The easy-money effect : credit card spending and hard-work reminders

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THE EASY-MONEY EFFECT: CREDIT CARD SPENDING AND HARD-WORK REMINDER

ABSTRACT

Purpose

This research paper aims to examine the proposed easy-money effect of credit cards, which stimulates consumers to over spend. This paper shows how such easy-money effect could be weakened.

Design/methodology/approach

In Study 1, an Implicit Association Test (IAT) was conducted with a sample of 169 participants to test the proposed easy-money effect. In Study 2, experimental data were collected online from 365 participants to test the effectiveness of a hard-work reminder in weakening the credit card's easy-money effect on consumer spending.

Findings

The proposed credit card easy-money effect existed, with spendthrift participants associating money with hard work less in the implicit association test after being presented with a credit card cue versus neutral cue. The results from Study 2 show that spendthrift participants spent more on their dinner than tightwad participants when shown a credit card cue. However, this effect could be weakened when spendthrifts were also reminded of their hard work by a picture accompanied with words.

Practical Implications

This paper suggests that credit card's spending-stimulating effect is due to consumers' associations between credit cards and easy money. Based on this notion, this paper suggests conditions in which credit cards will stimulate more and less spending.

Originality/value

This is the first research attempt to examine the credit cards' easy-money effect and the effectiveness of reminding consumers of their hard work to mitigate credit cards' long-established spending-stimulating effect.

Keywords

Credit cards, Spendthrift, Tightwad

Article Classification

Research paper

INTRODUCTION

Consumers tend to spend more when exposed to a credit card cue or paying by credit cards (Feinberg 1986, Hirschman 1979, McCall and Belmont 1996, Raghurir and Srivastava 2008, Shimp and Moody 2000, Soman 2001, Soman and Cheema 2002). The increasing omnipresence of credit card cues in our daily lives (e.g., credit card advertising through various channels and in-store credit card signs) and the rising credit card write-off rates (Pines 2016) make it vital for us to explore ways to curtail credit cards' spending-stimulating effect to ensure consumers do not overspend when seeing and using credit cards.

Existing researches on credit cards focus on why consumers spend more when exposed to credit card cues or paying by credit cards (Raghurir and Srivastava 2008, Shimp and Moody 2000, Soman 2001, 2003, Soman and Cheema 2002), without suggesting any practical tactics to help consumers remain unaffected by their spending-stimulating effect. Although ways to reduce the spending-stimulating effect - for example, increase the salience of parting with the money available from credit cards (Raghurir and Srivastava 2008), and keeping records of the expenses paid by credit cards (Soman 2001) - were suggested in this stream of research, very few of these suggestions were empirically tested.

Inspired by the notion of "easy come easy go", the present research proposes that the relatively easy process of credit card application and the high credit limits offered may lead to a perception that the money available through credit cards comes easily. This, in turn, encourages consumers to spend easily. Exposure to credit card cues and paying by credit card tends to conjure thoughts about easy money, causing consumers to momentarily underestimate the effort required to earn money and hence lowering their perceived value of money. As a result, consumers spend more under this "easy-money effect". By addressing the idea of "easy come

easy go”, a practical and easy-to-implement tactic may work to reduce credit cards’ spending-stimulating effect: reminding consumers of their hard work in earning the money may weaken the easy-money effect.

This article has two objectives. First, to test if the proposed easy-money effect brought about by credit cards really exists. If credit cards really bring about easy-money effect, we then examine if reminding consumers of their hard work can reduce credit cards’ spending-stimulating effect by weakening the easy-money effect.

CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Credit Cards’ Spending-Stimulating Effect

Research on credit cards in the past decades show that consumers may spend more when paying by credit cards (Hirschman 1979, Raghurir and Srivastava 2008, Soman 2001, 2003, Soman and Cheema 2002), or being simply exposed to credit card cue (Feinberg 1986, McCall and Belmont 1996, Shimp and Moody 2000). The former stream of research focuses more on how credit cards, as a payment mechanism, differ from cash, check, and other methods of payment and how their unique characteristics facilitate spending. The latter focuses more on how the mere exposure to credit card cues, such as logos of credit card companies and replicas of actual credit cards, induces people to spend more. The first stream of research suggests that, as compared with other methods of payment, features of credit card payment, for example, the lower vividness of outflow of money (Raghurir and Srivastava 2008), the delay in depleting consumers’ wealth (Soman 2001) and the lack of counting or written record of the amount paid, contribute to the spending-stimulating effect (Soman 2001, 2003). On the other hand, the second

stream of research explains credit cards' spending-stimulating effect by drawing on learning theories such as conditioning, which suggests that credit card stimuli have acquired the ability to elicit spending behavior as a conditioned response (Feinberg 1986), and social learning, which suggests that the learned behavior associated with credit cards' spending, may have become a default behavior in the presence of credit card cue (McCall and Belmont 1996).

