RESEARCH ARTICLE

Money, a Disconnecting Agent: Reminders of Money Trigger a Feeling of Disconnection which Increases the Likelihood of Unethical Decisions

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Abstract:

For eons many have hypothesized the corrupting influence of money, and yet, there has been a great void in the way of empirical experimentation. However, a series of pioneering experiments has begun to show confirmation of previous assumptions, one of which showed that the mere thought of money can loosen morals. This paper reveals three new experiments that explore the underlying process of this phenomenon. The results of experiments 1 and 2 suggest that individuals primed with money are less ethical than both a control group and individuals primed with business-related concepts. Further questioning revealed that an underlying mechanism behind the unethical decisions may be a decreased feeling of human connection. In accordance with this finding, the results of experiment 3 demonstrate that priming with disconnection themes results in a greater likelihood of unethical decisions.

Keywords: Money, Ethics, Morality, Connection, Environmental cues, Human connection, Disconnecting agents, Psychology, Alienation, Sociology, Experimental psychology, Cognition, Decision-making, Communications, Monetary system, Behavioral science, Economics
Introduction

Even within the earliest examples of writing one can find vivid warnings of the corrupting influence of money. And ever since, that message seems to have echoed around the world till present day. Perhaps the most quoted example can be found in the king James version of the bible: “for the love of money is the root of all evil” (Timothy 6:10). However, it is not the only warning of money found in the bible: “He that loveth silver shall not be satisfied” (Ecclesiastes 5:10), “they that will be rich fall into temptation and a snare ... which drown men in destruction” (Timothy 6:9), “there is a sore evil which I have seen under the sun, namely, riches” (Ecclesiastes 5:13), “it is easier for a camel to go through the eye of a needle, than for a rich man to enter into the kingdom of God” (Matthew 19:24). In fact, all of the religious texts that I have studied contained multiple direct warnings of money compromising ethical standards.

In the Śrīmad-Bhāgavatam—one of Hinduism's sacred texts—it gives the following prediction for our current age, “men will develop hatred for each other even over a few coins” (Canto 12). In the Brahmajāla Sutta—a Buddhist sacred document—there is a definitive 'ten-commandments-esque' list of that which the enlightened one must abstain from, this includes allowing slavery, killing others, and accepting money (Digha Nikaya 1). Guru Nanak, the founder of Sikhism, also condemned the accumulation of money stating that “it cannot be done without ceasing to be virtuous or without committing sins and social evils” (Gandhi, 2007).

In addition to the warnings found in ancient religious documents, our leading philosophers, also concerned about the flaws of a monetary system, explored and promoted returning to 'simpler times'. The ancient Greeks, in particular, were very outspoken on the subject. Plato once warned that “all wars are fought for the sake of getting money” (Avalos, 2005). He also promoted a less money-focused way of life by stating that “the greatest wealth is to live content with little” (Kets de Vries, 2009). Aristotle kept the message alive when he stated that “wealth is evidently not the good we are seeking” (Goodwin et al, 2009). Crates of Thebes turned ancient Greek philosophy into practice as he is well documented as giving away his wealth to live a humble, minimalist, and moral life. In one account, Crates threw all of his money into the sea and exclaimed, “I had rather drown you, than you should drown me”(Percy et al, 1840).

The sentiments of the ancient Greek philosophers, and indeed those before them, were relayed around the world. In ancient China, Confucius noted that while “the superior man understands what is right; the inferior man understands what will sell” (Bald, 2014). In ancient Rome, Cicero declared that “nothing is so secure as that money will not defeat it” (Cordry, 2015). And the Cree—one of the largest groups of First Nations in North America—gave the following haunting prophecy, “Only when the last tree has been cut down, the last fish caught, the last river poisoned, will we realize that one cannot eat money” (Dibble, 2012).

While similar warnings are still relayed to this day, only recently can we find documented empirical experimentation. And so, thanks to the pioneering new research are we close to an answer? Was there merit to the suspicions of those before us? Does money really have a corrupting influence?

Numerous experiments by Dr Paul Piff and his colleagues found that those with increased wealth were more likely to make unethical decisions: cheating, lying, stealing (Piff et al, 2012). When studying the unpublished IRS Data, economics professor Joel Slemrod and economist Andrew Johns revealed that
wealthier individuals were far more likely to cheat the system (Johns et al, 2010). In a survey of over 40,000 participants, Doctor Jon Grant and colleagues found that shoplifting was significantly more common among those with higher incomes (Blanco et al, 2008). And when surveying data from over 27 countries, professors Long Wang and Keith Murnighan found that a higher income was strongly related to the endorsement of unethical actions (Wang et al, 2014). In addition to the effects of accumulated wealth, a study by Francesca Gino and Lamar Pierce demonstrated that the very presence of money can promote unethical actions (Gino et al, 2009). And in a pioneering experiment by Professor Maryam Kouchaki and colleagues, it was revealed that the mere thought of money can trigger unethical decision-making (Kouchaki et al, 2013).

