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

Siyuan Yin and Marissa A. Sharif

TIAA Fellows Symposium 2023
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$8.98
Choose Quantity
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)

• **Purchase goals**
  

  – **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.

$\text{Used}$

- $\text{Closer to exhaustion}$
- $\text{More likely to infer achieved purchase goals}$
- $P(\text{non-essential purchase}) \uparrow$

$\text{Unused}$

- $\text{Further away from exhaustion}$
- $\text{Less likely to infer achieved purchase goals}$
- $P(\text{non-essential purchase})$
### STUDY OVERVIEW

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<th>Description</th>
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<td>Gift cards</td>
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<td>Study 6</td>
<td>Gift cards</td>
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<tr>
<td>Study 7</td>
<td>Gift cards</td>
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</tbody>
</table>
Study 1A Credit card reward points (N = 1144)

How do used (vs. unused) accounts influence consumption behavior using credit card reward points?
Study 1A Experimental Design

**Used account condition**

- 100,000 points available
- You earned 100,000 points this year.

**Unused account condition**

- 30,000 points available
- You earned 30,000 points this year.
- You have 30,000 points available in your reward program.
- 30,000 points available
- You have 30,000 points available in your credit card.
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.

Likelihood to buy the running shoes using my points

Very likely to use cash to buy these running shoes

Very likely to use points to buy these running shoes

0 10 20 30 40 50 60 70 80 90 100
People were more likely to spend points in a used (vs. unused) account.

**Graph:**
- **Y-axis:** Likelihood of Spending (%)
- **X-axis:** Account Condition
- **Legend:**
  - Used: 66.18%
  - Unused: 59.41%

*Significance:* (*)
Study 1D Incentive-compatible online shopping (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: 1,000 points

Unused account

Account A: 900 points

Account B: 100 points

You have 1,000 points in your account.

You have 900 points in Account A. You have 100 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

THE MIRA CASCADE BOTTLE

Would you like to purchase this item?

It costs 450 of your reward points.

Yes, I would like to spend my 450 reward points to purchase this item.

No, I would like to save my reward points for later items.
STUDY 1D ONLINE SHOPPING STAGE ONE (20 PRODUCTS; $15~$20)

Used account
Account: 100 points

Unused account
Account A: 0 points
Account B: 100 points

Fred WINE MONKEY Sock Monkey Bottle Caddy

Would you like to purchase this item?
It costs 450 of your reward points.

Yes, I would like to spend my 450 reward points to purchase this item.
No, I would like to save my reward points for later items.
STUDY 1D EXPERIMENT DESIGN

**Used account**

Account: 100 points

**Unused account**

Account A: 0 points

Account B: 100 points

You have 100 points in your account.

You have 0 points in Account A.

You have 100 points in Account B.
STUDY 1D ONLINE SHOPPING STAGE TWO
(6 PRODUCTS; ~$2)

Used account

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.

Yes, I would like to spend my 100 reward points to purchase this item.

No, I would like to save my reward points for later items.

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
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
Used

$100 \rightarrow \$10

\downarrow

Closer to exhaustion

\downarrow

More likely to infer achieved purchase goals

\downarrow

\[ P(\text{non-essential purchase}) \uparrow \]
Moderation by the absolute amount remaining

- Used
- More likely to infer achieved purchase goals
- P(non-essential purchase) ↑
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 (N = 1128) – Experimental Design

<table>
<thead>
<tr>
<th>Used $8</th>
<th>Unused $8</th>
<th>Used $16</th>
<th>Unused $16</th>
<th>Used $24</th>
<th>Unused $24</th>
</tr>
</thead>
</table>


Study 3 (N = 1128) – Experimental Design

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 (N = 1128) – Experimental Design

<table>
<thead>
<tr>
<th>Used $8</th>
<th>Unused $8</th>
<th>Used $16</th>
<th>Unused $16</th>
<th>Used $24</th>
<th>Unused $24</th>
</tr>
</thead>
</table>

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.
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?**

![Likelihood to buy the tasty drink now with gift card](chart)
Proportion of Account Remaining Moderates the Used Account Effect

- **Used $8 (20%)**: 58.20
- **Unused $8 (100%)**: 43.89
- **Used $16 (40%)**: 52.66
- **Unused $16 (100%)**: 42.42
- **Used $24 (60%)**: 42.24
- **Unused $24 (100%)**: 45.37

Graph showing likelihood of spending $5 from gift cards with different account conditions. The bars represent different account conditions and spending likelihoods. The Y-axis shows the likelihood of spending, which ranges from 0 to 60. The X-axis represents the gift card condition, with categories for 'Used' and 'Unused' accounts at different amounts ($8, $16, $24) and percentages (20%, 40%, 60%, 100%).

