Elsevier Editorial System(tm) for Journal of Consumer Psychology
Manuscript Draft

Manuscript Number: JCPS-D-12-00289R3

Title: Money, Moral Transgressions, and Blame

Article Type: Research Article

Keywords: money, morality, cognitive dissonance, attribution, blame, contagion

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Abstract: Two experiments tested participants' attributions for others' immoral behaviors when conducted for more versus less money. We hypothesized and found that observers would blame wrongdoers more when seeing a transgression enacted for little rather than a lot of money, and that this would be evident in observers' handwashing behavior. Experiment 1 used a cognitive dissonance paradigm. Participants observed a confederate lie in exchange for either a relatively large or small monetary payment. Participants blamed money more than the liar in the large sum condition, whereas they blamed the liar more than money in the small sum condition. Participants in Experiment 2 saw images of someone knocking over another to obtain a small, medium, or large monetary sum. In the small sum condition, participants blamed the perpetrator more than the money, whereas, in the large sum condition, they blamed money more than the perpetrator. Hence, participants assigned less blame to moral wrong-doers, if the latter enacted their deed to obtain relatively large sums of money. Small amounts of money accentuate the immorality of others' transgressions.

Money, Moral Transgressions, and Blame

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REPLY TO THE ACTION EDITOR (AE'S COMMENTS *IN ITALICS*)

Clarifying your contribution upfront.

We clarified the contribution of our manuscript by adding that observers will judge a perpetrator more immoral for actions driven by a small versus large amount of money, and that this evidence would be manifested in observers' handwashing behavior. You will find these clarification in the Abstract (page 1), page 2 (opening paragraph), and page 4 onwards (under Money is Salient).

In your review of the disgust literature, please add citations to (and key findings of) the major papers in marketing, such as those by Andrea Morales etc.

In agreement, we added marketing research findings in our review of the disgust literature (p. 5).

Please specify how large the groups of participants in study 1 (were they run in groups of 2, 10, 50?).

We clarify that, in both experiments, we tested participants individually (p. 7, p. 11).

On page 8 please specify what the units of time are (seconds I assume, but please mention it; please do this for study 2 as well).

We specify that the time unit was seconds in both experiments (p. 8, p. 12).

In the last full paragraph of page 8, you cannot claim that ".Participants who counted money descriptively spent longer hand-washing.." because this effect is not significant.

In agreement, we deleted the claim.

Can you please add means to figure 1? We redid the figures and added means.

For all of your p-value reporting, please use either p<.01 or p<.05; not specific p-values.

We did so throughout.

In study 2, the three target statements have an alpha that is too low (alpha = .50). Try removing an item that is bringing this value down if you need to keep this measure.

We removed one item. The alpha went up, but the results were the same as the reported one. We maintained the 3-item analysis in the text but reported the re-analyses in a parenthesis (p. 13).

Please report (as I requested before) the non-significant mediation analysis for study 2.

We did so on p. 14.

The correlations you report in the last paragraph on page 13 are not insightful or necessary. Please remove. We did so.

In the first paragraph on page 15, please alter your discussion about contamination to include observing and then touching the perpetrator, in terms of how the participant becomes contaminated, as this reflects your actual manipulations

We have specified the manipulation in the second paragraph of discussion (p.15).

It is not appropriate to conduct a meta-analysis on just your own two studies. Please remove that analysis and its discussion on page 15.

We removed that analysis.

You can omit figures 3 and 4 on the pretest results. (The reader does not need that much detail on simple pre-test results.)

We omitted these two figures.

*Manuscript without author identifiers
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Abstract

Two experiments tested participants' attributions for others' immoral behaviors when conducted for more versus less money. We hypothesized and found that observers would blame wrongdoers more when seeing a transgression enacted for little rather than a lot of money, and that this would be evident in observers' handwashing behavior. Experiment 1 used a cognitive dissonance paradigm. Participants observed a confederate lie in exchange for either a relatively large or small monetary payment. Participants blamed money more than the liar in the large sum condition, whereas they blamed the liar more than money in the small sum condition. Participants in Experiment 2 saw images of someone knocking over another to obtain a small, medium, or large monetary sum. In the small sum condition, participants blamed the perpetrator more than the money, whereas, in the large sum condition, they blamed money more than the perpetrator. Hence, participants assigned less blame to moral wrong-doers, if the latter enacted their deed to obtain relatively large sums of money. Small amounts of money accentuate the immorality of others' transgressions.

