Foundations of Experimental Economics

University of Kassel

Winter Term 2025/2026

Lecture 5: Field Experiments

Introduction

Types of Economic Experiments

- Harrison and List (2004) propose the following taxonomy of experiments:
  - *Conventional lab experiment:* employs a **standard subject pool of students**, an **abstract framing**, and an **imposed** set of rules
  - *Artefactual field experiment:* same as conventional lab experiment, but with a **nonstandard subject pool**
  - *Framed field experiment:* same as artefactual field experiment, but with **field context** in either the commodity, task, or information set
  - *Natural field experiment:* same as framed field experiment but where the **subjects naturally undertake tasks** and where the subjects do **not know that they are in an experiment**

Field Experiments

- Like lab experiments, *"[...] field experiments use randomization, but do so in naturally-occurring settings, in certain cases using experienced subjects who might not be aware that they are participants in an experiment […]"*

  Levitt & List (2009), p. 2

Field Context (Harrison & List 2004)

1. The nature of the subject pool.
2. The nature of the information that the subjects bring to the task.
3. The nature of the commodity.
4. The nature of the task or trading rules applied.
5. The nature of the stakes.
6. The nature of the environment that subjects operate in.

Lab vs. Field Experiments

- Lab experiments are often criticized with respect to their **external validity:**
  - *"[…] human behavior may be sensitive to a variety of factors that systematically vary between the lab and the outside world"* (Levitt & List 2007, p. 154)
  - "even though these results appear prevalent, they are suspiciously drawn […] by methods similar to scientific numerology […] because of students […] who are not real people." (White House official to John List (List 2011, p. 4))
- Observational data collected from natural contexts generally does not allow for straightforward causal inference.
- Field experiments may be a bridge between both.
  - "Gold standard" in terms of empirical methods? (We will discuss this later!)

Control vs. Natural Environment

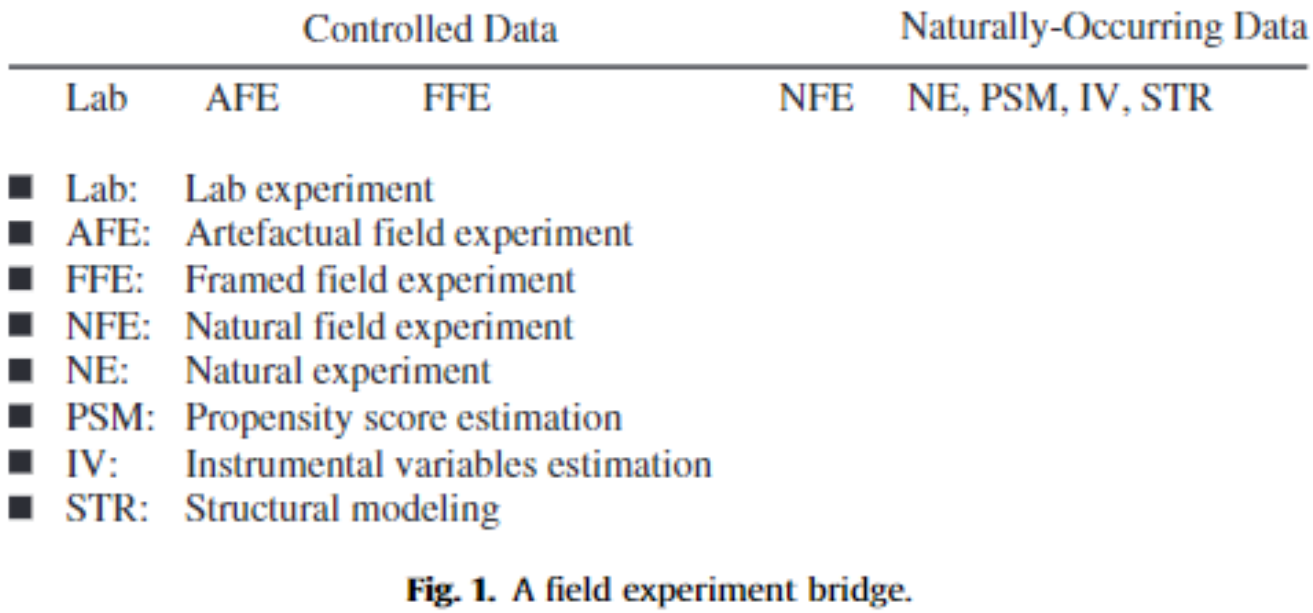


Fig. 1. A field experiment bridge.

Source: Levitt and List (2009, p. 8)

Goals for Today

- **Explore** the design of field experiments by examining studies across different topics.

- **Discuss** the promises and challenges involved in conducting field experiments.

- **Discuss** criticisms of lab experiments and counterarguments.

Recommended Readings

- Harrison, G.W. and J.A. List (2004): Field Experiments. Journal of Economic Literature, 42 (4), 1009-1055.

- Levitt, S. and J.A. List (2009): Field experiments in economics: The past, the present, and the future. European Economic Review, 53 (1), 1-18.

- List, J.A. (2011): Why Economists Should Conduct Field experiments and 14 Tips for Pulling One Off. Journal of Economic Perspectives, 25(3), 3-16.

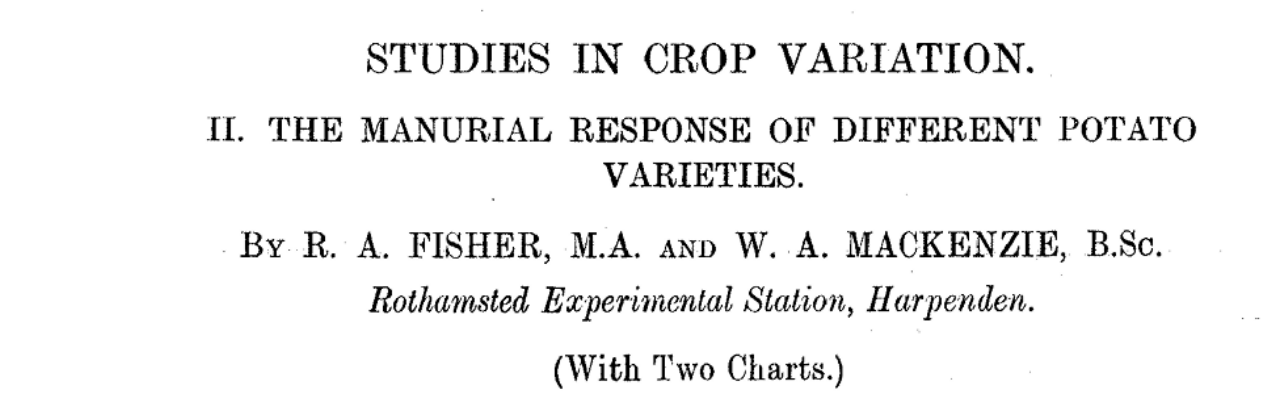
Required Reading

- Dannenberg, A., O. Johansson-Stenman, H. Wetzel (2022): Status for the Good Guys: An Experiment on Charitable Giving, *Economic Inquiry*, 60 (2), 721-740.

History of Field Experiments

History of Field Experiments (1/4)

- Early economic field experiments were conducted in the 1920s/30s in the context of agricultural economics (literally field experiments!)



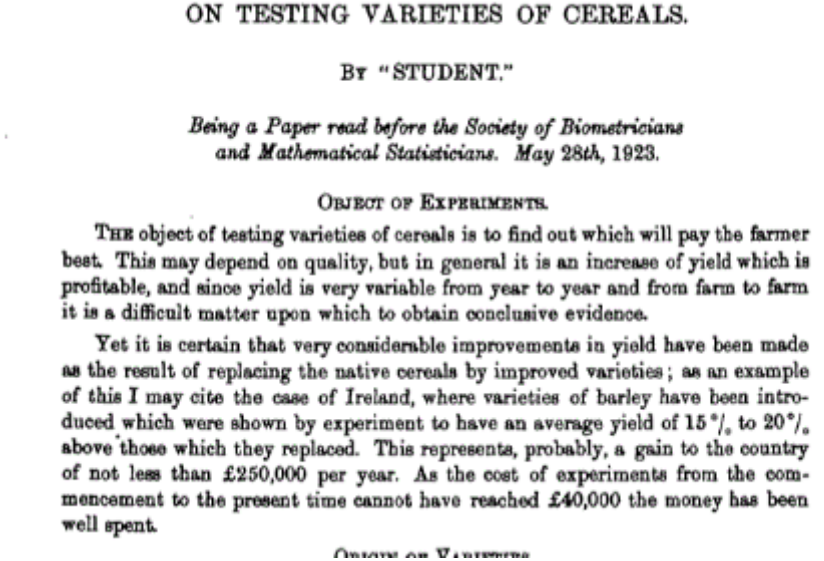
STUDIES IN CROP VARIATION.

