The Effects of an Emergency Reserve on Self-Control Performance

Marissa Sharif, University of California Los Angeles, USA
Suzanne Shu, University of California Los Angeles, USA

The presence of an emergency reserve in a mental budget can improve self-control by providing appropriate balance between indulgent flexibility and stringent goals. Reserves appear to work by reducing depletion and increasing task motivation. However, this effect is eliminated if initial budgets are too deprived.

[to cite]:

[url]:
http://www.acrwebsite.org/volumes/1017076/volumes/v42/NA-42

copyright notice]:
This work is copyrighted by The Association for Consumer Research. For permission to copy or use this work in whole or in part, please contact the Copyright Clearance Center at http://www.copyright.com/.
Becoming a Saver: Benefits, Obstacles, and Aids

Chairs: Eesha Sharma, Dartmouth College, USA
Abigail B. Sussman, University of Chicago, USA

Paper #1: A Penny Saved is a Partner Earned: The Romantic Appeal of Savers
Jenny Olson, University of Michigan, USA
Scott Rick, University of Michigan, USA

Paper #2: A Dollar Saved is not a Dollar Earned: Financial Deprivation Shifts Focus to Earning Over Saving
Eesha Sharma, Dartmouth College, USA
Punam Anand Keller, Dartmouth College, USA

Paper #3: When One Error Elicits Another: Unnecessarily Costly Reactions to Personal Fault
Abigail B. Sussman, University of Chicago, USA
Rourke O’Brien, Harvard University, USA

Paper #4: The Effects of an Emergency Reserve on Self-Control Performance
Marissa A. Sharif, University of California Los Angeles, USA
Suzanne Shu, University of California Los Angeles, USA

SESSION OVERVIEW
Common wisdom suggests it is prudent to budget and save; yet, savings rates among Americans have been declining since the 1980s (Bureau of Economic Analysis 2014; Economist 2013; McCully 2011). In light of this pattern, gaining a deeper understanding of consumers’ financial decision-making process grows increasingly important. Indeed, the topic has been of mounting interest to consumer researchers, practitioners, and policymakers alike (e.g., Fernandes, Lynch, and Netemeyer 2014; NEFE 2014). Accordingly, this session aims to disseminate and stimulate discussion about recent findings pertaining to causes and consequences of consumers’ saving behavior—specifically, perceptions of savers (Paper 1), obstacles that may hinder saving (Papers 2 and 3), and potential strategies to encourage more prudent budgeting (Paper 2 and 4).

In paper 1, Olson and Rick suggest that saving can reap interpersonal benefits as well as financial ones. Specifically, saving enhances perceptions of self-control and hence attractiveness; consequently, people who save are more romantically appealing. Papers 2-3 examine obstacles that may prevent people from spending prudently, including attention to saving and reactions to financial shocks. Specifically, paper 2 (Sharma and Keller) suggests that temporary feelings of financial deprivation increase the perceived security gained from earning rather than saving and in turn shift people’s focus from saving opportunities to earning opportunities. Further, paper 3 (Sussman and O’Brien) examines how people spend in response to negative income shocks and suggests that people are likely to spend more than necessary when they are responsible for the shocks. Fortunately, strategies exist to encourage budgeting behavior, and paper 4 (Sharif and Shu) discusses one of them. Specifically, the authors suggest that creating an emergency reserve may improve progress towards goals, and may be useful in both financial and non-financial domains which require self-control.

Thus, although saving behavior may be attractive for multiple reasons (Olson and Rick), people might not be as focused on saving opportunities when they feel worse off financially (Sharma and Keller), and when they feel personally responsible for their adverse state (Sussman and O’Brien). However, considering older age, potential emergency expenses, and the benefits of saving can boost saving tendencies (Sharma and Keller), and having an emergency reserve in a budget can improve self-control performance (Sharif and Shu). By utilizing these tactics, it may be possible to both improve the attractiveness of our financial position as well as our interpersonal standing.