Keywords: money, morality, cognitive dissonance, attribution, blame, contagion

Money, Moral Transgressions, and Blame

Money can make people behave in a foolish, unsavory way: Take and make risky bets, tattoo permanent advertising on their foreheads, prostitute themselves, and start wars – not to mention the garden-variety impieties of cheating, lying, and stealing. Yet with many such actions, there may be a tacit, if reluctant, understanding by observers that, when "big money" is at stake, people are tempted to commit odd, unlawful, or immoral acts. While acknowledging that money has varied effects – including positive and neutral (Belk & Wallendorf, 1990; Burroughs & Rindfleisch, 2002; Guo et al., 2012; Lea & Webley, 2006; Mishkin, 1992; Smith, 1776/1977; Yang et al., 2013; Zhou & Gao, 2008; Zhou, Vohs, & Baumeister, 2009) – its connotations with intemperance, illegality, and immorality raise the questions of when observers would judge others' illicit actions under the auspices of money as immoral or perhaps simply as less moral, and whether evidence for this judgment would be manifested in observers' handwashing behavior. We predicted that the amount of money at stake would be a key factor.

Money Can Justify Moral Transgression

Individuals long have considered money to be a dangerously powerful force in their and others' lives (Lea & Webley, 2006). Under desperate circumstances, some will seemingly do anything for money, such as selling their bodily organs or their children (Lea & Webley, 2006). As Lea and Webley (2006, p. 197) noted, "The evidence of labor market history is that there is no job that absolutely no one could be induced to do, if sufficient money was offered… In the right circumstances, money has the capacity to overwhelm all other motivators." Hence, the motive to obtain money can override even basic motives such as the desire to behave in line with moral standards.

Given its motivational power, money may constitute a justification for one's moral transgressions. The literature hints at this notion. Thompson, Harred, and Burks (2003) concluded that topless dancers in the United States use payment for their services as a way to neutralize the moral dissonance that they presumably experience. In a similar vein, Prasad (1999) argued that clients use money to distance themselves morally and emotionally from prostitutes.

Classic studies in psychology are also relevant. One such study asked participants to lie to another person and present a dull task as interesting. Some participants were paid $20 for this moral transgression, others were paid $1, and still others (control group) were not asked to lie (Festinger & Carlsmith, 1959). Participants who received $20 (compared to those who received $1) seemingly used money as a justification for their lies, in that they did not change their attitude toward the task and instead found the task as boring as those in the control group. We interpret this finding as suggesting that, if there is enough of a monetary incentive to commit a moral transgression, then the smaller the ethical dissonance (Barkan, Ayal, Gino, & Ariely, 2012) will be – perhaps because the immoral act had been adequately justified.

We used a similar paradigm as this classic dissonance study, but focused not on attitudes about the task but rather on attitudes about the actor. We hypothesized that lying about a boring task for a relatively small (vs. large) sum of money will change observers' attitudes, as they will consider the liar more immoral.

Money is Salient

Individuals spontaneously make inferences about potential causes of events (Heider, 1958). They can attribute outcomes to internal or external causes, meaning that they assign the cause of a behavior either to an actor's disposition (e.g., personality, attitudes) or the situation in which the behavior was embedded. We propose that individuals not only use obtaining money to justify their own moral transgressions, but they also see obtaining money as a way to justify others' transgressions.

What factors do observers take into account when they attempt to figure out the causes of an event? Much of the time they focus on others, and particularly on others' traits, chronic attitudes, or motives (Storms, 1973; Taylor & Fiske, 1975). Underestimating the role of situational factors often has a big effect on the outcome (Gilbert & Malone, 1995). That is, in making attributions, observers may assign causal weight to that which is most salient (Roese & Vohs, 2012).

As an object of desire, money is difficult to ignore, and especially so when it comes in large amounts (Gino & Pierce, 2009). The mere salience of money increases self-sufficiency (Vohs, Mead, & Goode, 2006) and can encourage unethical behavior (Gino & Pierce, 2009; Yang et al., 2013). Thus, even though observers are inclined to attribute others' behavior to internal causes, we propose that, in the case of a relatively large monetary sum (which constitutes a salient cue), participants will attribute others' behavior to the influence of money.