Statistical significance markers are indicated with *** (p < 0.001), ** (p < 0.01), and ns (not significant).
SUMMARY

Used

$100$10

\downarrow

Closer to exhaustion

\downarrow

More likely to infer achieved purchase goals

\downarrow

P(non-essential purchase)↑
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.

### SUMMARY

<table>
<thead>
<tr>
<th>Study</th>
<th>Standardised Mean Difference</th>
<th>SMD</th>
<th>95%–CI</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1A</td>
<td>0.18 ([-0.02; 0.34])</td>
<td>0.18</td>
<td>[0.02; 0.34]</td>
<td>6.5%</td>
</tr>
<tr>
<td>Study 1B</td>
<td>0.17 ([-0.03; 0.31])</td>
<td>0.17</td>
<td>[0.03; 0.31]</td>
<td>8.5%</td>
</tr>
<tr>
<td>Study 1C</td>
<td>0.16 ([-0.04; 0.32])</td>
<td>0.16</td>
<td>[0.04; 0.32]</td>
<td>8.8%</td>
</tr>
<tr>
<td>Study 1D</td>
<td>0.15 ([-0.05; 0.31])</td>
<td>0.15</td>
<td>[0.05; 0.31]</td>
<td>16.7%</td>
</tr>
<tr>
<td>Study 2</td>
<td>0.24 ([-0.10; 0.38])</td>
<td>0.24</td>
<td>[0.10; 0.38]</td>
<td>8.5%</td>
</tr>
<tr>
<td>Study 3</td>
<td>0.39 ([-0.18; 0.59])</td>
<td>0.39</td>
<td>[0.18; 0.59]</td>
<td>4.1%</td>
</tr>
<tr>
<td>Study 4</td>
<td>0.20 ([-0.02; 0.37])</td>
<td>0.20</td>
<td>[0.02; 0.37]</td>
<td>8.4%</td>
</tr>
<tr>
<td>Study 5</td>
<td>0.16 ([-0.04; 0.38])</td>
<td>0.16</td>
<td>[0.04; 0.38]</td>
<td>12.4%</td>
</tr>
<tr>
<td>Study 6</td>
<td>0.18 ([-0.02; 0.38])</td>
<td>0.18</td>
<td>[0.02; 0.38]</td>
<td>13.1%</td>
</tr>
<tr>
<td>Study 7</td>
<td>0.23 ([-0.01; 0.35])</td>
<td>0.23</td>
<td>[0.01; 0.35]</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

**Common effect model**

| Common effect model | 0.20 [0.16; 0.24] | 100.0% |

Heterogeneity: \(I^2 = 0\%, \tau^2 < 0.0001, \ p = 0.62\)

-0.4 -0.2 0 0.2 0.4
Marketing Implications

• The display of **credit card** use may affect consumers’ spending

Citi Double Cash® Card-1156

Current Balance  $1,466.09
Available Credit  $1,361.91
Credit Limit  $3,000.00

View Balance Breakdown
Statement closing May 23, 2023

<table>
<thead>
<tr>
<th>Account Summary</th>
<th>Card Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current balance: $3,155.01</td>
<td>Total credit line: $10,800.00</td>
</tr>
<tr>
<td>Total credit available: $7,538.61</td>
<td>Cash credit line: $200.00</td>
</tr>
<tr>
<td>Cash credit line available: $200.00</td>
<td>Amount over total credit line: $0.00</td>
</tr>
</tbody>
</table>
Marketing Implications

- The **reward points** display may affect consumers’ spending

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**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.

Redeem
THANK YOU!
syyin@wharton.upenn.edu