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Why money meanings matter in decisions to donate time and money

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Abstract Most charitable organizations cannot accomplish their missions without asking for money. This is paradoxical because recent research suggests that mentioning money primes a self-sufficient mindset, thus undermining the very behaviors these organizations desire to elicit. We offer an important qualification to this problematic effect. We find that priming cash concepts reduces willingness to help others, while activating credit card concepts reverses these effects. To explain our findings, in three studies we show that priming cash concepts makes costs associated with donating time or money more salient in the decision context, thereby reducing willingness to give help and to receive it. However, priming credit card concepts makes the benefits of donation more salient.

Keywords Money · Priming · Charity · Donation · Helping · Credit

In a typical philanthropic fundraising appeal, potential donors may be encouraged to give $25, $50, or perhaps $100 (in return for a mug or t-shirt). Unfortunately, the

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close association between money and either individual self-interest or self-sufficiency poses particular problems for organizations that rely on approaches such as this. The mere mention of money may cause potential donors to hold more tightly to their resources and to be less likely to offer help or to seek help (Vohs et al. 2006). For example, after being primed with money concepts, participants volunteered less help to the experimenter than those in the control condition (Vohs et al. 2006). This is a particularly vexing paradox given that charitable and non-profit organizations cannot easily avoid mentioning money in their solicitation or charitable outreach activities.

We offer a compelling theoretical and empirical qualification to this finding that reduces the pessimistic implications of money. Across three studies, we report that compared to cash primed participants, credit card primed participants donate more money (study 1), donate more time (studies 2–3), and identify more words associated with the benefits of helping (study 3). To account for this reversal of the money-prime effect demonstrated by Vohs and colleagues, we rely on a parsimonious explanation drawing on an associative network theory of memory and learning. First offered by Feinberg (1986) and supported by more recent research on credit and cash associations by Chatterjee and Rose (2012), we propose that properties inherent in the use of cash and credit forms of money lead to different associative networks surrounding these concepts in memory. Specifically, we argue that when using cash, the costs and benefits associated with the purchase are experienced in close contiguity with the cash-money concept. Consequently, strong associations between cash and costs benefits are created in memory after repeated experiences buying products and services with cash. In contrast, repeating purchases with credit leads to strong associations with product benefits, but weaker associations with costs because costs are not incurred at the time the purchase is made. Thus, when charitable appeals prime cash or credit payment mechanisms, the accessibility of the costs and benefits of donating varies, thereby influencing intentions to donate.

1 Background

Some recent work on payment mechanisms suggests that exposure to the idea of money can change people's behavior, as well as their cognitive, motivational, and emotional states (Briers et al. 2006; Vohs et al. 2006; Zhou et al. 2009). For example, participants primed with concepts related to money subsequently show more self-reliance but also more self-centeredness than participants exposed to neutral concepts (Vohs et al. 2006). In addition, those who were reminded of money preferred to work alone, play alone, and put more distance between themselves and other people (Vohs et al. 2008). Vohs et al. (2006) find that compared to a control group, a money-primed group shows both a reluctance to give help as well as to seek help. Vohs and colleagues explain this on the basis of instrumentality since money allows people to achieve their goals without any help from others.

However, these empirical demonstrations of the psychological impact of money paint a rather pessimistic picture from the perspective of charitable organizations. Theoretically, these studies also raise an important question about the nature of money as a concept. Do all forms of money (e.g., cash, credit cards, loans) have similar mental association and, therefore, similar psychological and behavioral

consequences? This implicit assumption of uniform mental associations of money concepts in prior work related to helping behavior deserves some careful examination. Previous research has suggested that money can be viewed as sacred or profane depending on the context of its acquisition and use (Belk and Wallendorf 1990), may have different socially derived meanings (Zelizer 1997), and different mental representations or associations (Chatterjee and Rose 2012; Feinberg 1986; Prelec and Loewenstein 1998; Prelec and Simester 2001; Soman 2001). For example, the money concept has been shown to be sensitive to situational manipulations such that credit card cues work as a stimulus to enhanced spending (Feinberg 1986).

Our research embraces this notion that different forms of money may have different mental associations. Is it possible to cue money in the context of helping behavior without unintentionally reducing people's propensity to help? In order to answer this question, we propose that helping behavior may be differentially affected by variations in the forms of money primed in contexts where help is either offered or solicited.