Consider, again, the classic cognitive dissonance study discussed above (Festinger & Carlsmith, 1959), in which participants were paid varying amounts to lie about a dull task. Would observers consider money to be more of a driving force of the actor's behavior when the wrongdoing is committed for a larger or a smaller monetary reward? We expected that observers would perceive the desire to obtain larger, as opposed to smaller, amounts of money as such a pull on the actor's behavior that the person would not be viewed as morally corrupt. Therefore Experiment 1 tested the hypothesis that observers will be more affected by viewing an immoral behavior enacted for a smaller than a larger monetary amount.

We tested this hypothesis by having participants wash their hands after viewing an immoral act. Research on contamination shows that objects can transfer their immoral essence through physical contact. Given our reasoning on how money can make others become symbolically filthy when only a pittance of it is enough to produce immoral behaviors, we predicted that observers would feel rather contaminated from coming into contact with the actor – or even representations of the actor (here, in the form of a photograph). Specifically, the

contamination effect will be larger when an immoral act has been committed for a small (vs. large) sum of money, which will manifest in a greater desire for physical cleansing. This proposal constitutes the main contribution of our research.

Contamination by negative stimuli leads to emotional responses and motivations to distance oneself from tainted people or objects (Haidt, Rozin, McCauley, & Imada, 1997; Paharia, Vohs, & Deshpandé, 2013; Rozin & Fallon, 1987). For example, companions of people with abominations of the body stigma or tribal stigma are also regarded as discredited (Pryor, Reader, & Monroe, 2012). Money earned through unethical channels (e.g., profit earned through illegal operation) is perceived as less desirable and valuable than money earned through neutral channels (e.g., earnings of a business without any accompanying negative information). Products considered contaminated through physical contact with disgusting goods also elicit consumers' disgust and lower their product evaluation (Morales & Fitzsimons, 2007). Feelings of disgust drive consumers to respond unfavorably to products that have been touched by others (Argo, Dahl, & Morales, 2006). Tainted objects threaten individuals' moral self-image (Stellar & Willer, 2013). Indirect or implicit ascription of immorality can take the form of physical distancing (Lee & Schwarz, 2011), such as washing one's hands, as a symbolic attempt for moral cleanliness. What is more, motor modality involved in a transgression figures prominently in the embodiment of moral purity (Lee & Schwarz, 2010).

Recent findings highlight the parallels between physical and moral contamination in which moral transgressions are akin to being physically filthy. Zhong and Liljenquist (2006) found that participants who recalled an immoral behavior were more likely to choose an antiseptic wipe rather than a pencil as a free gift, suggesting a desire to sanitize themselves. They also found that even the mere act of rewriting an immoral story about another person increased participants' desires to cleanse. Converging evidence has shown that physical cleanliness is associated with, or influences, moral judgments (Schnall, Benton, & Harvey, 2008) or judgments of moral purity (Zhong & Liljenquist, 2006). Therefore, in Experiment 1 and 2, we tested the hypothesis that, when a lie is told for a small monetary sum, observers will wash their hands longer after contact with a liar than with money. This hypothesis follows from our proposal that, when a lie is told for a small monetary sum, observers will view factors internal to the actor as a stronger force in producing the outcome than the lure of money.

Overview

In Experiment 1, we relied on the Festinger and Carlsmith (1959) cognitive dissonance paradigm, in which participants witnessed a person lie either for a larger or smaller monetary amount. Subsequently, they came into physical contact with either the liar or the money. We induced participants to wash their hands next, and we measured hand-washing duration as an implicit indicator of ascriptions of filth or immorality to which they had been

contaminated. Experiment 2 presented participants with images of a person knocking someone over in order to snatch some money off the ground. We asked participants to hold close up pictures showing either the hand of the perpetrator reaching for the money or the money laying on the ground. We used a behavioral measure similar to that of Experiment 1, and we also measured directly the proportion of blame attributed to money versus perpetrator.

Experiment 1

Experiment 1 tested attitudes toward money after observing a wrongdoing. We relied on a classic cognitive dissonance paradigm (Festinger & Carlsmith, 1959), with participants serving as observers. A confederate was (a) paid a relatively large monetary sum (￥50) to lie about a boring task, (b) paid a relatively small monetary sum (￥1) to lie about the same task, or (c) not paid and instructed to tell the truth. Then some participants shook hands with the confederate (the liar), whereas others counted money. Subsequently, all participants were instructed to wash their hands, with duration of hand-washing unobtrusively recorded as a measure of desire to cleanse symbolically the self after coming into contact with a moral contagion.