The majority of the studies conducted in the first stream of research investigate how the consumer's perception of the "outflow of money" when paying by credit card differs from that induced by other payment methods. In the present research, we look into the differences among different payment methods from another perspective – how consumers perceive the "inflow of money" differently when using credit cards versus cash and how spending is subsequently influenced. Drawing on the studies conducted in the second stream of research, which depend on the learning theories in explaining the effect brought about by credit cards, we speculate that the absence of difficulty or effort to get a credit card and the high credit limit offered may deceive consumers into regarding credit cards as easy money. The easy money offered by credit cards is then spent more easily than cash. Even when not paying by a credit card, consumers will also experience the easy-money effect if they are simply exposed to credit card cues, which remind them of easy money.

Credit Cards As Easy Money With Lower Perceived Value

In our daily lives, the media often presents credit cards as easy money – money that comes easily without much effort (Boshara and Longman 2007, Fox 2007, Frainee 2010, Lakshmi 2008). Past studies show that valuation of an object may depend on how it is obtained (Loewenstein and Issacharoff 1994). Extensive researches on cognitive dissonance and self-

perception have demonstrated that the more effort (whether in the form of time, physical exertion, pain, or money) individuals have invested, the more positively they would evaluate the product of such effort (Aronson and Mills 1959, Bem 1972, Feinberg 1986, Gerard and Mathewson 1966). A more recent study further shows that people may take effort as an indicator of quality – the more efforts invested, the better the product is deemed to be (Kruger, et al. 2004). Based on these findings, it is possible that people may evaluate money in the same way they evaluate other objects. Following this line of reasoning, people may evaluate the money earned from work, which requires them to invest more effort, more positively than the money available from credit cards, which is easily obtainable with much less efforts. The lower valuation of the money available from credit cards may then result in greater spending.

Source of Money and Spending

Economists argue that people should spend their income earned by working and money obtained from credit cards in the exact same way, as a dollar should be completely interchangeable with another irrespective of the difficulty faced or the efforts required in acquiring them. This argument is based on the assumption that money is fungible, i.e. without any label attached to it, so that money from different sources is pooled together to form one's overall wealth on which consumption decisions are based (Thaler 1990). However, it has been well established experimentally that consumers do label money and place money in separate mental accounts according to their sources and uses (Heath and Soll 1996, Kahneman and Tversky 1984, Shefrin and Thaler 1988, Thaler 1999, 2008). More importantly, such labelling affects how easily the money will be spent. For example, it is more tempting to spend current income than current assets and future income (Shefrin and Thaler 1988). Unanticipated income is

spent more readily than anticipated income (Arkes, et al. 1994). Also, different sources of money, such as gift, work bonus, debt repaid, inheritance are ranked differently when choosing between spending on oneself versus investing in a certificate of deposit (Henderson and Peterson 1992). Therefore, it is plausible that consumers consider the money available from credit cards and the money earned from working differently in separate mental accounts with different labels.

In fact, the processes underlying mental accounting, such as how or why mental accounts are formed or what their contents consist of, are found to be similar to those of categorization, under which a mental account is simply a category (Henderson and Peterson 1992). If people open a mental account exclusively for money available from credit cards, looking into what kinds of properties people may attach to this mental account or category helps us understand credit cards' spending-stimulating effect. In this article, we propose easy money as one of the properties of this category.

To summarize our discussion thus far, the absence of difficulty faced or effort required in obtaining money available from credit cards may lead people to label the money in the mental account of credit cards as easy money. Whenever payment is made by credit cards or credit cards are brought to minds, the mental account of credit cards, a category of money perceived as easy money of lower value, is activated. This gives us the first hypothesis and we call it credit cards' easy-money effect:

H1: When consumers are shown a credit card cue (cash cue/control), they are more (less) likely to associate money with easy.

Individual Differences in Sensitivity to Pain of Payment

Extant literature suggests that consumers often experience pain when paying, which undermines their pleasure derived from consumption (Prelec and Loewenstein 1998). Further study shows that people vary in their sensitivity to pain of payment, with tightwads (TWs) being more sensitive and spendthrifts (STs) less sensitive (Rick, Cryder and Loewenstein 2008). In this study, we posit that individuals' sensitivity to pain of payment may moderate credit cards' easy-money effect. Specifically, we propose that TWs, who are more sensitive to the pain of payment, are less prone to the easy-money effect because their high sensitivity and strong feelings about loss of money may prevent them from underestimating the value of money. On the other hand, STs who are less sensitive to the pain of payment are considered more prone to the easy-money effect, because their insensitivity and inattentiveness to loss of money may encourage them to underestimate the value of money. The moderating role of individual's sensitivity to pain of payment on the easy-money effect is formulated as Hypothesis 2.

