based on the data we collected from our previous participants, your choices of the apparel products were the same as the choices of 86% of our previous participants. In other words, you share a preference with a majority of your fellow students.” The other half received similar feedback, but were informed that their choices were the same as those of 14% of the previous participants and that they shared a preference with a minority of their fellow students.
Participants were then asked to answer a few additional questions about the news article comprehension task, wherein participants’ tendency to punish the bankers involved in the LIBOR incident was measured using a 5-item scale (averaged to provide an index of punishment tendency, $\alpha = .74$; see the Appendix for details of the items). Sample items included “To what extent are you motivated to take your money out of the banks and invest in other ways?” and “To what extent are you willing to sign a petition calling for an inquiry into the behavior of the bankers?” Participants’ responses to all the five items were recorded along a scale ranging from 1 (not at all) to 9 (very much).

Finally, participants completed a short manipulation check questionnaire measuring the extent to which they thought the bankers described in the news articles did something immoral/unfair/harmful/ and have deceived their clients, all from 1 (not at all) to 9 (a great deal) ($\alpha = .84$; averaged to provide a moral violation index) as well as the extent to which they thought the event described in the news would hurt the economy (1 = not at all; 9 = to a great extent). They further reported how involved/engaged/interested they were in reading the news article (1 = not at all; 9 = very much; $\alpha = .91$; averaged to provide a composite score of involvement). They then responded to the desire for unique consumer products scale (an established individual difference measure regarding consumers’ desire for unique products; Lynn and Harris 1997) as a control variable, reported their demographic information, and were funnel-debriefed. No participants suspected there was a link between the news article comprehension task and the product choice task.

**Results and Discussion**
Manipulation Checks. As expected, participants in the moral violation condition ($M = 6.67, SD = 1.42$) rated the bankers described in the news article as more immoral than those in the innocent error condition ($M = 5.41, SD = 1.56; F(1, 249) = 44.24, p < .001$), suggesting that the manipulation of moral violation (vs. innocent error) was successful. Moreover, participants in both conditions perceived that the LIBOR incident would destroy the economy to a similar extent ($M_{\text{moral violation}} = 5.84, SD = 1.83; M_{\text{innocent error}} = 5.60, SD = 1.77; F(1, 249) = 1.09, p = .297$). No significant differences were observed regarding participants’ involvement in the article comprehension task ($M_{\text{moral violation}} = 5.41, SD = 1.80; M_{\text{innocent error}} = 5.24, SD = 1.90; F(1, 249) = .51, p = .474$).

Punishment Tendency. An ANOVA conducted with participants’ punishment tendency toward the bankers as the dependent variable as well as the news article condition and feedback condition as the independent variables yielded the expected significant interaction effect ($F(1, 247) = 4.34, p = .038$). As predicted, among participants who read the moral violation news article, those who were led to believe that they belonged to the majority group ($M = 5.00, SD = 1.71$) in the product choice task expressed a lower desire to punish the bankers than their counterparts who perceived themselves as being in the minority group ($M = 5.66, SD = 1.40; F(1, 247) = 6.54, p = .011$). However, among those who read the innocent error news article, no such difference between the consumption majority ($M = 5.17, SD = 1.48$) and minority ($M = 5.07, SD = 1.20; F(1, 247) = .16, p = .689$) conditions. The interaction effect holds even after controlling for participants’ chronical need for uniqueness in consumption ($F(1, 246) = 6.25, p = .013$). Notably, among those in the moral violation conditions, the belief that they were in the majority group in a completely unrelated (consumption) domain reduced their desire to punish the moral violators to levels comparable to those in the innocent error conditions ($ps > .505$).
Discussion. Thus, the results of Study 2 provided convergent evidence supporting the proposition that the belief that an individual is in the majority (vs. minority) group, even in a morality-unrelated domain, can alleviate moral threat as reflected in the individuals’ reduced tendency to punish the moral violators.

STUDY 3: THE MEDIATING ROLE OF PERCEPTION OF SOCIAL ORDER

The results of Studies 1 and 2 were consistent with my hypothesis that the perceived majority (vs. minority) in consumption can reduce consumers’ perceived need to punish moral violators; furthermore, this effect is driven by the differences in consumers’ perceived moral majority (Study 1). As noted earlier, I posited that the perception of being in the moral majority (induced from consumption majority) can reduce consumers’ need for punishment because it signals to the individual that the world is in order. I tested this hypothesis in Study 3 through a multistage mediation model (i.e., being in the consumption majority → perceived moral majority → greater confidence in the social order → reduced tendency to punish moral violators).

Method

Participants and Design. Two hundred twenty-nine undergraduate students (73 males; \(M_{age} = 19.68\) years, \(SD = 1.45\)) at the University of Toronto took part in the study for course credits. The experiment followed a 2 (moral violation vs. innocent error) × 2 (false feedback: majority vs. minority) between-subjects design.

Procedure. Upon arrival at the lab, and after signing the consent form, participants were instructed that they would be completing several unrelated studies in this experiment session. To
manipulate exposure to moral violations, participants were presented with the same “News Article Comprehension” task as used in Study 2 (Essay 2) following exactly the same procedures. They were also asked to think of a title for the article and briefly summarize the main message conveyed in it using their own words in order to ensure that they had comprehended the article.

Afterward, to manipulate the perceived majority (vs. minority) status in consumption, participants were asked to indicate their choices for three pairs of clothing products ostensibly for a “Product Choice” task, using the same materials as I used in Studies 1 and 2 (Essay 2). Specifically, after participants indicated their product choices, half of them were provided with the feedback that “Based on the data we collected from our previous participants, your choices of the apparel products are the same as the choices of 86% of our previous participants. In other words, you share a preference with a majority of your fellow classmates.” The other half received similar feedback, but were instead informed that their choices were the same as the choices of 14% of our previous participants and that they shared a preference with a minority of others. Participants then completed a short survey entitled “Additional Questions Regarding the News Comprehension Task,” in which they indicated their punishment tendency toward the bankers involved in the LIBOR scandal using the same 5-item scale as used in Study 2 (Essay 2).

Next, to measure perceived moral majority, participants completed the same “Value Assessment Survey” as in Study 1 (Essay 2), in which they were instructed that the researchers were interested in understanding people’s judgments on social issues. They were then presented with the same six morally contested issues as used in Study 1 (Essay 2), and were asked to indicate whether they thought each issue was “wrong” or “not wrong.” Moreover, they were asked to estimate the percentage of others who would share their view on these issues by using a
sliding scale ranging from 0% to 100%. Following Study 1, I averaged participants’ estimation of the six issues to create a composite score of “perceived moral majority” (α = .72).

To capture participants’ perception of social order, participants were also asked to respond to the “confidence in the social system” scale (5-item; α = .66; adapted from Kay and Jost 2003; see the Appendix for the scale measures). Sample items included “In general, I find society to be fair” and “Society is set up so that people usually get what they deserve.” I counterbalanced the order of the “Value Assessment Survey” and the “Confidence in the social system” scale.

Lastly, participants responded to the same set of manipulation check questions as in Study 2 (Essay 2), indicated their mood (1 = sad; 9 = happy), and reported their demographic details. Participants were then thanked and debriefed.

Results and Discussion

Manipulation Checks. As expected, participants in the moral violation condition (M = 6.56, SD = 1.50) perceived the bankers described in the news article as more immoral than those in the innocent error condition (M = 5.54, SD = 1.40; F(1, 227) = 28.44, p < .001), confirming the success of the moral violation manipulation. Moreover, participants in both conditions perceived that the LIBOR incident would destroy the economy to a similar extent (M_{moral violation} = 5.68, SD = 1.78; M_{innocent error} = 5.73, SD = 1.96; F < 1). No significant differences were obtained regarding participants’ involvement in comprehending the articles (M_{moral violation} = 5.67, SD = 2.00; M_{innocent error} = 5.26, SD = 1.87; F(1, 227) = 2.54, p = .113). Furthermore, participants’ mood did not differ across conditions (ps > .10).
Punishment Tendency. An ANOVA conducted with participants’ punishment tendency toward the bankers as the dependent variable as well as the moral violation condition and the feedback condition as the independent variables yielded a marginally significant interaction effect ($F(1, 225) = 3.46, p = .064$). As predicted, and consistent with the findings in Study 2, among participants who read the moral violation article, those who were led to believe that they belonged to the consumption majority group ($M = 5.14, SD = 1.77$) expressed a lower desire to punish the bankers than their counterparts who believed that they were in the consumption minority group ($M = 5.90, SD = 1.28; F(1, 225) = 7.42, p = .007$). Among those in the innocent error conditions, no such difference was obtained between the consumption majority ($M = 5.09, SD = 1.25$) and minority conditions ($M = 5.12, SD = 1.59; F(1, 225) = .01, p = .910$). Notably, as in Study 2, feeling in the majority group in a completely unrelated domain led the participants exposed to a moral violation to feel less bothered by the immoral behavior and lowered their desire to punish the bankers to similar levels as those in the innocent error conditions ($ps > .834$).

Underlying Process. To examine the process underlying the effect of the perceived majority (vs. minority) group on consumers’ likelihood to punish the bankers in the moral violation conditions, I tested the proposed sequential mediation model (perceived majority in consumption $\rightarrow$ perception of moral majority $\rightarrow$ greater confidence in the social system $\rightarrow$ reduced tendency to punish the bankers).

As expected, participants in the consumption majority conditions ($M = 66.18\%, SD = 13.22\%$) also believed that they were in the moral majority as they estimated a larger percentage of their fellow classmates would share the same attitudes as them on the six moral issues, compared to those in the consumption minority conditions ($M = 58.64\%, SD = 13.60\%; F(1, 111) = 8.88, p = .004$). They also expressed marginally greater confidence in the social system than
their counterparts in the minority conditions (\(M_{\text{consumption-majority}} = 5.11, SD = 1.36; M_{\text{consumption-minority}} = 4.68, SD = 1.14; F(1, 111) = 3.29, p = .073\)).

A multistage mediation analysis revealed that the perceived majority in the consumption domain (1 = majority; 0 = minority) was positively associated with the perception of moral majority (\(b = 7.54, SE = 2.53, t(111) = 2.98, p = .004\)), which increased the confidence they had about the social system (\(b = .02, SE = .01, t(111) = 2.21, p = .029\)), leading to a lowered tendency to punish the moral violators (\(b = -.54, SE = .11, t(111) = -5.05, p < .001\)).