II. THE MANURIAL RESPONSE OF DIFFERENT POTATO VARIETIES.

By R. A. FISHER, M.A. and W. A. MACKENZIE, B.Sc.

Rothamsted Experimental Station, Harpenden.

(With Two Charts.)



ON TESTING VARIETIES OF CEREALS.

By "STUDENT."

Being a Paper read before the Society of Biometricians and Mathematical Statisticians. May 28th, 1923.

Object of Experiments.

The object of testing varieties of cereals is to find out which will pay the farmer best. This may depend on quality, but in general it is an increase of yield which is profitable, and since yield is very variable from year to year and from farm to farm it is a difficult matter upon which to obtain conclusive evidence.

Yet it is certain that very considerable improvements in yield have been made as the result of replacing the native cereals by improved varieties; as an example of this I may cite the case of Ireland, where varieties of barley have been introduced which were shown by experiment to have an average yield of 15 °/₀ to 20 °/₀ above those which they replaced. This represents, probably, a gain to the country of not less than £250,000 per year. As the cost of experiments from the commencement to the present time cannot have reached £40,000 the money has been well spent.

Origin of Varieties.

History of Field Experiments (2/4)

- In the 1960s/70s, governments in different countries did large scale policy experiments:
  - Randomized electricity pricing schemes for 3420 customers in the UK from 1966 to 1972 (Boggis 1974).
  - Randomized intensified employment service among 410 employment seekers in Sweden in 1975 (Björklund and Régner 1996).
  - Randomized implementation of a negative income tax (different guaranteed income levels and tax rates) among roughly 1300 households in the US starting in 1968 (Ross 1970, Moffit 1981).

History of Field Experiments (3/4)

- In (academic) economics, field experiments are commonly used since the late 1990s.
  - More focus on testing economic theory than public policy experiments.

- John List is generally seen as the leading pioneer in the application of field experiments in economics.
  - Initially many in cooperation with NGOs, nowadays often with private companies.

- In 2019, Abhijit Banerjee, Esther Duflo and Michael Kremer received the Nobel Prize for their use of **Randomized Control Trails (RCTs)** in the context of development economics.
  - We will look at these in more detail in the next lecture.

Note: „Labexperiments“are defined as „Lab experiments“ + „Artefactual field experiments“

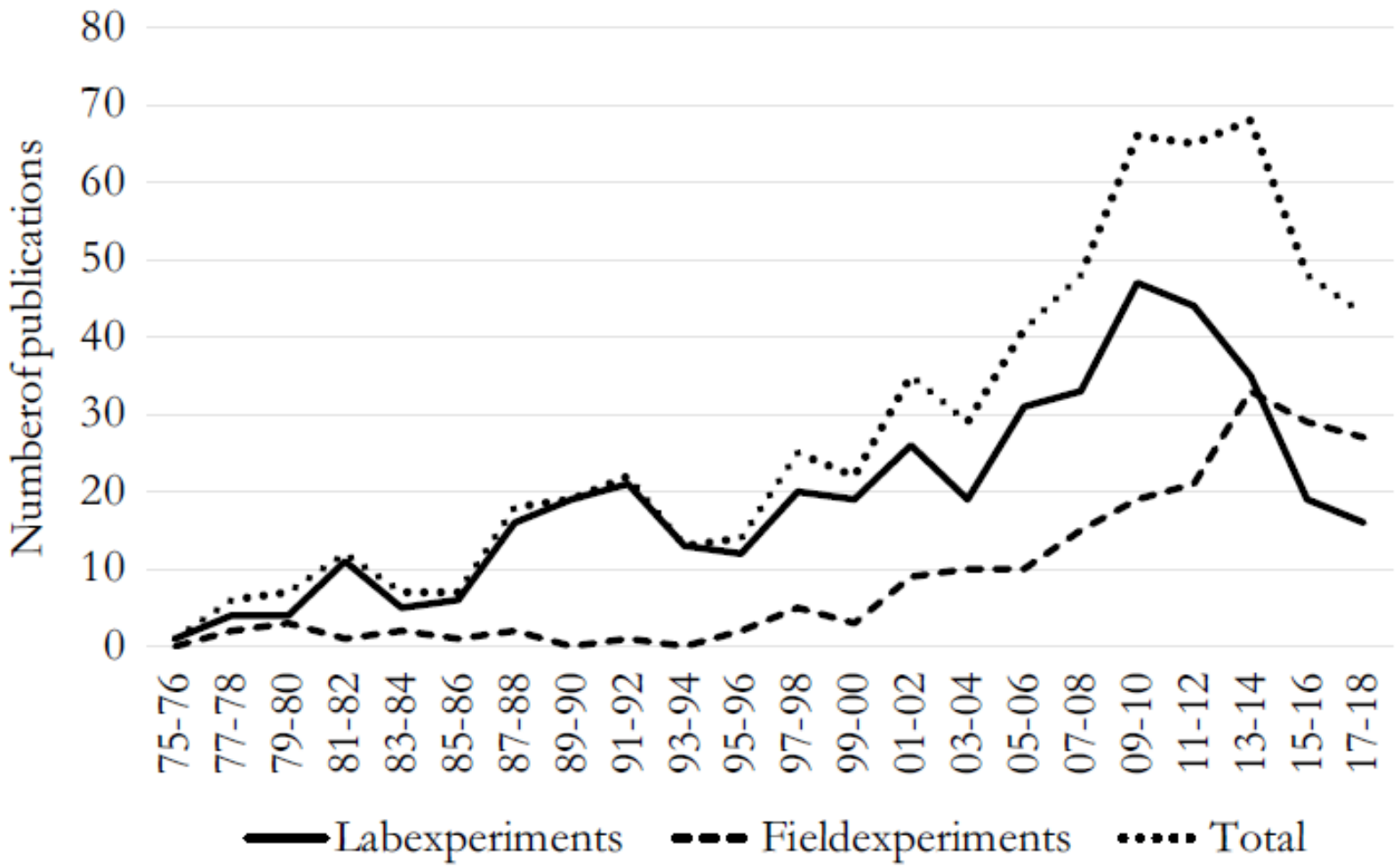


Fig. 1 Experimental papers published in the “top-5” economics journals (1975–2018)

Source: Nikiforakis & Slonim (2019, p. 145)

Examples of Field Experiments

Examples of Field Experiments

- In the following, we will examine examples of field experiments. For each study, we will consider the following questions:

1. **What is the main research question?**
   - What are the authors trying to find out?
2. **What is the field context of the study?**
   - Where and with whom was the experiment done?
3. **What is the decision-task and main outcome variable?**
   - What did the researchers measure?
4. **What are the treatments?**
   - What changed across groups?
5. **What are the results?**
   - What happened?

Drupp, Khadjavi & Quaas (2019)

ELSEVIER

European Economic Review

Volume 120, November 2019, 103310

Truth-telling and the regulator. Experimental evidence from commercial fishermen

Moritz A. Drupp [a], Menusch Khadjavi [b c d], Martin F. Quaas [b e f]

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https://doi.org/10.1016/j.euroecorev.2019.103310

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DKQ (2019): Research Question

- To what extend does regulator framing affect truth-telling among commercial fishermen?

DKQ (2019): Field Context

- The paper studies behavior of **commercial fishermen** registered with the German Federal Office for Agriculture and Food (896 contacted in total; 120 valid responses).

- These fishermen are subject to European Union regulations, such as quotas for fish catches and the discard ban, which prohibits the return of unwanted fish catches to the sea.

- Some of these regulations are not strictly enforced by the EU and, therefore, implementation depends on **honest behavior of fishermen**.

DKQ (2019): Task and Outcome Variable (1/2)

- Fishermen were contacted by written mail and asked to complete different tasks and fill out a survey.
- The letter included a 1€ coin for an **honesty-task**.
- Fishermen were asked to flip the coin four times and report how often the number came up on top.
- Incentive: For each instance that the number laid on top they received 5€.
- Outcome variable: Distribution of reported instances of number.

Task 2 (Baseline treatment)

The payoff in task 2 is determined by a coin toss, which you toss yourself.
For this, we have sent you enclosed a 1 Euro coin.

Your task is to toss this coin **exactly 4 times**. For each case that **"tails"** lies on top, you will receive 5 Euro.