The ubiquity and variety of spending experience with credit in US culture imbues credit as a particular type of money concept associated with spending (Feinberg 1986). Further, we argue that money in the form of cash has very different semantic associations. Why would this be the case? First, when paying with cash, people are acutely aware of the pain of payment because payment is made at the time the product or service is acquired (Prelec and Loewenstein 1998). Over repeated transactions, strong associations are developed between cash as a payment mechanism and various costs of obtaining the product. Conversely, consumers' prior experiences of instant gratification when paying with a credit card lead to strong associations with product benefits (Mendoza and Pracejus 1997; Shimp and Moody 2000), but weaker associations with costs because costs are not experienced in close contiguity in time and space to the act of using credit (McSweeney and Bierley 1984). In other words, asymmetry exists for credit cards such that costs associated with credit cards are delayed and benefits associated with credit cards are immediate. With repeated credit card purchase experiences ending in immediate gratification, this can also result in a greater accessibility of benefit considerations relative to cost considerations when credit cards are primed compared to situations in which cash is primed. Chatterjee and Rose (2012) obtained evidence for this process by demonstrating that the relative accessibility of costs and benefits mediated the influence of credit and cash primes on willingness to pay. We argue that, while priming cash may indeed engender a self-sufficient mindset, as suggested by Vohs et al. (2006), this is not likely to be the only type of cognitive response to a money prime. We argue that the type of associations activated depends on the type of money concept that is primed in the judgment context. Cash primes make costs more accessible relative to benefits, and credit primes decrease the relative accessibility of costs.

The costs of helping behavior could be financial as in the case of monetary contributions, or in terms of commitments of time and effort. Costs of accepting help could include social costs in the form of embarrassment or loss of face as well as diminution of self. Benefits of helping behavior could include social benefits or self-enhancement benefits. They could even be self-serving in some contexts such as donations of sick leave to sick-leave sharing systems, or donations to private blood banks. In such cases, benefits could include an expectation of future withdrawal of sick leave or blood from the system. Expected benefits of accepting help could be

social in the form of reinforced interdependence, utilitarian in the form of improved task performance, or experiential in the form of a better quality of life. Thus, cash-primed people show what appears to be more self-centered and self-sufficient behavior because they are thinking about the costs of giving or receiving help. On the other hand, we expect credit-primed participants to appear less self-centered and self-sufficient because they are thinking about the benefits but not the costs of giving and receiving help, thereby becoming more likely to offer and seek help when needed.

2 Study 1: does the form of money matter to donation behavior?

The objective of this study was to test whether credit card primed participants differ from cash primed participants with respect to their donation behavior. As per our conceptualization, participants primed with credit card concepts should exhibit a greater commitment to charitable causes and thus donate more, relative to those primed with cash concepts. We use a simple, one-factor design, and the key dependent variable was the amount of money donated.

2.1 Method

We developed a sentence-unscrambling task to prime cash and credit card concepts. Following the suggestions of Bargh and Chartrand (2000), we asked 56 undergraduate participants to generate five words related to cash or credit cards in a separate pretest. The objective of this pretest was to identify words participants associate with the different payment methods. Only the words that occurred at least five times were subsequently used in our main study in a sentence-unscrambling task to prime the concepts associated with the payment methods.

For the main study, we adopted the procedure followed by Vohs et al. (2006) in experiment 6. Sixty-five undergraduates (47 % male, M_{age}=22.1) participated in the study and were given partial study credit along with $1 in quarters in exchange for their participation. The participants were told that the quarters were used in an experiment that was now complete; in reality, the reason for giving participants quarters was to ensure that they had money to donate. The participants were randomly assigned to either a cash/credit card condition or a neutral condition. Participants initially engaged in a sentence-unscrambling task, adapted from Bargh and Chartrand (2000), in which they constructed grammatically correct sentences using four words from a list of five words presented in scrambled order. For those in the credit card condition, words invoking credit card-related concepts were embedded in the list (e.g., “TV shall watch we Visa”; the solution for which is “shall we watch TV”). Similarly, for those in the cash condition, words invoking cash-related concepts were used (e.g., “TV shall watch we ATM”). The unscrambling tasks also involved making sentences with some neutral words. The participants in the neutral condition were only exposed to the neutral words.