Bootstrapping results using the PROCESS SPSS macro (Hayes, 2013) based on 5,000 samples, with a 95% CI excluding 0 [-.1808, -.0028], provided support for this multi-step mediation chain. The alternative multi-step mediation model (i.e., perceived majority in consumption \(\rightarrow\) greater confidence in the social system \(\rightarrow\) perception of moral majority \(\rightarrow\) lowered tendency to punish the moral violations) was not supported (95% CI: [-.0738, .0020], including 0).

**Discussion.** The results of this study showed that participants in the consumption majority (vs. minority) (a) expressed a lower punishment tendency toward moral violators; (b) expressed a greater perceived moral majority as captured by their estimation of the percentage of other participants who shared the same view as them on various moral issues; and (c) expressed greater confidence in the social system. Moreover, the effect of the consumption majority on the reduced punishment tendency was mediated by (i) a heightened perception of moral majority that (ii) subsequently increased the confidence of social order.

**GENERAL DISCUSSION**

Across three studies, this research investigated the influence of consumption conformity—the feeling that one is making the same consumption choice as the majority (vs.
minority) others—on consumers’ moral judgment in subsequent, unrelated domains. In Study 1, I showed that belonging to the majority, even in a morality-unrelated domain, can reduce the perceived need to punish moral violators in various contexts by signaling one’s belongingness to the moral majority. Study 2 further demonstrated that being in the consumption majority (vs. minority) after exposure to moral violations reduced consumers’ tendency to punish the original moral violators. Study 3 replicated the findings of Study 2 and extended them by showing that it is the activated perception of the moral majority and, therefore, the heightened confidence in the social order that drives the effect of being in the consumption majority (vs. minority) on consumers’ reduced tendency to punish moral violators. Taken together, these results showed that an innocuous form of preference signaling—choosing a majority-endorsed rather than minority-endorsed product—can exert profound consequences on how people view the social world (e.g., whether they perceive themselves as being in the moral majority or not) and how they react to moral transgressions.

Contributions and Implications

Theoretically, this research brings together the hitherto disparate literature on group status perception, consumer conformity, and social order to explore how the perceived majority (vs. minority) in the consumption domain could affect consumers’ perception of moral majority and their tendencies to condemn moral violations. Taken together, the findings in Essay 2 make several important contributions to the literature.

First, this research contributes to our understanding of the psychological consequences of perceived group (majority vs. minority) status on moral judgment. Existing research has focused primarily on examining how people’s majority (vs. minority) group status may affect
information processing (Guinote, Brown, and Fiske 2006), intragroup perception (Mullen 1991; Mullen, Brown, and Smith 1992), and intergroup relations (Simon and Pettigrew 1990). To the best of my knowledge, the current research is among the first to study the moral consequences of perceived majority (or minority) group status. Although being in the majority (vs. minority) group in the consumption domain may not exert any real repercussions for the moral transgressors personally, it nevertheless signals social order and attenuates consumers’ concern about condemning and punishing moral violators.

Second, this research contributes to the malleability of individuals’ view of their group status by showing that people’s perception of group status in one domain (e.g., consumption) can affect their perception in a quite different domain (e.g., morality). Previous research, such as the false consensus effect, suggests that individuals tend to overestimate the degree to which their beliefs are shared by others (Hoch 1987). However, little research has examined how one’s own perception of group status in one domain may affect their perception in a different domain. By showing that one’s perception of group status in the consumption domain can have a profound impact on the perception of group status in the morality domain, this research contributes to the existent literature by demonstrating the cross-domain flexibility in group status perception.

Third, this research documents a novel psychological function of conformity, in addition to the normative and informative functions (i.e., obtaining social acceptance and making the right judgments and decisions, respectively). Results of the three studies suggest that a potential third psychological function of conformity is the belief that one is in the moral majority—the feeling that one is accompanied by many on the same moral ground—which could signal social order, increase people’s confidence in the social system, and attenuate moral threats resulted from exposures to moral violations.
Limitations and Opportunities for Future Research

In evaluating the generalizability of the Essay 2 findings and their implications, several points should be noted. First, in the current research, I manipulated consumption majority by giving participants false feedback. Although it is a well-established paradigm to manipulate social perceptions (e.g., Ross, Lepper, and Hubbard 1975), a natural question to raise is whether the format of feedback might make a difference. In the current studies, people made a choice and were then told that other people made the same choice. Although the choices could have been made simultaneously, this might still give participants a false sense that others were agreeing with them. Moreover, participants were provided with a numerical anchor (86% or 14%), from which they may have made an insufficient adjustment (Tversky and Kahneman 1974) as they estimated the percentage of fellow students who shared their moral views. This, in turn, could result in the downstream consequences including the need to punish moral violators (Studies 1-3) and confidence in the social system. Would the same effect generalize to other types of consumption majority (vs. minority) manipulations? Future research has been planned to test the generalizability of my findings by employing other types of manipulations (e.g., asking participants to make choices among popular brand alternatives versus among unique brand alternatives).

Second, although the current studies focus on the perceived need (Study 1) as well as self-reported tendency to punish moral violators (Studies 2-3), a fruitful avenue for future research is to examine whether being in the majority group in morality-unrelated domains may license immoral behaviors (e.g., more likely to purchase counterfeit luxury products). In addition to reducing the perceived need as well as the tendency to condemn immoral behaviors, being in
the majority (vs. minority) group might even license self-immoral behaviors, driven by their
greater confidence in the social system and the perception that the social order is well maintained
by the majority (and therefore their own immoral behaviors may be less threatening). Given that
most existent moral licensing studies have been limited to demonstrating how self-earned moral
credentials (Khan and Dhar 2006; Mazar and Zhong 2010) may license subsequent immoral
behaviors, investigating this possibility would expand the scope of moral licensing effects to
incorporate the potential influence of vicariously experienced moral credentials afforded by
group-level factors (e.g., the perceived majority group status in morality-unrelated domains) on
people’s tendency to engage in immoral behaviors themselves.

Third, in addition to alleviating the moral threat and reducing people’s tendency to punish
moral violators, it is possible that being in a majority group in consumption can assuage
numerous social threats, including moral threats. Therefore, future research could test (a)
whether being in a consumption majority group can increase perceived consensus on non-moral
issues (the key point here is to test if simply choosing or consuming a popular product can lead
people to falsely perceive that other people would agree with them on unrelated issues) and (b)
whether being in a consumption majority group can reduce other types of threats, such as social
exclusion (social threat) or a lack of personal control (personal threat). It is possible that being in
the consumption majority may help attenuate threats caused by a lack of social support or
belongingness (e.g., social exclusion), but not personal threats (e.g., lack of personal control).

Finally, future research could investigate the impact of the consumption majority on
moral judgment. Many social issues and activities (e.g., homosexuality, prostitution) evoke
moral considerations. People’s moral judgments on these issues—whether a certain action is
considered right or wrong—are not just personal opinions, but also decisions based on which we
condemn and punish others. Indeed, moral judgments have been recognized as the most critical element contributing to moral behaviors (Kohlberg 1981). Past research has shown that factors such as disgust (Schnall et al. 2008), religiosity (Barnett, Bass, and Brown 1996), conservatism (Feather 1979; Jost, Glaser, Kruglanski, and Sulloway 2003), financial deprivation (Sharma et al. 2014), and one’s own physical cleanliness (Zhong et al. 2010) can affect one’s moral judgment. Based on the findings in Essay 2, if the consumption majority leads to greater confidence in the social order, then it is possible that people perceiving themselves as in the consumption majority may express less harsh judgments on morally contentious issues. Preliminary results from analyzing participants’ attitude toward the six morally contentious issues (i.e., whether participants thought each of the six issues was 1 = “wrong” or 0 = “not wrong”) measured in Study 3 of Essay 2 suggested that this is indeed the case. I summed up participants’ responses toward the six issues to create an index of moral judgment. Results revealed that participants in the majority group indeed perceived the moral issues as less wrong than those in the minority group ($M_{\text{majority}} = 2.28, SD = 1.51$; $M_{\text{minority}} = 2.79, SD = 1.75$; $F(1, 227) = 5.57, p = .019$). A similar pattern of results was obtained using the same measures included in Study 1 of Essay 2. Future research could test this possibility and its underlying mechanism(s) more thoroughly.
CHAPTER FOUR: CONCLUSION OF THE THESIS

This two-essay dissertation offers novel contributions to the morality and conformity literature.

On the one hand, this research contributes to the morality literature (which focuses largely on individual moral judgment and decision making) by examining the impact of moral reasoning and considerations on interpersonal influences (e.g., how others’ choices might affect consumers’ own choices) – an important yet under-researched topic in the extant literature. As morality concerns about how people should treat each other and moral principles often guide how individuals make sense of the world, it is by nature relational. As posited by Rai and Fiske (2011), morality is essentially “relationship regulation” and moral judgments should take into consideration the particular types of social-relational contexts in which the actions or behaviors to be evaluated occur. However, existing literature on morality has largely ignored how moral reasoning would affect interpersonal influences. Contrary to prior research, this research examines how the motive for restoring social order resulted from witnessing moral violations can influence consumers’ desire to affiliate with the majority (vs. minority) others and their tendency to conform to others’ preferences and choices. To the best of my knowledge, this dissertation research represents the first attempt to show that exposure to moral violations can affect the way consumers relate to each other in their consumption preferences, in particular, their tendency to conform to other consumers’ product preferences and choices (Essay 1).

On the other hand, with the rapid advancement of technologies, consumers can easily access information about others’ preferences and choices. As a result, consumers nowadays are more susceptible to social influences than ever: a consumer could easily gauge the popularity of a product sold from transaction record or online reviews. Thus, understanding the social
influence on consumer decision making has become an increasingly important area of research. Conformity is one of the most basic principles underlying consumer behavior (Bearden, Netemeyer, and Teel 1989; Burnkrant and Cousineau 1975). This research contributes to the conformity literature by documenting a novel antecedent of conformity. Much of previous research has shown that people’s chronical personality factors such as the need to belong (Leary et al. 2013) could increase one’s tendency to conform whereas one’s need to be unique (Tian, Bearden, and Hunter 2001) could decrease it. However, the extent to which conformity is governed by the two aforementioned motives often depends on the goals that are made salient in the situation at hand and the relative importance of attaining them. Thus, in addition to relatively stable personality factors, one’s conformity tendency can also be moderated by *incidentally-evoked, situational* factors (e.g., Dong et al. 2015; Zhu and Argo 2013). In line with the recent findings showing that choices reflecting consumers’ conformity can be triggered by situational factors, my dissertation shows that exposure to immoral behaviors may also enhance consumers’ subsequent tendency to conform to the majority others’ preferences driven by their heightened desire to restore the balance of social order (Essay 1). Moreover, this research contributes to the conformity literature by demonstrating a novel psychological function of consumer conformity: conforming to others’ product choices can signal moral majority and attenuate moral threat (Essay 2).