Together, these papers examine a range of topics pertaining to consumer budgeting and saving, and may stimulate further questions and discussion about (1) factors that might hinder saving behavior, (2) factors that might encourage saving behavior, and (3) benefits to consumers who save. We believe this session will be of interest to researchers in many areas of study, including consumer financial decision making, economic psychology, goals, mental accounting, subjective well-being, and transformative consumer research.

A Penny Saved is a Partner Earned: The Romantic Appeal of Savers

EXTENDED ABSTRACT
What we consume conveys information about who we are. For example, in romantic contexts, men who are motivated to find a romantic partner are especially likely to buy luxury goods to signal their wealth (Griskevicius et al. 2007). This tendency echoes recent advice from the Wall Street Journal to (essentially) “burn a big pile of money on the first date,” as a signal of wealth (Oyer 2014). Indeed, when women only have information about a single purchase, they tend to view men who recently purchased a luxury good (a Porsche) as more attractive than men who recently purchased a more basic good (a Honda), presumably because the luxury purchase is a better signal of financial viability (Sundie et al. 2011, study 4).

However, in almost any context, people will have more information about potential mates than a single purchase. The multiple consumption cues present in many contexts (e.g., clothing, accessories, phones, laptops, and cars) are likely to convey information about one’s general spending habits (that is, whether one is generally a “spender” or a “saver”).

We propose that people’s general tendency to spend or save is likely to influence the inferences others draw about them, and thus their initial romantic appeal. Specifically, we hypothesize that savers are likely to be viewed as more attractive than spenders for both economic and psychological reasons. Economically, savers are presumably more likely to accumulate financial resources. Psychologically, savers may be viewed as possessing greater general self-control (applicable across many domains). For many people, saving requires actively suppressing the urge to spend. Individuals who possess self-control in one domain may be assumed to possess it elsewhere (e.g., savers may be assumed to be more likely to exercise and maintain a healthy diet). To the extent that general self-control makes one a better mate (e.g., by reducing the likelihood of cheating or saying hurtful things), savers should be viewed as more attractive than spenders.

Of course, our primary question of whether and why savers are viewed as more attractive is only relevant if people can accurately and easily distinguish between savers and spenders. Together, these papers examine the range of topics pertaining to consumer budgeting and saving, and may stimulate further questions and discussion about (1) factors that might hinder saving behavior, (2) factors that might encourage saving behavior, and (3) benefits to consumers who save. We believe this session will be of interest to researchers in many areas of study, including consumer financial decision making, economic psychology, goals, mental accounting, subjective well-being, and transformative consumer research.

A Penny Saved is a Partner Earned: The Romantic Appeal of Savers
rect guess (i.e., a guess that matched the self-diagnosis). Participants were 16% more likely to correctly guess that a saver was a saver than to incorrectly guess that a spender was a saver (significantly greater than the 0% chance baseline). These snap judgments displayed accuracy on par with the accuracy of common snap judgments documented in the personality literature (cf. Vazire et al. 2008).

Next, we examined whether, why, and when savers are romantically preferred to spenders. To carefully test our hypotheses and control for confounding factors that may be correlated with saving versus spending habits, our general experimental paradigm utilized online dating profiles in which targets disclosed their saving versus spending habits. (Describing your spending habits is common on popular dating websites such as eHarmony; Lieber 2010.)

In experiment 1A, we presented participants with an opposite-sex dating profile and manipulated whether the potential mates described themselves as a “saver” or a “spender” in a variety of ways (e.g., saving described as “love to save” or “hate to spend”). Participants reported how attracted they were to the potential mate. As predicted, there was a robust preference for savers over spenders (as well as “control” targets who did not describe their spending habits), regardless of how these habits were described. Experiment 1B demonstrated that savers are romantically preferred to spenders for both dating and longer-term relationships, though this preference does not persist within the context of one-night-stands (where saving versus spending habits are not actively considered). Experiment 1C extended beyond the domain of romantic attraction to physical attraction. A novel and direct implication of our proposed underlying mechanism (perceptions of general self-control, which encourages healthy practices) is that, when there is any ambiguity about true physical attractiveness, savers should be expected to be more physically attractive and viewed through this biased lens. As predicted, savers were perceived as being more physically attractive than spenders. We also found that savers were viewed as significantly less exciting than spenders (presumably due to the prudence encouraged by general self-control), ruling out a halo effect interpretation for the physical attractiveness finding.