After completing a brief, unrelated questionnaire, the participants were told that the experiments were finished and they were debriefed about the filler task. This was done to ensure that participants did not link the priming task with the donation

behavior. Just prior to leaving the lab, the experimenter mentioned that the lab was taking donations for the University Student Fund and that there was a box by the door if the participant wished to donate.

2.2 Results and discussion

The money donated was our dependent variable for the helping behavior. A one-way ANOVA was used to test for differences across the three conditions. Amount donated differed significantly across the three conditions, $F(2, 62)=27.75$, $p<.0001$. Post hoc comparisons of the three groups indicate that the credit card primed group ($M=72.91$ cents) donated significantly higher amounts than the cash primed group ($M=27.38$ cents), $p<.0001$. Participants in the neutral condition donated 41.25 cents, an amount significantly different from the means of both the credit card and cash primed groups. The significant reduction in giving in the cash prime condition, relative to the no-prime condition, replicates the results of Vohs et al. (2006), study 6. However, their explanation for this finding, that money primes a self-sufficient mindset, cannot account for the significant increase in giving in the credit card condition, relative to the no-prime control. Thus, the pattern of findings is consistent with our conjecture that different forms of money are associated in memory with different concepts. While practically significant, however, one could argue that the effect observed in study 1 is simply another demonstration of the credit card premium, and therefore less theoretically interesting. In the next study, we test whether credit primed participants differ from others, not just in monetary donation behavior, but also with respect to the amount of time and willingness to volunteer to charitable causes. In addition, we provide evidence toward our proposed mechanism.

3 Study 2: does money form matter when helping does not involve money?

The main objective of this study was to determine whether the results of the previous study extend to a related, but different type of helping behavior, that of volunteering time to charitable causes. Some prior research has argued that a focus on money versus time can have different implications for charitable behaviors (Liu and Aaker 2008); thus, it was important for us to replicate the findings with a different charitable behavior. Further, the credit card premium has been demonstrated solely in financial terms (Chatterjee and Rose 2012; Feinberg 1986; Soman 2001), and it is important to determine whether money meanings have broader impact. More specifically in this study, we expect the costs of volunteering time to charitable causes will be more salient to those primed with cash than to those not primed with cash concepts. Our prediction for participants in the credit prime condition is converse of the cash condition. If credit primes activate benefits more strongly than costs, participants should be more willing to donate their time.

3.1 Method

One hundred and eighty-four undergraduate students (53 % male, $M_{age}=21.1$) participated in the study and were given partial study credit in exchange for their

participation. The participants were randomly allocated to cash prime, credit prime, or no prime control conditions. Similar to study 1, participants completed a sentence-unscrambling task meant to prime different payment conditions. Following a short and unrelated questionnaire, the participants were told that the office of University Student Welfare was looking for some volunteers and that any amount of time that participants could donate per month would be helpful. The participants then indicated the amount of time in hours per month that they could volunteer.

3.2 Results and discussion

A one-way ANOVA was conducted with the time donated as the dependent variable to test for differences across the three conditions. Time volunteered differed significantly across the three conditions, F (2, 181)=141.65, $p<.0001$. Post hoc comparisons of the three groups indicate that the participants in the credit condition (M=6.46 h per month) volunteered significantly more time to charity than the participants in the cash condition (M=2.34 h per month), $p<.0001$. Participants in the no prime control condition volunteered 4.03 h per month, an amount that was significantly different from the means of both the credit and cash primed groups, $p<.01$ for both contrasts.

We replicated the basic findings from the previous experiment in a different domain, volunteering time to a campus organization. This was important because it can be argued that the results of study 1 were driven by the fact that credit cards facilitate spending directly instead of resulting from decreased accessibility of the costs of donating relative to the benefits of donating. This study was designed to rule out this simple spending-facilitation explanation that may be viewed as plausible by some readers. While a facilitated spending account may explain findings of study 1, the findings of this study do not support this simpler argument. Our results are, however, consistent with the notion that different forms of money prime different concepts in memory. In the next study, we offer more direct evidence in favor of the proposed explanation.