In summary, these two essays draw on research from multiple areas to enhance our understanding of the moral antecedent and consequence of consumer conformity. Theoretical contributions, practical implications, limitations and opportunities for future research are discussed in chapter 2 (Essay 1) and chapter 3 (Essay 2) respectively.
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ESSAY 1: APPENDICES

I. Additional Measures and Results

1. Additional Measures and Analyses of Study 1
   1.1 The Role of Perceived Social Support
   1.2 Other Measures

2. Additional Measures and Analyses of Study 2
   2.1 The Role of Need to Belong
   2.2 Manipulation Check of the Two Book Club Options
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3. Additional Measures and Analyses of Study 3
   3.1 The Role of Need to Belong
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5. Additional Measures and Analyses of Study 5
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II. Study Stimuli and Measures

1. Study 1 Stimuli
2. Study 2 Stimuli
3. Study 4 Stimuli

III. Additional Studies

1. Pilot Test of Study 1
2. Pretest of Study 4
3. Conceptual Replication of Study 5
I. ADDITIONAL MEASURES AND RESULTS

Additional Measures and Analyses – Study 1

1.1 The Role of Perceived Social Support

Affiliation with the majority signals to people that they have the moral support of others. If individuals already have ample social support from their existing social network (e.g., their family members, relatives, or friends), they should perceive less need to seek other forms of affiliation or conformity after witnessing moral violations. In other words, perceiving abundant (vs. scarce) social support should mitigate the effect of exposure to moral violations on preferences for majority-endorsed (vs. minority-endorsed) products.

In Study 1, after participants’ magnet choice, they responded to a 9-item perceived social support scale assessing the amount of social support they could potentially get from their relatives and friends (see Table S1 for the items; the last five items were adapted from the Perceived Social Support Scale; Zimet et al. 1990). We z-transformed and averaged scores for the 9 items ($\alpha = .72$) to create an index of perceived social support.

A binary logistic regression model with dummy-coded conditions (Dummy 1 = innocent error; Dummy 2 = natural disaster), perceived social support index, and their interactions as predictors of magnet choice (1 = choosing the majority-endorsed magnet; 0 = choosing the minority-endorsed magnet) suggested a greater tendency for participants to choose the majority magnet in the moral violation condition (55.1%) compared to the innocent error condition (33.3%; Dummy 1: $b = -1.09$, $SE = 0.38$, $z = -2.89$, $p = .004$) and the natural disaster condition (37.7%, Dummy 2: $b = -0.87$, $SE = 0.37$, $z = -2.32$, $p = .02$). These significant main effects provided support for our prediction that exposure to moral violations would increase consumers’ conformity tendency in product choice. The analysis also yielded a significant effect of perceived social support (Moderator: $b = -1.61$, $SE = 0.52$, $z = -3.08$, $p = .002$), which is consistent with prior literature showing that consumers with little social support tend to conform to the majority (Wang, Zhu, and Shiv 2012). Importantly, this effect of perceived social support was weaker in the innocent error compared to the moral violation condition (Dummy 1 × Moderator: $b = 2.04$, $SE = 0.66$, $z = 3.08$, $p = .002$) and weaker in the natural disaster compared to the moral violation condition (Dummy 2 × Moderator: $b = 2.00$, $SE = 0.69$, $z = 2.89$, $p = .004$). Since perceived social support was a continuous variable, we used the Johnson-Neyman “floodlight” approach recommended by Spiller et al. (2013) to probe the nature of the interaction. Specifically, we examined where along the continuum of perceived social support participants’ magnet choice differed between the moral violation condition versus the innocent error and the natural disaster conditions. Results of a 5,000-sample bootstrap resampling method revealed that for participants who scored at 0.15 or below on the perceived social support scale (54.61% of the participants), the difference between the moral violation and innocent error conditions was significant, and for participants who scored at 0.07 or below on the perceived social support scale (52.90% of the participants), the difference between the moral violation and natural disaster conditions was significant. These results confirmed that participants who perceived themselves as having less social support were influenced more by the exposure to moral violations.
1.2 Other Measures – Moral Identity, Desire for Control, Power, and Status, Desire for Unique Consumer Products, Mood, Arousal, and Power

As prior research shows that people with higher moral identity were more likely to respond to moral violations (e.g., justice violation; O’Reilly, Aquino, and Skarlicki 2016), we also measured participants’ moral identity (i.e., to what extent morality is important to one’s self-image; Aquino and Reed 2002) to see whether it would moderate or account for the moral violation effect we observed.

Moreover, prior research suggests that participants’ desire for control, power, and status (Wan, Xu, and Ding 2014), and their desire for unique consumer products ([DUCP], Lynn and Harris 1997) may reduce one’s tendency to conform to others’ preferences and are shown to fluctuate with temporary manipulations (Huang, Dong, and Mukhopadhyay 2014; Wan et al. 2014). Thus, we included these measures in the end of Study 1 as control variables.

Specifically, participants responded to the moral identity scale (including the internalization and symbolization subscales; Aquino and Reed 2002), desire for unique consumer products scale (DUCP; 8 items; Lynn and Harris 1997; α = .82), desire for control (5 items; Burger and Cooper 1979; α = .72), status (2 items; Wan et al. 2014; r = .57, p < .001), and power (4 items; Wan et al. 2014; α = .70) scales, all along scales from 1 (strongly disagree) to 9 (strongly agree).

They also indicated their mood (1 = very sad; 9 = very happy), arousal (1 = very calm, 9 = very aroused), and powerful feeling (1 = very powerless; 9 = very powerful) to see if exposure to moral violations changes their mood and feelings of power (similar to desire for power, the feeling of power is also associated with higher uniqueness seeking tendency; Lynn and Harris 1997).

Analyses revealed that participants in the three conditions did not differ in their desire for control, power, or status, desire for unique consumer products, or their mood, arousal, feelings of power (ps > .28; see Table S2 for means and SDs). Moreover, the effect of exposure to moral violations on conformity was independent of one’s moral identity (see Table S3a for details).

Lastly, logistic regression with magnet choice on moral violation condition, mood, arousal, feeling of power, desire for control, power and status, desire for unique consumer products as well as the interactions between moral violation and each of the control variables revealed only a significant main effect of moral violation (b = .41, SE = .16, z = 2.55, p = .01; see Table S3b). No other effects were found significant (ps > .17). This result suggests that none of the above measures could account for the effects.

--- Insert Table S2 & Table S3a about here ---

--- Insert Table S3b about here ---

Additional Measures and Analyses – Study 2

2.1 The Role of Need to Belong

According to the optimal distinctiveness theory (Brewer 1991), individuals have two foundational yet opposite needs that they strive to balance—namely, the need to belong and the need to be unique. When people feel too similar to others, they seek out ways to reassure their
individuality; when they feel too different from others, they desire more proximity with others. Thus, although people in general may seek ways to promote affiliation with majority others after witnessing moral violations, this desire may induce a motivation to conform to others’ preferences and choices only among those who perceive a lack of affiliation with others. Those who have low need to belong should feel less need to seek other forms of affiliation or conformity, which may mitigate the effect of exposure to moral violations on preferences for majority options. Therefore, we measured participants’ need to belong using the need to belong scale (10-item; Leary et al. 2013; counterbalanced with the conformist attitudes scale).

A binary logistic regression model with dummy-coded conditions (Dummy 1 = innocent error; Dummy 2 = natural disaster), need to belong (α = .85; averaged and mean-centered), and their interactions as predictors of book club choice suggested a greater tendency for participants to choose the majority book club in the moral violation condition (56.8%) compared to both the innocent error condition (38.1%; Dummy 1: $b = -0.78$, $SE = 0.32$, $z = -2.43$, $p = .015$) and the natural disaster condition (41.3%, Dummy 2: $b = -0.68$, $SE = 0.31$, $z = -2.18$, $p = .029$). The analysis also yielded a significant effect of need to belong (Moderator: $b = 0.76$, $SE = 0.22$, $z = 3.48$, $p < .001$), which is consistent with prior literature showing that consumers with high need to belong tend to conform to others’ preferences (Leary et al. 2013). Moreover, this effect of need to belong was weaker in the innocent error compared to the moral violation condition (Dummy 1 × Moderator: $b = -0.60$, $SE = 0.27$, $z = -2.20$, $p = .028$) and weaker in the natural disaster condition compared to the moral violation condition (Dummy 2 × Moderator: $b = -0.64$, $SE = 0.26$, $z = -2.43$, $p = .015$). Using participants’ relative preference for the majority (vs. minority) book club yielded the same pattern of results.

To probe the nature of the interaction, we conducted a floodlight analysis with 5,000 bootstrap resamples (Spiller et al. 2013), which revealed that for participants who scored at $-0.19$ (4.44 if unstandardized) or above on the need-to-belong scale (53.63% of the participants), the difference between the moral violation and innocent error conditions was significant, and for participants who scored at $-0.18$ (4.58 if unstandardized) or above on the need-to-belong scale (58.29% of the participants), the difference between the moral violation and natural disaster conditions was significant.

### 2.2 Manipulation Check of the Two Book Club Options

After participants indicated their choice and preference for each of the two book clubs, as manipulation checks, participants rated the perceived popularity (“The slogan emphasizes on the popularity of joining the club”, “The slogan emphasizes the book club’s mission to help people get together”; averaged to form an index of popularity appeal; $r_{majority\_club} = .45$, $p < .001$; $r_{minority\_club} = .65$, $p < .001$) and perceived uniqueness (“The slogan emphasizes on the uniqueness of joining the club”, “The slogan emphasizes the message that joining the club will make one stand out from the crowd”; averaged to form an index of uniqueness appeal; $r_{majority\_club} = .67$, $p < .001$; $r_{minority\_club} = .78$, $p < .001$) of each of the two book clubs (all from $1 = strongly\_disagree$ to $9 = strongly\_agree$; measures adapted from Huang et al. 2014). Repeated analyses were conducted to verify the effectiveness of the manipulation. The analyses showed that the majority book club was indeed rated as more popular ($M_{majority} = 6.12$, $SD = 1.84$; $M_{minority} = 3.61$, $SD = 2.14$, $F(1, 270) = 262.47$, $p < .001$), whereas the minority book club was rated as more unique.
majority = 4.60, SD = 2.00; minority = 7.71, SD = 1.36; F(1, 270) = 430.32, p < .001), confirming the validity of the manipulation of majority versus minority book clubs.