Experiments 2A and 2B sought to directly establish evidence for the underlying mechanism of self-control perceptions. Experiment 2A demonstrated that savers benefit from greater perceived financial viability and greater perceived general self-control, but that perceived self-control was the primary mediator between spending habits and romantic attractiveness. Experiment 2B added converging process evidence by holding spending habits constant and manipulating perceived self-control directly. Spenders who otherwise appear high in self-control were viewed as just as attractive as savers, with both types exceeding typical spenders (low in general self-control).

In experiments 3 and 4, we examined dispositional and situational factors that may moderate the romantic appeal of savers. Potential mates high in general self-control possess a number of attractive attributes, but choosing such a mate may require sacrificing stimulation. Consistent with the notion that general self-control favors prudence over fun, we found that traits (e.g., boredom susceptibility; Zuckerman 1979) and states (e.g., situational need for excitement) that increase the desire for stimulation decrease the preference for savers.

In addition to the obvious economic benefits, our work documents interpersonal benefits of saving: savers are viewed as possessing greater general self-control, which enhances both their perceived romantic and physical attractiveness. Of course, self-control is not always desired in a prospective mate: dispositional and situational forces that increase the need for stimulation attenuate the relative appeal of savers. Thus, savers may win in the mating market, but only when potential mates do not crave excitement.

**A Dollar Saved ≠ a Dollar Earned: Financial Deprivation Shifts Focus to Earning Over Saving**

**EXTENDED ABSTRACT**

Many people do not save despite knowing how and why they should save, and common explanations point to demographic and individual difference variables: lower income, younger age, lower education, lower financial literacy, self-control (e.g., Karlan, Ratan, and Zinman 2014). However, these explanations cannot address why older, wealthier, and more educated people also do not save. We suggest one reason why individuals do not save (and hence why it might be challenging to encourage them to do so): People are susceptible to transient states of deprivation, which shift their focus to earning rather than saving. Five studies demonstrate that financial deprivation enhances the perceived security associated with earning rather than saving, which in turn reduces people’s focus on saving opportunities in favor of earning opportunities.

Study 1 examined the correlation between perceived financial deprivation and financial security gained from earning over saving. Participants responded to the following measure: “I would feel more secure about my financial future if I” (7-pt scale; 1 = saved more, 7 = earned more) and rated their financial position using a version of Sharma and Alter’s (2012) subjective financial well-being scale. The worse participants felt financially, the more they felt that earning rather than saving would provide a greater sense of financial security, r(143) = -.29, p < .0001.

In Study 2 and the subsequent studies, we manipulated financial deprivation by asking participants to describe a time they felt they did not have enough money (deprived) or had more than enough money (flush). Participants then indicated the number of hours in a day they preferred to spend on two target activities (earning, saving) and filler activities. The ratio of time participants allocated to earning versus saving was the DV. As expected, this ratio was higher among deprived (M = 3.89, SD = 2.91) than flush (M = 2.76, SD = 2.39) participants, Mann-Whitney U = 791, p = .039.

In Study 3, we manipulated financial deprivation, measured participants’ selection between two jobs, and tested whether the effect of deprivation on job selection operated via feelings of financial security. The two jobs both offered a $4,000 increase in income, but differed in the source. In one job, the increase was described as coming from a bonus of $5,000 with an additional transportation expense of $1,000 (saving-framing) whereas in the other job, the increase came from a bonus of $2,000 and a $2,000 decrease in transportation expenses (saving-framing). The percentage of participants selecting the earning-framed job was marginally higher in the deprived (70.2%) than flush (59.6%) condition, χ²(1, N = 268) = 3.20, p = .07. In addition, perceived financial security gained from earning was higher among deprived (M = 5.50, SD = 1.48) than flush (M = 4.92, SD = 1.92) participants, F(1, 266) = 7.62, p = .006, and this perception mediated the effect of deprivation on job choice (95% CI: .01, .26).

