

# David Hagmann

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## EDUCATION

### THE WHARTON SCHOOL, UNIVERSITY OF PENNSYLVANIA

Visiting Scholar, Operations, Information, and Decisions Department  
Doc.Mobility Fellowship, Swiss National Science Foundation

Philadelphia, PA  
July 2017 – June 2018

### CARNEGIE MELLON UNIVERSITY

Doctoral Student, Behavioral Decision Research, Department of Social and Decision Sciences

Pittsburgh, PA  
(expected) June 2018

M.S., Behavioral Decision Research, Department of Social and Decision Sciences

May 2015

### FORDHAM UNIVERSITY

B.A., Mathematics and Economics, Minor in Psychology  
Summa cum laude

New York, NY  
January 2009 – December 2011

Visiting student at Columbia University, New York University, and the London School of Economics

## PUBLICATIONS

Loewenstein, George, David Hagmann, Janet Schwartz, Keith Ericson, Judd B. Kessler, Saurabh Bhargava, Jennifer Blumenthal-Barby, Thomas D'Aunno, Ben Handel, Jonathan Kolstad, David Nussbaum, Victoria Shaffer, Jonathan Skinner, Peter Ubel, & Brian J. Zikmund-Fisher. "[A Behavioral Blueprint For Improving Health Care Policy.](#)" *Behavioral Science & Policy* 3 (1): 53–66.

Behavioral policy to improve health and health care often relies on interventions, such as nudges, which target individual behaviors. But the most promising applications of behavioral insights in this area involve more far-reaching and systemic interventions. In this article, we propose a series of policies inspired by behavioral research that we believe offer the greatest potential for success. These include interventions to improve health-related behaviors, health insurance access, decisions about insurance plans, end-of-life care, and rates of medical (for example, organ and blood) donation. We conclude with a discussion of new technologies, such as electronic medical records and web- or mobile-based decision apps, which can enhance doctor and patient adherence to best medical practices. These technologies, however, also pose new challenges that can undermine the effectiveness of medical care delivery.

Golman, Russell, David Hagmann, and George Loewenstein. 2017. "[Information Avoidance.](#)" *Journal of Economic Literature* 55 (1): 96–135.

We commonly think of information as a means to an end. However, a growing theoretical and experimental literature suggests that information may directly enter the agent's utility function. This can create an incentive to avoid information, even when it is useful, free, and independent of strategic considerations. We review research documenting the occurrence of information avoidance as well as theoretical and empirical research on reasons for why people avoid information, drawing from economics, psychology, and other disciplines. The review concludes with a discussion of some of the diverse (and often costly) individual and societal consequences of information avoidance.

Golman, Russell, David Hagmann, and John H. Miller. 2015. "[Polya's Bees: A Model of Decentralized Decision-Making.](#)" *Science Advances* 1 (8): e1500253.

How do social systems make decisions with no single individual in control? We observe that a variety of natural systems, including colonies of ants and bees and perhaps even neurons in the human brain, make decentralized decisions using common processes involving information search with positive feedback and consensus choice through quorum sensing. We model this process with an urn scheme that runs until hitting a threshold, and we characterize an inherent tradeoff between the speed and the accuracy of a decision. The proposed common mechanism provides a robust and effective means by which a decentralized system can navigate the speed-accuracy tradeoff and make reasonably good, quick decisions in a variety of environments. Additionally, consensus choice exhibits systemic risk aversion even while individuals are idiosyncratically risk neutral. This too is adaptive. The model illustrates how natural systems make decentralized decisions, illuminating a mechanism that engineers of social and artificial systems could imitate.

Loewenstein, George, Cindy Bryce, David Hagmann, and Sachin Rajpal. 2015. "[Warning: You Are About to Be Nudged.](#)" *Behavioral Science & Policy* 1 (1): 35–42.

Presenting a default option is known to influence important decisions. That includes decisions regarding advance medical directives, documents people prepare to convey which medical treatments they favor in the event that they are too ill to make their wishes clear. Some observers have argued that defaults are unethical because people are typically unaware that they are being nudged toward a decision. We informed people of the presence of default options before they completed a hypothetical advance directive, or after, then gave them the opportunity to revise their decisions. The effect of the defaults persisted, despite the disclosure, suggesting that their effectiveness may not depend on deceit. These findings may help address concerns that behavioral interventions are necessarily duplicitous or manipulative.

