# Splurging After Reaching Your Goal: How and When does a Used (vs. Unused) Account Affect Consumption Behavior? 

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## amazon

\$100

## amazon

## Before you checkout

## $\$ 400$ \$10

## Complete your cart



## amazon

## Before you checkout

## \$10

## Complete your cart



## RESEARCH QUESTION

## Used

amazon
$\$ 400$ \$10

Unused

## amazon

\$10

How do used (vs. unused) accounts influence consumers' purchase decisions?


- Relative judgment
- Reference-dependent judgment (Sharif and Oppenheimer 2016; 2021; Sherman et al. 1978; Stewart et al. 2002; Tversky and Kahneman 1981)
- Joint vs. separate evaluation (Hsee 1996; 1998; Hsee and Leclerc 1998; Hsee et al. 2013)
$\$ 400$ \$10
$\downarrow$
Closer to exhaustion
$\downarrow$
More likely to infer achieved purchase goals
$\downarrow$
P(non-essential purchase) $\uparrow$
- Purchase goals
- Earmarking accounts (Heath and Soll 1996; Shefrin and Thaler 1988; Sussman and O'Brien 2016; Thaler 1985, 1999)
- Hedonic vs. utilitarian goals (Dhar and Wertenbroch 2000; Helion and Gilovich 2014)
- Switching to a different goal
- Goal-switch after achieving one goal (Fishbach, Dhar, and Zheng 2006)
- Switch to an indulgent goal (Dhar and Simonson 1999; Fishbach and Dhar 2005; Kivetz and Simonson 2002)


## HYPOTHESIS

Consumers will be MORE LIKELY to spend their resources in the used account than in the unused account.


## STUDY OVERVIEW

| Study 1A | Credit card reward programs |
| :--- | :--- |
| Study 1B | Credit card reward programs |
| Study 1C | Educational checking accounts |
| Study 1D | Online shopping reward program (incentive-compatible) |
| Study 2 | Credit card reward programs |
| Study 3 | Gift cards |
| Study 4 | Credit card reward program |
| Study 5 | Gift cards |
| Study 6 | Gift cards |
| Study 7 | Gift cards |

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How do used (vs. unused) accounts influence consumption behavior using credit card reward points?

## Study 1A Experimental Design

## Used account condition



You earned 100,000 points this year.


## Unused account condition



You earned 30,000 points this year.


You have 30,000 points available in your credit card.

## Study 1A Spending Likelihood

Would you use your points to buy these running shoes or instead use your cash and save your points for a different reward later? If you choose to use your points, you would have to use all of your points.


## People were more likely to spend points in a used (vs. unused) account



Account Condition

Study 1D Incentive-compatible online shopping
$(\mathbb{N}=1,492)$


How do used (vs. unused) accounts influence consumption behavior in the context of online shopping?

## STUDY 1D EXPERIMENT DESIGN

## Used account

Account: 1000 points

## Unused account

| Account $\mathrm{A}:$ <br> 900 points |
| :---: |
| Account B: <br> 100 points |

900 points available

Account B:
100 points


You have 1,000 points in your account.


You have $\mathbf{9 0 0}$ points in Account A. You have $\mathbf{1 0 0}$ points in Account B.

## STUDY 1D ONLINE SHOPPING STAGE ONE (20 PRODUCTS; \$15~\$20)

MIRA 25 Oz Stainless Steel Vacuum Insulated Water Bottle

- 24 Hours Cold, 12 Hours Hot - Leak-Proof Sports Flask - Blue Mountain


## Used account

> | Account: |
| :--- |
| 550 points |

## Unused account

> Account A: 450 points

## Account B: 100 points



THE MIRA CASCADE BOTTLE
(1) MIRAGUARD TECHNOLOGY (m) Drinks stay ice cold for 24 hours or piping hot for 12 hours due to our innovative double-wall vacuum insulation. For added insulation, bottles include a copper coating that provides a temperature shield.
2) LEAK-PROOF

Pack your bottle in your bag, backpack or travel luggage without worrying bbout spills or leaks.
(3) SWEAT-FREE EXTERIOR

Don't sweat It, our condensation-free exterior prevents your bottle
from sweating in your hands or in your bag from sweating in your hands or in your bag.
(4) BPA-FREE

Stay healthy with our BPA-Free, phthalates-free and non-toxic bottles.
(5) $18 / 8$ STAINLESS STEEL

Constructed from food-grade 18/8 stainless steel, our high-quality bottles won't rust, retaln or transfer flavors
(6) DURABLE OUTSIDE COATING Hold your bottle with comfort and ease as all of our bottles have a protective outsidide coatitng. Most bottles have a unique powder coat
finish for extra durability and a slip-free grip.


Would you like to purchase this item?

It costs 450 of your reward points.

## STUDY 1D ONLINE SHOPPING STAGE ONE (20 PRODUCTS; \$15~\$20)

Fred WINE MONKEY Sock Monkey Bottle Caddy

## Used account

Account: 100 points

## Unused account

> Account A: 0 points

## Account B: 100 points

:



It costs 450 of your reward points.

## STUDY 1D EXPERIMENT DESIGN

## Used account

## Account: 100 points



You have 100 points in your account.

## Unused account

| Account $\mathrm{A}:$ |
| :---: |
| 0 points |

Account B: 100 points


You have $\mathbf{0}$ points in Account A. You have $\mathbf{1 0 0}$ points in Account B.