4 Study 3: different associations for different payment primes

For study 3, our objective was to provide more direct evidence toward our proposed associative learning framework. The logic for this study was based on the assumption of differential foci of the cash primed and credit card primed people with respect to costs and benefits of the target behavior. That is, the participants primed with different money concepts should identify cost- or benefit-related words at different rates when participating in a word-completion task.

4.1 Method

Ninety-four undergraduates voluntarily participated (51 % male; M_{age}=21.6) in the study and were given partial course credit for their participation. Participants were randomly assigned to either the cash prime or credit prime condition and, similar to previous studies, completed a sentence-unscrambling task meant to activate cash vs.

credit concepts. The participants were then given information about a non-profit organization, The Nature Conservancy, and the benefits and costs of volunteering were listed in separate blocks on one page. Subsequently, the participants completed a word completion task, and the dependent variables were measured. The dependent variables were time and willingness to volunteer to a charitable organization. The word completion task entailed completing 25 words that were left incomplete. Nine were neutral words, and the rest were equally split between cost-related words (e.g., time, expenses, duties) and benefit-related words (e.g., esteem, recognition, trees) drawn from the charity stimulus. To ensure that the procedure was correctly understood, participants were instructed that the incomplete word Lo___ could be completed as LOFT or LOTUS, among other words. They were further instructed to write the first meaningful word that came to their mind and that there was no limitation on the length of the word in completed form. The order of word completion task and dependent variable assessment was counter-balanced. If our conjecture is correct, participants in the credit prime condition should think about the benefits of volunteering and consequently complete more words related to benefits than words related to costs, relative to the participants in the cash condition.

4.2 Results and discussion

A 2 (payment mechanism: credit-card vs. cash)×2 (order: word completion task-dv vs. dv-word completion task)×2 (target type: benefits vs. costs) repeated measures ANOVA was conducted, with target word type (i.e., benefits or costs) being a within-participant factor. The order of word completion and dependent variable assessment did not influence the results. The results showed a significant payment mechanism× target type interaction, $F(1, 90)=15.16$, $p<.05$. Consistent with expectations, participants in the credit prime condition correctly identified more words related to benefits compared to those in the cash prime condition ($M_{credit}=1.92$ vs. $M_{cash}=1.02$, $p<.05$). In contrast, those in the cash condition correctly identified more target words related to costs than those in credit condition ($M_{cash}=2.67$ vs. $M_{credit}=1.49$, $p<.05$; see Fig. 1). Also, consistent with our previous results, we found participants in the credit condition indicated a greater willingness to volunteer time ($F(1,90)=5.11$, $p<05$; $M_{credit}=3.9$ vs $M_{cash}=3.07$) and a greater amount of time volunteered ($F(1,90)=6.5$, $p<.05$; $M_{credit}=6.68$ vs $M_{cash}=3.72$) relative to those in the cash condition.

We then performed a mediation analysis as per (Preacher and Hayes (2008) and as elucidated in Zhao et al. (2010). We computed a difference score by subtracting the number of benefit words identified from the number of cost words identified. We then tested this difference score, a measure of the relative accessibility of benefit and cost concepts, as a mediator of the relationship between willingness to donate time/actual time donated and the payment conditions. We found the mean indirect effect for the dependent variable, amount of time donated, from the bootstrap analysis as −1.1869 with a 95 % confidence interval excluding zero (−2.72 to −0.31) which indicates a mediation of the effect by the difference score. Similarly, for the dependent variable, willingness to donate time, the bootstrap analysis suggested mediation. The mean indirect effect was −.3682 with a 95 % confidence interval excluding zero (−.88 to −0.066). Thus, the results support our associative learning perspective on the cognitive effects of different forms of money. Participants were relatively more focused on

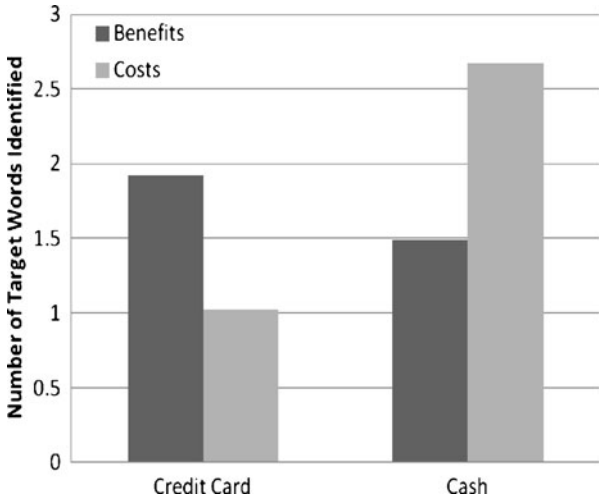

Fig. 1 Differential foci due to money primes, study 3

benefits than costs after exposure to a credit prime, while the converse was true after exposure to a cash prime.