We tested the idea that observers would implicitly view an actor lying for small money as more immoral than the money itself. That is, observers would want to cleanse themselves behaviorally, and therefore would spend more time hand-washing after physical contact with the liar than after physical contact with money. Conversely, observers would implicitly view money itself as more immoral than an actor lying for large money. That is, in the large money condition, observers would distance themselves behaviorally and would spend more time hand-washing after physical contact with the money than with the liar.

Method

Participants and Experimental Design

We tested individually 160 (81 female) university students and remunerated them with ￥5. Their ages ranged from 17 to 34 years (M = 23.25, SD = 3.02). The design was a 3 (lie condition: no lie, small money lie, or large money lie) × 2 (object touched: hand-shaking, money-counting) between-subjects factorial. We randomly assigned participants to one of the six experimental conditions.

Procedure

Participants learned that they would take part in two unrelated studies and were introduced to a confederate posing as another participant. The two sat across from each other and performed the same dull task, rotating a clip around a stick repeatedly for 10 minutes. Then they learned that they needed to wait for the experimenter to prepare the next task. In the presence of the participant, the experimenter casually asked the confederate to talk to another

potential participant over the phone, because this potential participant wanted to learn more about the task in order to decide whether to be involved in it.

At this point, one third of the participants (small money condition) saw the experimenter offer the confederate ￥1 ($0.14) to describe the task as interesting and engaging, because the experimenter wanted the potential participant to have positive expectations about the task. Another third of participants (large money condition), saw the experimenter offer the confederate ￥50 ($7.46) to do this. Participants in the lie for ￥1 condition and lie for ￥50 condition then watched the confederate get paid. The remaining participants (no lie condition) saw the experimenter instruct the confederate to describe the task truthfully. No money was offered. All participants watched the confederate make the phone call.

Next the confederate turned to leave the room. Before exiting, the confederate extended his hand to half of the participants to initiate a handshake (hand-shaking condition). For the other half of participants (money-counting condition), the confederate departed and the experimenter asked participants to count ￥1000 five times under the pretense of a finger-dexterity task.

Lastly, the experimenter told participants that their next task involved operating high-precision equipment for which they needed to wash their hands. Another experimenter, who was unaware of experimental conditions, inconspicuously used a stopwatch to record the duration (in seconds) that participants spent washing their hands. Participants were probed for suspicion (none was raised) and debriefed.

Results and Discussion

We anticipated an interaction between the object touched and lie conditions on hand washing time: Participants would behaviorally distance themselves by washing longer after touching a liar who lied for a smaller compared to a larger amount, but conversely would wash longer after having to touch money in the case when a lie took place for a larger as opposed to a smaller sum. We conducted a 3 (lie condition) × 2 (object touched condition) ANOVA[1]. The main effect of object touched condition was not significant: participants in the hand-shaking condition (M = 7.60, SD = 0.30) did not differ on time spent on hand-washing from participants in the money-counting condition (M = 7.49, SD = 0.31), $F(1, 154) = .058$, $p > .05$ The lie-condition main effect was significant, $F(2, 154) = 5.73$, $p < .01$. Crucially, the interaction was significant, $F(2, 154) = 4.76$, $p < .05$ (Figure 1). We proceeded with Tukey HSD comparisons.

Participants spent longer hand-washing after they shook hands with a person who lied for a small sum (M = 9.13, SD = 3.37) than a large sum (M = 6.99, SD = 2.66), $F(1, 154) = 8.50$, $p < .05$. However, the effect of lie condition after counting money was not significant, $F(1, 154) = 2.10$, $p > .05$.

INSERT FIGURE 1 HERE

We next analyzed the interaction from the alternative standpoint. In the no lie condition, hand-shaking participants (M = 6.66, SD = 1.69) did not differ from money-counting participants (M = 6.45, SD = 2.17) on hand-washing, $t(154) = .27$, $p > .05$. In the small money condition, however, participants who shook hands with a liar spent longer on hand-washing (M = 9.13, SD = 3.37) than those who counted money (M = 7.47, SD = 2.46), $t(154) = 2.27$, $p < .05$. In contrast, in the large money condition, participants who counted money (M = 8.55, SD = 3.48) spent longer on hand-washing than those who shook hands with a liar (M = 6.99, SD = 2.66), $t(154) = 2.09$, $p < .05$.