In Study 4, we manipulated financial deprivation and asked participants to read about a target individual seeking to improve her family’s financial position. Given that people tend to be able to save more as they grow older, we expected age to moderate the effect of deprivation on people’s focus on earning over saving. Accordingly, we varied whether the target was described as younger (30 years) or older (55 years), and asked participants to indicate whether they believed the target should earn more or save more using a seven-
point scale (1 = definitely earn more, 7 = definitely save more). We found the expected interaction, F(1, 317) = 5.83, p = .016. Follow up comparisons revealed that, in the younger-target conditions, deprived (M = 4.17, SD = 2.09) participants were less likely to think the target should save rather than earn, compared to flush (M = 4.93, SD = 1.67) participants, F(1, 317) = 8.01, p < .005. However, there was no difference between deprived (M = 5.51, SD = 1.67) and flush (M = 5.30, SD = 1.70) participants' ratings in the older-target conditions, F < 1. Critically, the age of the target had a significant effect on deprived (but not flush) participants' focus on earning over saving: Deprived participants thought it was more important for the target to save when the target was described as older (M = 5.51, SD = 1.67) than younger (M = 4.17, SD = 2.09), F(1, 317) = 21.99, p < .0001, whereas flush participants' ratings did not differ for the older (M = 5.30, SD = 1.70) and younger (M = 4.93, SD = 1.67) target, F(1, 317), 1.68, NS. These results suggest that the consideration of older age can moderate the effect of deprivation on people’s ‘earning-over-saving’ focus.

Study 5 introduced interventions to encourage deprived people to consider the importance of saving. Since we were focused on the deprived population, we gave all participants the financial deprivation manipulation and then asked them to consider a target attempting to improve her family’s financial position. A third of the participants received a scenario almost identical to that used in the younger-target condition in Study 4 (control condition), another third of participants received that control scenario plus educational information about saving (‘education intervention’), and the remaining third received the control scenario plus information about unexpected emergency expenses (‘emergency intervention’). The DV was the extent to which participants felt the target should focus on saving rather than earning. There was a significant effect on condition on the importance placed on saving, p < .001. Participants believed it was less important for the target to save in the control (M = 4.02, SD = 1.88) versus each intervention condition (M_education = 4.61, SD = 1.85, M_emergency = 5.27, SD = 1.64), both ps < .01. Participants’ beliefs regarding the financial security gained from earning, relative to the control condition, was significantly lower in the educational intervention condition (p = .001) and marginally lower in the emergency-expense intervention (p = .075), and feelings of deprivation (measured) affected the DV (ratings of earnings-importance) via the financial security mediator.

When One Error Elicits Another: Unnecessarily Costly Reactions to Personal Fault

EXTENDED ABSTRACT

Negative financial shocks have become both more common and more severe over time (e.g., Warren, 2003), and have even been tied to an increase in personal bankruptcy claims (e.g., Zywicki, 2005). Thus, the way that people respond to these shocks has important consequences for their financial wellbeing. Existing literature in mental accounting has examined positive shocks (windfall gains), and suggests that non-economic factors related to incurring these positive shocks can influence how people spend them (e.g., Aarke et al., 1994; Epley, Mak, and Idson 2006; Milkman & Beshears, 2009). While prior research has examined how circumstances leading to financial windfalls and corresponding emotions impact the spending of gains (Levav & McGraw, 2009), the current paper investigates the reverse: how do circumstances leading to negative financial shocks and corresponding emotions influence the payment of associated costs? Across four studies, we examine how financially equivalent negative shocks can lead to differences in debt perceptions, take-up and repayment decisions when coupled with variations in personal responsibility and subsequent emotional reactions. Ultimately, unnecessarily costly financial outcomes will make it even more difficult for those incurring negative financial shocks to build savings.

In Study 1, 244 participants were asked to imagine situations where they encountered a negative income shock and needed to borrow money. In two cases, participants were responsible for the expense (car accident caused by their own texting while driving; and vacation travel), and in two they were not (car accident caused by another driver texting while driving; and emergency travel). Participants reported whether they would be more likely to borrow money from their friends/family or to use a credit card (1-7 scale), as well as the interest rate they expected to pay. When participants were responsible for the expense, they reported being more likely to use a credit card (M = 4.12 vs. 3.18, p = .005 for car accident; M = 3.97 vs. 3.25, p = .005 for travel) and expecting to pay higher interest on that card (M = 10.01 vs. 7.53%, p = .012 for car accident; M = 9.02 vs. 6.94%, p = .022 for travel).

