

Social Status, Empathy, and Religious Background. A Study on Honest Behavior With Lost Wallets in Two Cities

Andreas Diekmann & Felix Ries

Analytical Sociology at VIU, San Servolo, November 20 -23, 2023

Funding: Zurich Tamedia, ETH
Leipzig: DFG

Preregistration of hypothesis, research design, sampling, statistical analysis by OSF

OSF <https://osf.io/jwhm4>

Return rate (RR)

H1 **Status** of victim
increases RR

H2 **Stake** effect: amount of
money is negatively c
correlated with RR

H3 **Discrimination** of
Muslim or Jewish name

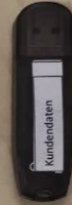
H4 **Empathy** effect
increases RR,
especially when
same group (H5)

The screenshot shows the OSF Registries interface for a study titled "Lost wallet experiment Leipzig". The page is categorized as an "Embargoed registration" and includes a "Study Information" section with the following hypotheses:

- H1: Status effect: The probability that finder will return wallets to high status individuals is larger than for low status individuals.
- H2: Stake effect: The return rate is negatively correlated with the amount of money in the wallet.
- H3: Cultural background effect (discrimination): A wallet with a typical German name on the inserted business card is more likely returned than a name that indicates a cultural or religious minority.
- H4: Empathy hypothesis (main effect): A wallet that contains an object that is valuable only to the owner (e.g. a key or an USB-stick with seemingly important information) will be returned with higher likelihood than a wallet without such an object.
- H5: Empathy hypothesis (interaction effect): A wallet that contains an object that is valuable only to the owner (e.g. a key or an USB-stick with seemingly important information) will be returned with higher likelihood than a wallet without such an object. This effect is larger for the majority group than for cultural or religious

Additional details from the screenshot include:

- Contributors:** Felix Ries and Andreas Diekmann
- Description:** Fieldexperiment looking into helpfulness towards strangers and discrimination on status and expected cultural background in the city of Leipzig, Germany.
- Registration type:** OSF Preregistration
- Date registered:** April 20, 2023
- Date created:** April 20, 2023
- Associated project:** osf.io/cd6mb



Choice of names validated in pretest

Online-Questionnaire with 10 Names, 3 cultural/religious backgrounds, 2 status

N = 1400 respondents, Prolific.org

Results

- Paul Schneider – 90,1% German name
- Hussain al Awadhi – 87,3% Arab name
- Abraham Goldstein – 78,4% Jewish name

Schneider (Taylor)

Abraham Goldstein

Paul Schneider

Hussain Al Awadhi



Geschäftsführer (Managing director)

Dr. oec Abraham
Goldstein

Dr. oec.
Paul Schneider

Dr. oec. Hussain
Al Awadhi

Lost wallets at tram stations in Leipzig and Zurich



Leipzig



Legten das Portemonnaie an einer VBZ-Haltestelle aus: Die wissenschaftlichen Mitarbeiter Matthias Nif und Anouk Widmer. Foto: Urs Jaudas
Tagesanzeiger 31.5.2021

Zurich

Sample Selection based on distance from city center

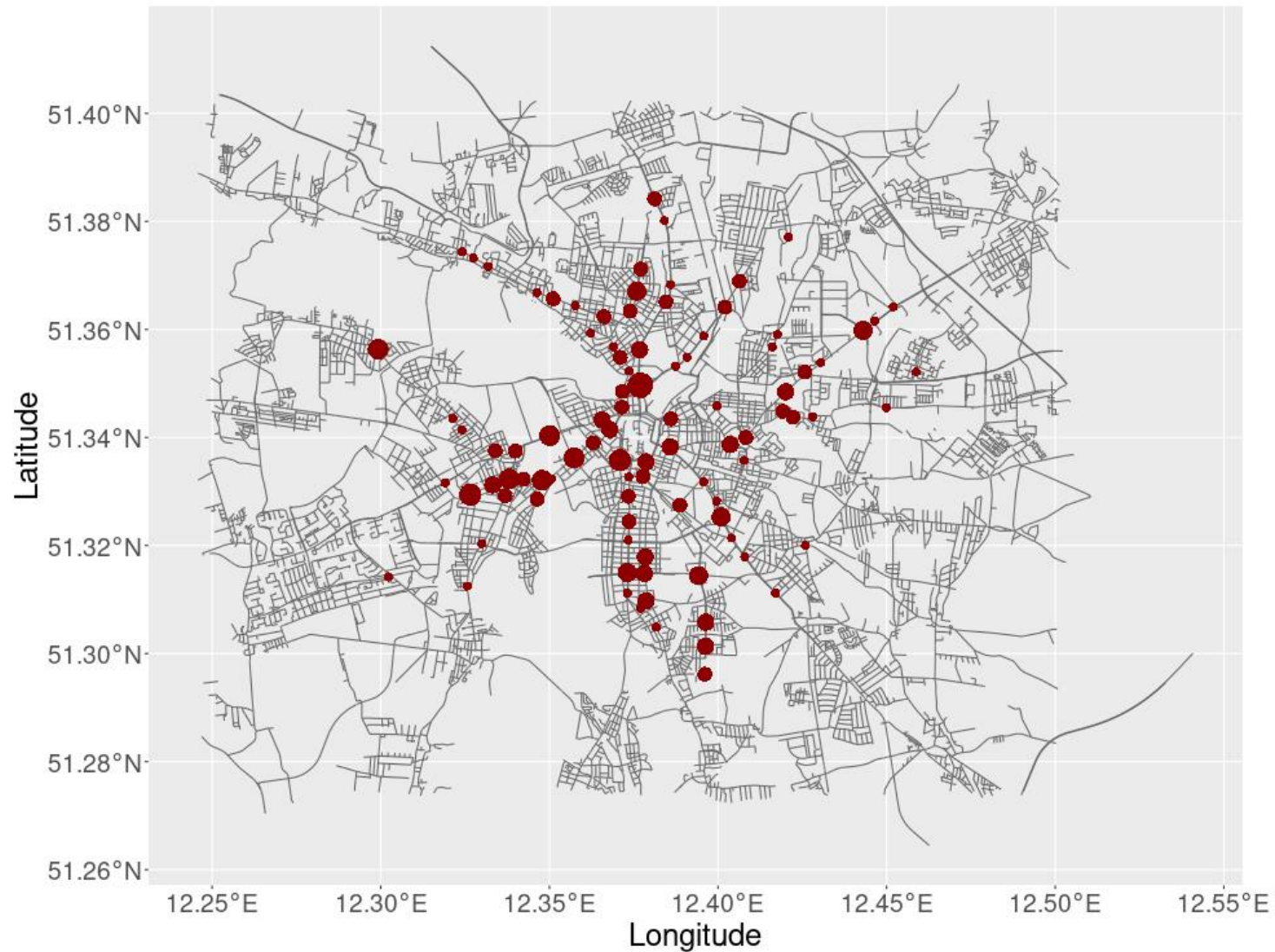
Leipzig tram stops

► Randomization of
Experimental tram stops

► Randomization of
purses (business
card characteristics,
money, key/USB-stick)



Selected tramstops in final data



Count ranges from 1 up to 9. The mean count is 2.1. In total 95 unique tramstops.

Leipzig overall return rate ?



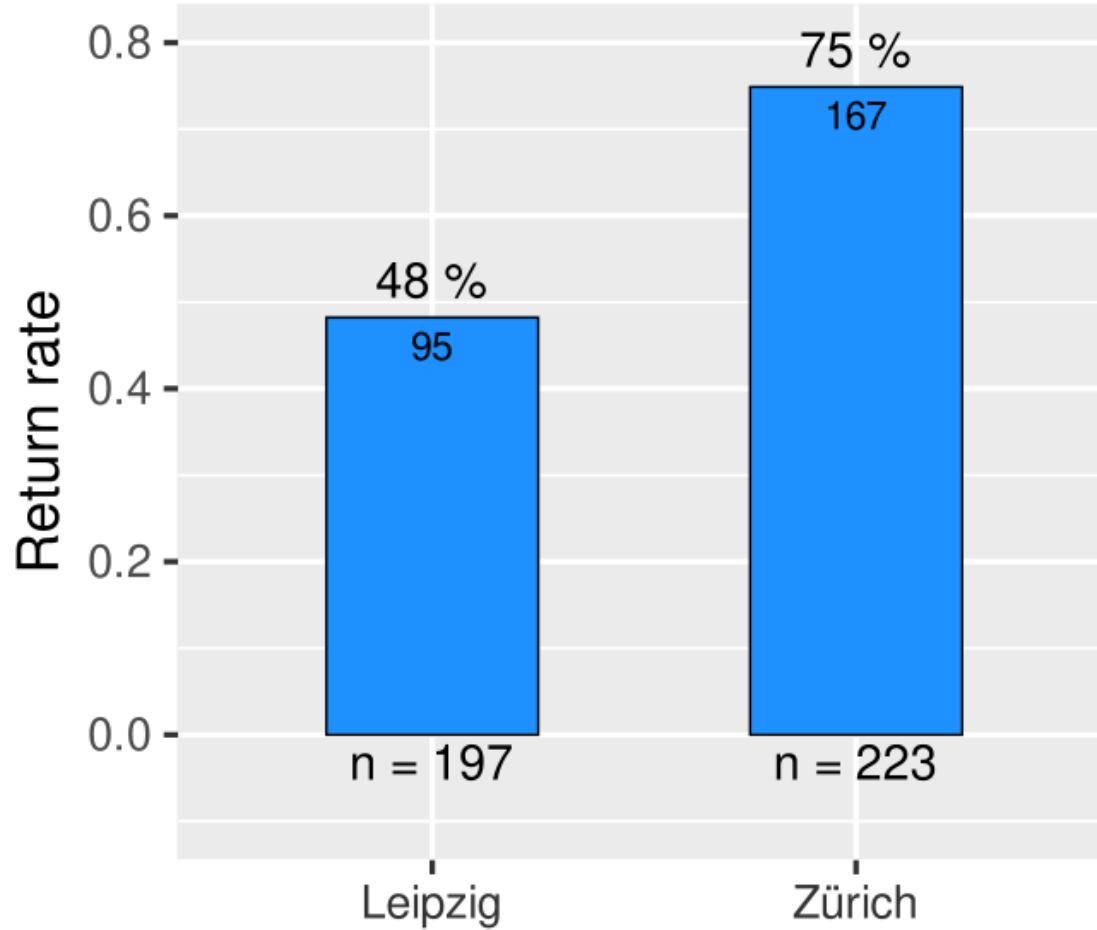
Overall return rate

Leipzig: **48 %**

(95 of 197)