The results were consistent with hypotheses. Merely observing immoral act elicits the desire to physically cleanse. Participants washed their hands longer, as a sign of desiring to be (psychically) clean, after watching a lie being told for a relatively small monetary sum and then coming into physical contact with the liar. After watching a lie being told for a large amount of money, participants washed longer following physical contact with money as opposed with the liar, suggesting that they felt dirtier after handling money.

Experiment 2

The findings of Experiment 1, as supportive of the hypotheses as they may be, raise a few issues. Chief among them is the question about the amount of money needed to shift the causal weight from the perpetrator of an immoral act to money. To address this ‘inflection point’ issue, we conducted a pretest. Participants rated whether they thought someone would push another person over in order to pick up a certain amount of money. If half of participants responded with “yes” and half with “no” to a certain amount of money, then, by the logic of our theorizing, that suggests that half of them would blame money and half the perpetrator for the wrongdoing. That amount, then, would serve as the inflection point. We also aimed to find a value at which 80% of participants would respond “yes” (which we would designate as the large amount), and one at which 20% of participants would respond “yes” (which we would designate as the small amount). We then used these amounts in the main Experiment 2.

The second question raised by Experiment 1 pertained to the “object touched” manipulation. Given that the money-counting task took longer than did the handshake, interpretation of the hand-washing outcome measure is muddied. Therefore, Experiment 2 equalized the touching time across conditions. A third improvement on Experiment 1 was that we measured directly participants’ attributions of blame. This allows us for more insight into

the psychological processes. As before, we also tested participants' implicit attitudes towards money and the perpetrator.

Pretest

We carried out a pretest to identify what constitutes a small, medium, and large amount of money. We tested 52 volunteers (43 females). Their ages ranged from 20 to 40 years (*M* = 24.17, *SD* = 3.21). Participants saw a series of six digital color photographs that depicted a perpetrator knocking over someone in order to pick up some money off the ground. The protagonists' faces were not visible to participants, as in a previous study using similar stimuli (Decety, Michalska, & Kinzler, 2011). Most important, the amount of money was blurred on the pictures (Figure 2).

INSERT FIGURE 2 HERE

Next, participants responded with a "yes" or "no" to each of the following six monetary amounts: "Do you think the protagonist would push someone over like this to pick up ￥10/￥50/￥100/￥500/￥1000/￥2000?" Finally, participants recorded the least amount of money for which they thought the protagonist would push someone over.

Results from linear interpolation showed that 50% of participants chose yes and 50% of them chose no somewhere around ￥300. Also, 15.38% of participants responded "yes" to ￥50, whereas 80.77% participants said yes to ￥2000.

This inflection point (i.e., ￥300) is consistent with participants' reports of the least amount of money for which they thought people would push someone over. The distribution of the amount of money is positively skewed, with the median being around ￥300. We selected ￥300 as the inflection point, because it split participants into fairly evenly-sized groups that would push versus would not push over someone for that amount. We implemented ￥50 as the small amount of money and ￥2000 as the large amount of money.

Method

Participants and Experimental Design

We tested 184 university volunteers individually (111 females). Their ages ranged from 18 to 50 years (*M* = 22.63, *SD* = 4.68). One participant left the experiment before he finished the tasks, and therefore we discarded his

data. The design was a 3 (money amount: small, medium, large) ×2 (object touched: hand, money) between-subjects factorial. We randomly assigned participants to one of the six experimental conditions.

Procedure

We presented participants with six digital color photographs of the same size. We displayed them in a successive manner to imply motion. The photographs portrayed a scene in which a protagonist pushed another person in order to snatch some money from the ground. Here, and contrary to the pretest, the amount of money was clearly visible to participants. Then we presented participants with enlarged images of fragments of those pictures. For half of participants, the close-up picture depicted the hand of the perpetrator reaching for the money, whereas, for the other half, it depicted the money on the ground. The experimenter asked participants to hold either the hand picture or money picture for 30 seconds. As a cover story, the experimenter instructed them to estimate the temperature of the picture they were holding.