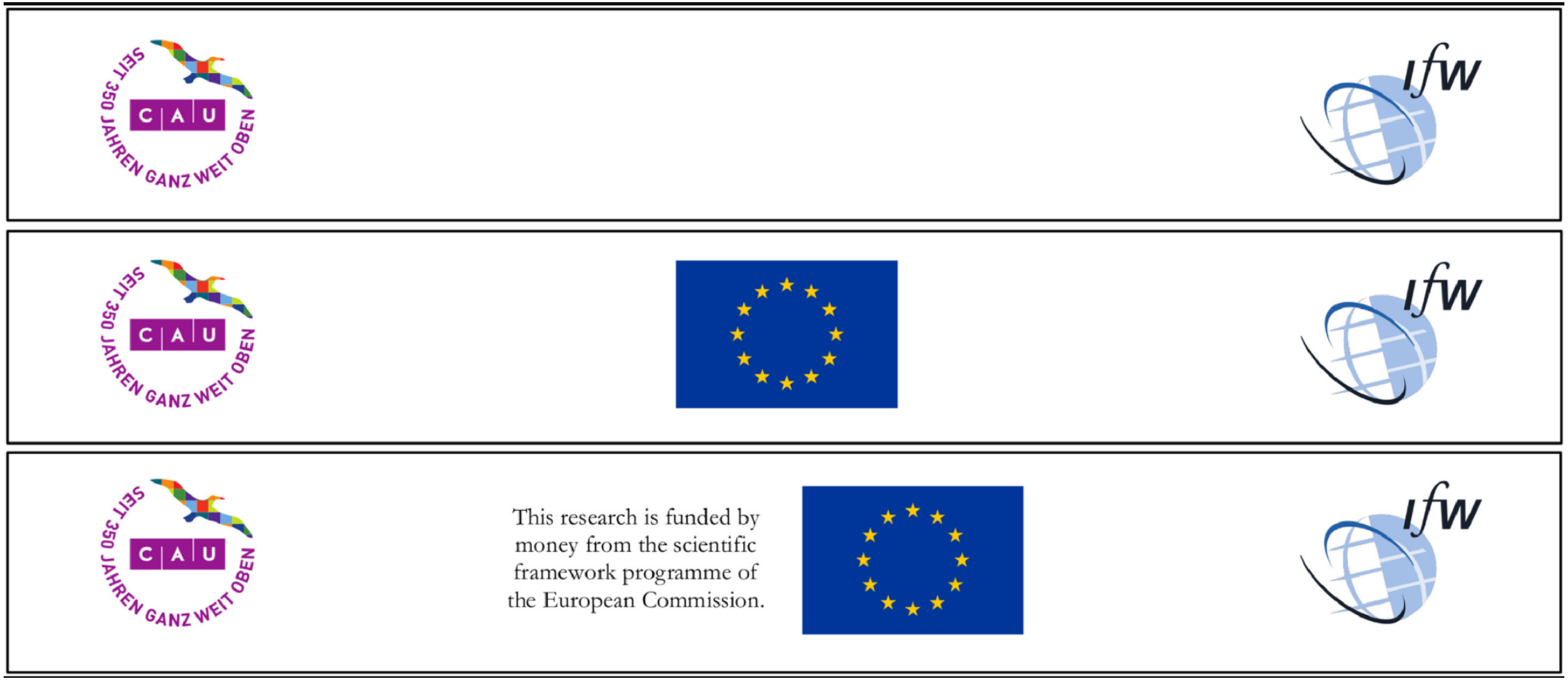
Afterwards, please record your result in the table below.

Times of coin tosses where „tails" came out top	Payment	Your outcome (please make one cross)
0	0.00 €	
1	5.00 €	
2	10.00 €	
3	15.00 €	
4	20.00 €	

Examples: If the number of coin tosses, for which "tails" came out top, is 1, you will receive 5.00 €. If the number of coin tosses, for which "tails" came out top, is 3, you will receive 15.00 €.

Source: Drupp, Khadjavi & Quaas (2019 (Appendix), p. 3)

DKQ (2019): Treatments



Source: Drupp, Khadjavi & Quaas (2019, p. 5)

DKQ (2019): Results (1/2)

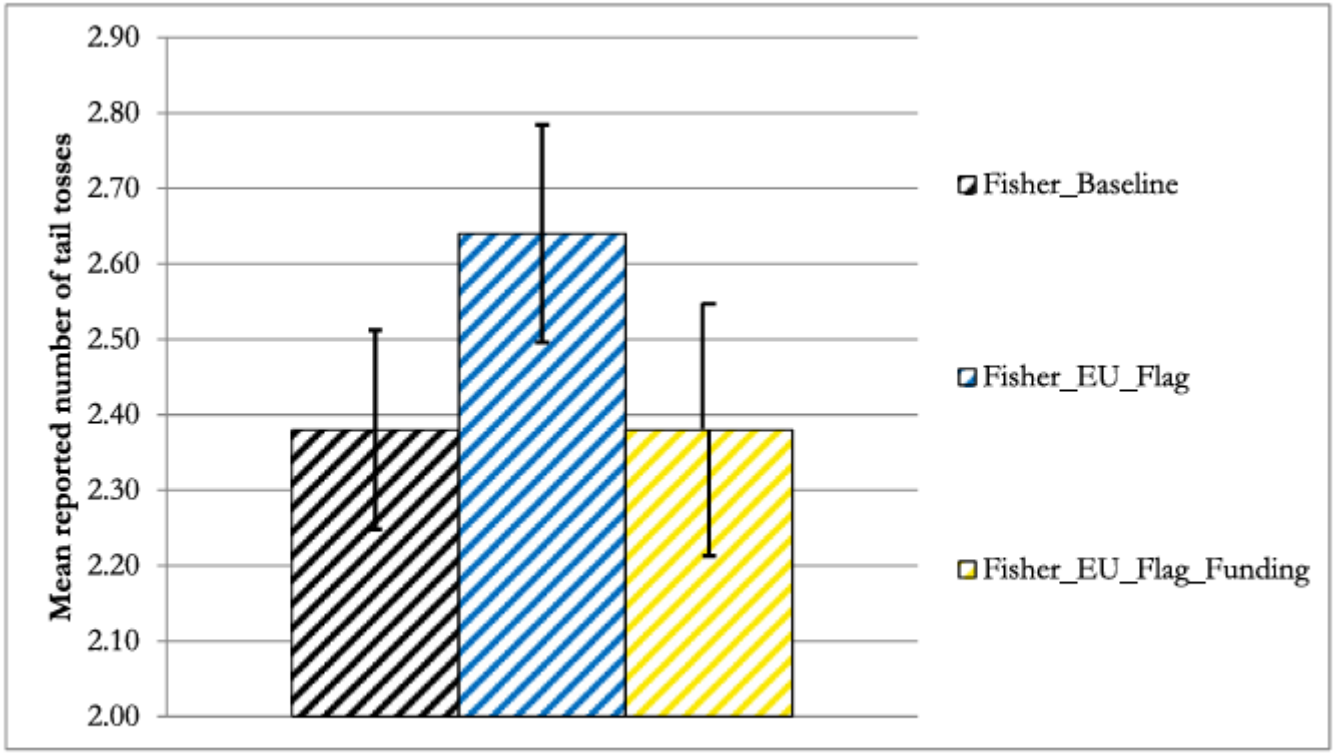
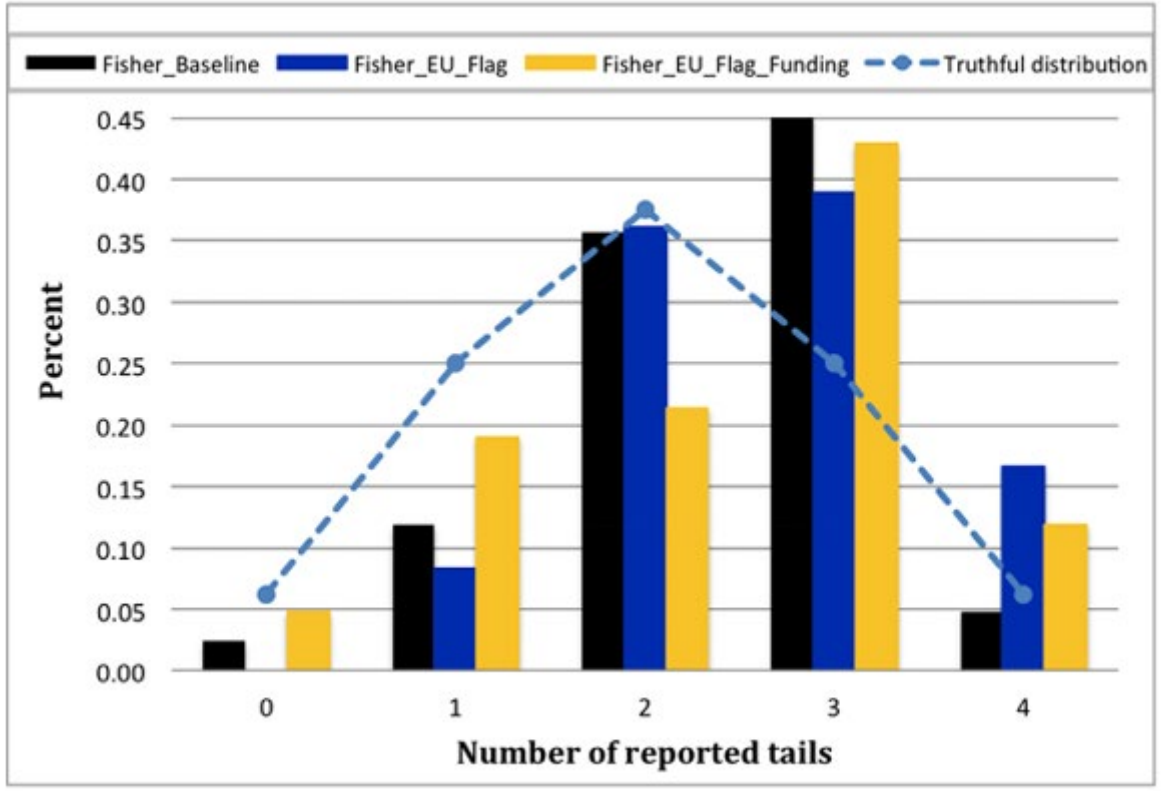


Fig. 3. Mean reported number of tail tosses per treatment, ±1 SE.

