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Labovitz School of Business & Economics, University of Minnesota Duluth, 11 E. Superior Street, Suite 210, Duluth, MN 55802

Spending Credit Like a Windfall Gain

Cynthia Cryder, Washington University, USA

Laura Xiao, Washington University, USA

We hypothesize that the term “credit” changes psychophysical representations of spending. In a series of experiments, we find that the term credit encourages people to mentally represent spending as a reduction of a gain rather than as a more subjectively painful loss.

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The Psychology of Debt: Steering Consumers out of the Red and Into the Black

Chairs: Grant E. Donnelly, Harvard Business School, USA

Nina Mazar, University of Toronto, Canada

Paper #1: Spending Credit Like a Windfall Gain

Cynthia Cryder, Washington University St. Louis, USA

Laura Xiao, Washington University St. Louis, USA

Paper #2: Debt Repayment Strategy and Consumer Motivation to Get Out of Debt

Keri Kettle, University of Miami, USA

Remi Trudel, Boston University, USA

Simon Blanchard, Georgetown University, USA

Gerald Häubl, University of Alberta, Canada

Paper #3: Balance Reframing: Paying by the Purchase Promotes Higher Repayments

Grant E. Donnelly, Harvard Business School, USA

Zoe Chance, Yale University, USA

Michael I. Norton, Harvard Business School, USA

Paper #4: Applying Behavioral Science in the Field: Nudging Customers to Pay Their Credit Card Dues

Nina Mazar, University of Toronto, Canada

Dan Ariely, Duke University, USA

SESSION OVERVIEW

Millions of consumers around the world have high-interest credit card debt. In the US alone, credit card use grew 50% in the last decade (US Census Bureau, 2010), with an average household credit card debt of \$10,678 (a 29% increase from 2000; see Chu & Acohido, 2008). This growth in indebtedness has not only had a devastating effect on individuals' personal finances, but has also been associated with increased negative affect (Silvera et al., 2008), lower life satisfaction (Norvilitis et al., 2006), greater instances of domestic violence (Fox et al., 2002) and even suicide (Yip et al., 2007). Despite the ubiquity of indebtedness, many essential questions about credit card use and debt repayment are just coming under the lens of consumer research. This symposium will present cutting-edge research on the psychological underpinnings on using credit, and new insights toward repayment motivation and behavior, with an emphasis on how to reduce consumer indebtedness.

First, Cryder will explore why using credit is so alluring. Cryder's research reveals that the term 'credit' prompts consumers to mentally code credit as a gain, changing the psychophysical representations of spending. A 'credit' (relative to a 'loan') mindset prompted consumers to respond quicker to gain-oriented words, view credit as a larger windfall gain, increased consumer happiness and resulted in additional interest in spending. These findings highlight how credit card terminology may introduce ambiguity to psychological processes of spending, encouraging consumers to feel as if they are spending a windfall gain, rather than incurring a loss, which may contribute to overspending and buildup of debt. Second, Kettle will examine how consumer motivation to repay existing credit card debt is affected by their repayment strategy. Using credit card data and online experiments, Kettle's research shows that the most effective strategy is for consumers to focus their debt payments on a single debt (rather than simultaneously repaying many debts). This focused pursuit leads consumers to perceive greater progress and increases motivation to repay. Third, Donnelly demonstrates that consumers pay more toward their credit card debt if they are given the option of paying off specific purchases, rather than making a payment on

the aggregated balance. When given the option consumers prioritize payment of more 'painful' purchases- splurges and interest charges.

Building on these findings, our symposium next examines real relationships between a credit card company and its customers. Mazar will present findings from a large-scale field experiment with over 500,000 delinquency instances, in which she manipulated the interactive voice recording message that reminds customers of their past dues. Mazar shows that creating a sense of urgency, targeting debt literacy, and helping customers to form implementation intentions substantially decreased delinquency and the time to repay one's past dues.

Spending too much on credit, making insufficient payment and missing the payment due date can prove costly to consumers, potentially resulting in long-term consequences. Together, the talks in this symposium will shed light on the benefits produced by small interventions grounded in judgment and decision-making that may significantly help consumers combat their debt.

Spending Credit Like a Windfall Gain

EXTENDED ABSTRACT

Credit card debt plays a significant role in total consumer debt, totaling \$4,530 of average debt per credit card holder in 2011 (Federal Reserve Bank, 2010; 2011). Credit cards pose multiple challenges to consumers. First, credit cards have high interest rates: once consumers have accrued credit card debt it is expensive to pay off. Another challenge posed by credit cards is that, at least in some cases, credit cards encourage consumers to spend more in the first place, imposing a "credit card premium" (Feinberg 1986; Raghuram and Srivastava 2008; Prelec and Simester, 2001; Soman 2003).