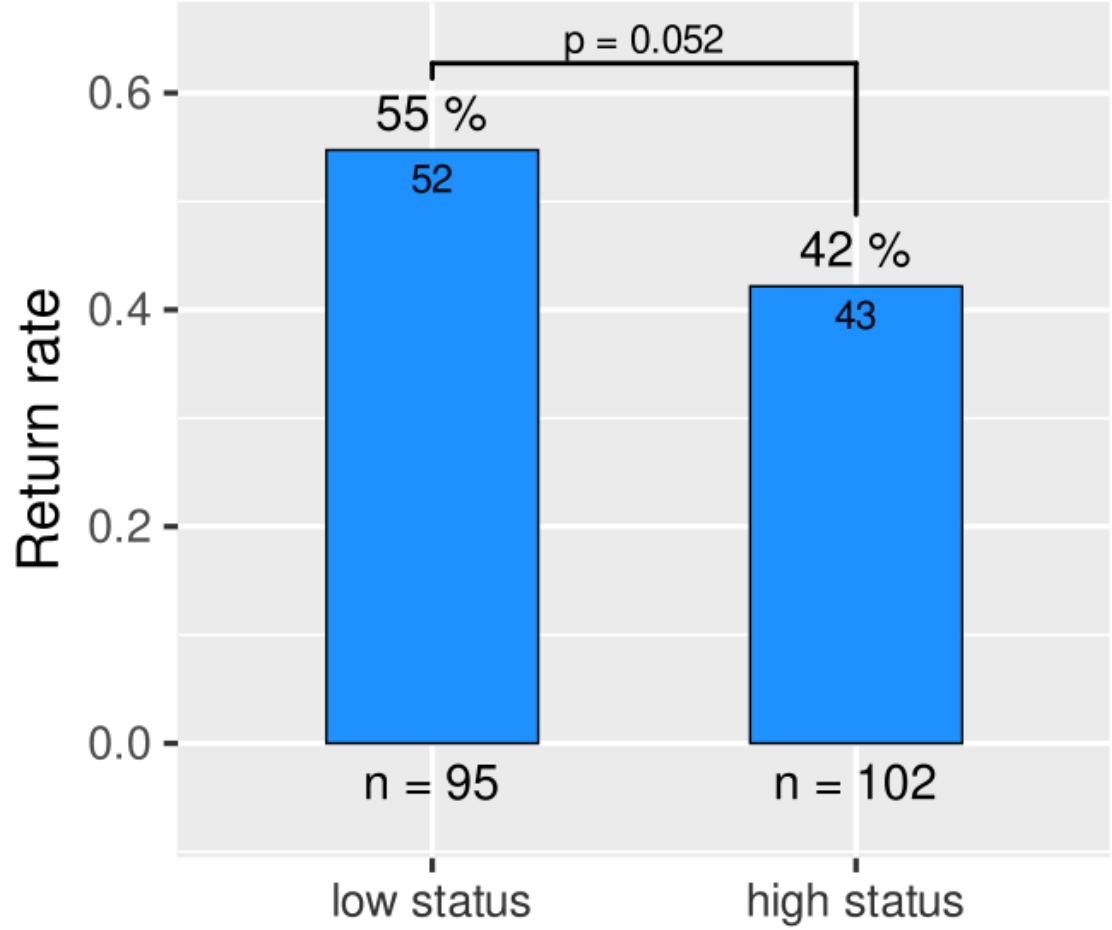
Zurich ?

Overall return rate by city



Status – Helping the taylor or the manager?

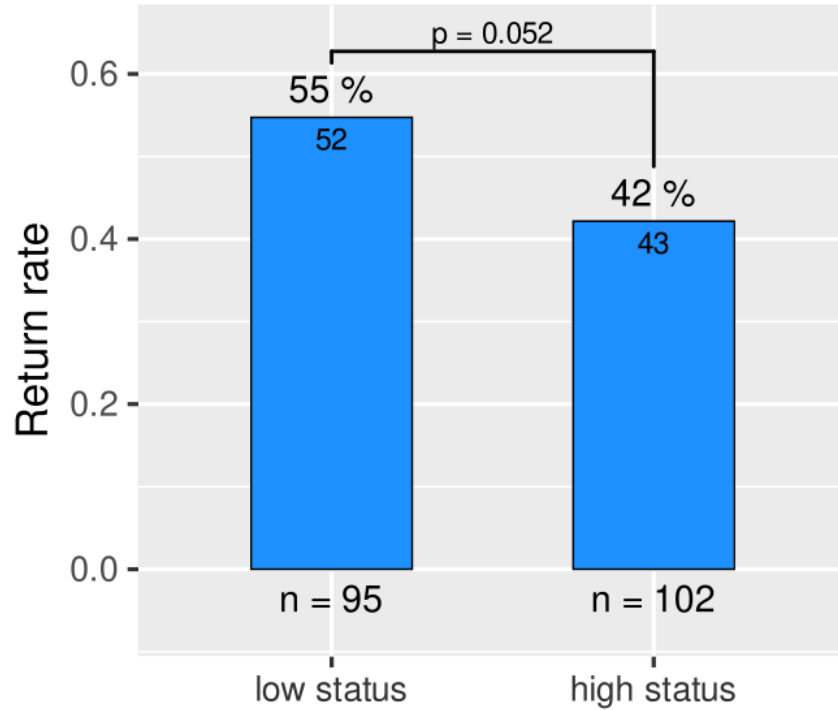
Return rate by status



H1 Status effect –
In contrast to
expectation!

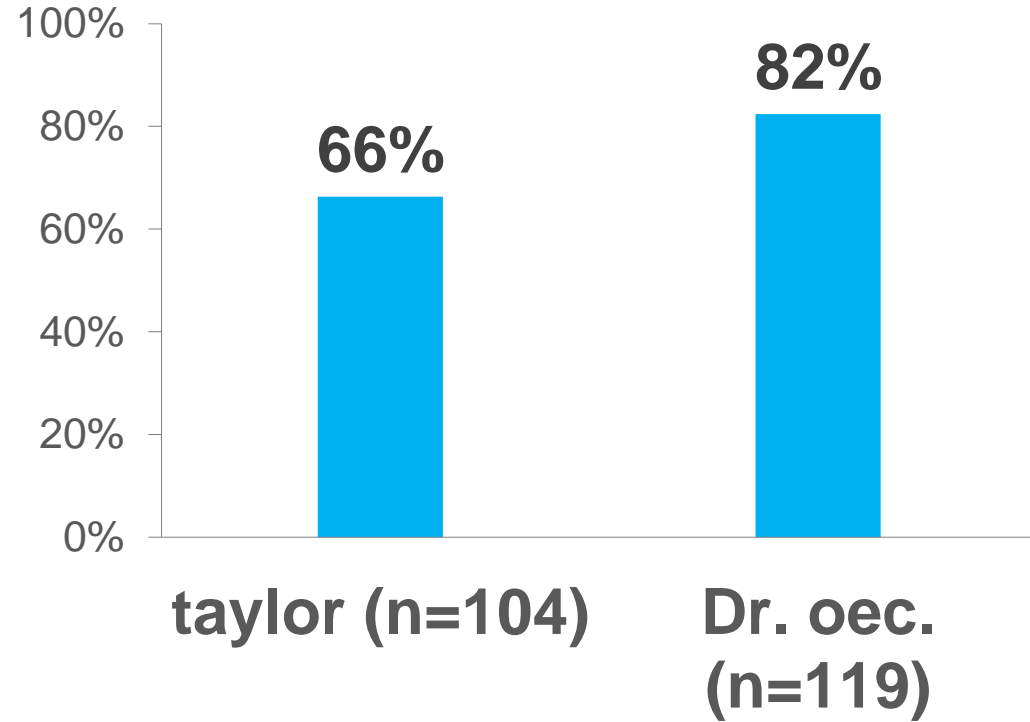
Leipzig:
„Giving to the poor!“

Return rate by status



Leipzig: „Giving to the poor!“

data: complete sample (p=0.006)