Hagmann, David, and Troy Tassier. 2014. "[Endogenous Movement and Equilibrium Selection in Spatial Coordination Games.](#)" *Computational Economics* 44 (3): 379–95.

We study the effects of agent movement on equilibrium selection in network based spatial coordination games with Pareto dominant and risk dominant Nash equilibria. Our primary interest is in understanding how endogenous partner selection on networks influences equilibrium selection in games with multiple equilibria. We use agent based models and best response behaviors of agents to study our questions of interest. In general, we find that allowing agents to move and choose new game play partners greatly increases the probability of attaining the Pareto dominant Nash equilibrium in coordination games. We also find that agent diversity increases the ability of agents to attain larger payoffs on average.

## IN PROGRESS (Draft available)

Hagmann, David and George Loewenstein. "[Persuasion With Motivated Beliefs.](#)"

Considerable research finds that people derive utility not only from consumption, but also from their beliefs about themselves and the world. Rather than dispassionately updating their views in response to new information, such belief-based utility leads people to avoid information and use other strategies to protect their existing beliefs. We present a two-stage model of persuasion in the presence of belief-protecting strategies and test it in an incentive compatible persuasion experiment. Persuaders seek to shift receivers' numeric estimates related to emotionally charged topics, such as abortion and racial discrimination. We manipulate whether the persuader first acknowledges her own lack of certainty and whether she first has an opportunity to build rapport with the receiver, which our theory predicts should enhance persuasiveness, but should be irrelevant or may even go in the opposite direction under the standard account.

Ho, Emily, David Hagmann, and George Loewenstein. "Measuring Information Preferences."

Advances in medical testing and widespread access to the internet have made it easier than ever to obtain information. Yet, when it comes to some of the most important decisions in life, people often choose to remain ignorant, because they may fear the implications of what they may learn. We design and validate an information preference scale to measure decision makers' desire to obtain or avoid information that may be unpleasant, but could improve their future decisions. The scale measures information preferences in three domains that are economically, and psychologically consequential: health, consumer finance, and personal characteristics. We present tests of the scale's reliability and validity and show that the scale predicts a real decision to obtain (or avoid) information in each of the domains. We find that many respondents prefer to remain in a state of active ignorance even when information is freely available. Moreover, we find that information preferences are a stable trait, but that preferences can differ across domains.

Hagmann, David, Jason Harman, and Cleotilde Gonzalez. "Wait, Wait... Don't Tell Me: Repeated Choices With Clustered Feedback."

When individuals make repeated choices between two lotteries without having a description of their payoffs, they have to form beliefs based on the observed outcomes of their choices. Previous research finds that choices differ consistently after learning about outcomes compared to having an objective description, an effect termed the description-experience gap. We introduce a new clustered feedback mechanism in which participants receive feedback consisting of individual outcomes of a number of choices at once, rather than observing the outcome immediately after making a decision. Presenting clustered feedback closes the description-experience gap and leads individuals to act as if they had a description available. We also use lotteries with rare outcomes and find that the description-experience gap is greatest when a high payoff is rare, and is closed by clustered feedback, but does not emerge when a high payoff is common.

Chin, Alycia, David Hagmann, and George Loewenstein. "Loss Aversion and Exploration."

In "explore-exploit" situations, decision makers must choose between exploring unknown options and exploiting known options. We study how explore-exploit decisions vary under the influence of loss aversion, predicting that (1) people will be less likely to explore if doing so can lead to losses and that (2) people will be less likely to exploit when doing so would lead to repeated losses. To examine these predictions, we use a novel computer task in which participants explore a one-dimensional environment that contains only gains or gains and losses. Across multiple

studies, we find evidence for both of our predictions. Additionally, we demonstrate that loss aversion can be adaptive, leading participants in low payoff environments to higher total rewards.