The "credit card premium" describes the tendency for consumers to spend more, up to 100% more, with credit cards compared to other spending currency such as cash (e.g., Feinberg 1986; Prelec and Simester 2001). Lower liquidity constraints, deferral of payment (Laibson 1997; Soman 2001), and decreased transparency of the payment amount (Soman 2003) combine to partially explain the credit card premium. However, we propose that there is an additional contributing factor that remains to be understood. Specifically, we hypothesize that using the term "credit" changes psychophysical representations of spending. Whereas typical spending is coded as a loss, we hypothesize that the term "credit" prompts consumers to mentally code credit as a gain. Therefore, spending credit is psychologically represented as the reduction of a gain, a hedonically less painful prospect than incurring an equivalently sized loss (Kahneman and Tversky, 1979). We test this idea in five experiments.

Experiment 1 used a Lexical Decision task to compare the term "credit" with a financial term that implies a similar arrangement, "loan". Structural differences between these two financial instruments should, if anything, encourage consumers to be more likely to view a loan as a windfall because loan money tends to be in-hand whereas credit money is merely accessible. Nevertheless, we predicted that consumers primed with credit would be more likely to exhibit associations with gains.

Participants first read financially relevant sentences that included the word "credit", the word "loan", or were control sentences. They then judged whether flashed configurations of letters were words or non-words. Participants were marginally significantly

more likely to accurately identify gain-related words when they were primed with “credit” as opposed to “loan” or with control sentences. Additionally, participants primed with “credit” were significantly more likely to accurately identify gain-related words compared to loss-related words or filler words. This pattern did not exist in the “loan” nor control conditions.

Experiment 2A tested whether consumers offered a line of credit represent that account as a gain more frequently than do consumers who are offered an equivalently structured loan. In Experiment 2A, participants were either asked to imagine that they had received a \$500 “line of credit” or a \$500 “loan.” They then were asked to imagine what their account would look like as represented by a bar graph. Next, participants were shown two bar graphs, one with a bar representing \$500 shown as a gain, and the other with the bar representing \$500 shown as a loss. Participants were asked to choose which graph was the closest to their mental representation of their account. Participants in the “credit” condition were significantly more likely to choose the graph with the bar representing a gain than were participants in the “loan” condition.

Experiment 2B tested the same idea, but used a tightly controlled comparison between a \$500 “credit account” versus a \$500 “account” described in equivalent terms. Participants in the “credit account” condition were significantly more likely to choose the graph with the bar representing a gain than were participants in the “account” condition.

Experiment 3 investigated the idea that the term “credit” prompts consumers

consider themselves more favorably in terms of subjective gains or well-being. Participants indicated to what extent their happiness would change after receiving a \$500 line of credit versus a \$500 loan. Participants who imagined receiving a line of credit reported a significant increase in happiness whereas participants in the loan condition reported no change; this difference was significant between conditions.

Finally, experiment 4 examined anticipated spending. Participants who imagined that they had received a \$500 line of credit versus a \$500 loan predicted that they would be more likely to purchase a \$50 DVD set and a \$250 plane ticket.

Using a credit card incurs a financial loss. Yet, credit card terminology introduces ambiguity to the psychological process of spending that encourages consumers to feel as if they are spending down a windfall gain rather than incurring a loss. Such ambiguity may contribute to overspending and over time, to the excessive buildup of consumer debt.

Debt Repayment Strategy and Consumer Motivation to Get Out of Debt

EXTENDED ABSTRACT

Consumers with problematic levels of debt tend to have multiple sources of debt, and must regularly decide how to allocate repayments across their debt accounts. We examine how the allocation of a consumer’s debt repayments influences their subsequent motivation to get out of debt. We theorize that paying down debt accounts sequentially (focusing repayments on one account at a time) rather than simultaneously (spreading repayments out across accounts) causes consumers to perceive greater progress which, in turn, increases their motivation to repay their debt. Evidence from a large consumer debt data set and two experiments provides strong support for the proposed process.

We obtained a dataset (from HelloWallet.com) with a total of 68,858 rows, each representing a separate month for each credit card

account (with a revolving balance) for a total of 2,522 clients. In every month, we measure how their repayments varied from entirely simultaneous (all repayments equal across all accounts) to entirely sequential (only one repayment is made across the indebted accounts). Our measure is based on the Index of Dispersion (Cox and Lewis 1966) and, once normalized, is a continuous score bounded between 0 and 1, where 0 indicates a completely simultaneous strategy and 1 indicates a completely sequential strategy.