Zurich: „Giving to the rich“

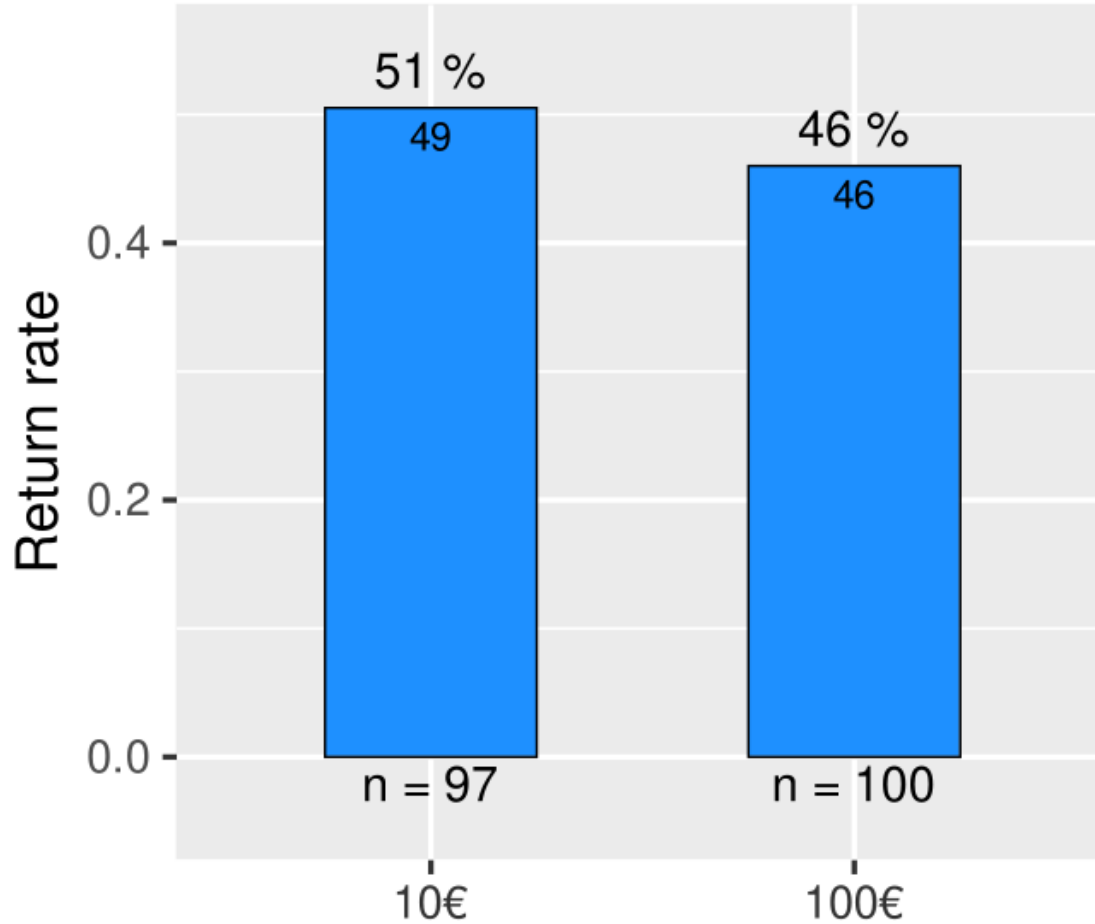
100 € versus 10 € Does Money Matter?



Tagesanzeiger 31.5.2021

Das Portemonnaie blieb das gleiche, der Inhalt variierte. Foto: Urs Jaudas

Return rate by stake

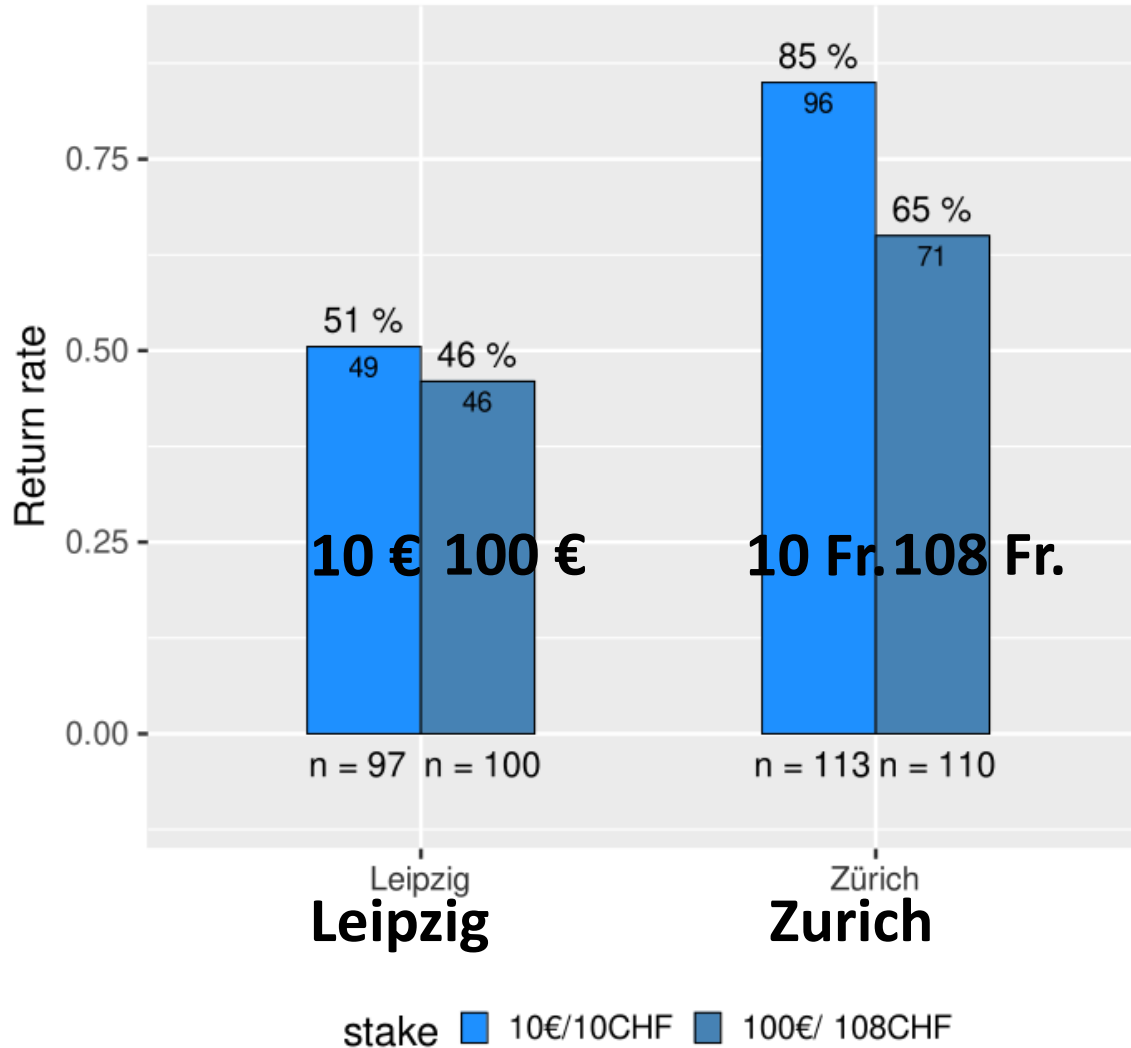


Leipzig

H2 In contrast to expectation:

No (significant) stake effect!

Return rate by stake & money

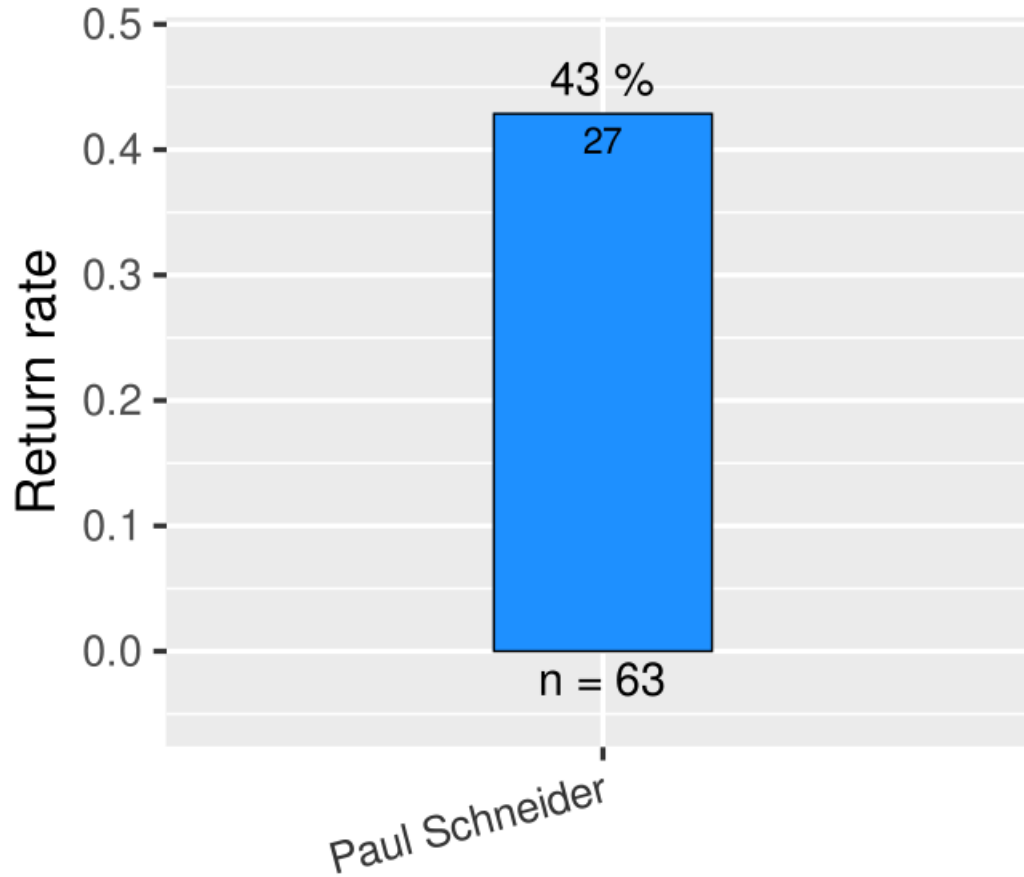


Leipzig: weak tendency, no significant stake Effect!