2.3 The Role of Moral Emotions

To test whether moral emotions could account for the effect, participants reported to what extent they experienced moral anger (angry, upset, and hostile; \(\alpha = .92\); averaged to form an index of moral anger), disgust, positive (averaged 10-items; \(\alpha = .91\)) and negative affect (averaged 10-items; \(\alpha = .93\)) captured by the PANAS scale, along 1 (not at all) to 9 (extremely) after they responded to the conformist attitude and need to belong scales.

Replicating previous findings (Chan et al. 2014; Skarlicki et al. 2013), participants in the moral violation condition also experienced greater moral anger (\(F(2, 268) = 13.09, p < .001\)) and disgust (\(F(2, 268) = 21.95, p < .001\); see Table S2 for means and SDs) than those in the two control conditions. In addition, although participants in the three conditions did not differ in positive affect (\(p > .73\)), those in the moral violation condition reported feeling more negative affect (\(F(2, 268) = 6.46, p = .002\)). However, mediation analyses revealed that neither negative affect nor moral emotions mediated the effect of exposure to moral violations on book club choice (using relative preference for the majority vs. minority book club yielded the same conclusion). These findings cast doubt on the account that participants were choosing majority options out of mere moral anger or disgust.

2.4 Preference for Social Networking Tools (Exploratory Measures).

In the last part of Study 2, embedded in the demographic information section, we also included an exploratory measure tapping on participants’ opinions toward various social media products to examine whether exposure to moral violations would carry over to influence participants’ attitude toward social network tools, which can facilitate their goal of rallying social support from the virtual community in order to feel being in the majority.

Participants were asked to indicate their attitudes toward seven major existing social network tools including Facebook, Twitter, Google +, Youtube, Instagram, Whatsapp, and Tumblr. For each social network tool, participants first indicated whether they are a current user of the product (1 = yes; 0 = no). If yes, they then indicated their attitude toward each of the social network tools along two dimensions (1 = very undesirable /not willing to use it frequently to 9 = very desirable /willing to use it frequently). If not, they then reported their attitude toward each of the social network tools along two dimensions anchored from 1 = very undesirable /not willing to join it to 9 = very desirable /willing to join it; \(r’s > .81, p’s < .001\). The two items were averaged to provide an index of participants’ desirability for each of the seven social network tools.

The results of participants’ preference for social network tools as a function of their current status and experimental condition were presented below (see Table S4). For current users, we did not observe any significant differences except for Youtube. Participants in the moral violation condition expressed a greater desire for Youtube, compared to those in the innocent error condition (7.61 vs. 6.91, \(F(1, 244) = 6.03, p < .05\)). For current non-users, we did find that participants expressed a more favorable attitude toward Facebook, Whatsapp, Instagram, and Tumblr after witnessing moral violation (vs. innocent error or natural disaster).
Additional Measures and Analyses – Study 3

3.1 The Role of Need to Belong

As in study 2, we measured participants’ need to belong using the need to belong scale (Leary et al. 2013; counterbalanced with the conformist attitudes scale). As in Study 2, need to belong also moderated the effect of exposure to cheating on conformity. Given that incentive structure did not have any effects on choice, we conducted a binary logistic regression on participants’ magnet choice with exposure to cheating (1 = cheater present; −1 = cheater absent), need to belong (α = .81; averaged and mean-centered), and their interaction as predictors. The analysis revealed a significant main effect of exposure to cheating (b = 0.44, SE = 0.17, z = 2.58, p = .01), a significant main effect of need to belong (b = 0.93, SE = 0.21, z = 2.29, p = .022), and a significant need to belong × exposure to cheating interaction (b = 0.47, SE = 0.20, z = 2.29, p = .022). Floodlight analysis revealed that for participants who scored at −0.19 (5.52 if unstandardized) or above on the need-to-belong scale (59.44% of the participants), the difference between the cheater-present and cheater-absent conditions was significant. These results confirmed that participants with high (vs. low) need to belong were influenced more by exposure to cheating.

3.2 The Role of Moral Emotions

After participants responded to the conformist attitude and need to belong scales, participants also reported their mood (1 = sad; 9 = happy), moral anger (averaged 3-items: angry, upset, and hostile; α = .85) and disgust, all from 1 (not at all) to 9 (extremely). A 2 (exposure to cheating) × 2 (incentive structure) ANOVA yielded that participants reported experiencing marginally more moral anger (F(1, 176) = 3.70, p = .056) and disgust (F(1, 176) = 3.25, p = .073) in cheater present conditions (Anger: M = 3.60, SD = 1.58; disgust: M = 3.16, SD = 1.93) than in cheater absent conditions (Anger: M = 3.13, SD = 1.69; disgust: M = 2.65, SD = 1.98). However, mediation analyses revealed that neither moral anger nor disgust mediated the observed effect. No significant mood differences were observed across conditions (ps > .13).

Additional Measures and Analyses – Study 4

4.1 The Role of Mood, Arousal, and Fear

After participants responded to the manipulation check items in the main study 4, participants also reported their mood, arousal, and fearful feeling, all from 1 (not at all) to 9 (extremely). No significant differences were observed in participants’ mood, arousal, or fearful feeling (ps > .30), and regression analyses revealed that none of them could predict participants’ conformity tendency in brand choice (ps > .62). The main effect of condition on conformity tendency remained significant even after controlling for these factors (F(2, 232) = 3.74, p = .025; see Table S2 for means and SDs).

4.2 Results by Product Category

To test whether the pattern of results is similar across the five choices, we first conducted reliability test and factor analysis for the 5 items used to measure brand preference: the 5 items
yielded high reliability ($\alpha = .76$). Moreover, a factor analysis of these items revealed that only one factor with an eigenvalue greater than one (eigenvalue = 2.56) emerged, suggesting that the 5 items are capturing the same underlying construct of conformity tendency.

We then conducted more statistical analyses: a) we checked and listed the percentage of participants choosing the majority, middle, and minority options in Figures S1a–S1c below as a function of moral violation condition. As expected, the choice patterns are quite similar across product categories, especially the choice pattern for the brand with the highest market share; b) we also conducted a mixed effects binary logistic regression with a random intercept to control for repeated measures (see Chan, Berger and Van Boven 2012 for a similar analysis). The analysis revealed that people were more likely to choose the majority-endorsed, highest market share brand after reading the unpunished, corrupt CEO article than those in either the punished, corrupt CEO condition ($b = 0.66, SE = 0.31, Wald = 4.56, p = .033$) or the control condition ($b = 0.80, SE = 0.20, Wald = 6.72, p = .010$). Ordered logit regression with consumers’ coded choice of the majority (coded as “3”), middle (coded as “2”), and minority (coded as “1”) option revealed that compared to the control condition, exposure to the unpunished corrupt CEO ($b = 0.72, SE = 0.19, t = 3.79, p < .05$) increased participants’ tendency to choose the majority option whereas exposure to the punished corrupt CEO ($b = 0.09, SE = 0.17, t = 0.54, n.s.$) did not (see Table S4 for details of the results).

--- Insert Figures S1a-S1c & Table S4 about here ---

**Additional Measures and Analyses – Study 5**

5.1 *Manipulation Check of the Two Book Club Options*

As in Study 2, after participants indicated their choice and preference for each of the two book clubs, as manipulation checks, participants also rated the perceived popularity (“The slogan emphasizes on the popularity of joining the club”, “The slogan emphasizes the book club’s mission to help people get together”); averaged to form an index of popularity appeal; $r_{majority\_club} = .51, p < .001$; $r_{minority\_club} = .61, p < .001$ and perceived uniqueness (“The slogan emphasizes on the uniqueness of joining the club”, “The slogan emphasizes the message that joining the club will make one stand out from the crowd”; averaged to form an index of uniqueness appeal; $r_{majority\_club} = .69, p < .001$; $r_{minority\_club} = .63, p < .001$) of each of the two book clubs (all from 1 = *strongly disagree* to 9 = *strongly agree*; measures adapted from Huang et al. 2014). Repeated analyses were conducted to verify the effectiveness of the manipulation. The analyses showed that the majority book club was indeed rated as more popular ($M_{majority} = 6.71, SD = 1.75$; $M_{minority} = 4.25, SD = 2.03, F(1, 301) = 200.83, p < .001$), whereas the minority book club was rated as more unique ($M_{majority} = 7.76, SD = 1.33; M_{minority} = 3.74, SD = 2.22; F(1, 301) = 595.97, p < .001$), confirming the validity of the manipulation of majority versus minority book clubs.

5.2 *Relative Preference for Majority (vs. Minority) Book Club*

Consistent with the results using book club choice as the dependent variable, a 2 (moral violation) × 2 (majority morality) ANOVA with moral violation condition (1 = moral violation; −1 = innocent error) and nature of the majority (1 = immoral; −1 = control) as the independent
variables, and participants relative preference the majority (vs. minority) book club (i.e., participants’ rated likelihood to join the majority book club subtracted by their rated likelihood to join the minority book club) yielded a significant main effect of nature of majority \((F(1, 298) = 18.37, p < .001)\) as well as a significant moral violation × majority morality interaction effect \((F(1, 298) = 6.30, p = .013)\). Specifically, participants in the majority control conditions expressed a greater preference for the majority book club if they had read the moral violation news article than if they had read the innocent error article \((M_{\text{moral violation}} = -0.15, SD = 4.10 \text{ vs. } M_{\text{innocent error}} = -1.93, SD = 3.94; F(1, 298) = 7.71, p = .006)\). In the immoral majority conditions, however, the difference disappeared and participants in both the moral violation and the innocent error condition had relatively low preferences for the majority book club \((M_{\text{moral violation}} = -3.22, SD = 3.60 \text{ vs. } M_{\text{innocent error}} = -2.73, SD = 3.93; F(1, 298) = .59, p = .44)\).
II. STUDY STIMULI

STUDY 1: MANIPULATIONS AND SCALE MEASURES

Part a. News Article Excerpts

*News Article for the Moral Violation Condition*

BY JAMES SUROWIECKI
THE FINANCIAL PAGE | July 30, 2012 ISSUE

In order to work well, markets need a basic level of trust. As Alan Greenspan once said, —In virtually all transactions, we rely on the word of those with whom we do business. So what happens to a market in which the most fundamental assumptions turn out to be lies? That is the question in a scandal that has roiled the banking industry all summer. The LIBOR (or the London Inter-bank Offered Rate) is the most important set of numbers in the global financial system. Used as a benchmark for interest rates around the world, it’s assembled by asking a panel of big banks to estimate what it would cost them to borrow money today if they had to.