Next, the experimenter told participants that the following task involved operating high-precision equipment for which they needed to clean their hands with a disposable wet wipe. They were asked to rehearse mentally a nine-digit number while washing their hands ostensibly as a test of multi-tasking. Another experimenter who was unaware of conditions inconspicuously used a stopwatch to record the length of time (in seconds) that participants spent wiping their hands.

Afterwards, participants completed a questionnaire that measured the proportion of blame attributed to the money versus perpetrator using a 100-point allocation. Participants recalled the pictures and allocated 100 points of blame between the money and the perpetrator. Then, participants rated their agreement with 10 statements measuring their explicit attitude toward money (1 = *totally disagree*, 10 = *totally agree*). Three were target statements: (a) “Money is the root of all evil”; (b) “Money is dung”; (c) “Capital comes dripping from head to toe, from every pore, with blood and dirt”. The remaining seven statements were fillers (e.g., “A journey of a thousand miles begins with a single step”). Finally, we probed participants for suspicion (none was raised) and debriefed them.

Results

We conducted a 3 (money amount) × 2 (object touched) ANOVA with hand-washing time as the dependent measure. As anticipated, the interaction was significant, $F(2, 177) = 5.46$, $p < .01$ (Figure 3). Simple effect analyses revealed that participants in the small amount condition spent longer on hand-washing after holding the hand picture ($M = 26.45$, $SD = 10.06$) than after holding the money picture ($M = 21.06$, $SD = 8.25$), $F(1, 177) =$

5.01, $p < .05$. In the medium amount condition, participants holding the hand picture ($M = 21.80$, $SD = 6.99$) did not differ on time spent hand-washing from those holding the money picture ($M = 22.38$, $SD = 10.51$), $F(1, 177) = .059$, $p > .05$. However, in the large amount condition, participants spent longer on hand-washing after holding the money picture ($M = 28.11$, $SD = 9.79$) than after holding the hand picture ($M = 22.28$, $SD = 10.05$), $F(1, 177) = 5.86$, $p < .05$.

INSERT FIGURE 3 HERE

An ANOVA on allocations of 100 points of blame yielded a main effect of amount of money, $F(1, 177) = 3.50$, $p < .05$. Tukey HSD comparisons revealed that participants in the large amount condition ($M = 19.25$, $SD = 20.35$) indicated that money was to be blamed to a greater extent than those in the small amount condition ($M = 11.70$, $SD = 14.37$), $F(1,177) = 6.03$, $p < .05$. Participants in the small amount condition ($M = 88.29$, $SD = 2.19$) blamed the perpetrator to a greater extent than those in the large amount condition ($M = 80.65$, $SD = 2.19$), $F(1,177) = 5.92$, $p < .05$ Participants in the medium amount condition ($M = 12.11$, $SD = 12.81$) blamed money less than those in the large amount condition ($M = 19.25$, $SD = 20.35$), $F(1, 177) = 3.88$, $p < .05$, but blamed money equivalently with those in the small amount condition ($M = 11.70$, $SD = 14.37$) , $p > .05$ The perpetrator who committed the wrongdoing for a medium amount was not assigned more blame than the perpetrator who committed the same wrongdoing for small or large amounts, $F_{\text{medium vs. small}}(1, 177) < 1$, $F_{\text{medium vs. large}}(1, 177) = 1.83$, $p > .05$.

Of the three target statements intended to assess participants' attitude toward money, we combined the two ("Money is the root of all evil", "Money is dung"; $\alpha = 0.62$) and excluded the third one ("Capital comes dripping from head to toe, from every pore, with blood and dirt") due to its low correlation with the others. Participants' attitude towards money did not differ in the small ($M = 11.85$, $SD = 5.33$), medium ($M = 11.97$, $SD = 1.00$) or large amounts ($M = 12.69$, $SD = 4.08$) conditions, $F(2, 176) = 0.557$, $p > .05$. The effect of conditions on ratings of fillers items was not significant, $F < 1$. Participants' explicit attitude toward money was independent of their hand-washing time, $r(181) = -.08$, $p > .05$. Neither participants' attitude towards money ($\beta = .09$, $t = 1.25$, $p > .05$) nor blame explicitly attributed to money ($\beta = -.08$, $t = -1.06$, $p > .05$) predicted hand-washing time (Baron & Kenny, 1986).

