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# Hannah Trachtman


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**Citizenship:** U.S., Israel

**Fields of Concentration:**
Behavioral Economics
Development Economics

**Desired Teaching:**
Behavioral Economics
Development Economics
Econometrics
Microeconomics

**Comprehensive Examinations Completed:**
2015 Oral: Development, Behavioral (with distinction)
2014 Written: Microeconomics, Macroeconomics

**Dissertation Title:** *Essays in Development and Behavioral Economics*

**Committee:**
Professor Costas Meghir (Chair)
Professor Dean Karlan (Co-Chair)
Professor Chris Udry
Professor Jason Abaluck

**Expected Completion Date:** May 2020

**Degrees:**
2020 Ph.D., Economics, Yale University (expected)
2016 M.Phil., Economics, Yale University
2015 M.A., Economics, Yale University
2010 B.A., Economics, Harvard University *(Magna cum Laude)*

**Fellowships, Honors and Awards:**

2014 National Science Foundation Graduate Research Fellow
2010 Phi Beta Kappa National Society
2010 Thomas Temple Hoopes Prize for outstanding scholarly research
2010 Korean War Memorial Prize for responsibility and strength of character
2009 Harvard College Research Program Fellowship

**Research Grants:**

2018 National Science Foundation Doctoral Dissertation Improvement Grant
2018 Institute for Social and Policy Studies Grant
2017 Russell Sage Foundation Small Grant in Behavioral Economics
2013 Yale University Doctoral Fellowship
2013 Yale Economic Growth Center Fellowship

**Teaching Experience:**

2018 Research Assistant for Prof. Edward Vytlacil, Intermediate Data Analysis and Econometrics (undergraduate), Yale College (assisted with course design; wrote problem sets and solution keys)
2013 Instructor, Behavioral Economics, Duke Talent Identification Program (designed and taught new course at summer enrichment program for gifted high school students)

**Research and Work Experience:**

2012 Managed study investigating labor markets and decision-making under direction of Drs. Dean Karlan, Abhijit Banerjee, Chris Udry, Bram Thuysbaert, and Robert Osei (Tamale, Ghana)
2011 Managed the evaluation of a new loan product for Pro Mujer Perú, a microfinance organization, under Drs. Dean Karlan, Xavier Gine, and Greg Fisher (Puno, Peru)
2010 Assisted Drs. Jonathan Zinman, Victor Stango, and Joanne Yoong with research on the measurement of behavioral biases (worked remotely)

**Publications:**

"Avoiding the Ask: A Field Experiment on Altruism, Empathy, and Charitable Giving" with James Andreoni and Justin M. Rao, *Journal of Political Economy*, 2017.

"Fair Weather Avoidance: Unpacking the Costs and Benefits of `Avoiding the Ask'" with James Andreoni, Justin Rao, Andrew Steinkruger, Mackenzie Wood, Adam Wooster, and James J. Murphy, *Journal of the Economic Science Association*, 2015.

**Working Papers:**

"Intervention Externalities due to Limited Attention" (October 2019), *Job Market Paper*

"Unpacking a Multi-Faceted Program to Build Sustainable Income for the Very Poor" (February 2018) with Abhijit Banerjee, Dean Karlan, Chris Udry, *NBER Working Paper No. 24271*

**Seminar and Conference Presentations:**

| | |
|---|---|
| 2019 | Institute for Fiscal Studies, London |
| 2018 | Northwestern University, Development Economics Seminar |
| 2017 | Hebrew University, Departmental Seminar |

**Referee Service:**

*American Economic Review, Economics Letters, Journal of Development Economics, Journal of Public Economics, Journal of Economic Behavior and Organization, Organizational Behavior and Human Decision Processes*

**Languages:**

English (native), Spanish (fluent), Hebrew (conversational)

**References:**

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## Dissertation Abstract

### Chapter 1: "Intervention Externalities due to Limited Attention" [Job Market Paper]

The potential welfare benefits of motivating people to vaccinate their children, consume healthy foods, or use clean cookstoves are enormous. Recent research has uncovered many interventions that cost-effectively improve such behaviors, as well as many that do not. But most research evaluates one intervention in isolation on target outcomes. As such, we have little understanding of how interventions might interact with one another, or whether they generate spillovers to other behaviors. This paper explores the hypothesis that behavior change interventions might generate negative externalities due to limited attention.

