# The Effect of Payment Method on Consumer Variety Seeking 

Liang Huang ${ }^{1}$ Rafay Siddiqui ${ }^{2}$ Anastasiya Pocheptsova Ghosh ${ }^{1}$
University of Arizona ${ }^{1}$, The Hong Kong Polytechnic University ${ }^{2}$

## Abstract

When buying multiple items, consumers often must decide between acquiring similar versus different items from a choice set. We demonstrate that decision makers exhibit less variety seeking when using payment methods that are associated with high (vs. low) pain of payment. This is because a higher pain of payment increases need for justification, which in turn decreases choice of options that are relatively less preferred.

## Background

## Literature Review

- Consumers experience pain of parting with money. Pain of payment increases need for justification, leads to more deliberation in the decision process, and avoidance of options that are likely to cause regret.(Prelec and Loewenstein 1998; Feinberg 1986; Soman 2003; Thomas, Desai, and Seenivasan 2010).
- Variety seeking often involves purchasing of less preferred items rather than sticking to one's favorite items. Consumption of less preferred items is less enjoyable and could lead to regret. (Simonson 1900; Ratner, Kahn, and Kahneman 1999)


## Propositions

- H1: Higher pain of payment leads to less variety seeking. - H2: Need to justify one's choice mediates the effect of pain of payment on variety seeking.


## Study 1 Cont.

- Real purchase study. Students purchase energy powders in the lab with the cash or coupons they received.
- $N=108$ (57\% female, Mage = 20.7); Between Subject.
- 2 Payment Method (cash vs coupon).
[cash payment is more painful than coupon payment]
- DV: Choice of 5 energy powders out of 5 flavor options.

Students get two $\$ 1$ bills, or two $\$ 1$ coupons when entering the lab.
-
Before leaving the lab, students purchase 5 packages of energy powders from available flavors with their cash/coupons.

## Study 1

## Results

$\mathrm{M}_{\text {cash }}=2.71, \mathrm{M}_{\text {coupon }}=3.15$
$\mathrm{F}(1,106)=5.07, \mathrm{p}=.026$
$\rightarrow$ Payment methods that are associated with high pain of payment lead to lower variety seeking.

## Replications

- Manipulating pain of payment using payment forms (cash vs. credit card) and payment schedules (pre-payment vs. post-payment).
- Purchase contexts of subscribing to online services and choosing activities to pursue for a trip.


## Study 2

- Real purchase (like study 1). Process through mediation.
- N=301 (59\% female); Between Subject Design.
- 2 Payment Method (cash vs coupon).
- DV: Choice of 5 tea bags out of 5 flavor options.
- Mediator: Choice justification (3-item scale)



## Results

Number of Different Teas Chosen

$M_{\text {cash }}=2.75, M_{\text {coupon }}=3.14$
$F(1,299)=6.314, p=.013$
$\rightarrow$ Replicate that high pain of payment leads to lower variety seeking.
$\rightarrow$ The need to justify one's choice mediates the effect.


## Study 3

- Process through moderation. Each participant sees a customized choice set based on their personal preferences. The effect is attenuated when all options in the choice set are preferred, thus are easy to justify, by consumers.
- $\mathrm{N}=155$ (41\% female, Mage = 32.4); Between Subject.
- 2 Payment Format (cash vs credit card) X

2 Choice Set Composition (most vs. less preferred items). Each participant ranks 18 ice cream flavors
V: 5 bottom ranked vs top ranked flavors available IV: Pay $\$ 7$ in cash vs credit card for 5 scoops in
DV: Choose 5 scoops of ice cream from the 5 flavors

## Results

Number of Different Flavors Chosen

- Cash Credit Card


Interaction: F (1, 179) = 3.60, p = .059;
$\mathrm{M}_{\text {cash_Bottom }}=3.16$,
$\mathrm{M}_{\text {card_Bottom }}=3.70, \mathrm{p}=.038$;
$\mathrm{M}_{\text {cash_Top }}=3.83, \mathrm{M}_{\text {card_Top }}=$ 3.67, N.S.

Bottom Ranked

Top Ranked

## $\rightarrow$ The effect of pain of payment on variety seeking is

 attenuated when all options in the choice set are highly preferred by consumers.$\rightarrow$ When the choice sets contain less preferred options, pain of payment leads to lower variety seeking.

## Discussion

- We demonstrate that high pain of payment leads to less variety seeking. We show that this effect is mediated by choice justification and is attenuated when all available options are preferred by consumers.
- This work establishes a causal link between pain of payment and variety seeking and thereby integrates these two important streams of research.
- Managers can choose to either increase sales of popular items, or of less popular items, by simply changing payment mechanisms in stores.