## STUDY 1D ONLINE SHOPPING STAGE TWO (6 PRODUCTS; ~\$2)

YumEarth Gluten Free Gummy Bears, Assorted Flavors, 2.5 Oz Bag - Allergy
Kate Aspen Sweet Honey \& Fresh Flower Scented Honeycomb Soap Baby
Shower Favor, Mommy to Bee
Dixon No. 2 Yellow Pencils, Wood-Cased, Black Core, 12-Count

## Account: 100 points

## Unused account

> Account A: 0 points

## Account B: 100 points



Would you like to purchase this item?

It costs 100 of your reward points.

Participants spent their remaining 100 points faster in the used (vs. unused) account condition.



## WE REPLICATE THE EFFECT OF A USED (VS. UNUSED) ACCOUNT



Study 1C
Educational Checking Accounts


## Moderation by the absolute amount remaining




Study 3 Gift cards
Will the effect of a used (vs. unused) account on spending likelihood be moderated by the proportion of the account remaining?

## Study 3 ( $\mathrm{N}=1128$ ) - Experimental Design

| Used $\$ 8$ | Unused $\$ 8$ | Used $\$ 16$ | Unused $\$ 16$ | Used $\$ 24$ | Unused $\$ 24$ |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Study 3 ( $\mathrm{N}=1128$ ) - Experimental Design

| Used $\$ 8$ | Unused $\$ 8$ | Used $\$ 16$ | Unused $\$ 16$ | Used $\$ 24$ | Unused $\$ 24$ |
| :--- | :--- | :--- | :--- | :--- | :--- |



Suppose you get one $\$ 40$ gift card to a clothing store from one of your friends.

Last month you spent $\$ 24$ of this gift card at the same clothing store.

## Study 3 ( $\mathrm{N}=1128$ ) - Experimental Design

| Used $\$ 8$ | Unused $\$ 8$ | Used $\$ 16$ | Unused $\$ 16$ | Used $\$ 24$ | Unused $\$ 24$ |
| :--- | :--- | :--- | :--- | :--- | :--- |



Suppose you get one $\$ 16$ gift card to a clothing store from one of your friends.

Last month you spent $\$ 24$ at the same clothing store.

## Study 3 Spending Likelihood

As you are checking out, you see that the clothing retailer is selling some tasty drinks (e.g., smoothie, latte). All of the drinks cost $\$ 5$ and you can use your gift card to pay for it.

How likely would you be to buy a tasty drink now with your gift card?

Not at all likely Very likely


## Proportion of Account Remaining Moderates the Used Account Effect



## SUMMARY



## SUMMARY

Consumers are more likely to spend resources in a used account than in an unused account, as they perceive a used account as closer to exhaustion and infer that account has achieved its purchase goal.

| Study | Standardised Mean Difference | SMD | 95\%-CI | Weight |
| :---: | :---: | :---: | :---: | :---: |
| Study 1A | - i | 0.18 | [ 0.02; 0.34] | 6.5\% |
| Study 1B | $\underline{\square}$ | 0.17 | [ 0.03; 0.31] | 8.5\% |
| Study 1C | $!$ | 0.18 | [ 0.04; 0.32] | 8.8\% |
| Study 1D | - | 0.16 | [ 0.06; 0.26] | 16.7\% |
| Study 2 | 1 | 0.24 | [ 0.10; 0.38] | 8.5\% |
| Study 3 |  | 0.39 | [ 0.18; 0.59] | 4.1\% |
| Study 4 | +1 | 0.12 | [-0.02; 0.27] | 8.4\% |
| Study 5 | $\cdots$ | 0.26 | [ 0.14; 0.38] | 12.4\% |
| Study 6 | $\stackrel{1}{1}$ | 0.16 | [ 0.04; 0.27] | 13.1\% |
| Study 7 | $1,$ | 0.23 | [ 0.12; 0.35] | 13.1\% |
| Common effect model | $\dot{\circ}$ | 0.20 | [ 0.16; 0.24] | 100.0\% |
| Heterogeneity: $I^{2}=0 \%, \tau^{2}<0.0001, p=0.62$ |  |  |  |  |
|  | $\begin{array}{lllll}0.4 & -0.2 & 0 & 0.2 & 0.4\end{array}$ |  |  |  |

## Marketing Implications

- The display of credit card use may affect consumers' spending


## Citi Double Cash® Card-1156



Curen Bance (a)
View Balance Breakdown

Available Credit ?
$\$ 1,361.91 \quad \begin{aligned} & \text { Credit Limit } \\ & \$ 3,000.00\end{aligned}$

## Account Summary

Current balance:
Total credit available:
Cash credit line available:

## Card Details

\$3,155.01
\$7,538.61
\$200.00
Cash credit line:
Amount over total credit
line:

Total credit line: $\quad \$ \mathbf{1 0 , 8 0 0 . 0 0}$
\$200.00
\$0.00

University of Pennsylvania

## Marketing Implications

- The reward points display may affect consumers' spending

```
kindle rewards Beta Kindle Points: 302
```


## How it works

1. Earn Kindle Points. Get 5 points per dollar spent on Kindle books and 2 points per dollar spent on print books.
2. Complete bonus offers. Get even more Kindle Points!
3. Redeem for Kindle book credits. Get $\$ 3$ for every 300 points.

Terms \& conditions apply.

## Your Kindle Points balance

## 302 points

Cha-ching! You can redeem 300 Kindle Points for $\$ 3$ in Kindle book credit.

## THANK YOU!

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