Experiment 2 addressed the limitations of Experiment 1 and replicated the finding that a relatively large amount of money exonerates perpetrators' moral transgressions. The more blame that participants attributed to

money, the more they agreed with the notions that money is filthy and evil. Participants were more likely to blame the money when a wrongdoing was committed for a larger rather than a smaller monetary sum. Conversely, when a wrongdoing was committed for a smaller monetary sum, the perpetrator took more blame than the money.

Also, Experiment 2 identified the inflection point at which observers' attitude shifts from money to the perpetrator. Of course, this inflection point is not an absolute value. Instead, it is a relative amount dependent on sample characteristics (e.g., what is a large amount to university students might not be to mid-career adults) and context surrounding the immoral behavior. In the current case, the blame on money and on the perpetrator evened out when the moral transgression was committed for ￥300.

General Discussion

Kant (1785/1996) argued that the goodness of an act is determined solely by its underlying good will or good intention, irrespective of its external outcome. The present research suggests that providing a monetary incentive for an immoral behavior has a systematic effect on attributions. A moral transgression for a large sum of money is considered less despicable than a moral transgression for a small sum of money. People long have believed money to be a treacherously powerful force in their and others' lives (Lea & Webley, 2006), a belief that apparently renders money a readily-available justification for wrongdoings.

In these two experiments, participants served as observers of wrongdoings and then had physical contact with the perpetrator. Results indicated that merely observing rather than participating in immoral behaviors elicits a sense of potential contamination after touching the moral transgressor. The key outcome we measured was duration of hand-washing, which we took to indicate a desire to cleanse symbolically oneself after such contamination. Our results suggest that people view (and become contaminated by) immoral actions committed for a small price as more immoral than those done for a large price. When an immoral act is enacted for a large sum of money, money – again symbolically – seems to share some responsibility for the blame and therefore observers view the wrongdoer as less filthy. However, when an immoral behavior is rewarded insufficiently, this constitutes a lack of an external justification for the bad behavior, and so observers attribute the wrongdoing back to where it perhaps should belong: to the wrongdoer.

When a person's behavior harms the welfare and legitimate interests of others, attributing the behavior to money can diminish the moral responsibility of the person. Money constitutes a compelling external justification, because people may believe it to be a potent and perilous force in their lives. Justifying one's wrongdoing in

consideration of the monetary payoffs diminishes moral dissonance and the need for attitude change. Similarly, justifying others' wrongdoing with money improves others' moral image to oneself (and others).

When a behavior is perceived to be due to external rewards like money, the attribution of the behavior to intrinsic reasons is weakened. Bem (1972, p. 39) expressed one of the basic tenets of attribution theory: "A person will infer that he was intrinsically motivated to execute the induced behavior to the extent that external contingencies of reinforcement appeared to be absent." Previous studies have established the so-called overjustification effect (Condry, 1977), namely that behavior performed for money weakens the attribution of the behavior to intrinsic reasons, even when the behavior is consistent with the actor's initial intrinsic interest in performing the behavior. For example, participants who are offered payment to help others rate themselves as less altruistic than those who are not offered such payment (Batson, Coke, Jasnoski, & Hanson, 1978). Likewise, the present findings suggest that justifying behaviors with money deprives people not only of their internal motivation and altruistic tendency, but also of taking moral responsibility. When a moral transgression has been performed for money, the person who performs the transgression is considered as less lamentable, because observers do not make internal attributions for the behavior.

Money is both loved and despised. On the one hand, people want money: money is an object of desire. On the other hand, they sometimes consider money filthy and evil. Our findings offer a novel perspective on the paradoxical attitude that people hold towards immorality and money. Blame attributed to the perpetrator, symbolically reflected by observers' handwashing behavior, depends on the monetary payoffs. Money itself is neither good nor evil but when seen as a cause of immoral behavior, it alters the moral responsibility of the perpetrator. When an immoral act is not paid enough, money cannot be used as an excuse and the perpetrator is deservedly blamed.

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Footnote

[1]As the hand-washing data were positively skewed, we carried out a log transformation to ensure that the data were normally distributed. Analyses on the log-transformed data produced results similar to the reported ones.

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FIGURES

Figure 1. Length of time spent washing hands after shaking hands with the confederate or counting money in Experiment 1.

Figure 2. Dynamic visual stimuli used in the pretest.