While evidence is beginning to stack up demonstrating that money could indeed weaken our morals, there is much work to be done with regards to understanding the underlying mechanisms. In this paper, I will explore why the mere thought of money can lead to an increase in unethical choices.

Professor Maryam Kouchaki and colleagues suggest that the idea of money can increase accessibility of business-related concepts, which might explain the increase of unethical decisions (Kouchaki et al, 2013). In support of their theory, they found that those primed with the idea of money were more likely to use business-related vocabulary during a word completion task. They also showed that those primed with money thoughts who lied in a subsequent experiment were more likely to agree with the statement “This was primarily a business decision.” They were also more likely to give answers indicating business motivations, over those that would indicate alternative explanations such as power or competitiveness.

The idea of a business decision frame leading to unethical decisions can also be seen elsewhere. A survey of 31 colleges revealed that business students were more likely to engage in various forms of academic dishonesty (McCabe et al, 1995). And perhaps this should come as no surprise as when looking at economic education—a core of the business studies curriculum—scientists found that there were more positive attitudes towards greed and greedy behavior (Wang et al, 2011).

While the preliminary research into this theory is starting to show merit, Kouchaki et al note that more work is needed to better understand the fundamental processes (Kouchaki et al, 2013). In the experiments reported here, I test the hypothesis that the underlying mechanisms may involve a feeling of disconnection. This stemmed from noting that theories around capital and business leading to reduced ethics often contain some form of disconnect. In a study by Professor Aaron Kay and colleagues, it was shown that when primed with objects found in the domain of business (such as a boardroom or briefcase), participants would be less likely to perceive ambiguous social interactions as cooperative (Kay et al, 2004). Professor Kathleen Vohs and colleagues state that “If money conjures up a market-pricing mode, in which people think of life in transactional terms with inputs and expected outputs, then one might expect problems when it comes to socially relating to others” (Vohs et al, 2008). This theory is echoed by Professor Anthony Giddens who claimed that our modern monetary system decreases important social ties (Giddens, 1990).

This idea also extends beyond those in the fields of psychology and sociology. History Professor, Yuval Noah Harari, claims that “money brings down the dams of community” (2014). Minister and activist, Martin Luther King Jr. stated that “capitalism forgets that life is social” (Callero, 2013). In the world of religious theory, Gautama Buddha warns of an attachment to wealth, and the subsequent
feelings of separation (Gorman, 2008). And in the world of philosophy, Karl Marx warned us that the economic and market system can lead to a sense of personal alienation (1844).

To the extent of my knowledge, there hasn’t been experimentation that explicitly tests if money leads to a feeling of human disconnection, and if this feeling of disconnect can lead to an increase of unethical decisions.

Experiment 1

It has previously been shown that money priming increases unethical decision-making when compared to a control group (Kouchaki et al, 2013). As the participants involved in previous experiments were all students, I wanted to see whether I would replicate the same trend with participants who had finished their studies and were now in full-time employment. One might assume that participants in full-time employment have different ideas about money and therefore perhaps these participants might produce different results. I also wondered if the non-monetary components of previous money priming strategies may have influenced results, therefore my experiments used new priming techniques with fewer variables. Finally, in an attempt to understand what it might be about money priming that leads to unethical decision-making, I wanted to gather additional information that explores specific states of mind.

Participants

100 US Citizens in full-time employment took part in the experiment (50% male, 50% female). In an attempt to reduce variables, all participants had the following in common: aged 30 to 35, caucasian ethnicity, English-only spoken at home, and completed education to a bachelor degree level. The data from 3 participants was discarded as they skipped the priming stage.