Source: Drupp, Khadjavi & Quaas (2019, p. 7)

DKQ (2019): Results (2/2)



Source: Drupp, Khadjavi & Quaas (2019, p. 8)

List & Samek (2015)

ELSEVIER

Journal of Health Economics

Volume 39, January 2015, Pages 135-146

The behavioralist as nutritionist: Leveraging behavioral economics to improve child food choice and consumption

John A. List [a], Anya Savikhin Samek [b]

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https://doi.org/10.1016/j.jhealeco.2014.11.002

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LS (2015): Research Question

- How can children be incentivized to make healthier food choices?

LS (2015): Field Context

- Subjects are 1614 children in an after-school program called *„Kids Cafe.“*

- The children make the choice between a cookie and a cup of dried fruit.

LS (2015): Task and Outcome Variable

- After eating a meal provided at the Kids Cafe, children approached the experiment table and were given the choice of a dried fruit cup or a cookie.

- The main outcome variable is the share of fruit choices.

LS (2015): Treatments

Table 3
Summary of treatments.

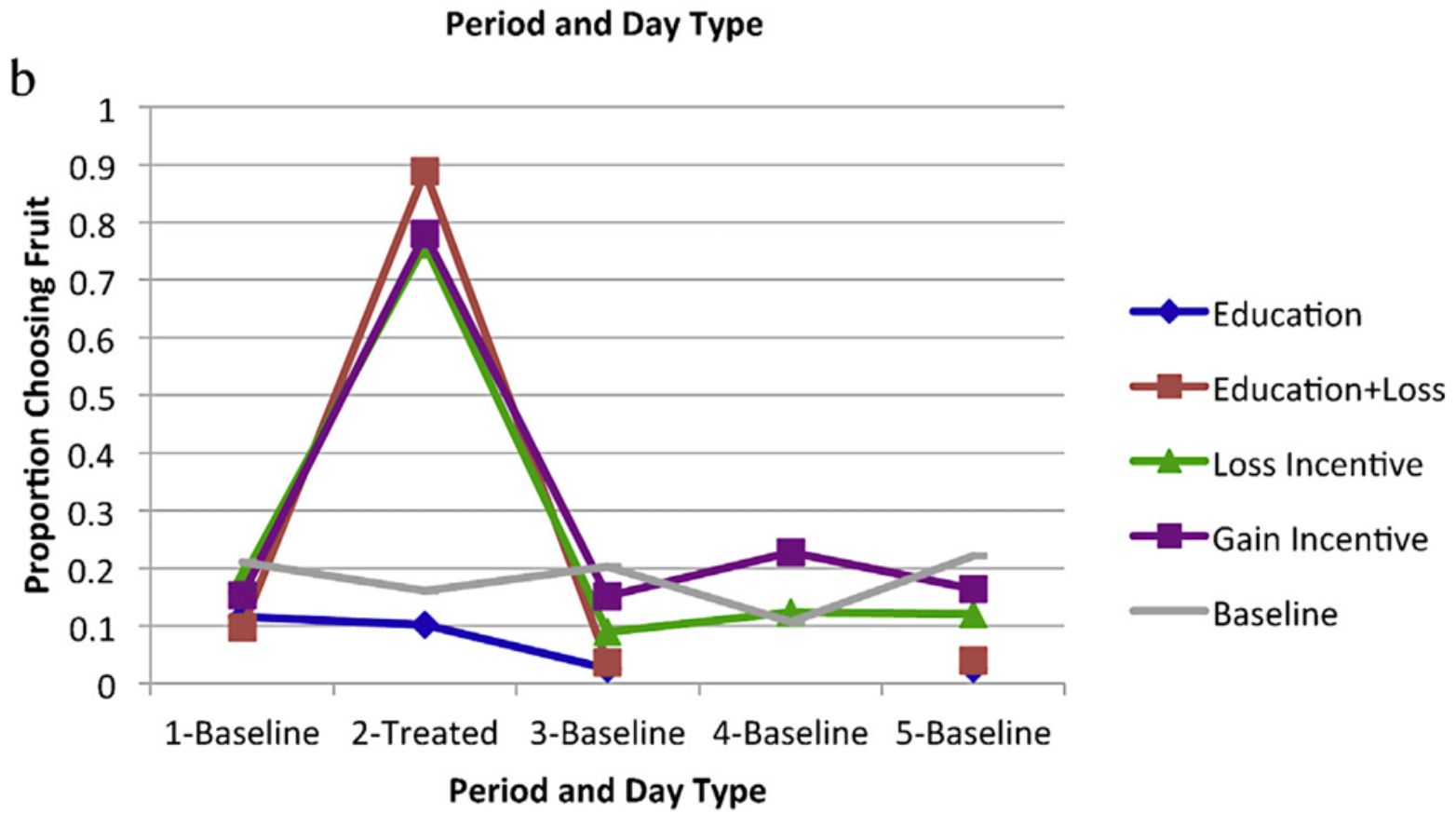
	Short study session	Long study session
No Intervention – (NONE)		Yes
"Gain" Incentive Only – (GAIN)	Yes	
"Loss" Incentive Only – (LOSS)	Yes	Yes
Education Only – message only (EDU)	Yes	Yes
Education + "Loss" Incentive – Incentive + message (EDU + LOSS)	Yes	Yes

Note: This table describes the treatments that were conducted. Not all possible variations were conducted due to small sample sizes.

Fig. 1. Photo of gift display.

Source: List and Samek (2015, p. 139/140)

LS (2015): Results



Source: List and Samek (2015, p. 141)

Dannenberg, Johansson-Stenman & Wetzel (2022)

Economic Inquiry WEAI

ORIGINAL ARTICLE | Open Access

Status for the good guys: An experiment on charitable giving

Astrid Dannenberg, Olof Johansson-Stenman, Heike Wetzel

First published: 06 October 2021 | https://doi.org/10.1111/ecin.13039 | Citations: 4

Abstract

We study the social status motive in an experiment at an art-house cinema in Germany where movie-goers can make monetary contributions to help the cinema become climate neutral. Our key result is that offering high contributors a "social status gift" that displays their good deed increases both the likelihood of a high contribution and mean contributions. It performs significantly better than previously studied mechanisms, such as the removal of anonymity, the provision of a reference point, or a neutral thank-you gift, and it also performs better than offering high contributors publicity through social media.

DJ-SW (2022): Research Question

- What is the influence of social-status motives on giving to a fundraising campaign?

DJ-SW (2022): Field Context

- The experiment was conducted at the **BaLi art house cinema in Kassel** during August and September 2018.

