

Samuel Hirshman

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EMPLOYMENT

University of Colorado

Post Doctoral Research Associate

Boulder, CO

August 2020- Present

EDUCATION

University of Chicago Booth School of Business

PhD in Behavioral Science

Chicago, IL

Expected September 2020

Swarthmore College

Bachelor of Arts in Theories of Decision Making; Minor: Mathematics and Statistics

Swarthmore, PA

Aug 2009 - May 2013

PUBLISHED AND WORKING PAPERS

- Hartzmark, Samuel M., Samuel Hirshman, and Alex Imas. "Ownership, Learning, and Beliefs". (Working Paper) [link to paper](#)
- Shen, Luxi and Samuel Hirshman. "As Wages Increase, Do People Work More or Less? A Wage Frame Effect". (R&R at Management Science)
- Hirshman, Samuel and Abigail B. Sussman. "More than the Minimum: Minimum Requirements Lead to Excess Dispersion in Allocation Decisions" (R&R at JOM)
- Hirshman, Samuel, Devin Pope, and Jihong Song. "Mental Budgeting versus Relative Thinking." AEA Papers and Proceedings, vol. 108, pp. 148-52. 2018.

RESEARCH IN PROGRESS

- Hirshman, Samuel, Abigail B. Sussman, Samuel M. Hartzmark, and Alex Imas. "Ownership Alters Learning and Beliefs about Product Attributes"
- Hirshman, Samuel, and Daniel M. Bartels. "Empirical Tests of the Quasi-Hyperbolic Discounting Model"
- Hirshman, Samuel, Connor Dowd, and Nicholas G. Polson. "Waiting For a Hot Hand: A New Test of Streaky Shooting in NBA Basketball"
- Hirshman, Samuel and George Wu. "Semi-parametric Estimation of the Prospect Theory Value Function for Sure Outcomes"

REFERENCES

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RESEARCH INTERESTS

Financial decision making, learning and beliefs, ownership, choice under uncertainty, and time discounting

AWARDS AND HONORS

- Russell Sage Foundation Summer Institute in Behavioral Economics Attendee, Summer 2018
- Thaler-Tversky Independent Research Grant, Fall 2018
- FAIR/Rady Spring School in Behavioral Economics Attendee, Spring 2019

CONFERENCE PRESENTATIONS

- “Ownership, Learning, and Beliefs” (with Samuel M. Hartzmark and Alex Imas)
 - Spring School in Behavioral Economics, 2019
- “More than the Minimum: Minimum Requirements Lead to Excess Dispersion in Allocation Decisions” (with Abigail B. Sussman)
 - SJDM, 2017
 - BDRM, 2018
 - FCAC National Research Symposium on Financial Literacy, 2018
 - SCP, 2019
 - ACR, 2019
- “Waiting for a Hot Hand: A New Metric for Detecting Hot Hand effects”(with Connor Dowd and Nick Polson)
 - SJDM, 2016 Poster Presentation

TEACHING

- **Managerial Decision Making**, Professor Linnea Gandhi, Spring 2017
- **Experimental Marketing**, Professor Oleg Urminsky, Summer 2017, and Spring, 2018
- **The Study of Behavioral Economics**, Professor Devin Pope, Winter 2017, Summer 2018 (Chicago 4.89/5), and Summer 2019 (Chicago 4.71/5)
- **Managerial Decision Making**, Professor George Wu, Summer 2018 (London 4.21/5)
- **Marketing Management**, Professor Pradeep Chintagunta, Spring, 2019 (Chicago 3.92/5, Hong Kong 4.69/5)

RESEARCH ABSTRACTS

Hartzmark, Samuel M., Samuel Hirshman, and Alex Imas. “Ownership, Learning, and Beliefs”

We study how ownership affects learning and beliefs. Using an experimental asset market, we find that owning a good leads people to over-extrapolate from signals about its underlying value: after seeing positive signals, people become too optimistic, after seeing negative signals, they become too pessimistic. This result holds relative to a Bayesian benchmark and compared to learning about goods they do not own. In fact, learning is less biased and more "correct" about goods that are not owned. We replicate these results in field data, showing that asset owners over-extrapolate nearly twice as much as non-owners from the same signals.

Hirshman, Samuel and Abigail B. Sussman. “More than the Minimum: Minimum Requirements Lead to Excess Dispersion in Allocation Decisions” (R&R at JCR)

Dividing scarce or budgeted resources such as money or time is a common problem for consumers in many domains. We investigate how minimum requirements, the need to do at least some amount of a task, alter people’s allocation strategies. We find a dispersion effect of minimum requirements, namely the presence of the minimum requirement causes consumers to spread allocations across more accounts beyond the minimum requirement. The dispersion effect typically interferes with the implementation of the optimal strategy. We demonstrate this effect occurs both between and within-subject in multiple domains including debt repayment, time allocation, and effort allocation (Studies 1-5). Making an explicit allocation decision for each account moderates the effects of the minimum requirements we document in prior studies, consistent with the minimum requirement shifting the consideration set and leading to more spreading across the considered accounts (Study 6). Finally, we provide evidence consistent with the dispersion effect of minimum requirements in field data on credit card debt repayments (Study 7).