H2: When being shown credit card cues, spendthrifts (tightwads) are more (less) likely to associate money with easy.

Our conceptual framework posits that the easy-money effect is one of the underlying pathways for credit cards' well-established spending-stimulating effect. As we propose that the pain of payment may moderate the easy-money effect, we believe that its moderating role in credit cards' spending-stimulating effect operates in a similar way. Therefore, individuals' sensitivity to pain of payment affects consumer spending:

H3: When being shown a credit card cue, spendthrifts (tightwads) spend more (less).

Based on our conceptual framework, interventions having a effect of weakening the easy-money effect may in turn mitigate the spending-stimulating effect of credit cards. Following the logic explained above on effort and its effect on people's evaluation of its product, we submit that a reminder of hard work may direct consumers' attention to the efforts they need to invest in earning money, thereby preventing them from underestimating the value of money. Consequently, the easy-money effect will be reduced, as will the spending on consumption.

H4: When being shown to credit card cues, consumers (not) being reminded of their hard work spend less (more).

As STs are supposed to be more prone to credit cards' easy-money effect than TWs, the influence of the hard-work reminder on the easy-money effect on spending may also be stronger on STs than TWs. Therefore, H4 is moderated as follows.

H5: A hard-work reminder has a greater (weaker) effect of reducing consumption spending on spendthrifts (tightwads) when they are shown credit card cues.

The conceptual framework discussed above is presented in Figure 1. We have conducted two experimental studies to test these hypotheses, with Study 1 testing H1 and H2 and Study 2 testing H3 to H5. The two studies are described below.

<Insert **Figure 1: The Conceptual Framework of the Easy-money effect** here>

STUDY 1

Method

In Study 1, the credit card easy-money effect (H1) and the moderating role of

individuals' sensitivity to pain of payment (H2) were tested by using the Implicit Association Test, a method measuring automatic associations that underlie implicit attitudes (Greenwald, McGhee and Schwartz 1998). Participants were invited to participate in a “consumer attitudes” study. They were asked to list their thoughts for either credit cards or nature. They were then led to complete the Implicit Association Test (IAT) online by categorizing words and pictures into groups as quickly as possible. Respondents' latencies were recorded to assess their automatic association between Easy versus Hard and Money versus Non-money respectively.

Participants. Amazon's Mechanical Turk (MTurk), an online marketplace open for getting work done by others, was used to collect data for this experiment. The quality of the web-based data collected by MTurk is suggested to be at least as reliable as those obtained by traditional methods (Buhrmester, Kwang and Gosling 2011). Participants were “workers” (paid task completers) who registered with MTurk to be able to browse available tasks and set up an account for receiving monetary compensation upon successful completion of each task. One hundred and sixty-nine workers (57% women) completed the questionnaire and test for a small sum of money. Participants' average age was 40, and 78% of them had a household annual income of \$20,001 or more.

Credit Card cue Manipulation. There were two conditions for the credit card cue manipulation, the credit card cue (Card) and the neutral cue (Control). In the Card condition, participants were presented with a picture showing different types of credit cards including MasterCard, Visa, Discover, and American Express. They were asked to list the things that come to their mind when hearing the word “credit card”, each thought on a separate line. In the Control condition, participants were presented with a picture showing a nature scene of mountains and lake. They

were then asked to list the things that come to their mind when hearing the word “nature”, each thought on a separate line.

Procedure. Participants needed to complete three parts in this study: 1. credit card cue manipulation, 2. IAT, and 3. questionnaire. The credit card cue manipulation and the questionnaire part were created using online survey software. The IAT part was administered by using the web version of an IAT software, Inquisit, which automatically runs the whole IAT itself after the participants had downloaded the plug-in file. Firstly, participants were randomly assigned to one of the two conditions (Card vs. Control). They were then presented with the Card or the Control stimulus respectively. They were asked to list out their thoughts about it to activate the corresponding concept, either credit card or nature, in their minds. Following the thought-listing task, all participants were asked to click a link to complete the IAT. They were required to download a small plug-in (1.82KB) before they could start doing the IAT. The web version IAT captured participants’ response times when they were asked to use two specific keys on the computer keyboard to categorize different stimuli, which include pictures showing Money or Non-money item and words describing easy and hard activities. Participants needed to categorize each stimulus shown into its corresponding category as quickly as possible by pressing the two specific keys on the keyboard. When participants were instructed to press the same key to categorize stimuli about Money (Non-money) and Easy (Hard), their response times were expected to be faster than pressing the same key to categorize stimuli about Money (Non-money) and Hard (Easy). Based on our hypotheses, the concept of Money (Non-money) and the attribute of Easy (Hard) were considered compatible while the concept of Money (Non-money) and the attribute of Hard (Easy) were considered incompatible. Compatible pairs were expected to have a higher level of automatic association resulting in faster response times when doing the

categorization task. After completing the IAT, participants were asked to return to the online questionnaire to answer the remaining psychographic and demographic questions. The details of how the IAT was conducted and how the individuals' sensitivity to pain of payment was assessed were described below.