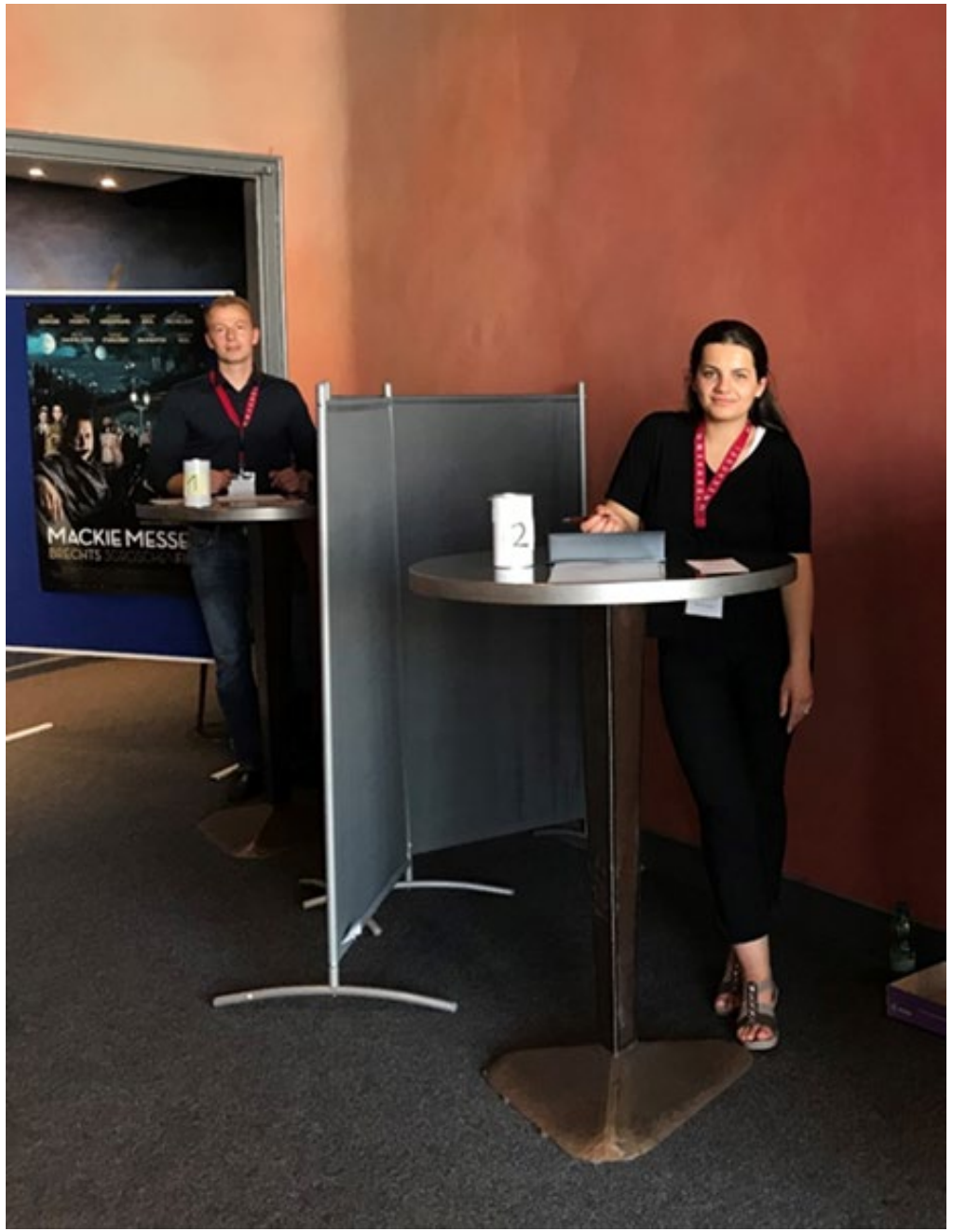
- The cinema (group) launched a **climate fundraising campaign** aimed at reducing its carbon emissions and achieving long-term climate neutrality.

- Subjects were movie-goers who were asked to contribute their **own money** to support the campaign.

DJ-SW (2022): Task and Outcome Variable (1/2)

- Subjects were asked to contribute their own money (in cash) to support the campaign.

- The main outcome variable is the average contributions.



Source: Dannenberg

Treatment	Reference level	Conditional offer	Number of participants	Brief description
Anonymous	-	No	152	Anonymous unobserved contribution
Non-Anonymous	-	No	151	As in Anonymous except that solicitor observes and writes down the contribution
Reference	€10	No	151	As in Non-Anonymous except that it was mentioned that "A contribution of €10 or more is seen as generous"
Gift	€10	Yes	161	As in Reference except that a conditional gift (mug or bag) was offered for contributions of €10 or more
Prestige-Gift	€10	Yes	159	As in Gift except that the gift (mug or bag) had the printed text "Supporter of the Climate Campaign"
Name-Publication	€10	Yes	159	As in Reference except that the donor could have her name published on social media for contributions of €10 or more

DJ-SW (2022): Treatments (3/4)

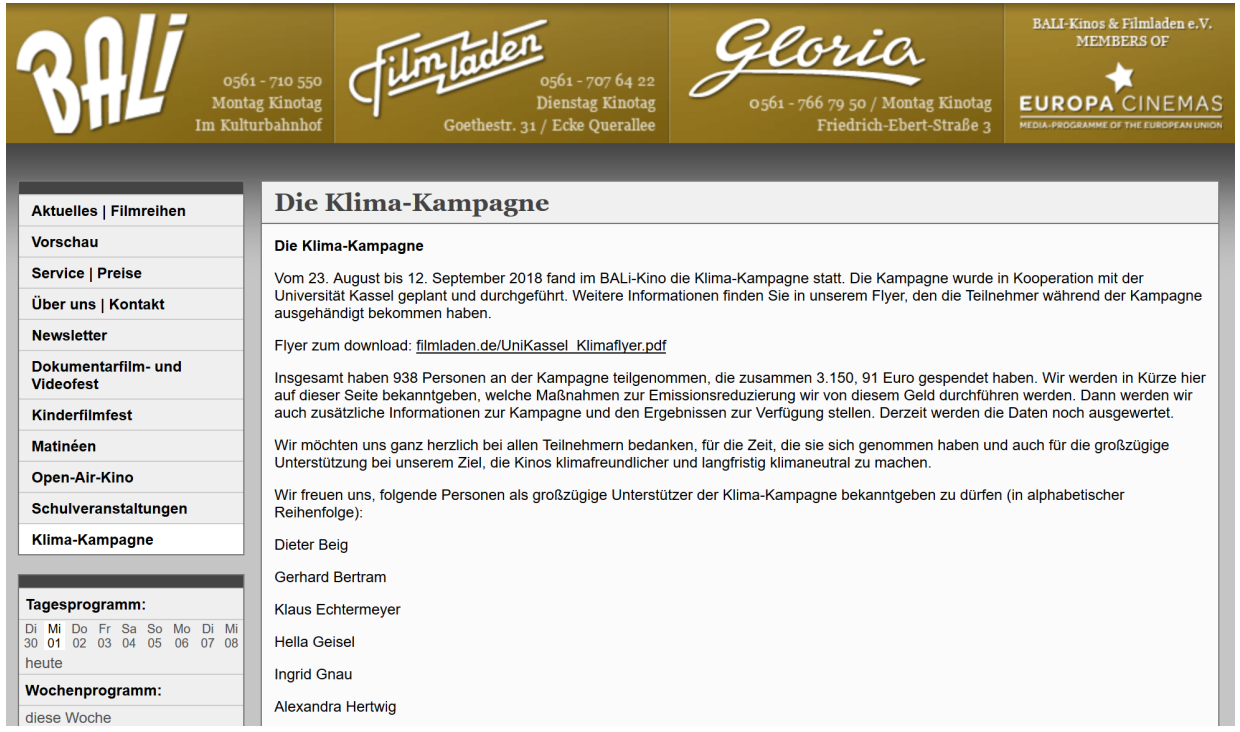
- Donors who gave 10€ or more could choose between mug and shopping bag.
- In *Gift:* Mug and bag only displayed the logos of the cinema.
- In *Prestige-Gift*: Mug and bag additionally displayed the slogan „Supporter of the climate campaign.”

Source: Dannenberg

DJ-SW (2022): Treatments (4/4)

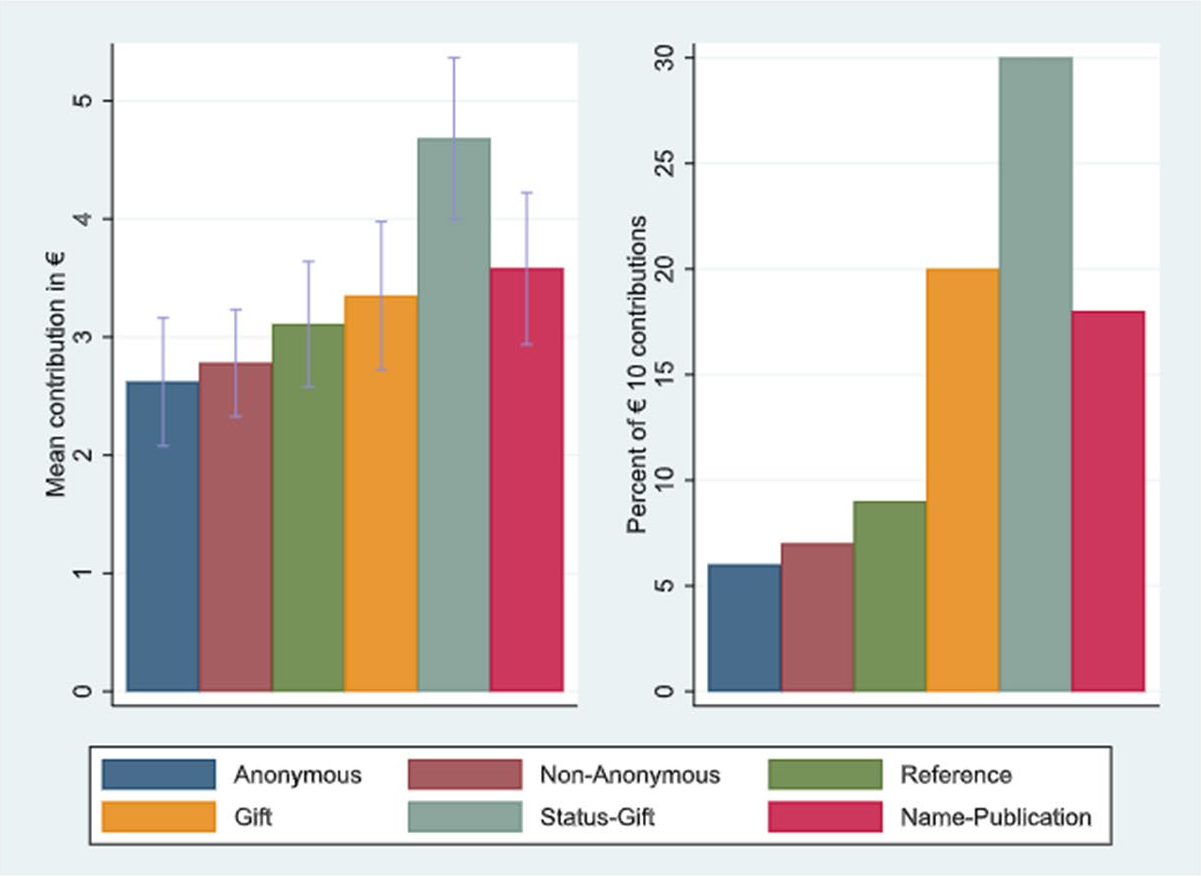
- In *Name-Publication*: Donors who gave €10 or more were offered to have their name published on the cinema's Newsletter, Facebook page, and Website