Zurich: Significant stake Effect!

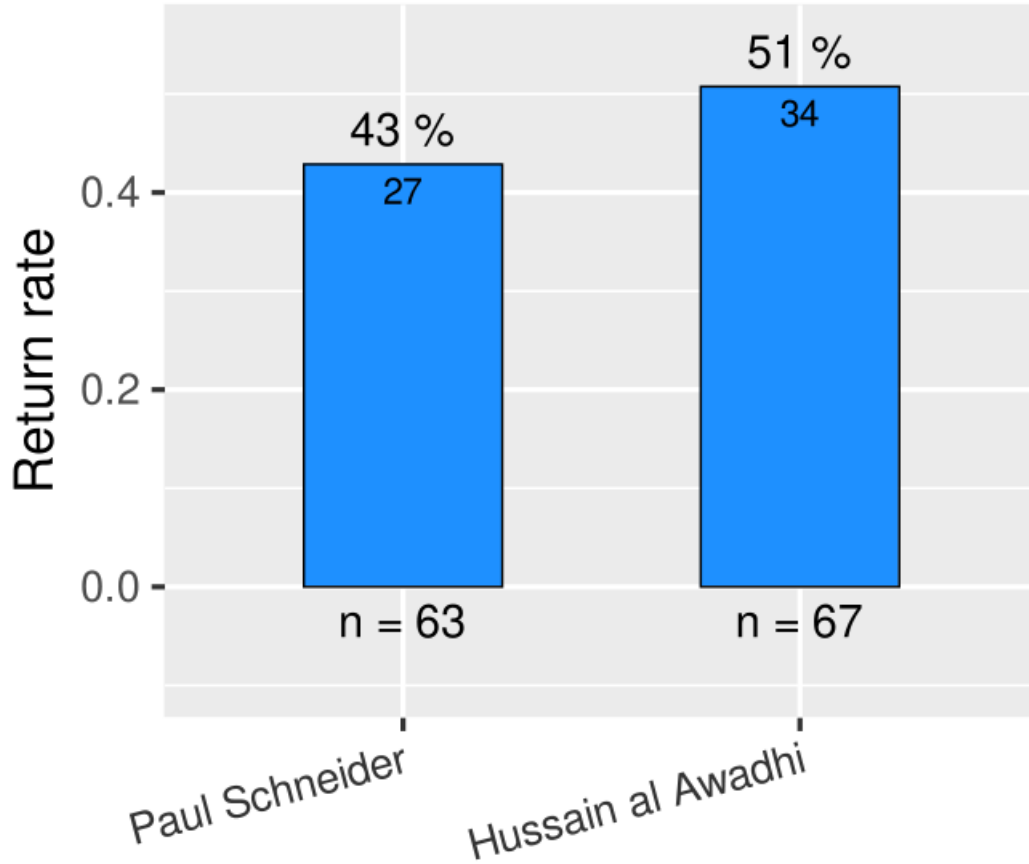
Discrimination of Arab or Jewish name?

Return rate by name

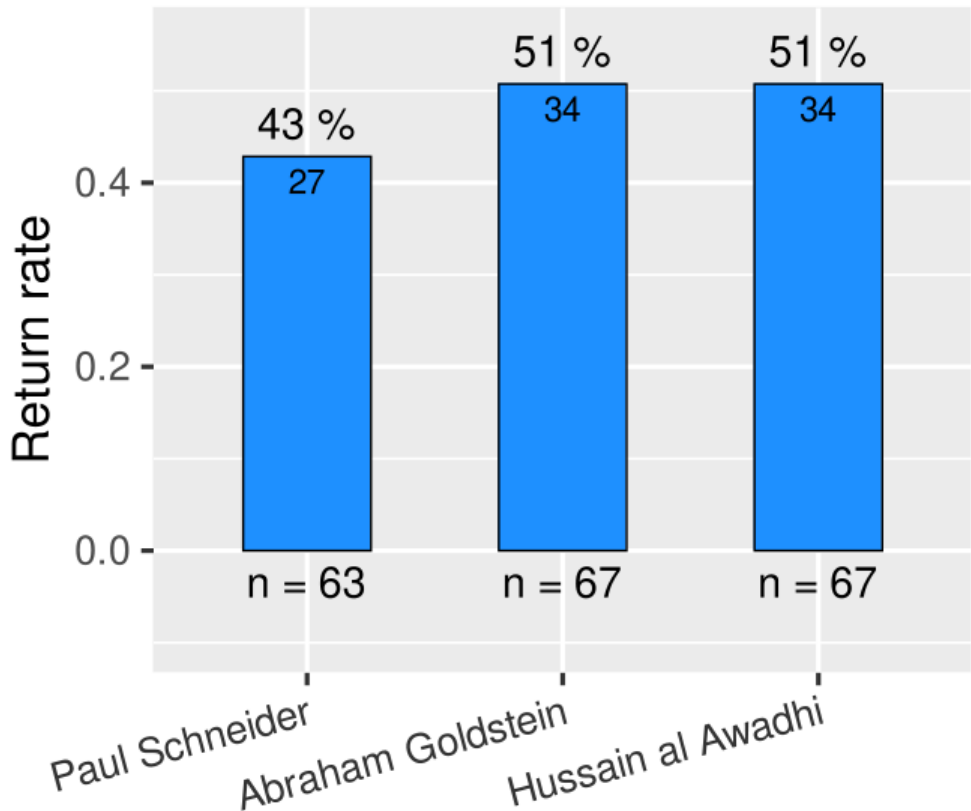


H3 Discrimination by
name/cultural background?

Return rate by name



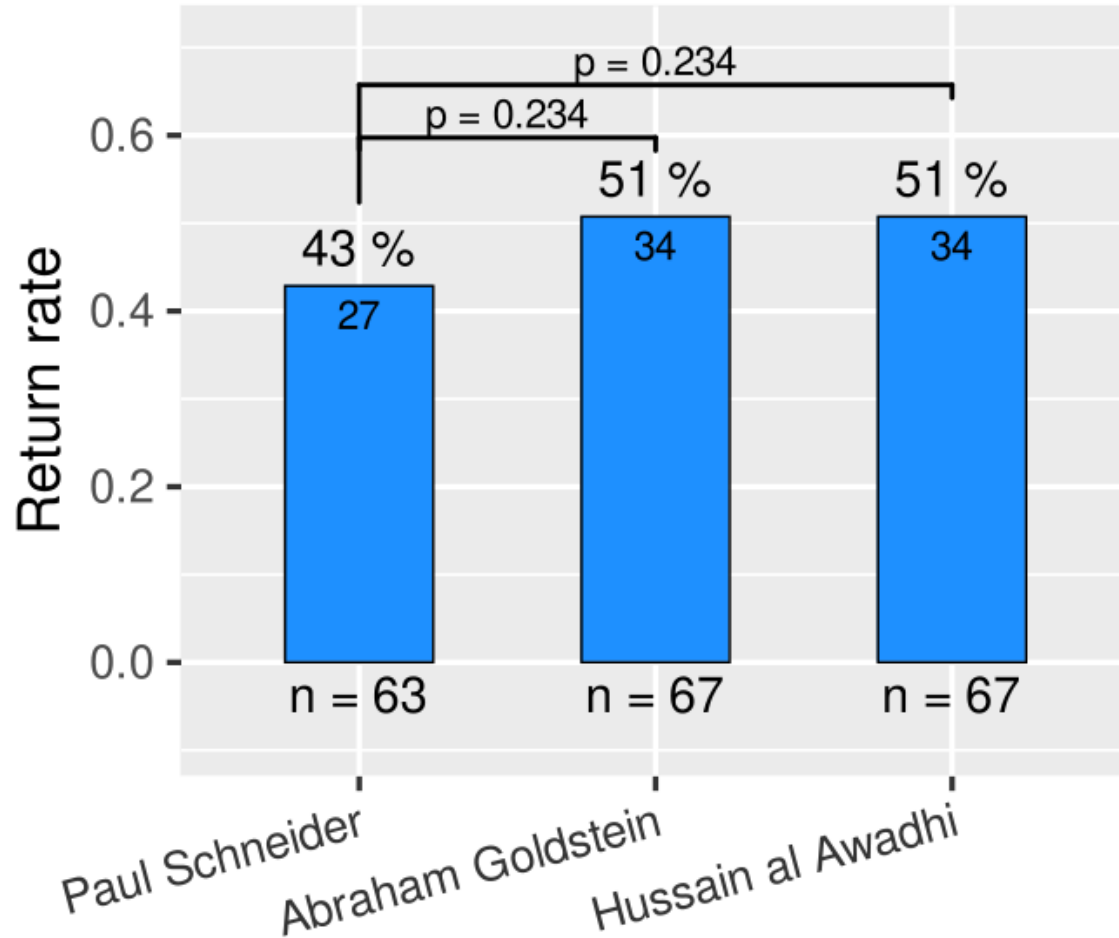
Return rate by name



H3 In contrast to expectation:

No discrimination by cultural background!