Shen, Luxi and Samuel Hirshman. "As Wages Increase, Do People Work More or Less? A Wage Frame Effect". (R&R at Management Science)

In jobs in which workers have the flexibility to decide how much work to supply, such as in the gig economy, the effect of a wage change on work supply can be hard to predict. A wage increase, for example, offers workers the opportunity to make more money, so they may want to work more, but at the same time, it allows them to enjoy more leisure, so they do not need to work so much. We show the effect of wage change on work supply depends on how the change is framed. Specifically, if the wage change is presented as a payment change ("work the same A hours and earn \$"), then work supply is expected to change in the same direction as the wage change. By contrast, if the wage change is presented as a workload change ("work B hours and earn the same \$X"), then work supply is expected to change in the opposite direction of the wage change. This wage frame effect occurs because in multi-attribute decisions, decision makers assign greater weight to attributes that change than to those that remain constant. A series of experiments (total N = 2,599) demonstrates the wage frame effect on both expressed willingness-to-work and actual work performance. Since any wage change has to be communicated with some specific frame, the choice of the frame can have powerful effects.

Hirshman, Samuel, Devin Pope, and Jihong Song. "Mental Budgeting versus Relative Thinking." AEA Papers and Proceedings.

A growing literature uses economic behaviors in field settings to test predictions generated by various psychological models. In some cases, psychological theories make conflicting predictions for the same consumer context. In this paper, we attempt to reconcile two conflicting predictions about upgrading behavior, one made by category budgeting (e.g., Heath and Soll, 1996, Thaler, 1985)—which suggests people will upgrade less as prices go up—and one made by relative thinking (e.g., Kahneman and Tversky, 1981)—which suggests people will upgrade more as prices go up.

Hirshman, Samuel, Abigail B. Sussman, Samuel M. Hartzmark, and Alex Imas. "Ownership Alters Learning and Beliefs about Product Attributes"

Consumers often make repeated purchase decisions. We investigate how owning a product alters learning about the owned goods as well as other products in the same category or made by the same brand. Across both experimentally controlled and naturally occurring purchase behavior, we show that owners (vs. non-owners) update their beliefs more extremely in response to new information. This exacerbates the effects of motivated reasoning in the positive domain, but attenuates it in the negative domain where it can even become more pessimistic than non-owners. We propose that differential attention to information drives these patterns of updating. Owners also report higher likelihood than non-owners of purchasing another product from a brand with a better product in our assessment task, but are no more likely to do so for a brand with a worse product. Our results suggest that ownership alters the way consumers incorporate new information about related products and brands into their beliefs.

Hirshman, Samuel, and Daniel M. Bartels. "Empirical Tests of the Quasi-Hyperbolic Discounting Model"

Quasi-hyperbolic discounting (Laibson, 1997) is often used to model excessive impatience. Our project aims to better understand (i) how quasi-hyperbolic people's preferences are and (ii) if they are, when does "now" end and the future start? We find "now" periods including tomorrow and a week outperform a "now" period only including today, though all outperform an exponential model. In addition, participants' best fitting "now" periods are sensitive to magnitudes. Even participants' responses to questions with a year delay are best fit by a two-parameter model, a pattern inconsistent with the predictions of the quasi-hyperbolic model.

Hirshman, Samuel, Connor Dowd, and Nicholas G. Polson. "Waiting For a Hot Hand: A New Test of Streaky Shooting in NBA Basketball"

Thirty years of research on the "Hot-hand" fallacy argues that basketball players' shooting does not deviate substantially from a random process. However, the belief in the "Hot-hand" is only a fallacy if, in fact, Gilovich, Vallone, and Tversky are correct that no observable sequential dependence exists. A recent paper in the economics literature has undermined the analysis used in Gilovich, Vallone, and Tversky, suggesting that in fact their paper provides evidence in favor of the "Hot-hand" (Miller and Sanjurjo, 2018). We introduce a new metric, based on expected waiting times for a binomial distribution, that is not subject to the Miller and Sanjurjo critique to detect "Hot-hand" effects in NBA shooting data. Using our metric, we do not find significantly more player-seasons displaying a "Hot-hand" than would be expected by chance. In fact, we find that players are significantly less prone to streaks of makes or misses than would be expected by chance, consistent with defenders and shooters responding endogenously to streaks.

OTHER RESEARCH

- Friedberg, Mark W., Maria Orlando Edelen, Samuel Hirshman, Michaela Kerrissey, Ashley-Kay Basile, Maïke V. Tietschert, Marc N. Elliott, and Sara J. Singer. "Development and Psychometric Analysis of the Revised Patient Perceptions of Integrated Care Survey." *Medical Care Research and Review* (2019): 1077558719842951.
- Hirshman, Samuel, Soeren Mattke, and Hangsheng Liu. "Anesthesia service use and the uptake of screening colonoscopies." *Medical Care* 55, no. 6 (2017): 623-628.
- Hussey, Peter S., Peter Huckfeldt, Samuel Hirshman, and Ateev Mehrotra. "Hospital and regional variation in Medicare payment for inpatient episodes of care." *JAMA Internal Medicine* 175, no. 6 (2015): 1056-1057.