http://www.filmladen.de/klima-kampagne



Source: Dannenberg

DJ-SW (2022): Results



Source: Dannenberg, Johansson-Stenman & Wetzel (2022, p. 730)

Hossain & List (2012)

MANAGEMENT SCIENCE
Vol. 58, No. 12, December 2012, pp. 2151–2167
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http://dx.doi.org/10.1287/mnsc.1120.1544

The Behavioralist Visits the Factory: Increasing Productivity Using Simple Framing Manipulations

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Recent discoveries in behavioral economics have led to important new insights concerning what can happen in markets. Such gains in knowledge have come primarily via laboratory experiments—a missing piece of the puzzle in many cases is parallel evidence drawn from naturally occurring field counterparts. We provide a small movement in this direction by taking advantage of a unique opportunity to work with a Chinese high-tech manufacturing facility. Our study revolves around using insights gained from one of the most influential lines of behavioral research—framing manipulations—in an attempt to increase worker productivity in the facility. Using a natural field experiment, we report several insights. For example, conditional incentives framed as both "losses" and "gains" increase productivity for both individuals and teams. In addition, teams more acutely respond to bonuses posed as losses than as comparable bonuses posed as gains. The magnitude of this framing effect is roughly 1%: that is, total team productivity is enhanced by 1% purely due to the framing manipulation. Importantly, we find that neither the framing nor the incentive effect lose their significance over time; rather, the effects are observed over the entire sample period. Moreover, we learn that repeated interaction with workers and conditionality of the bonus contract are substitutes for sustenance of incentive effects in the long run.

Key words: framing effect; natural field experiment; worker productivity; loss aversion
History: Received July 6, 2011; accepted February 3, 2012, by Gérard P. Cachon, decision analysis. Published online in *Articles in Advance* July 18, 2012.

HL (2012): Research Question

- Does the framing of a bonus scheme affect worker productivity?

HL (2012): Field Context

- Subjects are 165 factory workers of the Wanlida Group Company, a Chinese manufacturer consumer electronics.
- Subjects engaged in their regular tasks in their standard work schedules during the experiment producing various types of goods.
- Subjects do not know they are part of an experiment.

HL (2012): Task and Outcome Variable

- Subjects undertake their work naturally.

- The main outcome variable is the average hourly production rate for a given week.
  - The rate of defective products was also measured.

HL (2012): Treatments (1/3)

- **Reward: „***[…] in addition to your standard salary, you will receive a salary enhancement of RMB 80 for every week the weekly production average of your team is above or equal to K units/hour. This program will continue until the end of the week starting on August 18 and end on August 23. On August 25, you will receive your salary enhancement according to the above criterion. For example, if your team produces at a rate above K units/hour in two weeks, you will receive RMB 160 on August 25.”*

- **Punishment:** *„[…] in addition to your standard salary, you will receive a one-time salary enhancement of RMB 320. This payment will be made on August 25. However, for every week in which the weekly production average of your team is below K units/hour, the salary enhancement will be reduced by RMB 80. For example, if your team fails to produce at a rate of K units/hour in two weeks, your salary enhancement will be reduced by RMB 160. Then on August 25, you will only receive RMB 160.”*

HL (2012): Treatments (2/3)

- **Gift: „***For the next four weeks from July 28 to August 23, in addition to your standard salary, you will receive a one-time salary enhancement of RMB 320. This payment will be made on August 25.”*

Table 1 Experimental Design

Set	Job	Number of groups	Group size	Base productivity	Target	Group	Weeks 1–4 (Round 1)	Weeks 5–8 (Round 2)	Weeks 9–12 (Round 3)	Weeks 13–16 (Round 4)
G-1	DVD player MD chip production	3	14	350	400	Team *A*	Reward	Punishment		
						Team *B*	Punishment	Reward		
						Team *C*	Baseline			
G-2	P720 main-board plug-in	2	10	390	500	Team *A*	Reward	Punishment		
						Team *B*	Punishment	Reward		
G-3	Digital photo frame bracket production	2	7	780	900	Team *A*	Reward	Punishment		
						Team *B*	Punishment	Reward		
G-4	Digital photo frame packaging	2	7	780	900	Team *A*	Reward	Punishment		
						Team *B*	Punishment	Reward		
G-5	Adapter plug-in	2	12	490	550	Team *A*	Reward	Punishment		
						Team *B*	Punishment	Reward		
G-6	Adapter joining	2	15	780	900	Team *A*	Reward	Punishment		
						Team *B*	Punishment	Reward		
I-1	DVD player main-board inspection	11	1	90	110	Inspector 1–Inspector 3	Reward	Punishment	Baseline	Gift
						Inspector 4–Inspector 6	Punishment	Gift	Reward	Baseline
						Inspector 7–Inspector 8	Gift	Baseline	Punishment	Reward
						Inspector 9–Inspector 11	Baseline	Reward	Gift	Punishment
I-2	P720 main-board inspection	10	1	38	50	Inspector 1–Inspector 3	Reward	Punishment	Baseline	
						Inspector 4–Inspector 6	Punishment	Gift	Reward	
						Inspector 7–Inspector 8	Gift	Baseline	Punishment	
						Inspector 9–Inspector 10	Baseline	Reward	Gift	

Notes. This table reports experimental design by sets. Each set was broken up into a number of groups (teams), each of the same group size. "Target" denotes the team's target goal for per-hour productivity. Treatments are broken down by week number. All sets included one or two weeks of preexperiment baseline observations and one week of postexperiment baseline observation.

Source: Hossain & List (2012, p. 2154)

HL (2012): Results

Table 4 Treatment Effects on Producitivity

	Dependent variable: Log of per-hour productivity on a given week					
	Groups			Individuals		
	(1)	(2)	(3)	(4)	(5)	(6)
Reward	0.0365**	0.0864***	0.0846***	0.1178***	0.0561***	0.0495***
	(0.0158)	(0.0293)	(0.0252)	(0.0221)	(0.0155)	(0.0160)
Punishment	0.0470***	0.0969***	0.0951***	0.1354***	0.0439***	0.0308**
	(0.0158)	(0.0293)	(0.0251)	(0.0209)	(0.0150)	(0.0155)
Gift				0.1259***	0.0385***	0.0339**
				(0.0203)	(0.0146)	(0.0146)
Set-specific time fixed effects	No	Yes	Yes	No	Yes	Yes
Team/individual-specific fixed effects	No	No	Yes	No	No	Yes
N	118	118	118	249	249	249
Adjusted R^2	0.9655	0.9950	0.9964	0.9050	0.9685	0.9708
F-statistic Reward = Punishment	0.66	4.53**	6.44**	0.51	0.67	1.61

Notes. This table reports empirical estimates of Punishment and Reward treatment effects using pre- and posttreatment periods as a baseline. Standard errors are displayed in parentheses below. Specifications (1) and (4) include set-specific fixed effects. Specifications (2) and (5), for groups and individuals, respectively, include time and set fixed effects, which are specific to a set and week. Specifications (3) and (6) also include group/individual-specific fixed effects.

***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Source: Hossain & List (2012, p. 2159)

Khadjavi (2017)

MANAGEMENT SCIENCE
Articles in Advance, pp. 1–11
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http://dx.doi.org/10.1287/mnsc.2016.2519

Indirect Reciprocity and Charitable Giving—Evidence from a Field Experiment

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K (2017): Research Question

- Does indirect reciprocity work in the field?

K (2017): Field Context

- The owner of a hair salon sets up a donation box at the counter where payments are made.

- Khadjavi (2017) investigates tipping and donation behavior (871 observations).