Hundreds of trillions of dollars in derivatives, corporate loans, and mortgages are pegged to these rates. Yet we now know that for years LIBOR rates were rigged. Barclays has agreed to pay nearly half a billion dollars to regulators for its manipulations, and a host of other big banks are under investigation for similar misdeeds.

Rigging LIBOR was shockingly easy. The estimates aren’t audited. They’re not compared with market prices. And LIBOR is put together by a trade group, without any real supervision from government regulators. In other words, manipulating LIBOR didn’t require any complicated financial hoodoo. The banks just had to tell some simple lies. They had plenty of reasons to do so. At Barclays, for instance, traders were making big bets on derivatives whose value depended on LIBOR; changing rates by even a tiny bit could be exceptionally lucrative. In the years leading up to the financial crisis, these manipulations were, in the words of the Commodity Futures Trading Commission, —common and pervasive. The result was that, instead of reflecting what was real, LIBOR reflected what the banks wanted us to believe was real.

The most striking thing about this scandal is that it was predictable—yet no one did anything to stop it. So how do we rein them in? We could start by making it harder for the banks to game the system—LIBOR, for instance, should be revamped so that it reflects actual market rates, not self-serving guesses. Bankers were asked a simple question, and they lied in response. This new approach would be intrusive and overbearing, and would make it harder for bankers to do what they want. In other words, it’s exactly what the financial industry needs.

It is reported that this scandal would cause several different types of economic harm and hurt the sound growth of the global financial market.
In order to work well, markets need a basic level of efficiency. As Alan Greenspan once said, —In virtually all transactions we rely on those with whom we do business. So what happens to a market in which the most fundamental assumptions turn out to be flawed? That is the question that has perplexed the financial industry all summer. The LIBOR (or the London Inter-bank Offered Rate) is the most important set of numbers in the global financial system. Used as a benchmark for interest rates around the world, it’s assembled by asking a panel of industry analysts to estimate what it would cost them to borrow money today if they had to. Hundreds of trillions of dollars in derivatives, corporate loans, and mortgages are pegged to these rates. Yet we now know that for years LIBOR rates were inaccurate. One group has agreed to spend nearly half a billion dollars to correct for its unintentional errors, and a host of others are being studied for similar mistakes.

Miscalculating LIBOR was surprisingly easy. The estimates aren’t verified. They’re not compared with market prices. And LIBOR is put together by a trade group, without any real involvement from government. In other words, miscalculating LIBOR didn’t require any complicated financial instruments. The group just had to make their best estimates. They had plenty of reasons to do so. At Barclays, for instance, traders were making big bets on derivatives whose value depended on LIBOR; changing rates by even a tiny bit could be exceptionally important. In the years leading up to the financial crisis, these innocent mistakes were, in the words of the Commodity Futures Trading Commission, —common and pervasive. The result was that, instead of reflecting what was real, LIBOR reflected what the industry believed was real.

The most striking thing about this is that it was unforeseeable—no one could do anything to stop it. So how do we improve this? We could start by making it harder for the system to go awry—LIBOR, for instance, should be revamped so that it reflects actual market rates, not best guesses. Analysts were asked a question, but they were unable to give precise responses. This new approach would be helpful and effective, and would make it easier for everyone. In other words, it’s exactly what the financial industry needs.

It is reported that the inaccuracy of the LIBOR rate would cause several different types of economic harm and hurt the sound growth of the global financial market.
News Article for the Natural Disaster Control Condition

BY JAMES SUROWIECKI
THE FINANCIAL PAGE | July 30, 2012 ISSUE

In recent years, North Americans have experienced a steady increase in the number of storms, floods, droughts and other extreme weather events. In fact, the average number of natural catastrophes per year has risen 250% since the 1970s. At the same time, populations and economic activity continue to grow in vulnerable cities and regions.

The United Nations estimates that, by 2050, almost 70% of the world's population will reside in cities - many of which are located near coasts, floodplains and fault lines at risk for natural hazards. As a result, disasters now tend to exact higher economic tolls. Indeed, the average yearly economic cost of disasters has quadrupled since the 1980s.

Here in US and in Canada, these trends are clearer than ever. In U.S., flooding, for instance, intensifies in its many regions, even in areas where total precipitation is projected to decline. In Canada, the recent floods in Southern Alberta and in the Greater Toronto Area are a stark reminder of the country's vulnerability. The Alberta floods were the costliest natural disaster in Canadian history and the Toronto floods were the costliest natural disaster in Ontario's history.

Large natural disasters have a negative impact on economic outcomes. A typical disaster lowers gross domestic product (GDP) growth by approximately one percentage point and GDP by about 2%. However, major catastrophes can have even more pronounced effects. The 1995 Kobe earthquake, for instance, reduced residents' GDP per capita by 13% over the long term.

How quickly an economy rebounds depends on the extent to which losses are contained to avoid contagion to the rest of the economy. After Hurricane Katrina, for example, each dollar in direct losses led to an additional 39 cents in indirect losses. Natural disasters can also negatively affect public finances and debt sustainability. When a catastrophe strikes, government finances are hurt two ways: tax revenues drop as a result of a reduction in economic activity, while at the same time, public spending increases to pay for emergency relief and reconstruction. A recent World Bank study found that, on average, disasters lower tax revenues by 10% and raise government spending by 15%, leading to a combined 25% increase in budget deficits.

It is reported that the more frequent extreme weather and natural disaster would cause several different types of economic harm and hurt the sound growth of the global financial market.
STUDY 2: MANIPULATIONS AND SCALE MEASURES

Part a. Information of the Two Book Clubs

Club A (“Words of Wisdom” Book Club): “We have 513 book readers. We are dedicated to providing a friendly environment to discuss books that inspire rewarding conversations on subjects that are of common interest to all of our group members. We emphasize commonality among our group members. Our slogan is ‘Read to Belong, Are You One of Us?’”

Club B (“Beyond Words” Book Club): “We have 43 book readers. We are dedicated to engaging our members in readings and having lively and stimulating discussions on unique subjects. We regard the unique traits and characteristics of our group members as very important. Our slogan is ‘Read To Stand Out from the Crowd’”

Part b. Scale Measure

Conformist Attitudes Scale:
1. Imposing tough laws and punishments, even to minor crimes, is an effective way to preserve the fiber of a society.
2. Constantly breaking social norms often has harmful, unintended consequences.
3. The most important part of any game is a well-defined set of rules.
4. Obedience and respect for authority are the most important virtues children should learn.
5. People are constantly prying into matters that should remain unquestioned.
6. Too many new ideas in one country can cause its values to erode.
STUDY 4: STORIES USED IN THE MANIPULATIONS

Unpunished-Corrupt-CEO Condition:

Harrison Buchanan is the CEO of Emerson Technologies (ET). ET was founded in 1923 and has been providing a wide range of electronic products and consulting services to the technology industry. For many years, ET was a market leader in the technology industry producing innovative and stylish products.

Three years ago, Harrison Buchanan became CEO. Since Mr. Buchanan took office, ET has seen its position in the industry gradually weaken as a result of a series of reforms he introduced. One of these was an expansion plan that completely shifted resources from the most established and profitable graphic chipset business to support the various newly acquired start-up enterprises. His plan to expand ET not only caused the first loss ever in its history, but also unprecedentedly increased the operating cost of ET to what analysts described as an “unsustainable” level. Mr. Buchanan dealt with this crisis with another “consolidation plan” which featured the downsizing ET’s R&D department, which he described as “too costly.” Furthermore, he implemented the layoff plan by eliminating the highest paid employees first. As a result of this plan, ET survived the first crisis but unfortunately was lead into another: ET lost many of its best researchers, who also happened to be among the highest paid, and so their competitive advantages over their competitors eroded. More recently, it has discovered that Mr. Buchanan spent over $2,230,000 during his time as CEO purchasing luxurious vehicles for his personal use, hosting lavish parties, and renovating his office and home. One example of his extravagant purchases was a $26,500 coffee table that he put in his office. At the end of the last fiscal year, ET’s stock fell by 15%. Yet in spite of the decline in stock, ET’s board of directors voted to retain Mr. Buchanan and to “reward him for his visionary leadership during difficult times” with a $3,000,000 bonus which, along with stock options that he cashed prior to ET’s stock plunge, is worth an additional $7,000,000 in pay above his $2,000,000 salary.
**Punished-Corrupt-CEO Condition:**

Harrison Buchanan is the CEO of Emerson Technologies (ET). ET was founded in 1923 and has been providing a wide range of electronic products and consulting services to the technology industry. For many years, ET was a market leader in the technology industry producing innovative and stylish products.

Three years ago, Harrison Buchanan became CEO. Since Mr. Buchanan took office, ET has seen its position in the industry gradually weaken as a result of a series of reforms he introduced. One of these was an expansion plan that completely shifted resources from the most established and profitable graphic chipset business to support the various newly acquired start-up enterprises. His plan to expand ET not only caused the first loss ever in its history, but also unprecedentedly increased the operating cost of ET to what analysts described as an “unsustainable” level. Mr. Buchanan dealt with this crisis with another “consolidation plan” which featured the downsizing ET’s R&D department, which he described as “too costly.” Furthermore, he implemented the layoff plan by eliminating the highest paid employees first. As a result of this plan, ET survived the first crisis but unfortunately was lead into another: ET lost many of its best researchers, who also happened to be among the highest paid, and so their competitive advantages over their competitors eroded. More recently, it has discovered that Mr. Buchanan spent over $2,230,000 during his time as CEO purchasing luxurious vehicles for his personal use, hosting lavish parties, and renovating his office and home. One example of his extravagant purchases was a $26,500 coffee table that he put in his office. At the end of the last fiscal year, ET’s stock fell by 15%. After their yearly performance review of Mr. Buchanan’s performance, ET’s board of directors unanimously agreed to fire him for underperformance. Furthermore, they threatened to file a lawsuit against Mr. Buchanan for inappropriately using company resources for personal benefit. Facing the prospect of a court battle, Mr. Buchanan settled with the company and agreed to pay “a substantial amount” of money to the company to compensate them for their losses.
Control Condition (A Typical Day of a CEO):

Harrison Buchanan is the CEO of Emerson Technologies (ET). ET was founded in 1923 and has been providing a wide range of electronic products and consulting services to the technology industry. For many years, ET was a market leader in the technology industry producing innovative and stylish products.

