**Michael H. Yeomans**
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## Citizenship

Canada and United States *(dual)*

## Education

2014 – current: Post-Doctoral Fellow, Harvard University

2009 – 2014: University of Chicago Booth School of Business,
Ph.D. & MBA in Behavioral Science (Nicholas Epley, advisor)

2007 – 2009: University of Waterloo, M.A. in Psychology (Derek Koehler, advisor)

2005 – 2007: University of British Columbia, CANEX Exchange (Jonathan Schooler, advisor)

2002 – 2007: University of Toronto, B.Sc. (with Honors) in Psychology and Human Biology

## Research Interests

Judgment & Decision-Making, Field Experiments, Machine Learning, Natural Language Processing.

## Publications

Huang, K., **Yeomans, M.,** Brooks, A.W., Minson, J. & Gino, F. It doesn't hurt to ask: Question-asking increases liking. *Accepted at Journal of Personality & Social Psychology*

Al-Ubaydli, O. & **Yeomans, M.** (2016) Do people donate more when they perceive a single beneficiary whom they know? A field experimental test of the identifiability effect. *Journal of Behavioral & Experimental Economics.*

**Yeomans, M.,** & Herberich, D. (2014). An experimental test of the effect of negative social norms on energy-efficient investments. *Journal of Economic Behavior & Organization, 108,* 187-197

## Working Papers

**Yeomans, M.**, Mullainathan, S., Shah, A. & Kleinberg, J. Making Sense of Recommendations. *Invited Revision at Psychological Science*

**Yeomans, M.** & Reich, J. Planning to Learn: Plan-Making Encourages and Forecasts Goal Pursuit in Online Education
*In preparation for Science*

**Yeomans, M.** The Case Against Recommendations: A Preference for Self-Expression in Word of Mouth.
>   *In preparation for Management Science*

**Yeomans, M.** & Al-Ubaydli, O. How does Fundraising affect Charitable Giving? Evidence from a field experiment with volunteers.
>   *Submitted to Journal of Experimental Economics*

**Yeomans, M.** The Straw Man Effect: Natural Language of Partisan Misrepresentation
>   *In preparation for Political Psychology*

## Selected Research in Progress

w. Valdivia, M., Karlan, D., Frisancho, V. & Mullainathan, S. Conditional Cash Transfers and Commitment Savings Accounts in the Dominican Republic

w. Tingley, D., Stewart, B. & Reich, J. The Civic Mission of MOOCs: Computational Measures of Engagement Across Differences in Online Courses

w. Kizilcec, R., Reich, J., Rosen, Y., Tingley, D., Turkay, S., Williams, J. & Cohen, G. Interventions to Support Online Learning at Scale.

w. Wu, G & Walco, D. Recency in Reference Point Formation.

w. Moore, D.A., & Minson, J. The direct and indirect effects of arguments on overconfidence.

w. Mullainathan, S. & Danescu-Niculescu-Mizil, C. Verbal exhaust: A natural language processing account of the anchoring effect.

## Other Writing

**Yeomans, M.** (July 7, 2015) *"What Every Manager Should Know About Machine Learning".* *Harvard Business Review.*

## Awards and Fellowships

Hillel Einhorn Memorial Fellowship, 10/2011

Faculty Poster Award, 2nd Place. Max Planck Summer Institute, 28/6/2011.

Student Poster Award, 3rd Place. Society for Judgment and Decision Making, 22/11/2010.

University of Chicago Summer Research Grant, 9/2010

Chicago Booth. Ph.D. in Managerial and Organizational Behavior Fellowship, 9/2009-8/2014.

University of Waterloo MERIT Graduate Scholarship. 9/2007 – 8/2009.

Morris Belkin Undergraduate Dissertation Award, University of British Columbia. 28/4/2007.

**Selected Peer-Reviewed Presentations**

*Planning to Learn: Plan-Making Encourages and Forecasts Goal Pursuit in Online Education*
> Invited talk at Consumer Financial Protection Bureau, December 1, Washington, DC
> Paper presented at Society for Judgement and Decision-Making Conference,
> > November 21, 2016, Boston, MA.
> Paper presented at Conference on Digital Experimentation,
> > October 15, 2016, Cambridge, MA.
> Paper presented at Advances in Field Experiments Conference,
> > September 16, 2016, Chicago, IL.