K (2017): Task and Outcome Variable

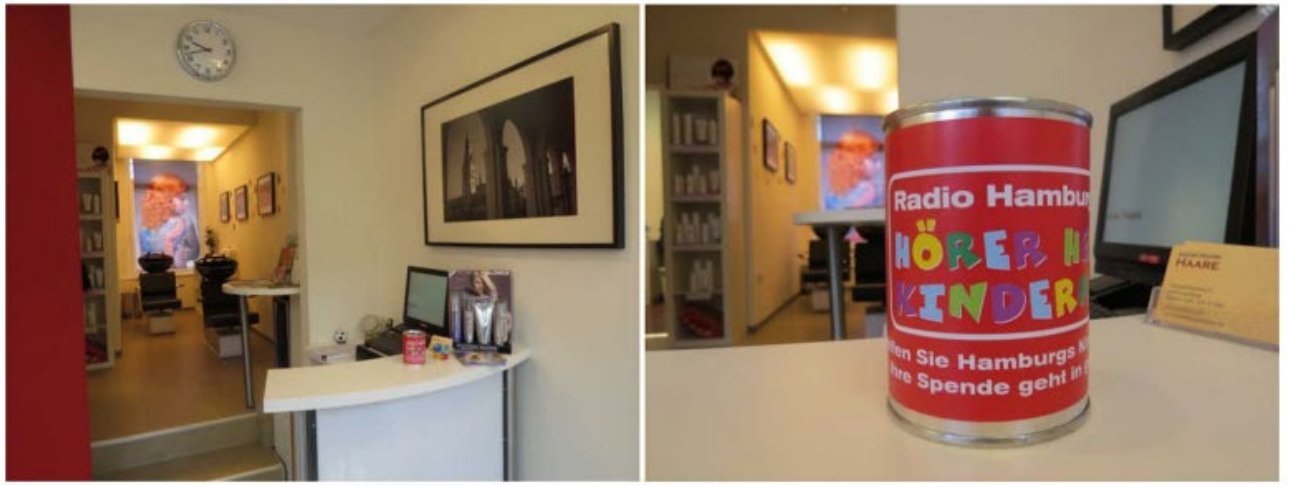
- Subjects undertake the payment and donation process naturally.

- The main outcome variable is the mean tipping amount.

K (2017): Treatments

- Data on tips was collected in three conditions:
  - **Baseline**: Usual payment situation
  - **Collect**: The hairdresser set up a donation box and pointed to it
  - **Collect + 1€**: Like “Collect” but hairdresser puts 1€ into the box

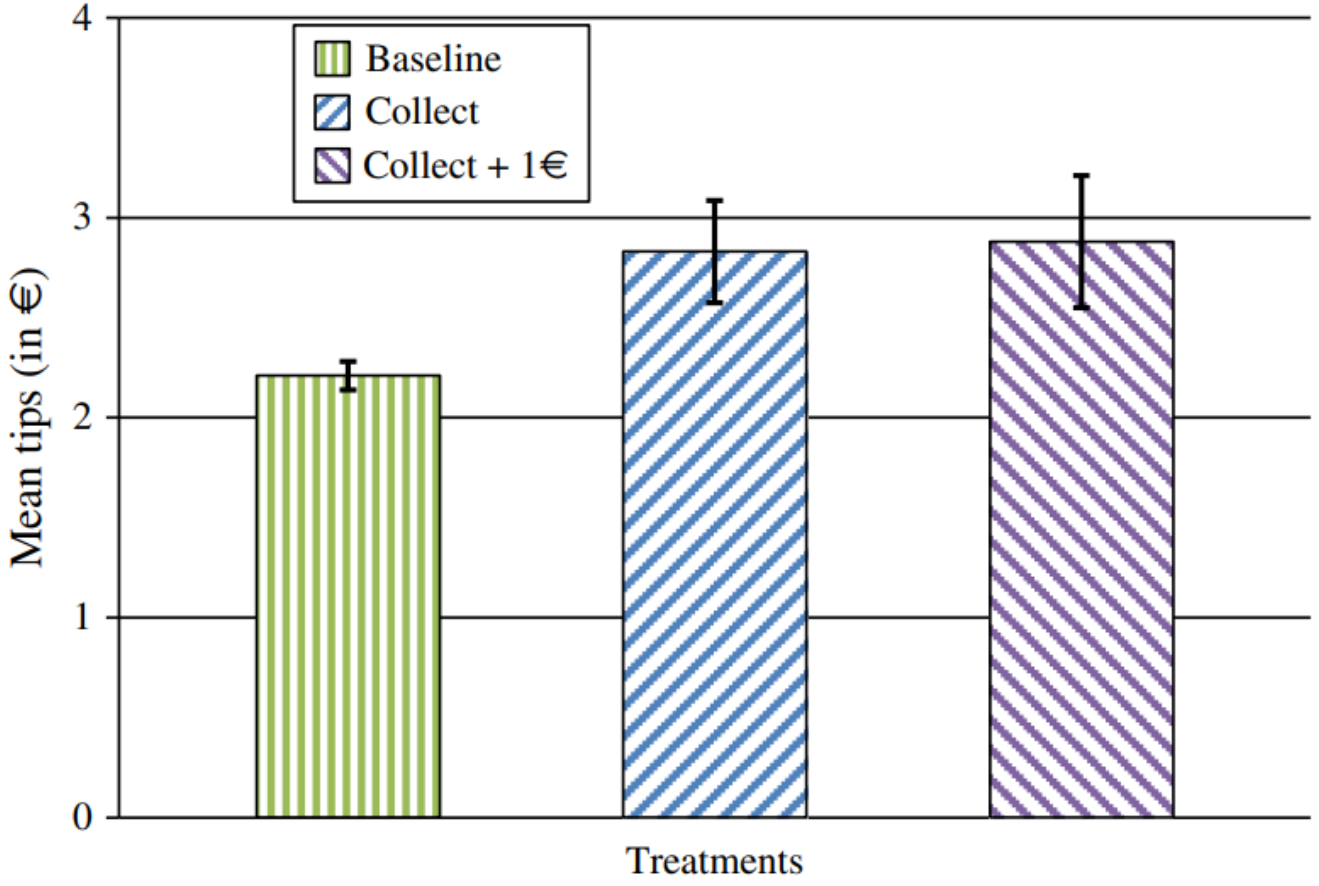
Figure 1 (Color online) Photographs of the Hair Salon and the Donation Box



Source: Khadjavi (2017, p. 3)

K (2017): Results (1/2)

Figure 2 (Color online) Mean Tips in the Three Treatments



Source: Khadjavi (2017, p. 5)

K (2017): Results (2/2)

Table 2 Descriptive Statistics

	Baseline	Collect	Collect + 1€	Kruskal–Wallis test or χ^2 test[a]	Overall
Observations	735	57	79	—	871
Mean price (in €)	32.10	33.34	29.61	$p = 0.6532$	31.96
Mean tips (in €)	2.21	2.83	2.88	**p = 0.0201**	2.31
% tipped	80.38	87.72	81.01	$p = 0.3970$	80.91
Mean tips, conditional on tip > 0 (in €)	2.75	3.22	3.55	**p = 0.0281**	2.85
Mean donations (in €)	—	0.32	0.49	$p = 0.8160$	0.42
% donated	—	14.04	15.19	$p = 0.8510$	14.71
Mean donations, conditional on donation > 0 (in €)	—	2.25	3.25	$p = 0.5989$	2.85
% male	44.61	41.07	44.30	$p = 0.8760$	44.35
Mean age (in years)	41.46	43.52	41.53	$p = 0.5234$	41.59
% regular customers	64.63	63.16	55.70	$p = 0.2910$	63.72

Source: Khadjavi (2017, p. 6)

Promises and Challenges of Field Experiments

Promises of Field Experiments (1/2)

Behavior under real incentives

- Participants in field experiments often face real consequences, monetary or social, so their behavior tends to be more aligned with actual decision-making patterns.
- This helps overcome one of the main limitations of lab settings, where stakes are often smaller or driven by house money effects.

Heterogeneous populations

- Field experiments typically include more diverse participant pools—e.g., actual consumers, workers, or voters—rather than students only.
- This diversity allows researchers to explore how different subgroups respond to treatments, enhancing both relevance and policy applicability.

Promises of Field Experiments (2/2)

Natural institutional settings

- These experiments often occur within existing institutions (schools, firms, charities), incorporating real-world context that lab experiments miss.

Longer time horizons

- Many field experiments can track behavior over time, capturing dynamic effects and allowing for assessment of both short- and long-term impacts.