As the CEO, Harrison receives $2,000,000 per year as his salary. Below describes a typical day experience of its CEO Harrison Buchanan:

He dedicates a large part of his day to try and absorb latest news, events and information and what it means for their business. As far as external environment goes, he loves to refer to newspapers, magazines, and CNBC every single day while he turns to internal reports, consultant decks or phone calls to their contacts for business-specific information.

He also spends a disproportionate time of his life in meetings. While people may have differing opinions on the overall value of time spent in meetings, they remain a significant part of the CEO’s diary. As the CEO, Harrison tries and spends a good amount of time meeting clients and fostering business relationships. Internal meetings of the Board, committees, departments, external vendors etc. are omnipresent, but Harrison has learnt to keep them really short and simple.

A day in the life of a CEO is a busy one, and one day is never the same. Like Harrison, most CEOs report that they wake up to emails and go to bed to emails, and being at home never means that they are off. With all of this responsibility, you can expect to earn a sizable salary. The average salary reported for Chief Executive Officers in the United States is $759,189 per year. This average is enough to motivate many individuals who want to be leaders to climb their way up the ladder so that they can experience a typical day for a CEO for themselves.

As a typical CEO, he spends more time on the road in a year than an average person spends in his entire working life. Apart from this, he also pursues a sport/hobby including golf, tennis or just a simple walk.
III ADDITIONAL STUDIES

Pilot Test of Study 1

Before commencing a full test of the predictions in Study 1, a pilot study was conducted to (a) check whether the products used to represent the majority-endorsed and the minority-endorsed options were equally attractive to participants, (b) verify the effectiveness of the manipulation using news comprehension task, and (c) provide a pilot testing for the predicted main effect of exposure to moral violations on consumers’ subsequent conformity tendency in real choice.

Method

59 participants (14 male; $M_{\text{age}} = 19.32$, $SD_{\text{age}} = 1.40$) from University of Toronto participated for course credit. The procedures of this pilot test were exactly the same as the main Study 1 except that (a) we only included the moral violation and innocent error conditions, and (b) we did not measure participants’ perceived social support, desire for unique consumer products, and their moral identity. One participant misunderstood the experimenters’ instructions and three participants refused to choose neither magnet, leaving us a final sample of 55 participants for further analysis.

Results and Discussion

Manipulation checks: As expected, participants in the moral violation condition ($M = 7.05$, $SD = 1.35$) perceived bankers’ behaviors as more immoral (averaged 4-item scale; $\alpha = .87$) than those in the innocent error condition ($M = 5.93$, $SD = 1.68$; $F(1, 53) = 7.55$, $p = .008$), suggesting that the manipulation of moral violation was successful. In addition, participants rated the articles as equally realistic ($M_{\text{moral violation}} = 5.79$, $SD = 2.33$; $M_{\text{control}} = 5.26$, $SD = 1.85$; $F(1, 53) = .86$, $p = .359$) and were equally involved in the news comprehension task ($M_{\text{moral violation}} = 5.51$, $SD = 1.93$; $M_{\text{innocent error}} = 4.98$, $SD = 1.77$; $F(1, 53) = 1.16$, $p = .287$).

Choice of Magnet. As predicted, participants who were in the moral violation condition were more likely to choose from the $\frac{1}{4}$ full box magnets (i.e., the majority-endorsed option rather than minority-endorsed option), compared with those who were in the innocent error condition ($M_{\text{moral violation}} = 64.3\%$ vs. $M_{\text{innocent error}} = 40.7\%$; $\chi^2(1) = 3.06$, $p = .080$). The difference was also confirmed in a binary logistic regression ($b = 0.96$, $SE = 0.56$, $z = 1.73$, $p = .083$) with magnet choice (1 = choosing the majority-endorsed magnet; 0 = choosing the minority-endorsed magnet) as the dependent variable and moral violation condition (1 = moral violation; 0 = innocent error).

Desire for Control, Power, and Status Seeking. Analysis of variance results showed that the news article condition did not influence participants’ desire for control ($\alpha = .83$; $M_{\text{moral violation}} = 5.37$, $SD = 1.46$; $M_{\text{innocent error}} = 4.91$, $SD = 1.33$; $F(1, 53) = 1.49$, $p = .228$), power ($\alpha = .83$; $M_{\text{moral violation}} = 4.42$, $SD = 2.14$; $M_{\text{control}} = 4.15$, $SD = 1.48$; $F(1, 53) = 0.30$, $p = .588$) or status seeking ($r = .71$, $p < .001$; $M_{\text{moral violation}} = 3.84$, $SD = 1.58$; $M_{\text{innocent error}} = 3.59$, $SD = 1.80$; $F(1, 53) = 0.29$, $p = .591$). These results suggest that desire for control, power, and status seeking cannot account for the observed effect.

Moreover, repeated analyses suggested that the white and yellow magnets were rated similarly in terms of perceived quality ($M_{\text{white}} = 4.75$, $SD = 1.79$; $M_{\text{yellow}} = 4.78$, $SD = 1.72$; $F(1,$
54) = 0.02, \( p = .887 \), masculinity \( (M_{\text{white}} = 4.42, SD = 1.51; M_{\text{yellow}} = 4.78, SD = 1.36; F(1, 54) = 1.57, p = .216) \), attractiveness \( (M_{\text{white}} = 5.29, SD = 2.04; M_{\text{yellow}} = 4.67, SD = 2.02; F(1, 54) = 1.87, p = .177) \), or liking \( (M_{\text{white}} = 5.29, SD = 1.80; M_{\text{yellow}} = 4.76, SD = 1.91; F(1, 54) = 1.84, p = .181) \) suggesting that none of these factors could explain the choice pattern we observed.

To sum, the results of the pretest gave us confidence in the effectiveness of the manipulations and the basic main effect of exposure to moral violations on consumers’ choice of majority-endorsed (vs. minority-endorsed) products.

**Pretest of Study 4**

Before conducting the main study, we conducted a pretest with 102 participants (61 males; \( M_{\text{age}} = 32.98 \) years) from Amazon’s Mechanical Turk (different participants from those in the main study) to verify the assumption that witnessing moral violations would lead to perceived threat to social order, which would in turn increase consumers’ endorsement of conformist attitudes. Five participants did not pass the attention check question and were therefore excluded from further analyses (final \( N = 97 \)).

**Method**

We manipulated exposure to moral violations using exactly the same procedure as in the pretest. The average time participants spent reading the article was 132.44 seconds and was similar across conditions \( (p > .64; \text{see Table 1}) \). After reading the assigned CEO story, participants responded to the index of perceived threat to social order \( (\alpha = .94) \) used in the main Study 4. Participants also responded to the same conformist attitudes scale \( (\alpha = .84) \) used in Studies 2 and 3. The order of the two scales was counterbalanced. Finally, participants responded to the same manipulation check items as we used in the main Study 4.

**Results and Discussion**

**Manipulation Checks.** As expected, participants in the two corrupt-CEO conditions perceived the CEO as more immoral than did those in the control condition \( (M_{\text{unpunished corrupt}} = 8.02, SD = 1.39; M_{\text{punished corrupt}} = 7.76, SD = 1.62; M_{\text{control}} = 2.99, SD = 1.24; F(2, 94) = 121.11, p < .001) \). And although participants in the two corrupt-CEO conditions believed that the CEO should be punished to the same extent \( (p > .23) \), those in the unpunished- (vs. punished-) corrupt-CEO condition reported that the CEO did not receive adequate punishment for his bad deeds \( (p < .001) \), confirming the success of the punishment manipulation.

**Results.** Participants in the unpunished-corrupt-CEO condition indeed perceived greater threat to social order \( (M = 7.18, SD = 1.68) \) than did those in the punished-corrupt-CEO \( (M = 5.41, SD = 1.82; F(1, 94) = 17.02, p < .001) \) or the control condition \( (M = 4.25, SD = 1.76; F(1, 94) = 44.41, p < .001) \). A similar pattern emerged for conformist attitudes: Participants in the unpunished-corrupt-CEO condition \( (M = 5.33, SD = 1.46) \) expressed greater conformist attitudes than did those in the punished-corrupt-CEO \( (M = 4.47, SD = 1.35; F(1, 94) = 5.06, p = .03) \) or the control condition \( (M = 4.23, SD = 1.86; F(1, 94) = 7.99, p = .01) \).

To assess the role of perceived threat to social order in driving the effect of exposure to moral violations on conformist attitudes, we conducted a mediation analysis (Hayes and Preacher...
The first contrast compared the unpunished-corrupt-CEO condition to the punished-corrupt-CEO condition. The second contrast compared the unpunished-corrupt-CEO condition to the control condition. As hypothesized, perceived threat to social order mediated the effect of the first contrast on conformist attitudes ($b = -0.6459$, $SE = 0.2219$; 95% CI: [-1.1798, -.2854]). Moreover, perceived threat to social order also mediated the effect of the second contrast on conformist attitudes ($b = -1.0695$, $SE = 0.2795$; 95% CI: [-1.6722, -.5790]). These results suggest that greater perceived threat to social order was indeed a precursor for the heightened conformist attitudes after exposure to a moral violation (omnibus indirect effect: $b = 0.1140$, $SE = 0.0375$; 95% CI: [.0519, .1999]). The alternative mediation model (exposure to unpunished corrupt CEO $\rightarrow$ conformist attitudes $\rightarrow$ perceived threat to social order) was not supported (omnibus indirect effect: $b = 0.0314$, $SE = 0.0353$; 95% CI: [-.0035, .1163]).