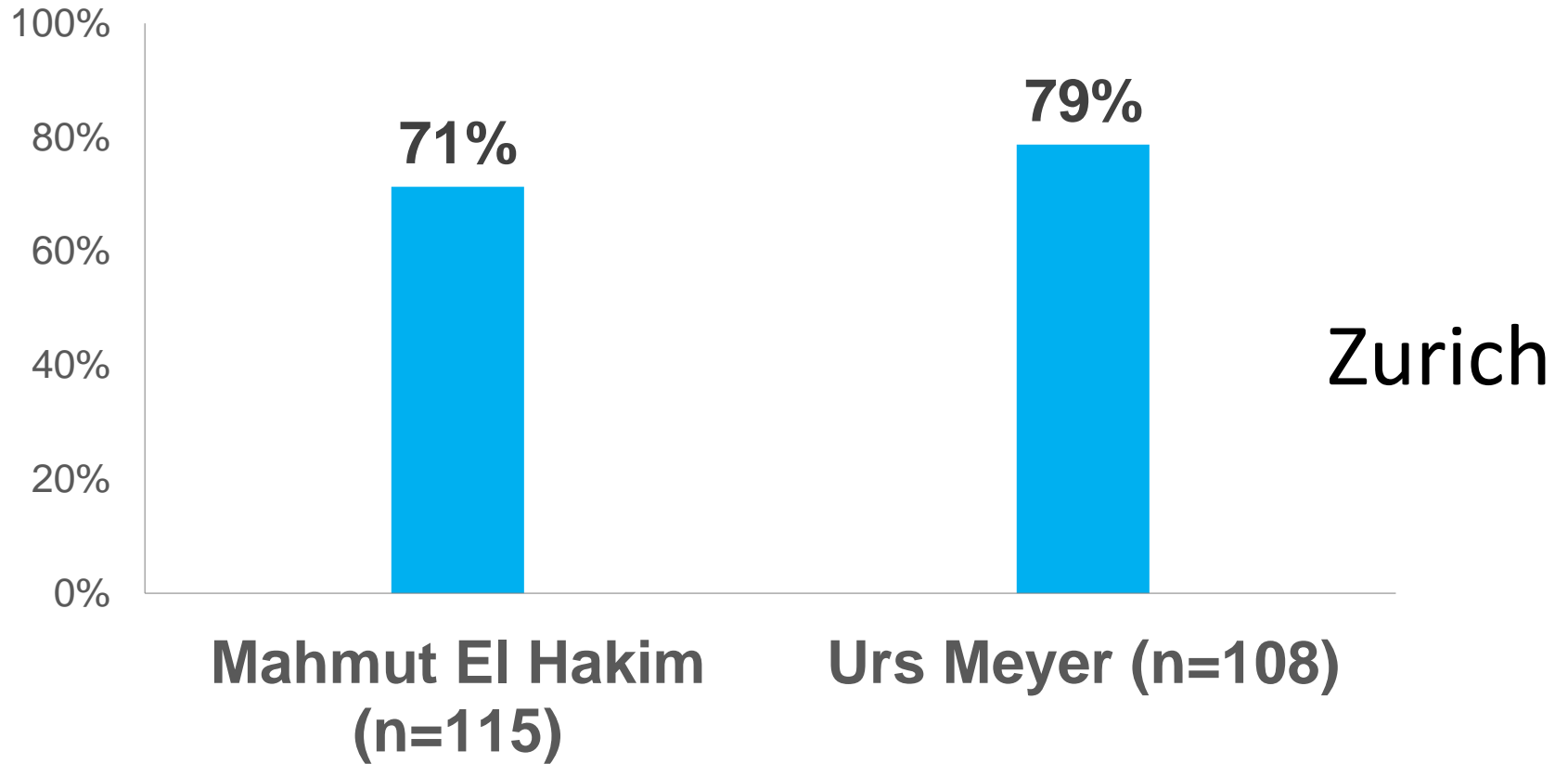
Return rate by name



Leipzig

No discrimination by
cultural background!

Return rate by name



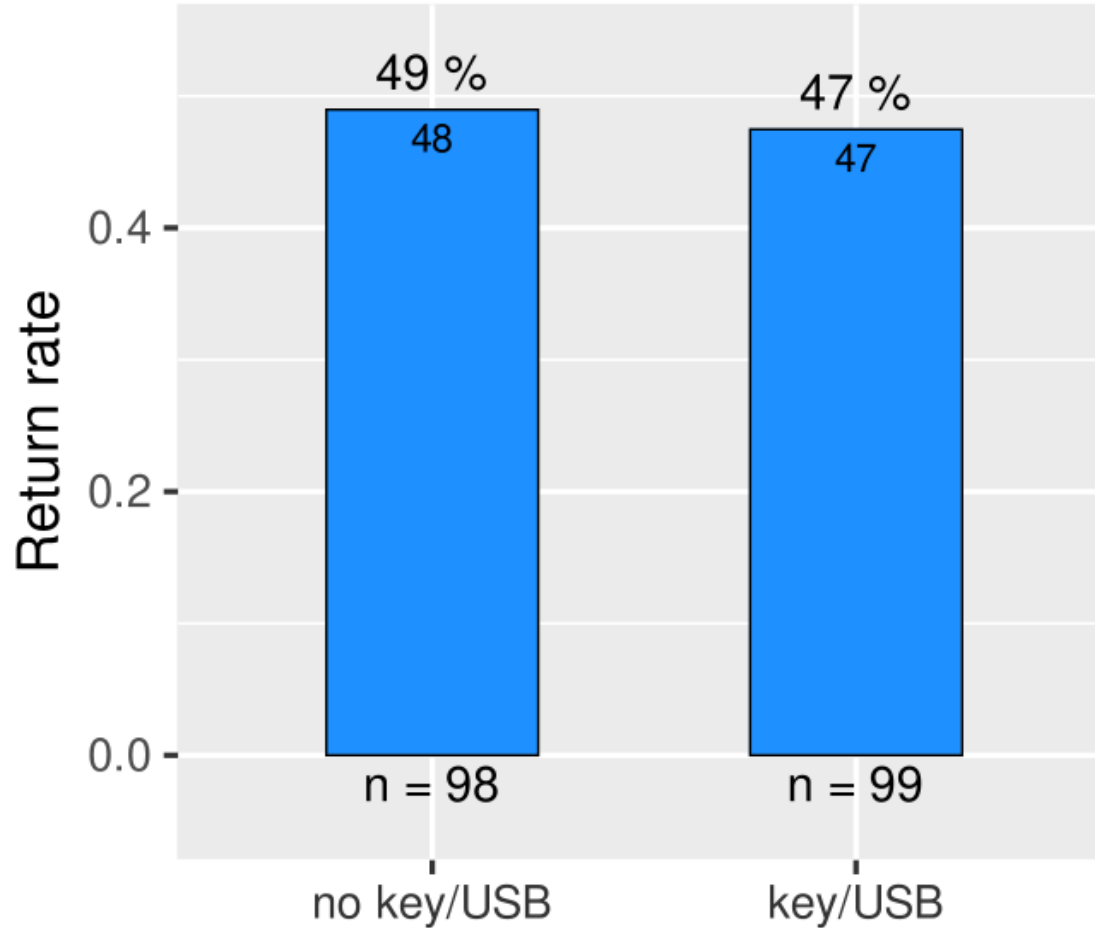
data: complete sample (p=0.20)

The Role of Empathy key & USB stick versus no key & stick



Nicht nur Geld entscheidet: Liegt dem Portemonnaie ein Schlüssel bei, steigt die Retournier-Quote. Tagesanzeiger 31.5.2021

Return rate by key/USB



Leipzig

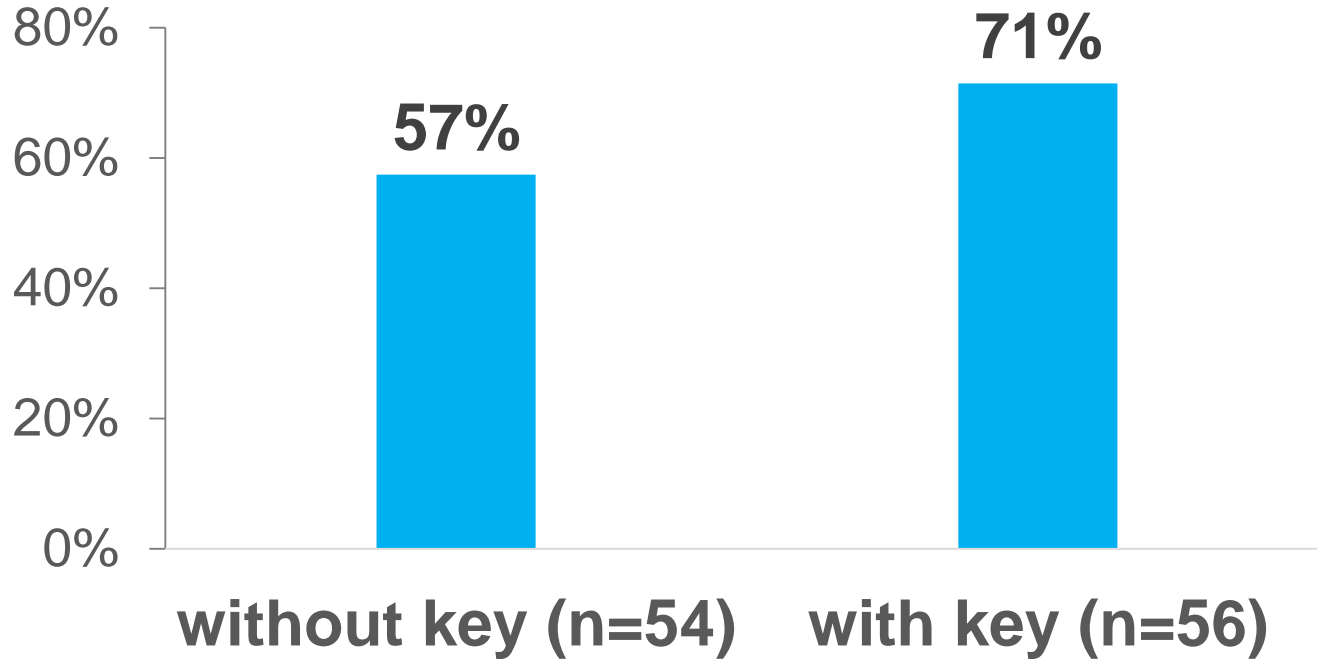
H4 In contrast to expectation:

No empathy effect!