*The Case Against Recommendations: A Preference for Self-Expression in Word of Mouth.*
> Invited talk at AirBnB, January 19, San Francisco, CA
> Paper presented at Behavioral Decision Research and Management Conference,
> > June 11, Toronto, ON, 2016
> Paper presented at JDM day, April 8, Boston, MA, 2016
> Paper presented at Society for Judgment and Decision Making, Chicago, IL, 2015

*Making Sense of Recommendations.* (w/ A. Shah, S. Mullainathan & J. Kleinberg)
> Paper presented at Psychology & Technology Conference,
> > October 22, 2016, Los Angeles, CA.
> Paper presented at Association of Consumer Research Conference,
> > October 7, 2015, New Orleans, LA.
> Paper presented at the Academy of Management Conference,
> > August 8, 2015, Vancouver, BC.
> Paper presented at Society for Consumer Psychology Summer Conference,
> > August 6, 2015, Toronto, ON.
> Paper presented at Society for Judgement and Decision-Making Conference,
> > November 20, 2014, Long Beach, CA.

*How does Fundraising affect Charitable Giving? Evidence from a field experiment with*
> *volunteers.* (w/ O. Al-Ubaydli)
> Paper presented at the Academy of Management Conference,
> > August 9, 2015,  Vancouver, BC.
> Poster presented at Society for Judgment and Decision Making Conference,
> > Nov 17, 2013, Toronto, ON
> Paper presented at Society for Probability, Uncertainty & Decision-Making Conference,
> > August 20, 2013,  Barcelona, Spain.
> Paper presented at TIBER Symposium on Psychology and Economics,
> > August 18, 2013, Tilburg, The Netherlands.

*Tire Pressure Neglect.* (w/ D. Herberich)
> Paper presented at Behavioral Decision Research and Management Conference,
> > June 28, 2012, Boulder, CO.
> Paper presented at Whitebox Conference, May 15, 2012, New Haven, CT.
> Poster presented at Society for Judgment and Decision Making Conference,
> > Nov 21, 2010, St. Louis, Missouri.
> Poster presented at Max Planck Summer Institute in Bounded Rationality,
> > June 21, 2011, Berlin, Germany.

*Imagining a Crowd Within Reduces Overconfidence.* (w/ J. Soll & D. Koehler)
> Poster  presented at Society for Judgment and Decision Making Conference,
> > November 5, 2011, Seattle, WA.
> Poster presented at Behavioral Decision Research and Management Conference,
> > June 12, 2010, Pittsburgh, Pennsylvania.
> Poster presented at Society for Judgment and Decision Making Conference,
> > November 17, 2009, Boston, Massachusetts.

## Teaching Assistantships

BUS38002: Managerial Decision Making
> April - June 2011; January - March 2012; April – June 2012, Jan – July 2013
> Instructors: Richard Thaler (x3), George Wu, Jane Risen (x2), Cade Massey
> Duties: Grading, course planning, meeting with students, leading a team of graders.

PSYC391: Advanced Data Analysis
> September - December 2007; September - December 2008
> Instructor: Jonathan Fugelsang
> Duties: Teaching statistics tutorial sessions, grading, office hours

PSYC398: Research in Memory
> May 2008 - August 2008
> Instructor: Colin McLeod
> Duties: In-class support of group work, office hours, grading

## Professional Affiliations

> Society for Judgment and Decision Making (2009-present)
> Academy of Management (2015-present)
> Association for Consumer Research (2010-present)

## Editorial Service

> Ad-Hoc Reviewer: Management Science, Journal of Environmental Economics and
Management, Psychological Science.

## Recommendations

**Making Sense of Recommendations.** *(w/ Anuj Shah, Sendhil Mullainathan & Jon Kleinberg)*

Algorithms are increasingly being used to make recommendations about matters of taste, expanding their scope into new domains. This raises two questions. Can algorithms predict subjective preferences as well as other people can? And do people trust algorithmic recommendations? Despite the many disadvantages facing recommender systems, we find that they outperform human recommenders, even in a subjective domain where people have extensive experience: Predicting what people will find funny. Moreover, these recommender systems outperform friends and family. But people do not trust these systems. They do not use them to make recommendations for others, and they prefer to receive recommendations from other people instead. This lack of trust partly stems from the fact that machine recommendations seem harder to understand than human recommendations. But, simple explanations of recommender systems can alleviate this distrust, by providing understanding of the recommendation process. This work demonstrates how human-computer interaction can be leveraged to support better decision-making at scale.

**The Case Against Recommendations: A Preference for Self-Expression in Word of Mouth.**

The benefits of advice are obvious from the recipients' perspective. But what do advisors like about making recommendations? Cognitively, recommenders often use egocentric projection to predict what others will like. In this paper we experimentally manipulated the amount of egocentric projection, to test whether self-expression (vs. perspective-taking) also has hedonic consequences. Participants were asked to either recommend (suggest a choice for another person) or surrogate (describe their own choice) from a choice set of movies, jokes, or restaurants. And over five studies, people preferred surrogating over recommending. Overall, participants enjoyed surrogating more, because recommenders doubted that they would recommend the right item to recipients, unless they knew the recipient had identical tastes. This suggests that false consensus may be exaggerated in word of mouth, since recommending is more enjoyable when the recipients are believed to be more similar. Our results also suggest that both consumers and firms who are seeking product reviews can be more successful asking for explicit surrogations rather than recommendations, because that is more congruent with the recommenders' preference for self-expression.