Implicit Association Test. The IAT measures the strength of automatic association by asking participants to categorize stimuli such as words and pictures into one of four categories as quickly and as accurately as possible (Greenwald, McGhee and Schwartz 1998). In this study, the four categories were Easy, Hard, Money, and Non-money. We selected 6 phrases to represent Easy and Hard respectively, and selected 6 pictures to depict Money and Non-money respectively. There were altogether 7 blocks to complete this test. Table 1 summarizes the procedures for this test. Instructions about the response key and the item-categorization task were given at the beginning of each block. The first two blocks of the IAT were practice blocks which required participants to categorize all of the picture stimuli as either Money or Non-money (Block 1), and all the word phrase stimuli as either Easy or Hard (Block 2). Participants used the response keys, "E" and "I" on the keyboard, to perform the categorization. Pressing "E" categorized the stimuli into the category shown at the left top corner, while pressing "I" categorized the stimuli into the category shown at the right top corner. Block 5 was also a practice block, with the key pairings reversed from block 1.

<Insert **Table 1: IAT Procedures in 7 Test Blocks** here>

Blocks 3, 4, 6, and 7 were critical combined blocks used to assess the strength of association between the categories. Two categories were mapped onto the same response key in

the following two combinations: Easy and Money onto “E” vs. Hard and Non-money onto “I” (the compatible block), and Easy and Non-Money onto “E” vs. Hard and Money onto “I” (the incompatible block). For example, when Easy and Money were mapped onto “E”, participants were required to press “E” whenever they saw stimuli related to Easy or Money displayed on the screen. The faster the response, the stronger the association between the two categories paired onto the same response key, Easy and Money in this case. Participants were randomly assigned to one of the two conditions: Condition A with block 3 and 4 as the compatible blocks and block 6 and 7 as the incompatible blocks or Condition B with block 3 and 4 as the incompatible blocks and block 6 and 7 as the compatible blocks.

We expected that participants who were in the Card condition would respond faster in the compatible blocks when Easy and Money (and Hard and Non-money) were paired and slower in the incompatible blocks when Hard and Money (and Easy and Non-money) were paired. Participants’ response times were computed and converted into D-score, which basically measures the difference in response times between the incompatible and compatible blocks, in an algorithm excluding latencies above 10,000ms and including latencies for correct responses only (Greenwald, Nosek and Banaji 2003). The higher the D-score, either the faster the responses in the compatible blocks or the slower the responses in the incompatible blocks. This indicates a stronger association between Easy and Money (and Hard and Non-money) or a weaker association between Hard and Money (and Easy and Non-money).

Individuals’ Sensitivity to Pain of Payment. After completing the IAT, participants were asked to go back to the questionnaire part. The “spendthrift-tightwad” (ST-TW) scale developed by Rick, Cryder, and Loewenstein (2008) was used to assess participants’ sensitivity to pain of

payment. The ST-TW scale consists of four questions. The total score for all four questions ranges from 4 to 26. Participants with higher scores tend to be Spendthrifts (ST) who are proposed to be more prone to credit cards' easy-money effect, whereas participants with lower scores tend to be Tightwads (TW) who are proposed to be less prone to credit cards' easy-money effect. Participants with intermediate scores tend to be Unconflicted (UC) who are proposed to be influenced by the easy-money effect at a level between ST and TW.

Other Measures. Finally, participants' genders, ages, and incomes were asked at the end of the survey.

Results

Linear regression analysis was conducted by following guidelines given in Jaccard et al. (2003) to test H1 and H2. The focal independent variable was Credit Card cue Manipulation (X), represented by a dummy variable scored as 0=Card condition and 1=Control condition. The moderator variable was the Individual's Sensitivity to Pain of Payment (M), measured by the ST-TW scale with the total score ranging from 4 to 26 (spendthrift and tightwad being the anchors for highest and lowest scores respectively). The product of the two (XM), which was the interaction effect between the Credit Card cue Manipulation and the Individual's Sensitivity to Pain of Payment, was another predictor variable. The dependent variable was the computed D-score. One hundred and sixty-nine responses were submitted for the regression analysis. The mean and standard deviation of the ST-TW score were 12.88 and 4.91 respectively; those of the D-score were -0.349 and 0.483 respectively.