I propose a simple framework that models three types of limited attention that have distinct policy implications. A decision-maker has two behaviors available to her, x and y. Doing each behavior generates a return, but requires attention, which is costly. A benevolent social planner can subsidize attention to a particular behavior with incentives or SMS messages. The model generates two non-parametric predictions, and with additional structure, allows for the identification of structural parameters that link to each type of limited attention.

The framework motivates an experiment design with five treatment groups: a control group, a group that gets messages about behavior x, a group that gets messages about behavior y, a group that gets both sets of messages, and a group that gets incentives for behavior y. I use Facebook Ads to recruit 3,845 individuals who are interested in meditation (behavior x) and nutritional monitoring (behavior y). Over four weeks these individuals receive messages or incentives for one or both behaviors according to their treatment assignment. During this period, and for a follow-up period of four additional weeks, I collect daily data on meditation and nutritional monitoring via phone applications.

I find that messaging and incentive interventions generate negative spillovers on the opposite behavior of 2.8 and 2.4 percentage points on base rates of 9.4 and 11.8 for meditation and meal tracking, respectively. I estimate the parameters of the model to decompose the observed spillovers by type of limited attention and to examine the policy implications. The results reveal that effective messaging interventions do not necessarily generate larger negative spillovers than ineffective interventions, all else being equal. Specifically, suppose a low-effectiveness intervention (0.2 SDs) is scaled so that, in the absence of spillovers, it is equally cost-effective to a high-effectiveness intervention (1 SD). In the presence of spillovers driven by limited attention of the observed type, the former intervention is predicted to cost 28% more than the latter. Thus, for policymakers who care about multiple outcomes, small-scale, highly-effective interventions may be preferable to large-scale, less effective ones, once spillovers are taken into account.

**Chapter 2: Unpacking a Multi-Faceted Program to Build Sustainable Income for the Very Poor** (with Abhijit Banerjee, Dean Karlan, Robert Osei, and Chris Udry)

A multi-faceted program comprising a grant of productive assets, training, coaching, and savings has been found to build sustainable income for those in extreme poverty across several countries, including Ghana. We exploit two additional experimental arms that were implemented in Ghana alongside the standard program to understand which components of the program drive the effects we observe. Specifically, we focus on two questions: whether a mere grant of productive assets alone, and whether access to a savings account and a deposit collection service alone, would generate similar impacts. We find no evidence that a grant of productive assets (goats) alone had any effect on welfare. While beneficiaries of the full program ultimately raised their total livestock holdings and built businesses that generated persistent income, beneficiaries of the asset program did not accumulate more total livestock, substituting goats for other animals, and did not enjoy higher income levels. We find significant positive effects of the savings-only program on financial inclusion and consumption at two years, but both effects are much weaker by the three-year mark. The full program generated much more savings than the savings-only program, even when the latter had a 50% match rate, suggesting either that people need earnings in order to save, or that the coaching was critical to ensuring that savings would be spent on investments that would generate higher income in the long-run.

**Chapter 3: Does Poverty Change Labor Supply? Evidence from Multiple Income Effects and 115,579 Bags** (with Abhijit Banerjee, Dean Karlan, and Chris Udry)

Many social policies assume that increases in income will reduce labor supply. However, this may not be the case in contexts with imperfect labor markets, in which the price of an efficiency unit of labor may not be equivalent between the market and a family enterprise, and the acquisition of an asset may lead households to work more and not less. It also may not be the case in contexts with nutritional or psychological poverty traps. To test how labor supply and effort respond to exogenous changes in income, we use an add-on experiment to a larger study evaluating a multi-faceted program to build long-term income for poor women in rural northern Ghana. The add-on involves a bag-sewing employment program which served as both an intervention as well as a measurement exercise. We find that beneficiaries of the multi-faceted program, relative to non-beneficiaries, provided more hours and more effort per hour producing bags and to productive activities generally. Program beneficiaries also have improved cognitive and dexterity abilities, as measured by relative performance on more complex bag-making tasks. The increases in labor supply and effort per hour, both overall and to bags production, are most apparent amongst beneficiaries who were assigned to a relatively high level of unconditional consumption support, but we do not find any direct evidence that improvements in nutrition or physical health drive these differences. In terms of wage elasticity, we find that higher (lower) piece rates led to greater (lower) bags production, but only after the worker received her first payment at the higher (lower) rate. We find that the wage elasticity of labor supply to bags production is mostly confined to those randomly assigned to improved access to savings accounts, and especially so during periods of the year in which the use of female labor in agriculture is low.