5 Theoretical contributions

Across three studies, we demonstrate that credit card primes cause people to focus more intently on benefit considerations of the target helping judgment as opposed to cost considerations. In contrast, cash primes make costs of an option to help or be helped more salient. The findings are important from a theoretical perspective because they demonstrate that the psychological and behavioral impacts of money on helping behavior are not uniform and in fact depend on the type of money concept activated. Further, we show that the impact of credit primes can extend to non-purchase contexts, in addition to the product evaluation and purchase contexts that have been previously studied (Chatterjee and Rose 2012; Feinberg 1986; Thomas et al. 2011). In this research, we attempt to distinguish between our associative learning process and the mindset activation process suggested by Vohs et al. (2006) to explain the helping-inhibition effects generated by exposure to cash-related forms of money.

We argue that the relative accessibility of costs and benefits mediates willingness to help or accept help. This mediation by benefit and cost associations of the effect of money primes has been demonstrated in the context of willingness to pay for products in prior research (Chatterjee and Rose 2012). We are able to show that benefits and costs related to donation behavior are differentially accessible after credit or cash primes, and we provide initial evidence that these accessible concepts mediate willingness to help or accept help in the charitable contexts we study. Thus, our work is best viewed as an interesting qualification of the money-prime effects demonstrated by Vohs et al. (2006) accompanied by some evidence regarding an associative learning mechanism. Additional evidence regarding process would be desirable. Indeed, it is possible that money primes activate a number of complex

cognitive and/or motivational responses. For example, money primes could activate different goals, mindsets, or self-construals. The pain of payment could be decoupled from spending when using credit, as suggested by Soman (2001). We agree that using credit leads to a weaker association between costs and the method of payment. However, our work differs from the pain of payment notion by focusing on activated concepts rather than an affective state that is unpleasant. While we prefer a simple explanation based on the strength of learned associations, other money prime effects are clearly possible, if not likely, given the complexity of money as a concept and its centrality to consumer behavior.

6 Substantive implications

Despite documented ways of enhancing charitable behaviors (Aunel and Basil 1994; Cialdini and Ascani 1976; Reingen 1978; Small and Loewenstein 2003; Weyant and Smith 1987), non-profit organizations often state that encouraging donors to donate is their biggest challenge (Bloom and Novelli 1981). Perhaps the answer to why it is so difficult to encourage donations lies in notion of the money-help paradox addressed in the current research.

With the prominence of credit concepts as a backdrop, our research has identified one solution to the money-help paradox: prime potential helpers or recipients of help with credit concepts prior to soliciting the target behavior. This is a relatively straightforward proposition in practice in that it is not particularly difficult to prime credit-related concepts before soliciting helping behavior, irrespective of whether the objective is to solicit help or encourage the acceptance of help. Such priming could be accomplished consciously (Feinberg 1986), supraliminally but subconsciously (as in the current work), or perhaps even subliminally (Bargh and Chartrand 2000). We believe our findings have important practical implications for the non-profit organizations and how they may effectively target fundraising activities. From the perspective of a marketer of a non-profit-making organization, the phenomenon is important because it indicates how a consumer may be motivated to contribute more and help in the sustenance of charity work. The findings are especially relevant because they suggest that charities do not have to make any expensive changes to their fundraising effort in order to increase people's engagement to charity. However, as suggested by our results for cash primes and consistent with prior work by Vohs and colleagues, exposing potential donors to appeals for cash forms of money should be avoided. Research that addresses ways to increase willingness to help others seems well worth doing, not just for the clear benefits to the less fortunate, but also due to benefits for the helpers themselves (Dunn et al. 2008).

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