We regressed the D-score on X, M, and XM. The results for the unstandardized coefficients are summarized in Table 2. As predicted, the regression coefficient for X was significant ($t=-1.99$, $p<.05$), indicating a main effect of the Credit Card cue on the D-score in the direction that a higher D-score was found in the Card condition, supporting H1. The regression coefficient for XM was also significant, suggesting the presence of a two-way interaction. Further analysis revealed that the slope of the ST-TW score in the Card condition was significant and positive on the D-score ($t=1.92$, $p<.05$), indicating that in the Card condition, the higher the ST-TW score or the higher tendency to be a spendthrift, the higher the D-score. The higher D-score indicated that ST participants in the Card condition were more likely to associate money with easy than TW participants, supporting H2. In order to better understand the differences of D-score between the ST and the TW participants across the Card and Control condition, we performed a spotlight analysis (Aiken and West 1991). The spotlight analysis provided an estimate and statistical test of the simple effect of D-scores across the Card and Control condition at one standard deviations below and above the mean of the ST-TW score. A constant was added to all ST-TW scores, “shifting” the mean lower or higher so that the simple effect of D-scores across the conditions could be tested specifically for the TW and the ST participants. The statistics of the spotlight analysis are summarized in Table 3. A significant difference was found at one standard deviation above the mean ST-TW score ($t=2.86$, $p<.01$), showing that ST participants in the Card condition associate money with easy more than those in the Control condition. The easy-money effect of the credit card cue was weaker on UC participants, as reflected in the marginally significant ($t=1.40$, $p<.1$) results on the D-score difference across the Card and Control condition. The easy-money effect of the credit card cue reversed direction for TW participants but not significantly. The spotlight analysis is graphically presented in Figure 2.

<Insert **Table 2: Summary of Regression on the D-Score in the IAT (N = 169)** here>

< Insert **Table 3: Spotlight Analysis on the D-Score of IAT at Selected Levels of Sensitivity to Pain of Payment (N=169)** here>

<Insert **Figure 2: Predicted Mean IAT D-score Across Card vs. Control Condition at Selected Levels of Sensitivity to Pain of Payment** here>

Discussion

The results of study 1 suggest that the easy-money effect of the credit card cue exists. The first two hypotheses are supported. However, rather than concluding that STs associate money with easy more after being shown the credit card cue, the results of study 1 only support that they associated money with hard less, as reflected from the negative mean D-score. Since participants in general tended to associate money with hard as suggested by the negative sample mean D-score (-0.349), the easy-money effect we proposed may take the form of weakening participants' association between money and hard but not promoting their association between money and easy. Interestingly, ST participants associated money with hard more than TW participants in the control condition, as reflected in the significant and negative slope of the ST-TW score in the regression analysis on D-score ($B = -.018$, $t = -1.83$, $p < .05$). Further analysis showed that the income levels were the same across the STs, the UCs, and the TWs ($F = .005$), eliminating possible explanations regarding the income differences across the groups. Perhaps, because of STs' insensitivity to spending, they spent too easily feeling that they never have enough money to spend, resulting in a perception that it is hard to get money.

STUDY 2

Method

In Study 2, the moderating role of the individual's sensitivity to pain of payment on credit cards' spending-stimulating effect (H3) and the effectiveness of hard-work reminder in weakening easy-money effect on spending (H4 & H5) were tested in the context of restaurant dining. Participants were invited to participate in a "Restaurant-Dining Study", which was ostensibly conducted to understand consumers' food choice for a tapas menu. They were asked to order from a hypothetical restaurant menu. The total spending of their order was then calculated, serving as the dependent measure.

Participants. Similar to study 1, MTurk was used to collect data for this experiment. In this study, 365 workers (55% women) participated for a small sum of money. The average age of participants was 33, and 79% of them had a household annual income of \$20,001 or more.

Payment Cue Manipulation. When investigating the effect of credit cards, the prior study compared participants who are shown a credit card cue with either participants who were informed that only cash payment is accepted or participants in the control condition who are not shown any payment cue. There has been no research attempt comparing participants across all these three of these conditions within one study. As past studies on money have suggested that people behave differently when they are primed with the concept of money by cash images (Vohs, Mead and Goode 2006, Vohs, Mead and Goode 2008), we speculate that people who are informed that only cash payment is accepted may also be primed with the concept of money causing them to spend differently from people in the control condition. Although we do not have any specific predictions regarding the priming of money by cash cue, we are interested in

examining whether people may spend differently across the “cash only” group and the control group. Therefore, the payment method was manipulated by having three conditions: participants assigned to the credit card cue condition (Card condition) were shown the logos of four credit card operators – MasterCard, Visa, Discover, and American Express – accompanied by the statement “We accept all major credit cards”; participants assigned to the cash cue condition (Cash condition) were shown the statement “We accept cash only”; participants assigned to the control condition were not shown any stimuli related to payment methods.