Study 2 aimed to investigate how perceptions of the scenarios differed beyond responsibility, and how these perceptions correlated with different decisions. We presented 440 participants with the same two car accident scenarios used in Study 1, and asked them to report the highest interest rate they would be willing to pay to repair the car damage, assuming they were using a credit card for the payment. Participants were willing to pay higher interest rates when they were responsible for the expense (M = 10.93 vs 9.57%, p = .031). They also completed the PANAS, indicating the extent to which they would feel each of 20 emotions in the situation they read about. People were most prone to associate responsibility for the accident with feelings of guilt (M = 4.02 vs 1.53, p < .001) and to associate another’s responsibility with feelings of hostility (M = 2.26 vs 2.99, p < .001). Mediation analyses reveal that our measure of self-reported guilt mediates the direct effect of being in the fault condition on interest rates and our measure of hostility mediates the direct effect of being in the no fault condition.

To explore consequences of specific emotions, Study 3 manipulated them directly. Three-hundred four participants read a scenario about a costly car accident or a home break-in, and were then asked to focus on aspects of the incident that made them feel either guilty or hostile (see Small, Lerner, & Fischhoff 2006). Participants chose whether they would be more likely to borrow money to have their car fixed/possessions repurchased immediately, or wait until they had saved enough money (1-7 scale). In this situation, borrowing corresponds to a more costly behavior given associated interest payments. Participants in the guilty versus hostile condition were significantly more likely to report borrowing for an immediate remedy (M = 4.69 vs. 3.76, p = .001).

Finally, to gain additional insight into how perceptions of guilt and personal responsibility may be influencing subsequent financial decisions, Study 4 examined deservingness as a possible mediator. Specifically, we hypothesized that people who felt responsible for their bad financial situation would believe that they deserved additional financial punishment. To test this possibility, we presented 139 participants with the same car accident scenarios (varying personal responsibility) used in Studies 1 and 2. Participants again reported the highest interest rate they would be willing to pay to fix their car assuming credit card payment, and also rated other measures including a four-item scale that measured beliefs about deserving bad financial outcomes. Participants were again willing to pay higher interest rates when they were responsible for the expense (M = 11.67 vs 8.66%, p = .012). As hypothesized, beliefs that they de-
served worse financial outcomes when they caused the accident mediated this response.

Across studies, we find that personal fault can correspond to guilt about the situation and lead people to believe that they deserve subsequent negative financial outcomes. In turn, these patterns influence how people respond to identical expense shocks and differences in these responses can be financially costly beyond what economic factors would dictate. In other words, once a single misstep compromises a person’s finances initially, she may be more likely to aggravate her situation by incurring additional unnecessary costs while attempting to remedy the situation, hindering her long-term ability to build savings.

The Effects of an Emergency Reserve on Self-Control Performance

EXTENDED ABSTRACT

Prior research has shown that flexibility within mental budgets allows consumers to make exceptions to budget rules in order to justify indulgent choices, thus reducing self-control (Cheema & Soman, 2006). However, other research has suggested that too stringent of mental budgets can lead to self-control failure through self-control depletion and the “what the hell” effect (Muraven, Tice, & Baumeister, 1998; Polivy & Herman, 1985) We demonstrate that including an explicitly defined emergency reserve, an extra-defined amount above an initial limitation, in mental budgets helps improve self-control performance by providing a compromise between these two extremes. In four experiments, we show that including reserves within mental budgets improves self-control performance. Additionally, we reveal a moderator of our effect, the initial level of the mental budget.