## WORKSHOPS

### BRIQ WORKSHOP

**Bonn, Germany**  
July 2017

### BEHAVIORAL INSIGHTS GROUP, HARVARD UNIVERSITY

BIG Ideas Workshop

**Boston, MA**  
June 2017

### BEHAVIORAL INSIGHTS GROUP, HARVARD UNIVERSITY

BIG Ideas Workshop

**Boston, MA**  
August 2015

### RUSSELL SAGE FOUNDATION

Summer Institute In Behavioral Economics

**Waterville Valley, NH**  
June 2014 – July 2014

### RADY SCHOOL OF MANAGEMENT, UC SAN DIEGO

Spring School in Behavioral Economics

**San Diego, CA**  
March 2014

### NEW YORK UNIVERSITY, ABU DHABI

Winter Experimental Social Sciences Institute

Workshop on field experiments; emphasis on both economics and political science

**Abu Dhabi, UAE**  
January 2014

### MARTINOS CENTER FOR BIOMEDICAL ENGINEERING

fMRI Visiting Fellowship

**Boston, MA**  
October 2013

### FULLERTON UNIVERSITY

Advanced Training in Web-Based Research

**Fullerton, CA**  
August 2013

### KENNEDY SCHOOL OF GOVERNMENT, HARVARD UNIVERSITY

Workshop on Behavioral Economics and Public Policy

First prize in a group research design competition (\$1,000 research grant)

**Boston, MA**  
August 2013

### AMERICAN ECONOMIC ASSOCIATION CONTINUING EDUCATION

Development Economics, with Anne Case and Angus Deaton

**Denver, CO**  
January 2011

## INVITED PRESENTATIONS

University of Nottingham

**Nottingham, UK**  
November 2017

University of West Bohemia, Department of Sociology

**Plzen, Czech-Republic**  
November 2017

University of Economics Prague

**Prague, Czech-Republic**  
November 2017

Tilburg University, Experimental Economics Seminar

**Tilburg, Netherlands**  
November 2017

Maastricht University, Department of Finance

**Maastricht, Netherlands**  
November 2017

West Virginia University, Department of Psychiatry, Grand Rounds Seminar

**Morgantown, PA**  
August 2017

Center for Advanced Hindsight, Duke University

**Durham, NC**  
September 2016

## CONFERENCE PRESENTATIONS

Society for Judgment and Decision Making

**Vancouver, Canada**  
November 2017

Stanford Institute for Theoretical Economics (SITE), Experimental Economics Session

**Palo Alto, CA**  
August 2017

Opinion Dynamics and Collective Decisions

**Bremen, Germany**  
July 2017

Early Career Behavioral Economics Conference

**Pittsburgh, PA**  
June 2017

|  |                                 |
|--|---------------------------------|
| Thurgau Experimental Economics Meeting                                     | <b>Kreuzlingen, Switzerland</b> |
|  | April 2017                      |
| Society for Judgment and Decision Making                                   | <b>Boston, MA</b>               |
|  | November 2016                   |
| Penn Center for Health Incentives and Behavioral Economics, Roybal Retreat | <b>Skytop, PA</b>               |
|  | October 2016                    |
| Foundations of Utility and Risk  | <b>Coventry, UK</b>             |
|  | June 2016                       |
| Exploring Ignorance Symposium  | <b>Konstanz, Germany</b>        |
|  | May 2016                        |
| Whitebox Advisors Graduate Student Conference, Yale University             | <b>New Haven, CT</b>            |
|  | May 2016                        |
| Network for Integrated Behavioural Science                                 | <b>Norwich, UK</b>              |
|  | April 2016                      |
| Annual PhD Conference at Leicester University                              | <b>Leicester, UK</b>            |
|  | December 2015                   |
| Society for Judgment and Decision Making                                   | <b>Chicago, IL</b>              |
|  | November 2015                   |
| Economic Science Association   | <b>Dallas, TX</b>               |
|  | October 2015                    |
| Penn Center for Health Incentives and Behavioral Economics, Roybal Retreat | <b>Cape May, NJ</b>             |
|  | September 2014                  |
| Subjective Probability, Utility, and Decision Making (SPUDM)               | <b>Budapest, Hungary</b>        |
|  | August 2015                     |
| Society for Judgment and Decision Making                                   | <b>Long Beach, CA</b>           |
|  | November 2014                   |
| Penn Center for Health Incentives and Behavioral Economics, Roybal Retreat | <b>Cape May, NJ</b>             |
|  | September 2014                  |
| Network for Integrated Behavioural Science                                 | <b>Nottingham, UK</b>           |
|  | May 2014                        |
| Computational Social Science Society of America Annual Conference          | <b>Santa Fe, NM</b>             |
|  | August 2013                     |
| Computational Social Science Society of America Annual Conference          | <b>Santa Fe, NM</b>             |
|  | September 2012                  |
| Eastern Economic Association Annual Conference                             | <b>Boston, MA</b>               |
|  | March 2012                      |
| Computational Social Science Society of America Annual Conference          | <b>Santa Fe, NM</b>             |
|  | October 2011                    |