Hard-work Reminder (HWR) Manipulation. Participants were reminded of their hard work by a picture showing a man buried in a pile of paperwork accompanied by the phrase “after a day of hard work”. Since this study was conducted in a restaurant-dining context, the manipulation of the payment cue and the hard-work reminder were done by integrating the stimuli previously described into the menu as a banner being placed across the top of the menu.

Procedure. The experiment used a 3 (Payment Cue: Credit Card cue vs. Cash Cue vs. Control) x 2 (Hard-Work Reminder: Absence vs. Presence) between subjects design. Similar to Study 1, the questionnaire was created using an online survey software which randomly assigned the participants to one of the six between-subjects conditions. They were told to imagine that they were dining in a tapas restaurant with three other friends, who asked the participant to be fully in charge of what to order for their party of four so that they could share the tapas for the dinner.

Participants were informed that a party of four usually ordered 8 to 12 tapas to share. They were then asked to order from a tapas menu which includes 31 menu items with price ranging from \$4 to \$11. As part of the banner across the top of the menu, the payment cue and the hard-work reminder were manipulated immediately before the menu items were shown.

Restaurant ambience sound effects were automatically played as the background music for the menu page in order to better resemble the real restaurant environment as people were reading the menu and deciding which dishes to order. Participants could then order any items by checking the box for the item.

Individuals' Sensitivity to Pain of Payment. After placing their dinner order, participants were asked to complete the four-item ST-TW scale to assess their sensitivity to pain of payment.

Self-Estimated Spending. They were also asked about how much they think they have spent on their order without looking back at the menu. The online survey was set in a way that participants were unable to go back to the menu when answering this question.

Other Measures. Finally, questions about participants' dietary requirements (e.g. vegan, vegetarian, etc.) and demographics (i.e. gender, age, and income) were asked at the end of the survey.

Total Spending. The prices of the selected items were summed up to give the total spending of each participant, serving as the dependent measure.

Results

Participants who indicated that they have special dietary requirements such as vegan, vegetarian, Muslim, etc. were excluded from the analysis, because our pretest showed that these participants were only concerned with choosing the “correct” menu items according to their own diet rules making them almost immune to the effect of the credit card cue and the HWR. As a result, 309 responses remained for further analysis. We conducted linear regression analyses by following the guidelines given in Jaccard et al. (2003) to test H3 to H5.

The focal independent variable was the Payment Cue Manipulation, represented by two dummy variables. One was the dummy variable for the Card condition (X1) in which responses in the Card condition received a 1 and all others (both Cash and Control) received a 0. The second was the dummy variable for the Cash condition (X2) in which responses in the Cash condition received a 1 and all others (both Card and Control) received a 0. The first-order moderator variable was the Individual's Sensitivity to Pain of Payment (M1), measured in the same way as in study 1. The second-order moderator variable was the HWR manipulation (M2), represented by a dummy variable scored as 1=Presence and 0=Absence of Hard-Word Reminder. The products of X1(X2) and M1, the two-way interaction effects between the Card (Cash) condition and the Individual's Sensitivity to Pain of Payment, were two other predictor variables. The products of X1(X2) and M2, the two-way interaction effects between the Card (Cash) condition and Hard-Work Reminder, were two other predictor variables. The products of X1(X2), M1, and M2, the three-way interaction effects among the three independent variables, were also included as predictor variables. Finally, ages and incomes were also included as predictor variables. The dependent measure was Total Spending. The means and standard deviations of variables and measures are shown in Table 4.

Total Spending for the Dinner. We regressed Total Spending onto X1, X2, M1, M2, X1M1, X2M1, X1M2, X2M2, M1M2, X1M1M2, X2M1M2, age, and income. The results of the omnibus F test showed that the regression model we proposed could predict the total spending ($F=4.85, p<.00$). The results are summarized in Table 5. The results of the unstandardized coefficients are summarized in Table 6. As predicted, the regression coefficient for X1M1M2 is significant for total spending ($t=-4.32, p<.01$), suggesting the presence of a three-way interaction.

The squared multiple correlation for the model that omits X1M1M2 was .124, whereas the full model yields a squared multiple correlation of .177. The difference between these squared multiple correlations was .053, indicating that the three-way interaction accounted for 5.3% of the variance in the total spending.

<Insert **Table 4: Means and Standard Deviations for Variables and Measures** here>

<Insert **Table 5: Omnibus F Test Results of the Proposed Regression Model** here>

<Insert **Table 6: Summary of Regression on Total Spending (N = 309)** here>

To further test the moderating role of Individuals' Sensitivity to Pain of Payment, we derived its effect on Total Spending across the six conditions by transforming the ST-TW score and recoding the dummy variables to change the reference level for comparisons, as shown in Table 7 and Figure 3. As predicted, in the absence of HWR, ST participants spent more than TWs when being shown the credit card cue, as reflected by the positive slope of ST-TW score ($t=3.69$, $p<.01$). This result supports H3.