## Natural Language Processing

**It doesn't hurt to ask: Question-asking increases liking.** *(w/ Karen Huang, Alison Wood Brooks, Julia Minson, & Francesca Gino)*

Conversation is a pervasive human experience, one that is necessary to pursue intrapersonal and interpersonal goals across myriad contexts, relationships, and modes of communication (e.g., written, spoken). In the current research, we isolate the role of an understudied conversational behavior: question-asking. Across three studies of live dyadic conversations, we identify a robust and consistent relationship between question-asking and liking: people who ask more questions are better liked. When people are instructed to ask more questions, they ask more questions overall and, more specifically, they ask more follow-up questions. Asking more follow-up questions makes them appear more empathic, engaged, and responsive to their partners (compared to people who ask fewer questions). We also found that in speed-dating conversations, daters who ask more questions are more likely to get second dates. We used natural language processing and machine learning algorithms to build a "follow-up question detector" that we applied to our speed-dating data (and can be applied to any text data to more deeply understand question-asking dynamics). Despite the persistent effect we identify, people do not seem to anticipate the connection between question-asking and interpersonal liking.

**Planning to Learn: Plan-Making and Goal Pursuit in Online Education** *(w/ Justin Reich)*

Among all of the learners in Massive Open Online Courses (MOOCs) who intend to complete a course, the majority fail to do so. This intention-action gap is found in many domains of human experience, and research in similar goal pursuit domains suggests that plan-making is a cheap and effective nudge to encourage follow-through. In a natural field experiment in three HarvardX courses, some students received open-ended planning prompts at the beginning of a course. These prompts increased course completion by 29%, and payment for certificates by 40%. This effect was largest for students enrolled in traditional schools. Furthermore, the contents of students' plans could predict which students were least likely to succeed - in particular, students whose plans focused on specific times were unlikely to complete the course. Our results suggest that planning prompts can help learners adopted productive frames of mind at the outset of a learning goal that encourage and forecast student success. We also discuss MOOCs as a model for other domains with follow-through problems.

## Field Experiments in Pro-Social Behavior

**An experimental test of the effect of negative social norms on energy-efficient investments.** *(w/ David Herberich)*

Energy efficiency is an important economic and environmental concern, and likewise the correction of current wasteful energy practices. We document widespread "tire pressure neglect" - three-quarters of drivers waste gas driving on underinflated tires. Negative descriptive social norms are one potential cause, but have not been tested in high-neglect environments, where those norms are widespread. This confounds the mechanism: are these norms signals of private value to consumers, or do they imply standards for social judgment from others? We conducted a field experiment at gas stations in Chicago - our intervention included treatments with information about tire pressure neglect, promotions in the form of price reductions from $0.50 to free, a descriptive norm of behavior, and "help" in the form of air pump assistance. Treatments that only included information were ineffective, despite average fuel savings of $10.51, but small promotions had substantial impacts. When the air pump price was free, the social norm discouraged inflation. However, when the research assistant offered help, inflation rates were buoyed by the social norm. These results highlight the importance of incentives over mere information treatments, and offer a new perspective on how information and monetary levers can influence decision-making in the presence of negative social norms.

**How does Fundraising affect Charitable Giving? Evidence from a field experiment with volunteers.** *(w/ Omar Al-Ubaydli)*

Does fundraising have an effect other types of giving, like volunteering? We report results from a field experiment in which a non-profit firm asked their current volunteers to donate money, in a randomly-staggered roll-out. We observe volunteers' entire portfolio of giving to the firm - both donations, and volunteer hours before and after the call. Overall, there was some decline in volunteer hours after fundraising, and it was concentrated among newer volunteers. By contrast, long-time volunteers maintained their volunteering after the call, and were also more likely to donate in the first place. Substitution was rare, as most donors increased their volunteer hours after donating. Our findings provide new evidence for the effect of personal history on charitable giving, and provide new practical guidance for fundraisers.

**Do people donate more when they perceive a single beneficiary whom they know? A field experimental test of the identifiability effect.** *(w/ Omar Al-Ubaydli)*

According to the identifiability effect, people will donate more to a single beneficiary rather than to many beneficiaries, holding constant what the donations are actually used for. We test the identifiability effect for two novel subject pools (the suppliers and beneficiaries of volunteer labor). We also test a refinement of the identifiability effect where we vary whether or not the single beneficiary is personally known to the solicitees. While the behavior of volunteers is consistent with the identifiability effect, we find that the identifiability effect is reversed for beneficiaries of volunteer labor. Moreover, we find that making the single beneficiary personally known to the solicitees lowers donations by a statistically insignificant amount, suggesting that it does not enhance donations.