In Study 1 and 2, participants imagined that they were part of a point-based weight loss program and made a series of 28 choices between different food options over two virtual weeks. After entering their demographics, they were given a fictional number of points that the average person of their characteristics consumes in a week to lose weight. Participants were then asked to estimate how many points they would use throughout one virtual week. In the No Reserve condition, participants only made this single point estimate of total point use. In the Constrained Aim conditions, participants were asked to set a lower number of points to aim for after their initial estimation. In the Reserve conditions, participants were given lower reference points and asked to set aside additional points in case of an “emergency” after their initial estimation. Participants in the Reserve condition used significantly fewer points than those in the No Reserve condition, $F(1,154) = 7.19, p < .01$, when they had standard mental budgets, while those in the Constrained Aim condition did not use significantly fewer points than those in the No Reserve condition, $F(1,154) = 2.50, p > .1$. Our results suggest that the harder boundaries of the emergency reserve are contributing to the increased self-control performance rather than flexibility and lower reference points alone (which Constrained Aim participants also have).

However, participants who begin with deprived (poor) mental budgets in the Reserve condition did not use a significantly lower number of points than those in the No Reserve condition, $F(1,154) = 1.38, p > .1$, suggesting that the effect of reserves depends on having a reasonable initial budget. Study 2 (240 participants) used the same paradigm as Study 1 and found that emergency reserves in standard mental budgets: 1) reduce of self-control depletion, 2) increase perceived flexibility while still maintaining stringency, and 3) reduce the sense of failure and associated negative emotions.

In Study 3, participants were randomly assigned a time goal to type a series of CAPTCHAs (distorted images of letters that humans can read but computers cannot). Participants’ goal was to finish the task within 210 seconds in the No Reserve-Easy condition, within 210 second but aim to complete the task within 180 seconds in the Aim Condition, within 180 seconds with an additional 30 seconds of emergency time available “in case they need it” in the Reserve condition, and within 180 seconds in the No Reserve-Hard condition. Participants in the Reserve condition typed CAPTCHAs at a significantly faster rate than participants in the No Reserve-Easy condition ($b = .42, p < .05$). However, participants in the Constrained Aim condition did not type the CAPTCHAs significantly faster than participants in the No-Reserve Easy condition ($b = .32, p > .1$), nor did participants in the No Reserve-Hard condition ($b = .27, p > .1$). Study 3 thus demonstrates that participants with reserves are more motivated and thus perform better in monotonous tasks.

Studies 1-3 revealed that participants with reserves adhere more closely to the difficult reference point and perform better than participants with no reserves and an easier reference point. In study 4, we demonstrated that participants with reserves perform better than participants without reserves and the more difficult reference point if the task involves persistence in a task over time. Participants were randomly assigned a goal specifying how many days they need to complete a CAPTCHA task throughout a week. In addition to receiving $1 daily for completing the task, participants received an additional $5 bonus if they completed their goal. Participants’ goal was to complete the task five days out of the week in the No Reserve-Easy condition, to complete the task five days but aim to complete the task every day in the Aim condition, and to complete the task every day of the week in the No Reserve-Hard condition. Participants’ goal in the Reserve condition was to complete the task every day but they were also told “In case you need it, up to two days will be excused” and that they would still receive their bonus if they missed up to two days. Reserve participants were significantly more likely to receive their bonus than No Reserve-Easy Participants, $\chi^2(1, N = 113) = 9.02, p < .01$, Constrained Aim Participants, $\chi^2(1, N = 115) = 4.00, p < .05$, and No Reserve-Hard participants, $\chi^2(1, N = 116) = 13.40, p < .00$. Reserve participants were also more likely to complete the “easier” lower reference point goal (five days a week) than the No Reserve-Hard participants, $\chi^2(1, N = 116) = 5.19, p < .05$.

This paper presents an innovative strategy to improve self-control performance. While our studies were designed around self-control tasks that could be easily tested in a lab environment, the results suggest that emergency reserves have potential beneficial implications for other self-control goals, such as saving, budgeting, and spending. For example, individuals struggling to stay within a strict financial budget may feel less depleted and remain more motivated by knowing that they have set aside an emergency reserve, similar to the participants in our studies. However, this work also cautions that beneficial self-control strategies like emergency reserves can backfire for those with deprived mental budgets.

REFERENCES