<Insert **Table 7: Slopes for Total Spending Regressed Onto Individual's Sensitivity to Pain of Payment (N=309)** here>

<Insert **Figure 3: Side-by-Side Plot for the Regression Lines of Total Spending on Individual's Sensitivity to Pain of Payment as a Function of Payment Cue and Hard-Work Reminder Manipulation (N=309)** here>

To further test the effectiveness of the HWR in weakening the easy-money effect of the credit card cue, its effects on Total Spending across the three payment cue manipulations at the three selected levels of sensitivity to pain of payment were derived, as shown in Table 8 and Figure 4. In the Card condition, there were significant difference between the Absence and Presence of HWR at the mean and at one standard deviation above the mean ST-TW score ($t=3.32, p<.01$; $t=5.07, p<.01$). The results showed that both UC and ST participants in the Card condition spent less when being reminded of their hard work, supporting H4. For the TW participants in the Card condition, however, reminding them of their hard work did not influence their spending ($t=-.59, p>.1$). These results support H5, suggesting that, under exposure to the credit card cue, the effect of HWR in reducing spending is stronger on STs and weaker on TWs.

<Insert **Table 8: Cell Means and Simple Effect Parameters of HWR on Total Spending at Selected Levels of Sensitivity to Pain of Payment Across the Three Different Conditions (N=309)** here>

<Insert **Figure 4: Predicted Mean Total Spending Across the Six Conditions at Selected Level of Individual's Sensitivity to Pain of Payment (N=309)** here>

Discussion

The results of Study 2 support our hypotheses, showing that individuals' sensitivity to pain of payment moderates the spending-stimulating effect of the credit card cue with ST participants spending more than TW participants when exposed to the credit card cue. We further show that reminding participants of their hard work can weaken the spending-stimulating effect of the credit card cue, but only on ST and UC participants. Interestingly, reminding participants in the cash and control conditions of their hard work can also reduces their spending, but this

only works for TW and UC participants, not ST participants. This interesting finding seems to be consistent with the results of Study 1, which showed that ST participants associated money with hard more than TW participants in the control condition. As a result, the hard-work reminder might not work well for ST participants in the control condition, because they had already perceived money as hard to get in that condition.

GENERAL DISCUSSION

Our first research attempt in testing the easy-money effect across different payment cue conditions and the effectiveness of the hard-work reminder in reducing the spending-stimulating effect of credit card cue has given positive results. Firstly, the results of Study 1 suggests that the proposed easy-money effect of the credit card cue exists, with ST participants associating money with hard less in an IAT after being shown the credit card cue versus neutral cue. Secondly, the results of Study 2 show that individuals' sensitivity to pain of payment moderates the spending-stimulating effect of the credit card cue in a restaurant-dining context. In particular, ST participants spent more on their dinner than TW participants in the presence of the credit card cue. Thirdly, the results of Study 2 demonstrate that, when being shown the credit card cue, participants who were reminded of their hard work by a picture with textual stimuli spent less. However, this happened to ST and UC participants only, not TW participants. Although our results suggest the existence of the easy-money effect of the credit card cue and its underlying role in stimulating consumer spending, there was no direct test examining the mediating role of the proposed easy-money effect in the study. Also, the easy-money effect was assessed from participants' implicit association between easy/hard and money without directly testing their

perceived value of money. Future research may consider examining the easy-money effect by measuring participants' perceived value of money directly such as asking them to set prices for selling certain products. Supposedly, under the influence of the easy-money effect, consumers who perceive the value of money to be lower are more likely to set the prices higher for the same item.

Also, even though the results from Study 1 reveal that participants associate money with hard less when exposed to the credit card cue, they do not necessarily perceive the money to be easier to obtain as proposed by our conceptual framework. Participants may associate money with hard less simply because they perceive that money is easier to spend after being exposed to the credit card cue. Thus, future research on the topic may need to show more clearly that the easy-money effect is due to consumers' association between easy and getting money, not between easy and spending money.

The results from Study 2 show that reminding participants in the Card condition of their hard work can reduce their spending. However, it is also possible that reminding people of their hard work can give them reasons to reward themselves and hence spend more. Thus, future research may want to test the robustness of the HWR effect and find when the HWR does not work in weakening the easy-money effect.