(and no interaction effect - in contrast to H5)

Empathy Hypothesis

CHF 108 in wallet
returned in original state

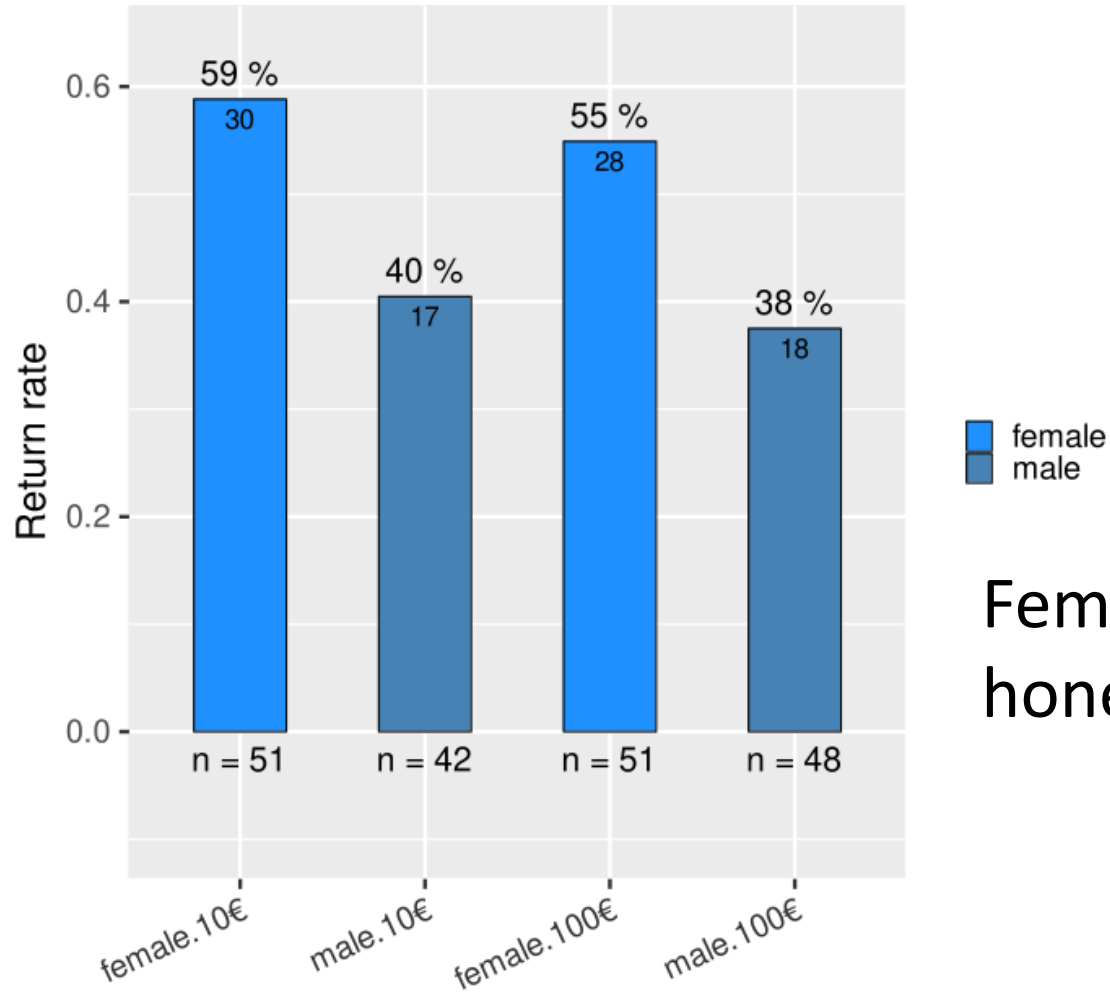


Zurich

data: CHF 108 experiment / complete content ($p = 0.12$)

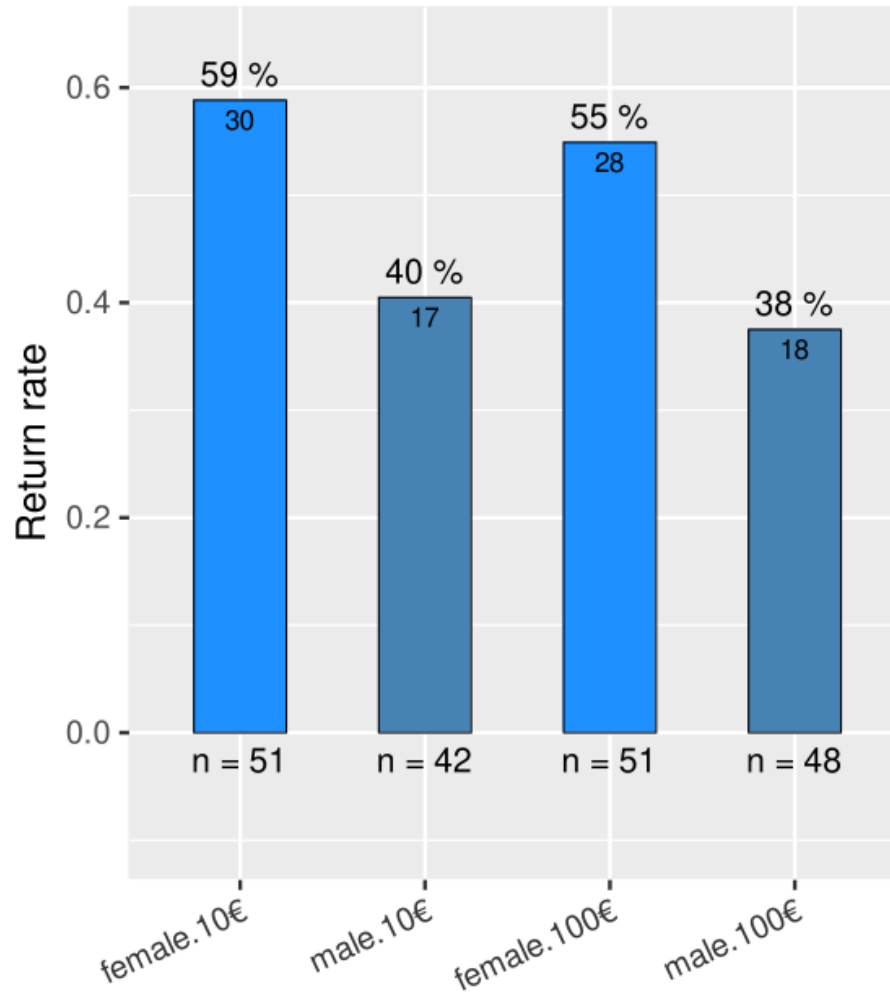
Gender of finder?

Return rate by stake & gender last finder



Females are more honest?

Return rate by stake & gender last finder



Leipzig

female
male

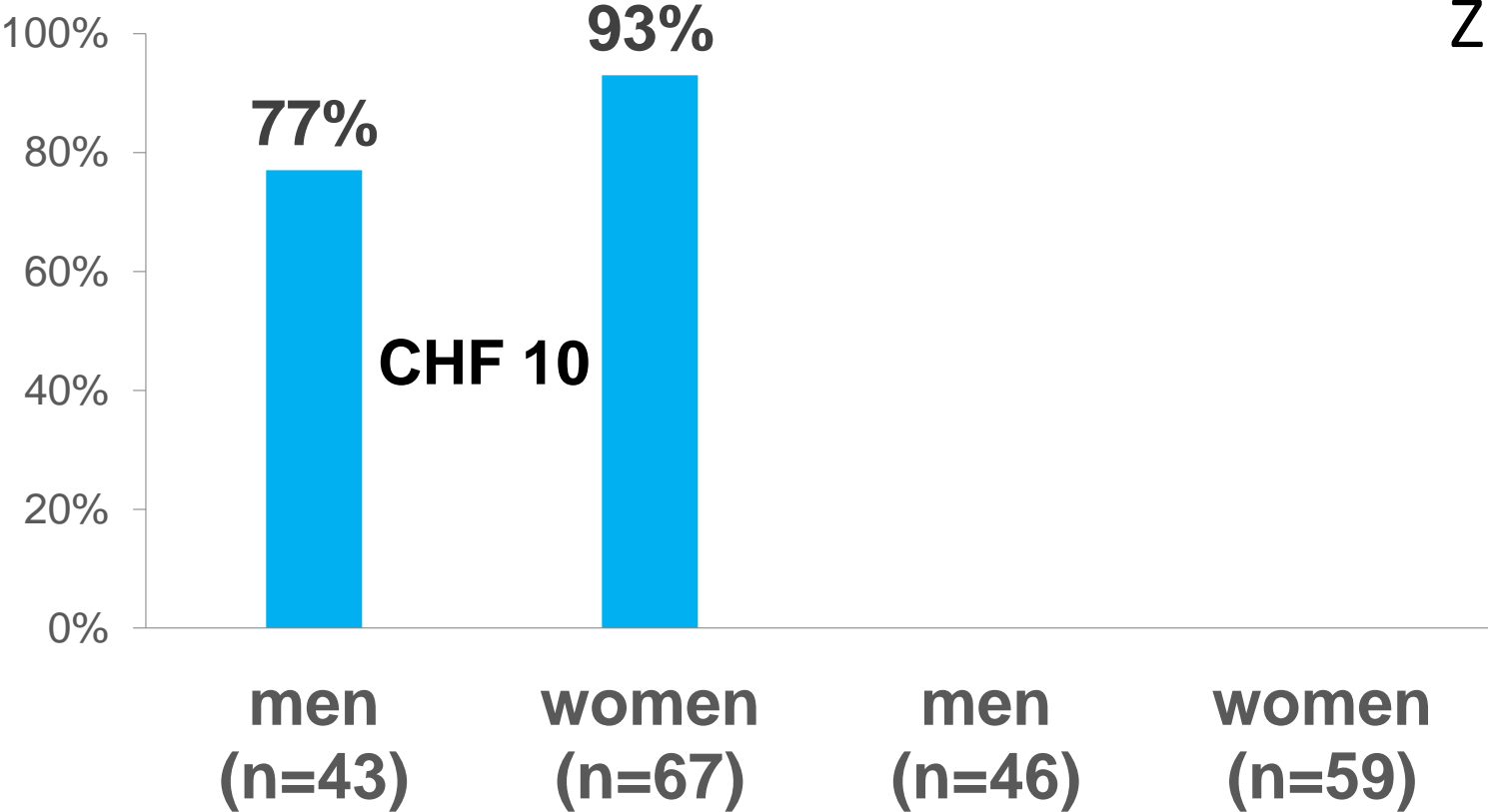
Females are more honest?

