

Guest Editors' Preface to the Special Issue of Field Experiments in Economics and Management

Recent years have seen an enormous increase and interest in research using experimental methods in the field to address questions across a broad range of topics in economics and management. The reason for this is clear: addressing questions pertaining to theory and practice most often requires a clear identification of causal effects. Experiments – in which scientists utilize randomization and create treatment and control groups – are one of the most direct and effective ways to construct a proper counterfactual and achieve this gold standard in the social sciences.

Research utilizing field experiments is squarely in line with the mission of the Journal of Economics and Management, which seeks to publish articles that contribute real insight and innovation. The applied nature of the methodology of field experiments lends itself well to investigating the effects of different intervention programs, pricing schemes, and incentive mechanisms. In this volume, we include experiments that provide insights into a diverse range of interesting questions: What is the effect of 99-cent price endings on consumer demand? Do students behave rationally on multiple-choice tests? How does information provision affect the decision to donate blood? Moreover, these papers encompass research that was conducted using subjects from many different parts of the globe - from villagers in the Central Himalayas, to Bolivian micro-lenders, to students in Japan, to bidders in an online marketplace.

Field experimentation is still a new area of study. One methodological point of great importance in this literature is the proper use of statistical power and sample size. In the first paper in this volume, Johannes Ledolter explores improving the efficiency of field experiments as they are currently carried out in practice. In particular, Ledolter explores appropriate sample size calculation and delves into the advantage of multi-factor experimental plans.

In the papers that follow, we selected research that uses a broad range of field methods. Using the common taxonomy proposed by Harrison and List (2004), we

classify these into four types: *natural field experiments*, in which case participants are not aware of being in an experiment yet are randomized, *framed field experiments*, in which case participants are recruited into an experiment in a laboratory but the decision context is intact, and *artefactual field experiments*, in which case a particular sub-set of the population (e.g., villagers, microlenders) is recruited to participate in an experiment.

1 Natural Field Experiments

In their paper, Sobei Oda, Erika Seki and Yan Zhou explore the effect of information provision on blood donation. The authors recruited over 1,000 undergraduate students in Kyoto City and randomized these students to receive one of two flyers soliciting blood donors. The baseline flyer contained information about the blood drive, while the treatment flyer provided additional information about the ideal blood donor profile. The authors find that the proportion of donors increased due to the flyer, but that the treatment flyer actually had a negative effect on the donors who would fit the specified profile. The kinds of insights provided by Oda and co-authors shed light on what works and what doesn't in assisting blood banks to overcome the challenge of increasing contribution rates.

Antonio Filippin uses a natural field experiment to investigate the effect of 0.99 price endings on consumer demand. Using two very similar products in an Italian supermarket, Filippin imposed a price increase on both products for one month – one brand was priced above 0.99 and the other brand's price stayed below 0.99. Filippin's subsequent analysis of results suggests that despite the frequent use of 0.99 endings by retailers, they are not effective and may even be counter-productive for sales. This finding is of great practical relevance for firms, and provides insights into behavioral motivations as well.

In their paper, Sean Gray and David Reiley use a natural field experiment on eBay, with the experimenter acting as a bidder to investigate the benefit of sniping (submitting a bid seconds before an auction closes) on final price. Reiley does not find a significant benefit to this practice; in fact, prices for snipers are only 2.54% lower than for bidders who do not snipe. Because a considerable share of bidders engage in this behavior, it is highly relevant to learn that the behavior, in fact, does not provide monetary benefits in Gray and Reiley's setting.

2 Framed Field Experiments

María Paz Espinosa and Javier Gardeazabal compare the effects of framing incentives on students' decisions while taking multiple-choice exams. Undergraduate economics students were informed at the beginning of the course about their treatment assignment, and the scoring rules by which they would be assessed for all multiple-choice exams. The three experimental treatments consisted of: a penalty for incorrect guesses, a modified (less punitive) penalty, and a reward for omitted questions. The authors find that framing the incentive as a penalty vs. reward matters for risk-averse subjects. In contrast with the psychometrics literature's assumption of subjects' risk neutrality, Espinosa and Gardeazabal draw attention to how framing disproportionately affects the behavior of risk-averse students.

3 Artefactual Field Experiments

Giorgia Barboni, Alessandra Cassar, Arturo Rodriguez Trejo and Bruce Wydick use an artefactual field experiment to test the causal relationship between joint-liability lending and adverse selection, moral hazard, and free riding. The authors recruited 200 Bolivian adults, most of whom were current microfinance borrowers, to be subjects in the experiment. The subjects were randomized into four treatments: half were endowed with a safe or risky project and were asked to choose between an individual or joint-liability contract; the other half were endowed with either an individual or joint-liability contract and were asked to choose between a safe or risky project. Finally, all subjects participated in a risk-elicitation task by choosing between two lotteries, one of which was riskier and had the potential for larger payoffs. Barboni and colleagues find that subjects with risky projects strongly prefer joint-liability contracts, and argue that the motive is free-riding rather than to diversify the individual borrower's risk

Finally, Sujoy Chakravarty, Carine Sebi, E. Somanathan and Emmanuel Theophilus examine the relationship between social differences and voluntary contributions to public goods. In their artefactual field experiment, the authors recruited 390 participants from 20 villages in the Gori-Ganga basin of India. Groups

of 10 subjects played 15 rounds of public goods games in which they anonymously made decisions about how much endowment money to keep or contribute to a public fund. During some rounds, subjects were allowed to communicate with each other. In contrast with other voluntary contribution mechanism experiments, Chakravarty and colleagues find that contributions to the public good decrease only slightly across rounds. Their paper also highlights demographic differences that, in heterogeneous societies, can contribute towards differential provisions of public goods.

It is our hope that this special issue spurs even greater interest in the use of field experiments in management and economics. As can be noted from the work in this special issue, experimentation is a flexible approach that is easily applied to many business and economic policy questions.

John List

University of Chicago, U.S.A.

E-mail address: jlist@uchicago.edu.

Anyam Samak

University of Wisconsin-Madison, U.S.A.

E-mail address: asamak@wisc.edu.

Michael Price

University of Tennessee-Knoxville, U.S.A.

E-mail address: mprice21@utk.edu.