## SERVICE

|   |      |
|---|------|
| Behavioral Science and Policy Association Fellow, Health Working Group  | 2016 |
| Faculty Search Committee for Behavioral Economics, Department of Social and Decision Sciences, Carnegie Mellon University | 2014 |

## Reviewer Activity

Economic Journal, Journal of Economic Psychology, Science Advances, Social and Personality Psychology Compass

## RESEARCH POSITIONS

|   |             |
|---|-------------|
| Research Assistant for Prof. Cleotilde Gonzalez, Carnegie Mellon University | 2015 – 2016 |
| Research Assistant for Prof. Cleotilde Gonzalez, Carnegie Mellon University | Summer 2014 |
| Research Assistant for Prof. George Loewenstein, Carnegie Mellon University | Fall 2012   |
| Research Assistant for Prof. Erte Xiao, Carnegie Mellon University          | Summer 2012 |
| Research Assistant for Prof. David Budescu, Fordham University              | Spring 2012 |
| Research Assistant for Prof. Gregory Bard, Fordham University               | Summer 2011 |

## PROFESSIONAL ASSOCIATIONS

|   |                |
|---|----------------|
| Behavioral Science & Policy Association | 2015 – present |
| Economic Science Association            | 2012 – present |

Society for Judgment and Decision Making  
 American Economic Association  
 Computational Social Science Society of America  
 Eastern Economic Association

2012 – present  
 2010 – present  
 2011 – 2015  
 2010 – 2012

## TEACHING EXPERIENCE

### TEACHING ASSISTANT

Prof. Stephen Broomell, **Decision Science & Policy**  
 Prof. George Loewenstein, **Behavioral Economics & Public Policy**  
 Prof. Serguey Braguinsky, **Policy Analysis I**  
 Prof. Erte Xiao, **Organization**  
 Prof. Erte Xiao, **Behavioral Economics**  
 Prof. Erte Xiao, **Organization**

Spring 2017  
 Fall 2016  
 Fall 2014  
 Spring 2014  
 Fall 2013  
 Spring 2013

### INVITED GUEST LECTURES

Prof. Silvia Saccardo, Department of Social and Decision Sciences,  
**Behavioral Economics in Organizations**  
 Prof. Elif Incekara Hafalir, Tepper School of Business, **Freshman Seminar**

Fall 2016, 2017  
 Spring 2013

### ONE TO WORLD

*Global Classroom Volunteer*

**New York, NY**  
 August 2009 – August 2012

### COLUMBIA UNIVERSITY COMMUNITY IMPACT

*GED Substitute Teacher*

**New York, NY**  
 January 2011 – May 2011

## CONSULTING EXPERIENCE

### IRRATIONALLY HEALTHY

Working with employers to implement health-promoting policies for employees

**San Francisco, CA**  
 July 2016

### COMMON CENTS

Working with Fintech firms on incorporating behavioral economics in their products.

**San Francisco, CA**  
 April 2016

### STARTUPONOMICS

Advising startups on applying insights from behavioral economics to their product design

**San Francisco, CA**  
 August 2014

### IRRATIONAL LABS

Advised numerous teams at Google on implementing randomized controlled trials and on product design. Consulted for startups on improving user experience, services, and product design

**San Francisco, CA**  
**Mountain View, CA**  
 June 2014 – July 2014

## AWARDS AND HONORS

### *Fellowship*

Doc.Mobility Fellowship, Swiss National Science Foundation (\$43,800)

July 2017 – June 2018

### *Awards*

Doc.Mobility Fellowship, Conference Travel Award (CHF 2,000, ~\$2,000)  
 Graduate Student Assembly/Provost Conference Award (\$500)  
 Graduate Student Assembly/Provost Conference Award (\$500)  
 Graduate Student Assembly/Provost Conference Award (\$500)  
 Graduate Student Small Project Help Research Grant (\$750)  
 Graduate Student Assembly/Provost Conference Award (\$500)

July 2017  
 Spring 2017  
 Spring 2016  
 Fall 2014  
 Spring 2014  
 Spring 2013

### *Honors*

Omicron Delta Epsilon (Economics Honor Society)  
 Pi Mu Epsilon (Mathematics Honor Society)  
 Psi Chi (Psychology Honor Society)  
 Alpha Sigma Nu (Jesuit Honor Society)