Based on the finding that exposure to a moral violation heightens conformist attitudes because it induces greater perceived threat to social order, we tested the complete mechanisms underlying the effect through a multistage mediation by perceived threat to social order and then conformist attitudes.

**Conceptual Replication of Study 5**

In the Study 5, we found that exposure to moral violations does not always increase conformity tendency in consumption. Specifically, when choosing the majority-endorsed option is viewed as being complicit with the immoral others (e.g., the majority option is endorsed by immoral population) and may therefore further disrupt the balance of social order, the effect disappeared.

**Methods**

We conducted a conceptual replication of Study 5 by using another manipulation of immoral majority. In the original Study 5, the immoral majority (i.e., financial industry employees) is related to the initial moral violation that participants were exposed to. In the new conceptual replication, we intended to test whether the effect can generalize to manipulations that are perceived as immoral, but has nothing to do with the initial moral violation.

Three hundred and three participants recruited from Amazon’s Mechanical Turk online panel (159 males; $M_{age} = 37.29$ years) took part in this study for payment (US$0.5). They were randomly assigned to conditions of a 2 (exposure to: moral violation vs. innocent error) $\times$ 2 (majority morality: immoral vs. control) between-subjects design. We followed exactly the same procedure as the original Study 5 except that we changed the manipulation of the immoral majority conditions. Instead of using financial industry employees versus non-profit organization employees, participants were told that most members of the majority book club were tobacco industry employees, whereas most members of the minority book club were construction industry employees.

We selected these two industries through a pretest with 52 participants (29 males; $M_{age} = 34.23$ years) recruited from the same online participant pool. Participants were told that the study was concerned about people’s perceptions of a variety of different industries including tobacco
industry, construction industry, entertainment industry, technology industry, education industry, healthcare industry, as well as the general population. For each industry, participants rated the employees along four dimensions: (a) morality (1 = very immoral, 9 = very moral), (b) income level (1 = very low income, 9 = very high income), (c) education level (1 = very poorly educated, 9 = very well educated), and (d) gender composition of the industry (1 = consisting of mainly female employees; 9 = consisting of mainly male employees). We omitted the gender composition item for the general population. As expected, participants evaluated the tobacco industry employees ($M = 4.08, SD = 2.00; F(1, 51) = 19.02, p < .001$) as less moral, but the construction industry employees ($M = 5.92, SD = 1.98; F(1, 52) = 3.74, p = .059$) as marginally more moral, than the general population ($M = 5.31, SD = 1.35$). Moreover, they perceived employees of these two industries as comparable in terms of income level ($M_{tobacco} = 5.12, SD = 1.93; M_{construction} = 4.67, SD = 1.87; F(1, 51) = 2.75, p > .10$), education level ($M_{tobacco} = 5.50, SD = 1.73; M_{construction} = 5.10, SD = 1.95; F(1, 51) = 1.93, p > .17$), and gender composition ($M_{tobacco} = 6.40, SD = 1.65; M_{construction} = 6.81, SD = 1.40; F(1, 51) = 2.40, p > .12$). Based on these results, we selected tobacco industry (immoral/majority) and construction industry (moral/minority) in the manipulations.

As in the main Study 5, prior to analysis, eighteen participants were excluded for failing to pass an attention check. Moreover, post-experimental probe revealed that twenty participants in the immoral majority conditions were unaware of the occupation information of most members for each book club (which manipulated the perceived morality of each book club) and the data of these participants were excluded from further analysis. Screening based on these two exclusion criteria left us a final sample of 267.

Moreover, we also asked participants in the immoral majority conditions whether they themselves worked in the tobacco industry or the construction industry. None of our participants worked in the tobacco industry, and only three out of 124 indicated that they worked in the construction industry.

**Results and Discussion**

*Manipulation Checks.* As expected, participants in the moral violation condition ($M = 8.08, SD = 1.20$) perceived bankers involved in the LIBOR incident as more immoral than did those in the innocent error condition ($M = 6.30, SD = 1.89; F(1, 265) = 86.38, p < .001$). Moreover, all participants perceived that the LIBOR incident described in the news article would damage the economy to a similar extent ($M_{moral\_violation} = 5.65, SD = 1.88; M_{innocent\_error} = 5.27, SD = 2.01; F(1, 265) = 2.57, p > .11$). In addition, all participants perceived the news article to be realistic since the realism ratings were significantly higher than the scale midpoint ($M_{moral\_violation} = 6.98, SD = 1.87, t_{moral\_violation vs.\ midpoint} (138) = 12.50, p < .001; M_{innocent\_error} = 6.57, SD = 1.91, t_{innocent\_error vs.\ midpoint} (127) = 9.32, p < .001$) and were comparable across conditions ($F(1, 265) = 3.12, p > .07$). No significant difference was observed in participants’ involvement across conditions ($M_{moral\_violation} = 7.66, SD = 1.62; M_{innocent\_error} = 7.66, SD = 1.71; F < 1$). Finally, for majority morality manipulation check, participants indeed rated employees of tobacco industry ($M = 4.37, SD = 2.03$) as less moral than those of construction industry ($M = 6.34, SD = 1.40; F(1, 123) = 96.52, p < .001$).
**Book Club Choice.** A binary logistic regression model with moral violation (1 = moral violation; −1 = innocent error), majority morality (1 = immoral; −1 = control), and their interaction as predictors of book club choice (1 = choosing the majority book club; 0 = choosing the minority book club) yielded a significant main effect of majority morality (\(b = -0.53, SE = 0.15, z = -3.49, p = .001\)) and a significant moral violation × majority morality interaction effect (\(b = -0.34, SE = 0.15, z = -2.23, p = .026\)). Planned contrast revealed that exposure to a moral violation (vs. an innocent error) increased preference for the majority book club (47.3% vs. 24.6%; \(\chi^2(1) = 7.92, p = .005\)) for those in the majority control conditions. In the immoral majority conditions, participants had relatively lower preferences for the majority book club and their preferences did not significantly differ between the moral violation and innocent error conditions (13.8% vs. 18.6%, respectively; \(\chi^2(1) = .53; p > .46\)).

Using participants’ relative preference for the majority (vs. minority) book club yielded the same conclusion. Specifically, a 2 (moral violation) × 2 (majority morality) ANOVA with moral violation condition (1 = moral violation; −1 = innocent error) and nature of the majority (1 = immoral; −1 = control) as the independent variables, and participants relative preference the majority (vs. minority) book club (i.e., participants’ rated likelihood to join the majority book club subtracted by their rated likelihood to join the minority book club) yielded a significant main effect of nature of majority (\(F(1, 263) = 19.39, p < .001\)) as well as a significant moral violation × majority morality interaction effect (\(F(1, 263) = 5.14, p = .024\)). Specifically, participants in the majority control conditions expressed a greater preference for the majority book club if they had read the moral violation news article than if they had read the innocent error article (\(M_{\text{moral violation}} = 0.16, SD = 4.14\) vs. \(M_{\text{innocent error}} = -1.57, SD = 2.94\); \(F(1, 263) = 8.87, p = .003\)). In the immoral majority conditions, however, the difference disappeared and participants in both the moral violation and the innocent error condition had relatively low preferences for the majority book club (\(M_{\text{moral violation}} = -2.68, SD = 3.45\) vs. \(M_{\text{innocent error}} = -2.47, SD = 3.09\); \(F(1, 263) = .11, p = .75\)).

**Discussion.** The results of this study conceptually replicate the findings in the original Study 5 by showing that when choosing the majority-endorsed option is viewed as being complicit with the immoral others (even if the immoral others are unrelated to the original moral violation) and may therefore further disrupt the balance of social order, the effect disappeared.
### Table S1. Perceived Social Support Measures

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How many close friends do you have: ____________</td>
<td></td>
</tr>
<tr>
<td>2. How many immediate family members (excluding yourself) do you have? ____________</td>
<td></td>
</tr>
<tr>
<td>Note: Immediate family includes a person’s parents, spouses, siblings and children.</td>
<td></td>
</tr>
<tr>
<td>3. I have __________ social support when things go wrong: (1 = very little; 9 = a lot of)</td>
<td></td>
</tr>
<tr>
<td>4. My friends and relatives are _________ when I am in need. (1 = not accessible at all; 9 = very accessible)</td>
<td></td>
</tr>
<tr>
<td>5. Please indicate to what extent you agree or disagree with the following statements:</td>
<td></td>
</tr>
<tr>
<td>(a) There is a special person who is around when I am in need. (1 = strongly disagree, 9 = strongly agree)</td>
<td></td>
</tr>
<tr>
<td>(b) There is a special person with whom I can share my joys and sorrows. (1 = strongly disagree, 9 = strongly agree)</td>
<td></td>
</tr>
<tr>
<td>(c) My friends really try to help me. (1 = strongly disagree, 9 = strongly agree)</td>
<td></td>
</tr>
<tr>
<td>(d) I can count on my friends when things go wrong. (1 = strongly disagree, 9 = strongly agree)</td>
<td></td>
</tr>
<tr>
<td>(e) There is a special person in my life who cares about my feelings. (1 = strongly disagree, 9 = strongly agree)</td>
<td></td>
</tr>
</tbody>
</table>
Table S2. Summary of Results for Additional Measures (Studies 1-4)