We analyzed the effect of debt repayment strategy in month t on the total amount of repayments in the subsequent month ($t + 1$), while including fixed effects for a consumer’s total debt, number of credit cards, credit card spending, and total debt repayment. In support of our theoretical account, the use of a more sequentially oriented repayment strategy has a positive influence on one’s debt repayment in the subsequent month. This effect is robust to varying levels of indebtedness, credit card spending, and repayment amounts.

To test the proposed psychological process, we conducted two experiments that examined the effect of different debt repayment strategies on consumers’ perceptions of progress and motivation to repay debt. We presented participants with a hypothetical debt repayment scenario, and independently manipulated the total amount of debt repaid and how that amount was allocated across their debt accounts. In support of our theoretical account, participants who had been randomly assigned to more sequential debt repayment strategy perceived greater progress toward the goal of getting out of debt and indicated greater motivation to repay their debt, and perceived progress mediated the effect of debt repayment strategy on motivation.

This is the first research to examine the psychological mechanisms underlying the relationship between debt repayment strategy and motivation to repay debt, and is the first to consider the motivational effects of paying down accounts gradually, as opposed to the discrete events of paying such accounts off altogether. This latter distinction is very important because while closing out a revolving debt account is a very rare event, indebted consumers do regularly make repayments towards their debt accounts, and it is thus important to understand how the ongoing repayment of debt accounts influences the motivation of indebted consumers.

Balance Reframing: Paying by the Purchase Promoted Higher Payments

EXTENDED ABSTRACT

Consumers treat credit differently than other forms of payment. People spend more when using credit cards compared to cash or checks (e.g., Rick, Cryder & Loewenstein, 2008). Possibly, the reason credit cards increase spending is because they allow the consumer to separate the pleasure of buying from the “pain of paying” (i.e., the discomfort of spending money; see Prelec & Loewenstein, 1998), and make the true cost of each purchase more difficult to evaluate by compiling all consumption in a monthly bill (Raghubir & Srivastava, 2008). This strategy relies on insights from prospect theory and the value curve proposed by Kahneman and Tversky (1979). The value curve proposes that humans are sensitive to changes or differences in wealth rather than absolute magnitudes, and that losses loom larger than gains. Considering that credit card companies pool many small losses into one larger loss, they are able to reduce the total loss felt by a consumer (Thaler, 1985).

While this strategy has likely contributed to the accumulation of debt, recent research concerning debt repayment has suggested that aggregated debt balances are overwhelming and difficult to repay. For instance, when consumers are confronted with multiple debts they often prioritize the debt with the smallest balance first (even

when this is not the most financially optimal strategy; see Amar et al., 2011). This tendency is aligned with the literature on sub-goals, suggesting that a short, proximal task will help fuel commitment toward subsequent larger tasks. In fact, a consumer who prioritizes repaying the smallest balance is 14% more likely to become debt free than a consumer who consistently targets the largest balance debt (Gal & McShane, 2012). Further, research has suggested that information presented to consumers at the time of repayment influences repayment decisions. For instance, repayers anchor on the minimum payment requirement (Navarro-Martinez et al., 2011).

Given these conditions, the current study proposes that segregating losses, by allowing consumers to make payments toward each individual purchase on a credit card bill could increase feelings of loss, resulting in increased repayment. The saliency of each cost may (a) increase the pain of parting with money and increase the motivation to repay the purchase, and (b) change perceptions of the manageability of the debt because this process breaks down the charge into smaller pieces.

We presented consumers with a hypothetical purchasing scenario where they made purchases in certain categories (i.e., vacation, clothing). Participants were told that all of these purchases were made on a credit card and were saddled with the same amount of debt. Consumers were presented with either an aggregated debt balance, or an aggregated debt balance with line items that composed the debt (segregating the losses of the debt). Consumers who saw line items were able to allocate money towards certain purchases, while those who saw the aggregated balance were only able to allocate toward the total balance. Consumers who were able to repay toward specific purchases allocated more money toward debt repayment ($M = \$561.64$), than those who paid toward the aggregated balance ($M = \$473.50$), $p < .001$ (a near 19% increase in repayment).

In another scenario, consumers were presented with the same hypothetical purchasing task but were told that half of the purchases were made on a credit card that allowed purchasing toward the individual purchases, while half were made on a credit card that allowed purchasing on the total balance. Consumers paid significantly more toward the card that allowed repayment toward specific purchases ($M = \$333.01$), relative to the card that allowed repayment toward the total balance ($M = \$131.75$), $p < .001$ (a near 153% increase in allocation). Consumers perceived the card that allowed payments on the whole balance as bigger than the card that allowed payments toward specific purchases $t(179) = 2.36$, $p = .019$.