Interestingly, the sample mean D-score found in Study 1 was negative, reflecting that participants in general have a strong association between money and hard. Perhaps, MTurk workers who earn a small sum of money by completing our study online are already working in an environment that promotes thoughts about money being earned hard. Future research may explore the easy-money effect of the credit card cue by collecting responses from people who are

more likely to associate money with easy. The IAT can also be conducted in a within-subject design, studying participants' associations between money and easy before and after showing the credit card cue, to test the robustness of the credit card cue effect on mental associations.

Additionally, it would be interesting to explore the behavioral consequences of the easy-money effect of credit card cue other than spending. It is possible that the credit card cue may lead people to associate not only money with easy, but also other objects with easy, causing people to underestimate the effort required to obtain something or to complete something.

THEORETICAL AND PRACTICAL IMPLICATIONS

The results of the two studies together provide convergent support to the easy-money effect of the credit card cue. This paper contributes theoretically by shedding light on the underlying process of the long established spending-stimulating effect of the credit card cue. The notion of “easy come easy go” seems to be applicable to the money available from credit cards, becoming “easy money easy go”. As money available from credit cards can be obtained with relatively less effort when compared to money earned by working, very often, consumers regard it as easy money. Due to the lower effort invested in obtaining money from credit cards, consumers may evaluate it less positively, just as they evaluate objects obtained by less effort to be of lower quality (Aronson and Mills 1959, Gerard and Mathewson 1966, Kruger, et al. 2004). The less positive evaluation of money from credit cards may lead consumers to perceive it to be of lower value and spend it more easily. Results of our two studies show that this effect may also occur when consumers are only exposed to the credit card cue without using credit cards, because the credit card cue can activate the concept of easy money if credit cards are mentally associated with easy money in a consumer's mind. These findings suggest a first implication of

this paper - credit cards can stimulate more spending whenever the easy-money associations are salient.

Another theoretical contribution of this paper is bringing a very relevant concept, individual's sensitivity to pain of payment, into the picture when explaining credit cards' spending-stimulating effect. The existing literature suggests that consumers take their immediate pleasure and immediate pain of consuming into consideration when making spending decisions (Prelec and Loewenstein 1998). Since people are likely to have different propensities in experiencing the pain of paying, "Tightwads" are proposed to spend less than they would like to spend while "Spendthrifts" typically spend more than they would like to spend due to their individual differences in anticipating the pain of paying (Rick, Cryder and Loewenstein 2008). Very few studies has taken this concept into consideration when examining the spending-stimulating effect of the credit card cue. Our study suggests that not only the payment characteristics of credit cards and consumer demographics affect credit card spending, but consumer psychographics such as individuals' sensitivity to the pain of payment also play a role.

There is one previous study investigating how individual differences in sensitivity to the pain of payment moderates consumers' spending across different payment methods. Specifically, when making impulsive purchase decisions on vice products (e.g., unhealthy food items), TWs spend more when paying by credit card (vs. cash) while STs spend similarly regardless of the payment method (Thomas, Desai and Seenivasan 2011). This is because the pain of paying in cash can restrain TWs' impulsive urges to buy vice products, because they are more sensitive to the pain of payment. Such a vice-regulation effect of cash payments was not found when participants made deliberative purchase decisions on virtue products (e.g. healthy food items).

The current paper complements the previous study by examining how the individual differences in sensitivity to the pain of payment affects the purchase of neutral products (i.e. tapas dishes for dinner), in the absence of the vice-regulation effect of cash payments. As opposed to the previous study which examines how the higher sensitivity to the pain of payment of tightwads affects their vice-products purchase behavior, our study contributes theoretically by investigating how STs' lower sensitivity to the pain of payment affects their neutral-product purchase behavior. This paper suggests that there might be more nuances than expected when studying why consumers spend more when using credit cards.

Unlike previous research on credit cards, which focuses on examining the spending-stimulating effect without empirically testing how its theory could be applied in reducing the effect, this paper contributes to consumer welfare by suggesting a practical tactic that can be used to reduce the spending-stimulating effect of the credit card cue. Based on our conceptual framework of the easy-money effect, we propose that reminding consumers of their hard work can weaken the easy-money effect of credit card cue and hence consumer spending. Results of The results of study 2 support this proposition, offering consumers a practical way to discourage spending when credit cards are involved. Consumers who do not want to overspend through their exposure to credit cards can consider keeping a hard-work reminder in their wallet just next to their credit cards. More importantly, this paper suggests that credit cards will not elicit more spending whenever there are cues able to make the easy money associations less salient.

With empirical data supporting the conceptual framework, this paper suggests conditions in which credit cards will stimulate more and less spending. Our research illustrates how the easy-money effect could explain credit cards' long-established spending-stimulating effect and

how understanding this possible underlying mechanism could help both consumers and marketers better achieve their goals regarding credit cards. Further research is needed to determine if the easy-money effect exists across time and space regardless of the consumers' economic environment.

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