<table>
<thead>
<tr>
<th>Study 1 (N = 210)</th>
<th>Moral Violation</th>
<th>Innocent Error</th>
<th>Natural Disaster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire for control</td>
<td>5.28(1.02)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.40(0.78)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.36(1.24)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Desire for power</td>
<td>4.30(1.35)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.59(1.14)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.51(1.35)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Desire for status</td>
<td>4.25(1.50)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.62(1.49)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.59(1.64)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>DUCP</td>
<td>5.56(1.28)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.84(1.47)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.39(1.36)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Internalization</td>
<td>6.26(0.72)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.10(0.85)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.08(1.04)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Symbolization</td>
<td>4.76(1.09)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.14(1.24)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.36(0.98)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Mood</td>
<td>5.84(1.64)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.86(1.48)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.67(1.29)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Arousal</td>
<td>3.65(2.44)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.67(2.04)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.28(1.82)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Powerful feeling</td>
<td>5.00(1.55)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.29(1.52)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.38(1.63)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study 2 (N = 271)</th>
<th>Moral Violation</th>
<th>Innocent Error</th>
<th>Natural Disaster</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral anger</td>
<td>4.57(2.27)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.65(2.13)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>3.00(1.91)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Moral disgust</td>
<td>5.22(2.78)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.23(2.68)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>2.77(2.21)&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Positive affect index</td>
<td>5.12(1.67)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.15(1.92)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.96(1.79)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Negative affect index</td>
<td>2.01(1.37)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1.44(0.80)&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1.58(1.05)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study 3 (N = 180)</th>
<th>Cheater Present</th>
<th>Cheater Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral anger</td>
<td>3.60(1.58)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.13(1.69)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Moral disgust</td>
<td>3.16(1.93)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.65(1.98)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Mood</td>
<td>5.55(1.65)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.39(1.61)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study 4 (N = 238)</th>
<th>Unpunished-Corrupt-CEO</th>
<th>Punished-Corrupt-CEO</th>
<th>Typical Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood</td>
<td>6.02(1.90)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.35(1.54)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.39(1.46)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Arousal</td>
<td>4.02(2.28)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.37(2.43)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.39(2.53)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Fearful feeling</td>
<td>2.64(1.08)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.72(1.28)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.90(1.44)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: Cells with different superscripts in each row differ significantly at \( p < .05 \).
### Table S3a: Effects of Moral Violation and Moral Identity on Choice for Study 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DV: Magnet Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.10(1.35)</td>
</tr>
</tbody>
</table>
| Moral Violation (1 = Moral Violation,  
  −1 = Otherwise)                       | 0.43(0.16)*       |
| Internalization                        | −0.08(0.21)       |
| Symbolization                          | 0.06(0.14)        |
| Moral Violation × Internalization      | −0.24(0.18)       |
| Moral Violation × Symbolization        | −0.23(0.16)       |
| Cox & Snell $R^2$                      | 0.06              |
| Nagelkerke $R^2$                       | 0.08              |

Note: Unstandardized coefficients are given, with standard errors in parentheses. *$p < .01$*

### Table S3b: Full Model Logistic Regression Results for Study 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DV: Magnet Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>−0.18(0.16)</td>
</tr>
</tbody>
</table>
| Moral Violation (1 = Moral Violation,  
  −1 = Otherwise)                       | 0.41(0.16)*       |
| Mood                                   | −0.14(0.11)       |
| Arousal                                 | −0.02(0.07)       |
| Powerful Feeling                       | 0.08(0.10)        |
| Desire for Control                     | 0.04(0.24)        |
| Desire for Power                       | −0.17(0.19)       |
| Desire for Status                      | −0.02(0.11)       |
| DUCP                                   | 0.17(0.12)        |
| Moral Violation × Mood                 | −0.13(0.11)       |
| Moral Violation × Arousal              | −0.01(0.07)       |
| Moral Violation × Powerful Feeling     | 0.13(0.10)        |
| Moral Violation × Desire for Control   | 0.05(0.24)        |
| Moral Violation × Desire for Power     | −0.10(0.19)       |
| Moral Violation × Desire for Status    | −0.02(0.11)       |
| Moral Violation × DUCP                 | −0.10(0.12)       |
| Cox & Snell $R^2$                      | 0.08              |
| Nagelkerke $R^2$                       | 0.11              |

Note: Unstandardized coefficients are given, with standard errors in parentheses. *$p < .05$*
Table S4. Desirability of Social Network Tools (Exploratory Measure) – Study 2

<table>
<thead>
<tr>
<th>Current Users</th>
<th>N</th>
<th>Moral Violation</th>
<th>Innocent Error</th>
<th>Natural Disaster</th>
<th>F-test and p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>228</td>
<td>6.75 (1.90)a</td>
<td>6.90 (1.67)a</td>
<td>6.78 (1.69)a</td>
<td>F(2, 225) = 0.15, p = .86</td>
</tr>
<tr>
<td>Twitter</td>
<td>119</td>
<td>5.90 (1.98)a</td>
<td>6.38 (1.97)a</td>
<td>6.04 (1.96)a</td>
<td>F(2, 116) = 0.60, p = .55</td>
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<tr>
<td>Google+</td>
<td>94</td>
<td>5.50 (2.28)a</td>
<td>5.58 (1.94)a</td>
<td>5.29 (1.88)a</td>
<td>F(2, 91) = 0.18, p = .84</td>
</tr>
<tr>
<td>Youtube</td>
<td>247</td>
<td>7.61 (1.37)a</td>
<td>6.91 (2.00)b</td>
<td>7.10 (2.02)a,b</td>
<td>F(2, 244) = 3.31, p = .04</td>
</tr>
<tr>
<td>Whatsapp</td>
<td>26</td>
<td>7.00 (1.25)a</td>
<td>7.88 (0.95)a</td>
<td>6.81 (2.20)a</td>
<td>F(2, 23) = 1.11, p = .3547</td>
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<tr>
<td>Instagram</td>
<td>86</td>
<td>7.86 (1.36)a</td>
<td>7.57 (2.12)a</td>
<td>7.37 (1.53)a</td>
<td>F(2, 83) = 0.64, p = .53</td>
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<tr>
<td>Tumblr</td>
<td>39</td>
<td>7.27 (1.82)a</td>
<td>7.54 (1.95)a</td>
<td>6.17 (1.95)a</td>
<td>F(2, 36) = 1.79, p = .18</td>
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<td>Non-Users</td>
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<tr>
<td>Facebook</td>
<td>43</td>
<td>3.59 (1.94)a</td>
<td>2.18 (1.33)b</td>
<td>1.89 (0.93)b</td>
<td>F(2, 40) = 5.02, p = .01</td>
</tr>
<tr>
<td>Twitter</td>
<td>152</td>
<td>3.72 (2.24)a</td>
<td>3.26 (1.85)a</td>
<td>3.30 (1.74)a</td>
<td>F(2, 149) = 0.86, p = .43</td>
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<tr>
<td>Google+</td>
<td>177</td>
<td>3.74 (2.19)a</td>
<td>3.87 (1.69)a</td>
<td>3.62 (2.13)a</td>
<td>F(2, 174) = 0.22, p = .81</td>
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<tr>
<td>Youtube</td>
<td>24</td>
<td>5.00 (2.00)a</td>
<td>4.28 (2.08)a</td>
<td>4.20 (1.96)a</td>
<td>F(2, 21) = 0.29, p = .75</td>
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<tr>
<td>Whatsapp</td>
<td>245</td>
<td>4.56 (2.20)a</td>
<td>3.80 (1.98)b</td>
<td>3.89 (1.89)b</td>
<td>F(2, 242) = 3.45, p = .03</td>
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<tr>
<td>Instagram</td>
<td>185</td>
<td>4.58 (2.02)a</td>
<td>3.74 (2.01)b</td>
<td>3.70 (2.27)b</td>
<td>F(2, 182) = 3.58, p = .03</td>
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<tr>
<td>Tumblr</td>
<td>232</td>
<td>3.91 (2.01)a</td>
<td>3.15 (1.77)b</td>
<td>3.31 (1.99)b</td>
<td>F(2, 229) = 3.63, p = .04</td>
</tr>
</tbody>
</table>

Note: Cells with different superscripts in each row were significantly different at p < .05.
Table S5. Ordered Logit Regression Results – Study 4

<table>
<thead>
<tr>
<th>Coefficients:</th>
<th>Choice</th>
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<tbody>
<tr>
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<td>(3 = Highest Market Share Brand; 2 = Middle Market Share Brand; 1 = Lowest Market Share Brand)</td>
</tr>
<tr>
<td>Unpunished Corrupt CEO Condition (Dummy)</td>
<td>0.71884* (0.1897)</td>
</tr>
<tr>
<td>Punished Corrupt CEO Condition (Dummy)</td>
<td>0.09235 (0.1713)</td>
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</table>

<table>
<thead>
<tr>
<th>Intercepts:</th>
<th></th>
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<tbody>
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<td>Lowest Market Share Brand</td>
<td>Middle Market Share Brand</td>
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<tr>
<td>Middle Market Share Brand</td>
<td>Highest Market Share Brand</td>
</tr>
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</table>

Residual Deviance 1427.367

AIC 1435.367

* p < .05
Figures S1: % of Participants Choosing the Highest Market Share Brand (Figure S1a), Middle Share Brand (Figure S1b), and Lowest Market Share Brand (Figure S1c) – Study 4

Figure S1a. % of Participants Choosing the Highest Market Share Brand

Figure S1b. % of Participants Choosing the Middle Market Share Brand

Figure S1c. % of Participants Choosing the Lowest Market Share Brand
ESSAY 2: APPENDICES

I. Study 1 Materials

Product Choice Stimuli:

<table>
<thead>
<tr>
<th></th>
<th>For Female Participants</th>
<th>For Male Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td><img src="image1.jpg" alt="Product Image" /></td>
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<tr>
<td>Pair 3</td>
<td><img src="image5.jpg" alt="Product Image" /></td>
<td><img src="image6.jpg" alt="Product Image" /></td>
</tr>
</tbody>
</table>

Scenarios Used in the “Daily Experience Survey”

(1) You see a student copying a classmate’s answer sheet on a makeup final exam.
(2) You see a professor giving a bad grade to a student just because he dislikes him.
(3) You see a woman swerving her car in order to intentionally run over a squirrel.
(4) You see a teacher hitting a student’s hand with a ruler for falling asleep in class.
(5) You see an employee at a morgue eating his pepperoni pizza off of a dead body.
(6) You see a student stating that her professor is a fool during an afternoon class.
II. Study 2 Materials

Punishment Measures:

(1) To what extent would you be willing to protest against the bankers described in the “New York Times” article that you read in the beginning?
(2) To what extent are you motivated to take your money out of banks and invest in other ways?
(3) To what extent are you willing to sign a petition calling for an inquiry into the behavior of bankers?
(4) To what extent you would urge the government to tighten the regulations toward the financial sectors?
(5) To what extent do you think bankers should be punished for what happened to the financial market described in the article?
III. Study 3 Materials

Confidence in the Social System Measures:

Please now indicate to what extent you agree or disagree with the following statements (1 = strongly disagree; 9 = strongly agree):

1. In general, I find society to be fair.
2. Most policies in our society serve the greater good.
3. Everyone has a fair shot at wealth and happiness.
4. The order of our society is getting worse every year (reverse-coded).
5. Society is set up so that people usually get what they deserve.
REFERENCES FOR APPENDICES