Or are females more frequent finders?

Honesty by Gender

Return by monetary incentive and gender of finder

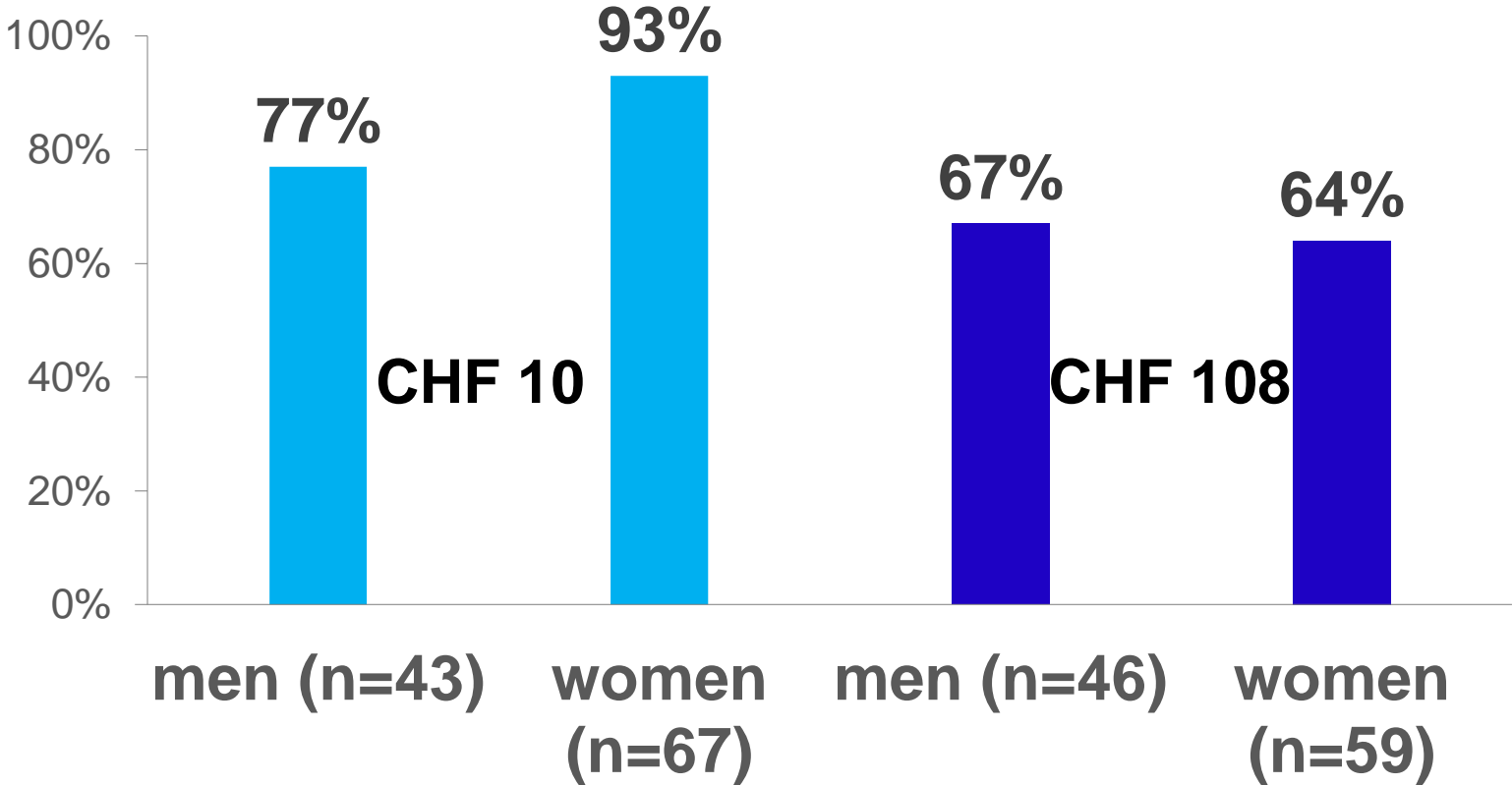
Zurich



Honesty by Gender

Return by monetary incentive and gender of finder

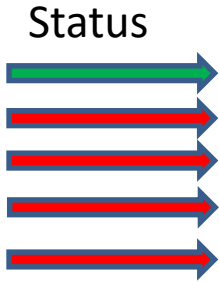
Zurich



light-blue: CHF 10 experiment (p=0.019)

dark-blue: CHF 108 experiment (p=0.75)

Treatments



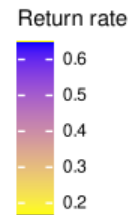
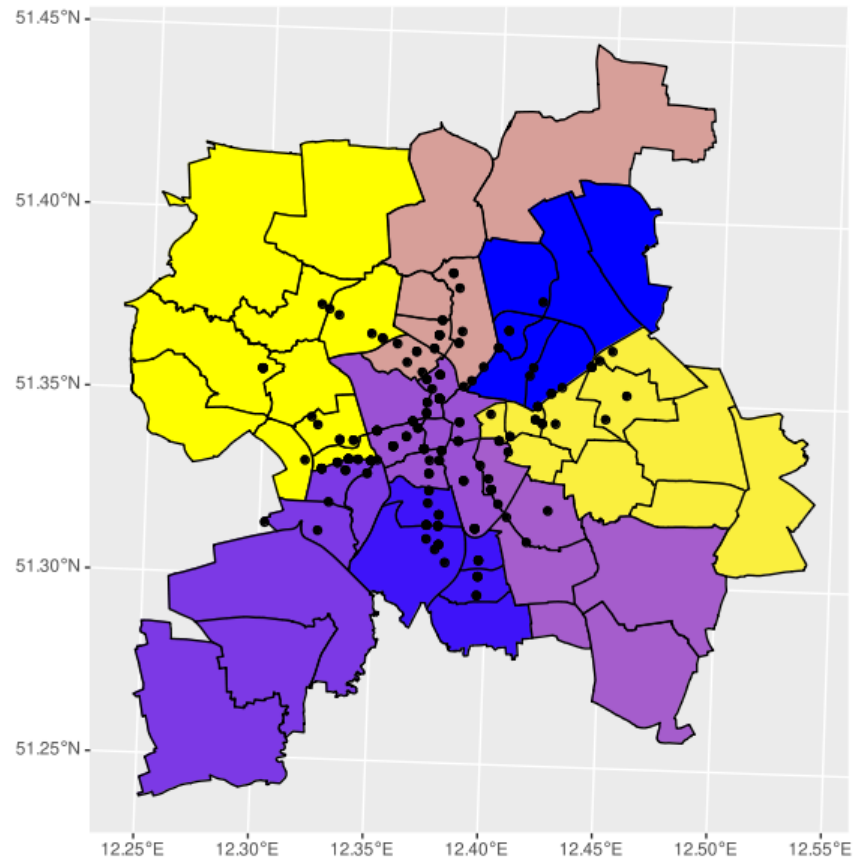
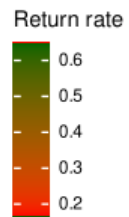
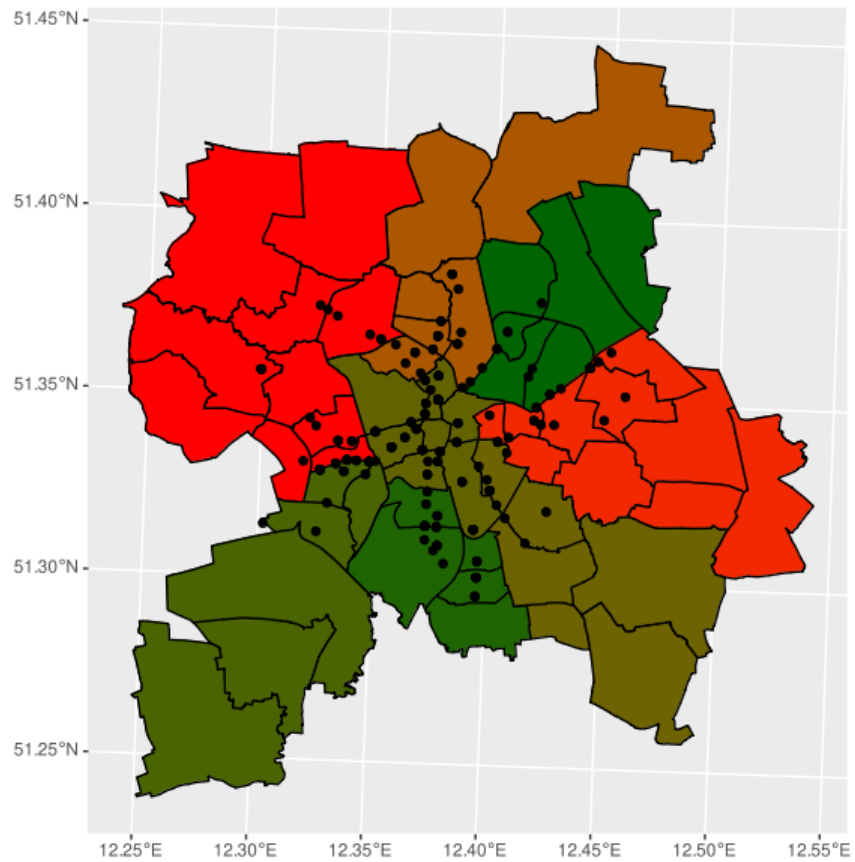
~~Other characteristics of finder~~