Procedure

Participants were randomly assigned to one of two groups: Control (C), and Money Prime (MP) (50 participants per group, both with an even ratio of male to female). Participants were then given a set of 15 tasks. This primarily consisted of various word-based challenges, such as reordering a list into alphabetical order and adding missing letters or words to complete a sentence. The Control group had no references to money and included sentences such as “I walk on grass.” In the Money Prime group, every sentence contained a reference to money, such as “I spend money.” The tasks also included a few picture rounds, where participants had to estimate the number of certain objects in an image (example: trees for the Control group, 100 dollar bills for the Money Prime group). Before completing the 15 tasks, participants were given the following message, “Often, when completing similar tasks on a related theme, one can make simple errors due to a momentary lapse in concentration. All of the following tasks require similar skills and all make reference to a common theme. This survey will test whether people are still likely to make mistakes even after forewarning. Pay close attention when completing the following 15 tasks.” This message was given in an attempt to reduce possible suspicions of the recurring
theme. This facilitated not having to mix in non-monetary tasks, or be less direct, which reduced the possibility of unintentional non-monetary influences. To further assist this, I made a very conscious effort to keep the money priming questions as simple as possible. I noticed that a previous experiment used the priming sentence, “She spends money liberally” (Kouchaki et al, 2013). In this example, there is a chance that participants were not necessarily influenced by money, but the thought of spending it liberally which could be associated with carelessness, hence why I used a simplified version, “I spend money.”

After the priming tasks, both groups read through the same set of 8 ethically relevant scenarios and were asked to indicate on a 7 point scale how likely it would be for them to engage in the behavior described (1 = not at all likely, 7 = highly likely). The scenarios and rating scale have been used in prior experiments (Piff et al, 2012; Kouchaki et al, 2013) and have been validated in several ways: Experts in ethics came to an agreement that the scenarios accurately depict unethical behaviors, and documented scores have correlated to engagements of unethical activities in multiple studies (Piff et al, 2012). Here is a sample scenario, used in the experiment: “Your boss at your summer job asks you to get confidential information about a competitor’s product. You therefore pose as a student doing a research project on the competitor’s company and ask for the information.” The measurement of unethical decision-making is the mean result across the 8 scenarios (total score of group ÷ number of scenarios ÷ number of participants = M).

After measuring for ethics, participants were given a list of 7 short statements and were asked to indicate on a 7 point scale how much they agree with each one (1 = totally agree, 7 = totally disagree). These questions explored possible underlying thought processes of unethical behaviour. Here is a sample statement used in the experiment, “Socializing and friendship are important to me.” The measurement of potential underlying thought processes is the mean result of each statement (total score of group ÷ number of participants = M).

**Results and Discussion**

In accordance with previous findings (Kouchaki et al, 2013; Gino et al, 2014), the Money Prime group indicated that they were more likely to engage in unethical activities (M = 3.55, SD = 2.27) when compared to the Control group (M = 3.26, SD = 2.24), t(94) = 1.12, p = .2. This result offers further support for the theory that the mere thought of money prompts unethical outcomes despite the difference in priming strategies and participant demographics.

The results for potential underlying thought processes produced some interesting findings. For example, although the Money Prime group indicated more unethical behaviour, both the Control group and the Money Prime group gave very similar responses to statements regarding the importance of ethics (MP: M = 3.3, SD = 2.37, C: M = 3.27, SD = 2.36), and the importance of money (MP: M = 4.2, SD = 1.79, C: M = 4.22, SD = 1.64). The result that had the largest difference between the Money Prime group and the Control group came from a statement regarding human connection. The Control group was more likely to agree with the statement, “I feel a strong authentic connection with all humans” (MP: M = 4.3, SD = 1.91, C: M = 4.06, SD = 1.75). This supports the hypotheses that money priming can create a feeling of disconnection, and that this feeling of disconnection may be an underlying mechanism of unethical decisions.
Experiment 2

A previous study suggested that money priming may lead to greater accessibility of business-related concepts which could explain why money priming appears to reduce ethics (Kouchaki et al., 2013). To further explore this theory, I wanted to see if priming business-related concepts directly would have the same effect of reducing ethics. And in an attempt to understand what it might be about business priming that impacts ethics, I wanted to gather additional information that explores specific thought processes. This would enable further testing of the hypothesis that unethical decision making might be related to a decreased feeling of human connection.

**Participants**

50 US Citizens in full-time employment took part in the experiment (50% male, 50% female). In an attempt to reduce variables and maintain consistency with experiment 1, all participants had the following in common: aged 30 to 35, caucasian ethnicity, English-only spoken at home, and completed education to a bachelor degree level. The data from 1 participant was discarded as they skipped the priming stage.

**Procedure**

As with experiment 1, participants were given a set of 15 priming tasks. Every word challenge or picture game contained direct references to business, such as the sentence “The business is open.” or an image of a boardroom meeting. Before completing the priming tasks, participants were given the same forewarning of a common theme, as used in experiment 1. This was used to maintain consistency as well as reduce possible unintentional influences.