Consumers who were given the option to repay toward specific purchases prioritized payments toward interest charges and vacations. Previous research has suggested that consumers prefer to pay off vacations prior to the trip because paying for purchases after the benefits have been received is aversive (Hirst et al., 1997). Our findings suggest that when given the option, consumers will make payments toward items they find aversive, or where losses loom larger. Nearly 40% of consumers expressed interest in switching to a credit card that allowed for repayment by the purchase, and this effect was even larger (50%) for consumers who maintain a credit card balance from month-to-month, suggesting that this method might have increased benefits to individuals who struggle with repaying their debts.

Applying Behavioral Science in the Field: Nudging Customers to Pay Their Credit Card Dues

EXTENDED ABSTRACT

Consumer loans, in principle, serve an important function in society benefiting both consumers and lenders (Shapiro, 2011; Skiba, 2012). In particular, using credit cards can help consumers to man-

age cash flow and expand their financial capabilities. At the same time, credit card loans can also be costly to both consumers and lenders. For consumers who do not pay off their balance in full each month debt can quickly spiral out of control due to accumulating daily interest charges on their outstanding debt. In addition, consumers, who do not make their monthly minimum payment (also referred to on monthly statements as “total due”), become delinquent, which usually results in late fees and potentially downgraded credit scores. The lenders on their side face the risk of not being able to recuperate their loans in case of consumer defaults. In this project we focus on testing interventions that might be helpful in diverting such potential lose-lose situations of delinquency for both lenders and borrowers.

In an effort to avoid such damaging and expensive actions, once a card holder has missed one monthly minimum payment and therefore becomes delinquent, credit card companies often make use of interactive voice recording messages (IVR) to make borrowers aware of their total due amount and prompt them to pay it such that their accounts are no longer delinquent (i.e. their accounts move from being “past due” to become “current”). To the extent that IVRs are effective, they can be an economical way to intervene early on in the delinquency process, and potentially eliminate some of its negative consequence.

Standard IVR messages typically tend to assume that the account holder has full information, experience, and knowledge and, therefore, if anything, all they need is to be reminded of their lapse (i.e. that they have a total due amount). While this reminder-approach has merit, it ignores the possibility that the individuals facing delinquency have low levels of financial and debt literacy (Soman and Mazar, 2012). For example, according to a 2009 National Financial Capability Study (FINRA Investor Education Foundation, 2012), people low on financial literacy are significantly more likely to engage in negative (i.e. costly) credit card behaviors. Yet, only about two-thirds of Americans are estimated not to comprehend the workings of credit cards (Lusardi and Tufon, 2009). Thus, one of the main goals of the current research is to test the potential benefits of a script that is focused on better explaining the situation and the actions needed to resolve it.

In addition to the potential limiting effect of debt literacy, there are other possible barriers that could prevent delinquent customer from repaying their debt. For one, it is possible that while repaying their debt is generally desirable, that this intention is not sufficient to create a repayment action. In this regard, it has been shown that helping people to make plans (i.e. forming implementation intentions; Gollwitzer, 1999; Gollwitzer, Bayer, and McCulloch, 2005; Gollwitzer and Sheeran, 2006; Milkman et al., 2011; Nickerson and Rogers, 2010) and making them actively commit to their intentions (Cialdini and Goldstein, 2004; Shu et al., 2012) can increase their likelihood of following through on these plans. These findings have powerful implications for interventions directed toward increasing socially important behaviors that individuals intend to, but often fail to, perform. Thus, in addition to providing delinquent customers with an explanation of their situation and the actions needed to resolve it (debt literacy), we also tested the effect of creating implementation-intentions for their debt repayment (implementation intentions), and the effect of prompting a promise to repay (active commitment).

Together with a North American credit card company that has a substantial share of higher risk subprime customers (i.e. customers of lower credit quality) we tested the effects of five variations of the traditional IVR message (control condition) on customers' likelihood and speed to make payments on their account such that they were no longer delinquent.

The results from our large-scale field experiment conducted over 9 months with over 500,000 call observations suggest that small and fairly cheap changes to an automated IVR message can significantly alter behavior: they can increase the likelihood and speed to pay current a delinquent credit card account. Specifically, our results show that creating a sense of urgency, coupled with a focus on debt literacy and the formation of implementation intentions reduced delinquency by 3.3% (in absolute percentage points) and increased the average speed by which delinquent account holders set their accounts in order by almost a full day (0.9 days).

While it is possible that the improvement in repayment to the focal credit card accounts was done at the expense of other debts, the results suggest that delinquency is not simply an outcome of either forgetting or sheer inability to make a payment. Instead, delinquency might also be due to a lack of understanding or awareness of its meaning as well as non-specific plans to follow through on one's payment intentions.

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