Figure 3. Length of time spent washing hands after contacting the hand or the money in Experiment 2.

Figure 1. Length of time spent washing hands after shaking hands with the confederate or counting money in Experiment 1.

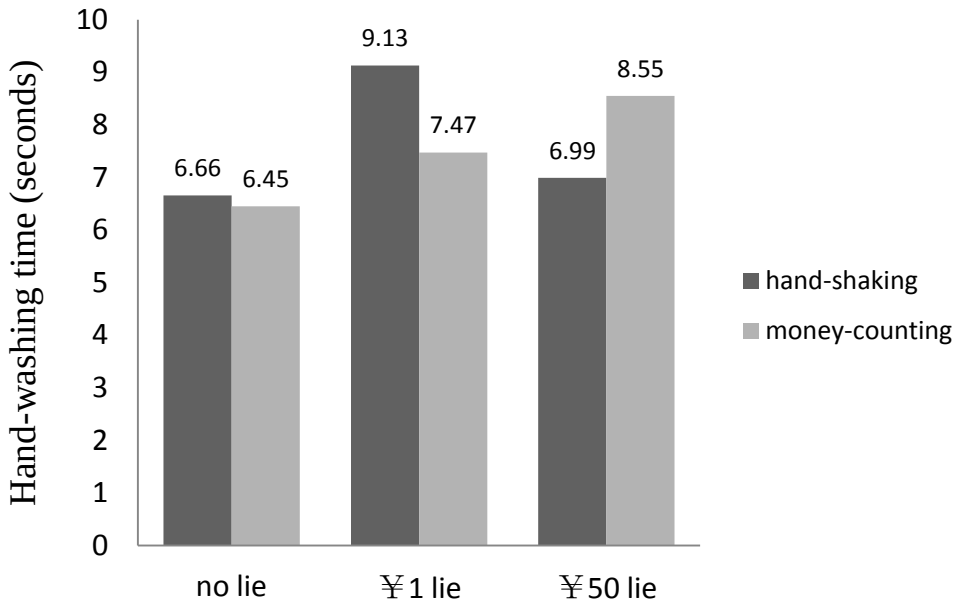

Figure 2. Dynamic visual stimuli used in the pretest.
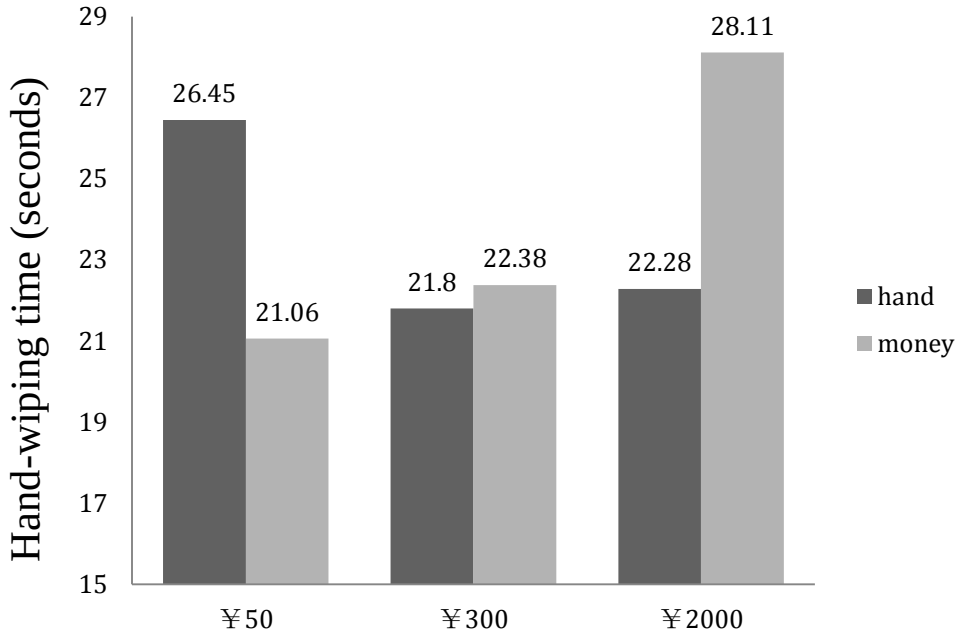
Figure 3. Length of time spent washing hands after contacting the hand or the money in Experiment 2.