After the priming tasks, the group was given the same set of 8 ethically relevant scenarios, and the same 7 statements to assess underlying thought processes as used in experiment 1.

**Results and Discussion**

Due to previous findings and theories (McCabe et al., 1995; Wang et al., 2011; Kouchaki et al., 2013), I expected the Business Prime group's (B) results to be similar to those of the Money Prime group. However, the results indicated that they were less likely to engage in unethical activities when compared to both the Money Prime group (MP), and the Control group (C):

- **B** \( M = 3.04, \ SD = 2.17 \)
- **C** \( M = 3.26, \ SD = 2.24 \)
- **MP** \( M = 3.55, \ SD = 2.27 \)

When comparing the data from experiments 1 and 2, there is a correlation between the results of the ethical scenarios and the sense of authentic human connection. The least ethical group (MP) agreed the least with the statement “I feel a strong authentic connection with all humans”; And the most ethical group (B) agreed the most:
Experiment 3

Experiments 1 and 2 indicate that an underlying mechanism behind unethical decisions may be a feeling of human disconnection. To explore this further, I wanted to see whether priming a sense of human disconnection directly would have the same effect of reducing ethics when compared to priming a sense of human connection.

**Participants**

100 US Students took part in the experiment (50% male, 50% female). In an attempt to reduce variables, all participants had the following in common: US citizens, aged 18 to 24, caucasian ethnicity, English-only spoken at home. No data was discarded.

**Procedure**

Participants were randomly assigned to one of two groups: Connection Prime (CN), and Disconnection Prime (D) (50 participants per group, both with an even ratio of male to female). Each group was given a set of 15 word and image tasks that were relevant to their prime. Consistent with experiments 1 and 2, participants were given the same forewarning message pre-priming, and the same set of ethically relevant scenarios post-priming.

**Results and Discussion**

The data revealed that the Disconnection group (M = 3.63, SD = 2.05) were indeed less ethical when compared to the Connection group (M = 3.45, SD = 2.09). This further supports the hypothesis that a reduced feeling of human connection results in an increase of unethical decision-making.

As a side note, when I compared the data across all 3 experiments, I noted that female participants (M = 3.27), were on average, more ethical than their male counterparts (M = 3.54). This finding is in line with previous studies (Franke et al, 1997; Lewicki et al, 1998; Dreber et al, 2008; Kray et al, 2012).
Future Studies

It has previously been shown that money priming can lead to a reduction in prosocial behaviour (Vohs et al, 2006; Mogilner, 2010). Those primed with money have been found to be less caring, less helpful, and appear to prefer being on their own (Vohs, 2015). It has also been shown that they express less emotion (Jiang et al, 2014) and are more self-focused (Reutner et al, 2013). The combination of these behavioral patterns suggests a possible subconscious inclination to being less connected with others. In accordance with this, my experiments showed that those primed with money were less likely to agree with the sentence “I feel a strong authentic connection with all humans.” The combined findings across these studies suggest that there is legitimacy to a shared broader theory that has echoed through the ages: that money can lead to some form of disconnect (e.g., Gautama Buddha, Confucius, The Cree, Karl Marx, Martin Luther King Jr). While there is still a great deal of work to be done, should we begin to start thinking of money as a disconnecting agent?

Another important finding was that a feeling of disconnection appears to have a strong correlation with less ethical decision-making. This was demonstrated both as a byproduct of money priming, and via priming disconnection themes directly. This finding is particularly troubling when one considers the plethora of technologies that may also decrease our sense of authentic human connection: processed foods, cars, televisions, computer games, online shopping, pornography, smartphones, 'social' media, etc. Again I feel that there is much work to be done with this line of enquiry, in particular, the inclusion of wider demographics, and exploring a variation of priming techniques.

The findings in this paper also give rise to a more promising road of investigation, that is, that triggering a feeling of connection may increase ethical decisions. It would be interesting to further explore this opportunity in future work, and see if priming a feeling connection can mitigate primes that would otherwise trigger unethical decisions.

Concluding Remarks

While it can appear as though humankind is progressing in a positive linear fashion, we may well be losing our most important connections. We are surrounded by our own creations: planes, plastics, phones. And rightly so, we are starting to examine the consequences of these inventions. However, there are somethings so old and intrenched that we seem to forget that we once created them: nations, commodities, money. Scientifically questioning the consequences of all creations could yield some giant upgrades for humanity. Nothing should be free from the critique of science, especially that which we assume as a given and that which is labelled 'unquestionable'. 
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