Field Experimental Bridge (1/2)

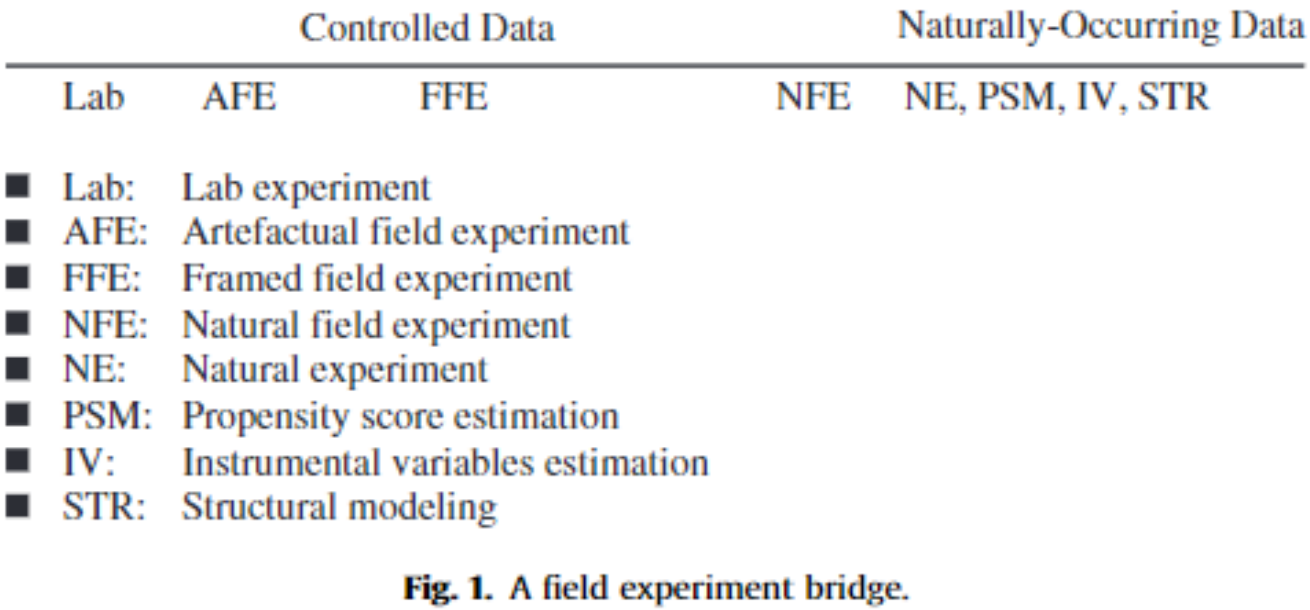
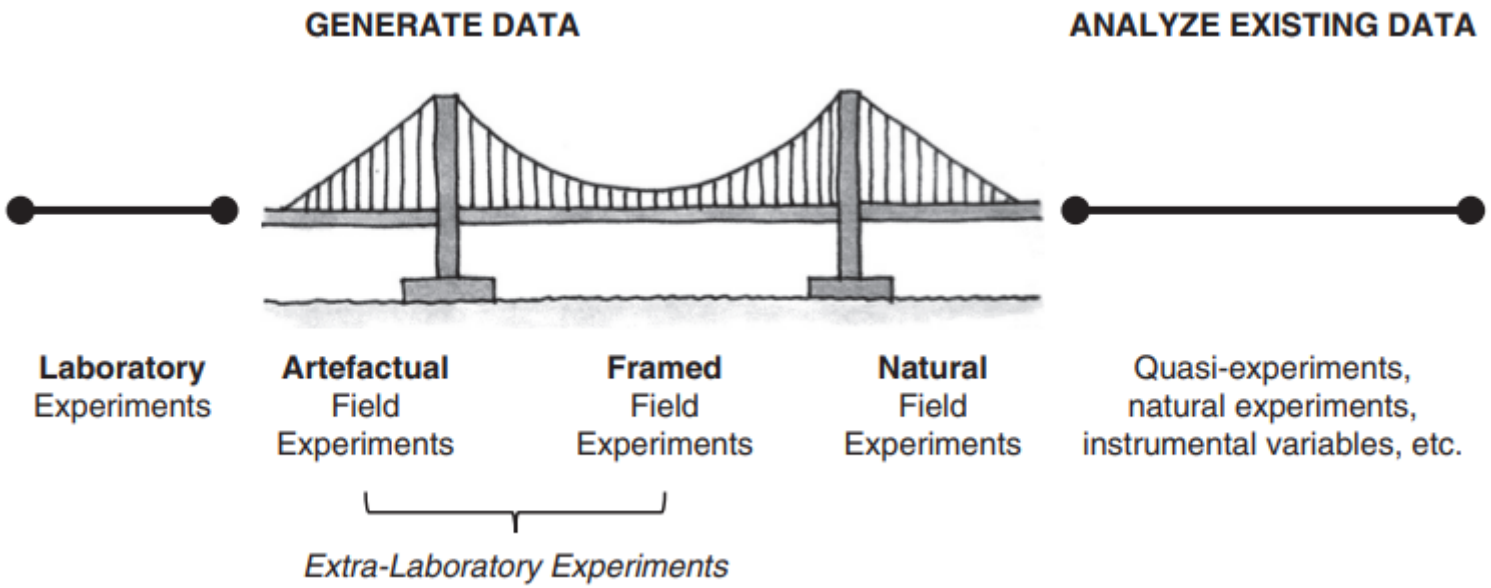


Fig. 1. A field experiment bridge.

Source: Levitt and List (2009, p. 8)

Field Experimental Bridge (2/2)



Source: Samek (2007, p. 107)

Challenges of Field Experiments (1/3)

Cost and logistical complexity

- Real-world settings often require **significant resources**—money, time, and partnerships with organizations or governments.
  - Field experiments are often a matter of opportunity.

Ethical and practical constraints

- Manipulating real-world environments can raise **ethical issues.**
  - Informed consent is not possible in natural field experiments.

Challenges of Field Experiments (2/3)

Limited internal validity

- Compared to lab experiments, field studies offer less control.

Replication

- A specific field experiment is often hard to replicate (run the exact same study with different subject) due to logistical constraints.

Challenges of Field Experiments (3/3)

- *"Properly conducted field experiments really are messy. There is often much more planning involved. One has to devote a lot of thought to identify which population of participants to target, and even more thought to figure out how to gain access to the target population. The opportunity cost of time for non-student populations is often much higher. This factor alone means the procedures often need to be streamlined to minimize the participants' commitment of time. But it also means that more thought must be put into these procedures, since researchers often have only one chance with the population."*

Carpenter, Harrison and List 2005, p.7

Field Experiments as Gold Standard?

Field Experiments as Gold Standard?

- A research method that combines a **high degree of internal validity through randomization** with **strong external validity** by collecting data in a natural environment may be considered superior to other research approaches.

- Researchers who align with this view often refer to field experiments as the **“gold standard”** of research methods.

- Calling field experiments the “gold standard” might make lab experiments seem less important. Is that fair?

Levitt & List (2007) (1/3)

- Levitt & List (2007) formulate a critique regarding lab experiments measuring social preferences (e.g., results from Dictator Game, Trust Game, Ultimatum Game etc.): *"What Do Laboratory Experiments Measuring Social Preferences Reveal about the Real World?"*

- They point out the following aspects:
  - Scrutiny and anonymity
  - Context
  - Stakes
  - Selection into the experiment
  - Artificial restrictions on choice sets and time horizons

Levitt & List (2007) (2/3)

Scrutiny and anonymity

- Subjects are keenly aware they are monitored.

Context is controlled less than often assumed

- Level of control in lab experiments may be overrated.

Stakes

- Lab experiments typically involve (relatively) low stakes.

Levitt & List (2007) (3/3)

Selection into the experiment

- Individuals taking part in experiments may differ in systematic ways from the general population (or population of interest for specific questions).

Artificial restrictions on choice sets and time horizons

- Choices are restricted to a single mode (e.g., giving away money) and are made within a short time frame.

Reply by Falk and Heckman (2009) (1/2)

- Main advantage of lab experiments is tight control and the ability to infer causal effects
- Generalizability is an issue for both lab and field experiments.
- Many of the points raised by Levitt & List (2007) actually call for more investigation through lab experiments.
- There is no natural hierarchy among different empirical methods and modes of data collection, e.g., field experiments, lab experiments, survey data or observational data.

Reply by Falk and Heckman (2009) (2/2)

- *"The usefulness of particular methods and data is ultimately a matter of the underlying research question. Lab experiments are very powerful whenever tight control […] is essential. This applies in particular for testing (game theoretic) models and behavioral assumptions. […] Tight control […] also allows replicability of results, which is generally more difficult with field data."*

Falk & Heckman 2009, p. 537

Questions

Exam Objectives

In the exam, you should be able to:

- **Describe** the experiment by Dannenberg, Johansson-Stenman & Wetzel (2022) in terms of the field context, the task and outcome variable, treatments and main results.

- **Discuss** the promises and challenges of conducting field experiments.

- **Explain** the main arguments and counterarguments in the debate on lab experiments between List & Levitt (2007) and Falk & Heckman (2009).

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- https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcR4w2GpWKBW-G5kvDdbjAS2CBeYJv0VC131cw&s

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