~~Characteristics of city district~~

	Model 1
Intercept	-1.18 (2.97)
Status: Low	0.80 (0.33) *
Stake: 100EUR	-0.15 (0.33)
Origin: arabisch	0.52 (0.40)
Origin: jüdisch	0.32 (0.40)
key/USB	0.20 (0.33)
time	-0.00 (0.00)
temp in C	-0.04 (0.05)
Stop as planned	-0.01 (0.43)
gender last finder	-0.65 (0.33) *
age last finder	-0.01 (0.01)
bystander dummy	0.11 (0.34)
alone last finder dummy	-0.25 (0.40)
% migrants	0.00 (0.03)
% w/o job	-0.03 (0.19)
% pensioners	0.01 (0.02)
% home ownership	-0.03 (0.03)
% university degree	0.04 (0.02)
#crimes/1000 inhabitants	-0.00 (0.00)
median household inc	0.00 (0.00)
AIC	272.65
BIC	337.17
Log Likelihood	-116.33
Deviance	232.65
Num. obs.	186

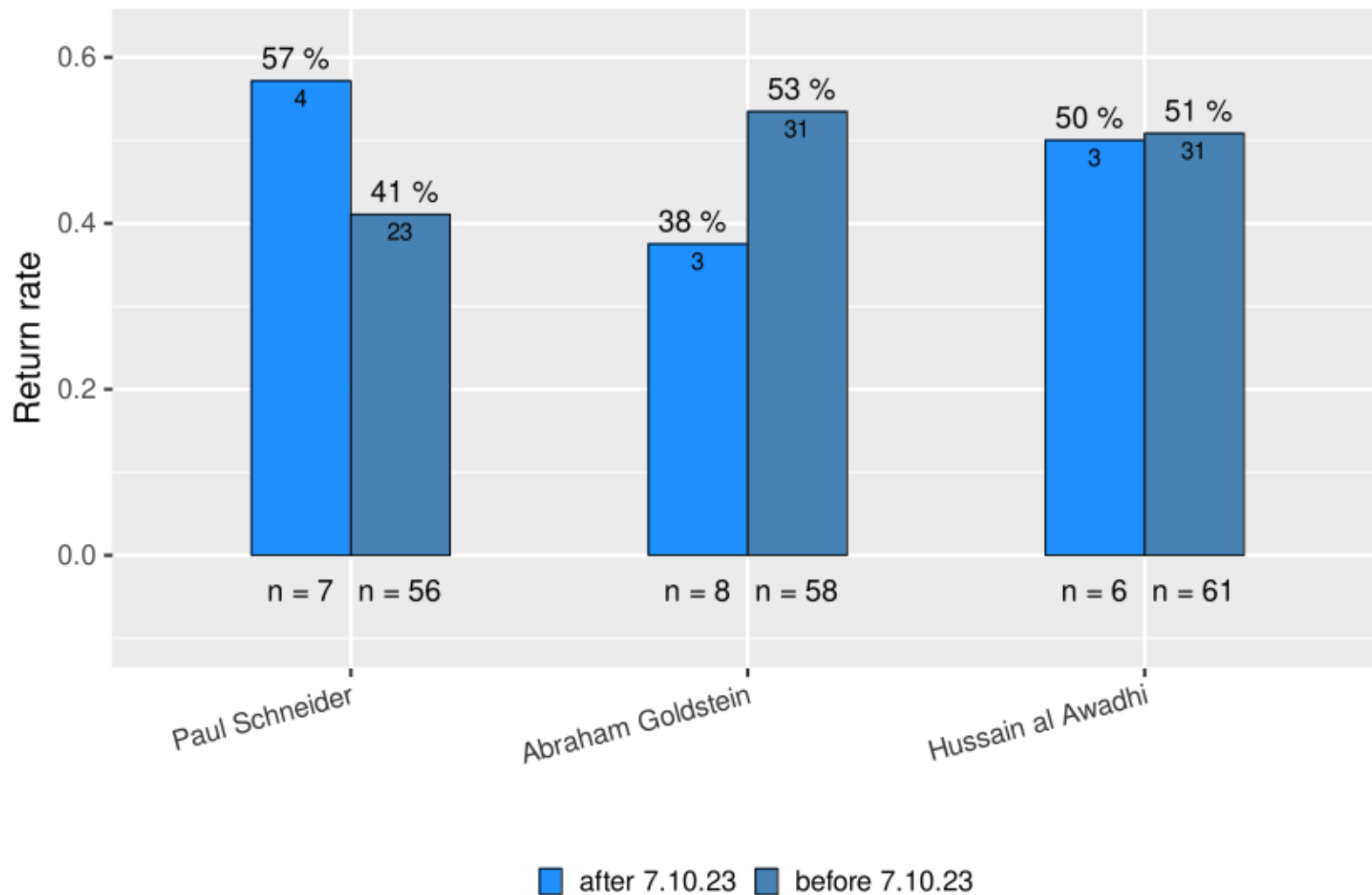
Logistic regression with return rate (0/1 = returned)

Leipzig

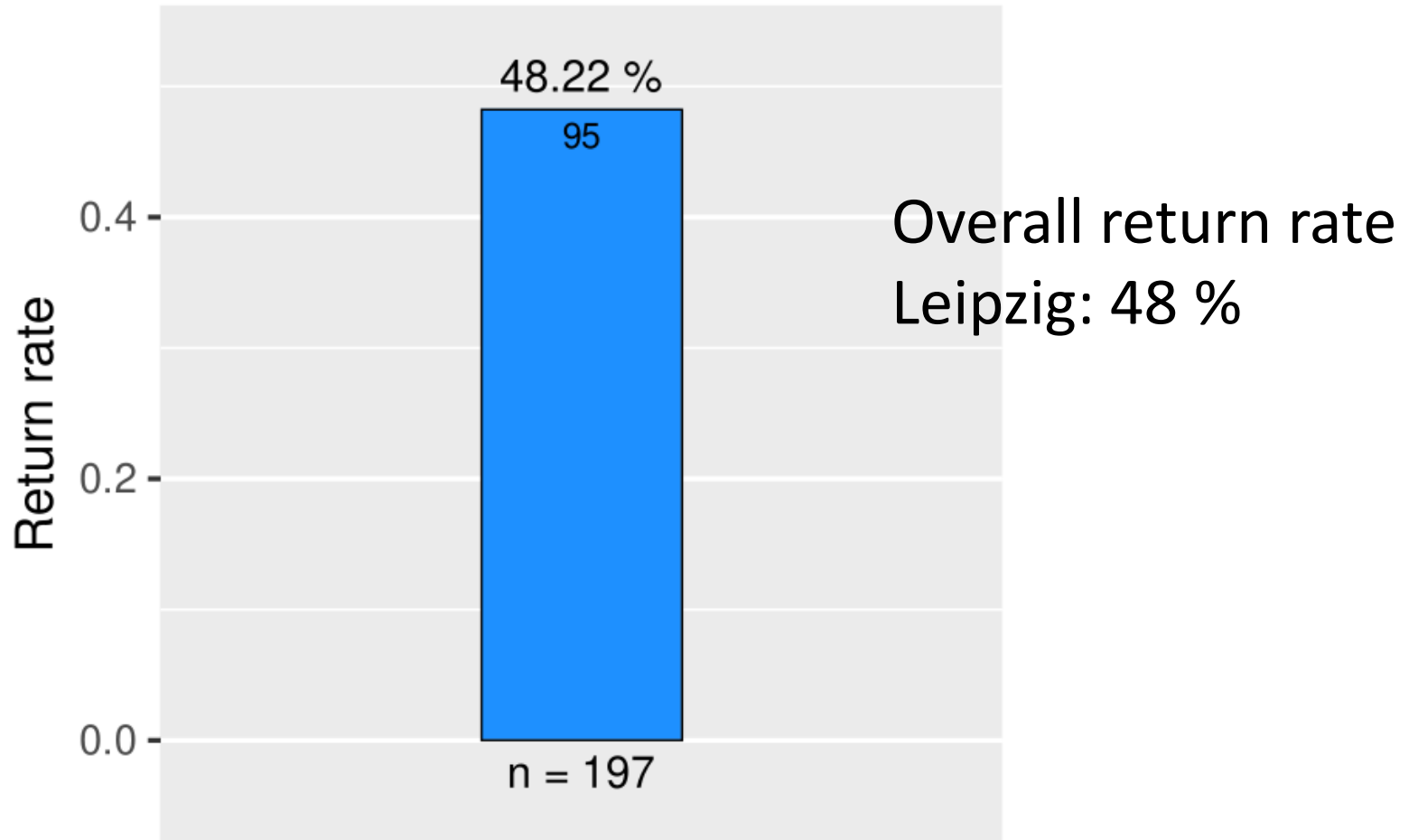


THE END

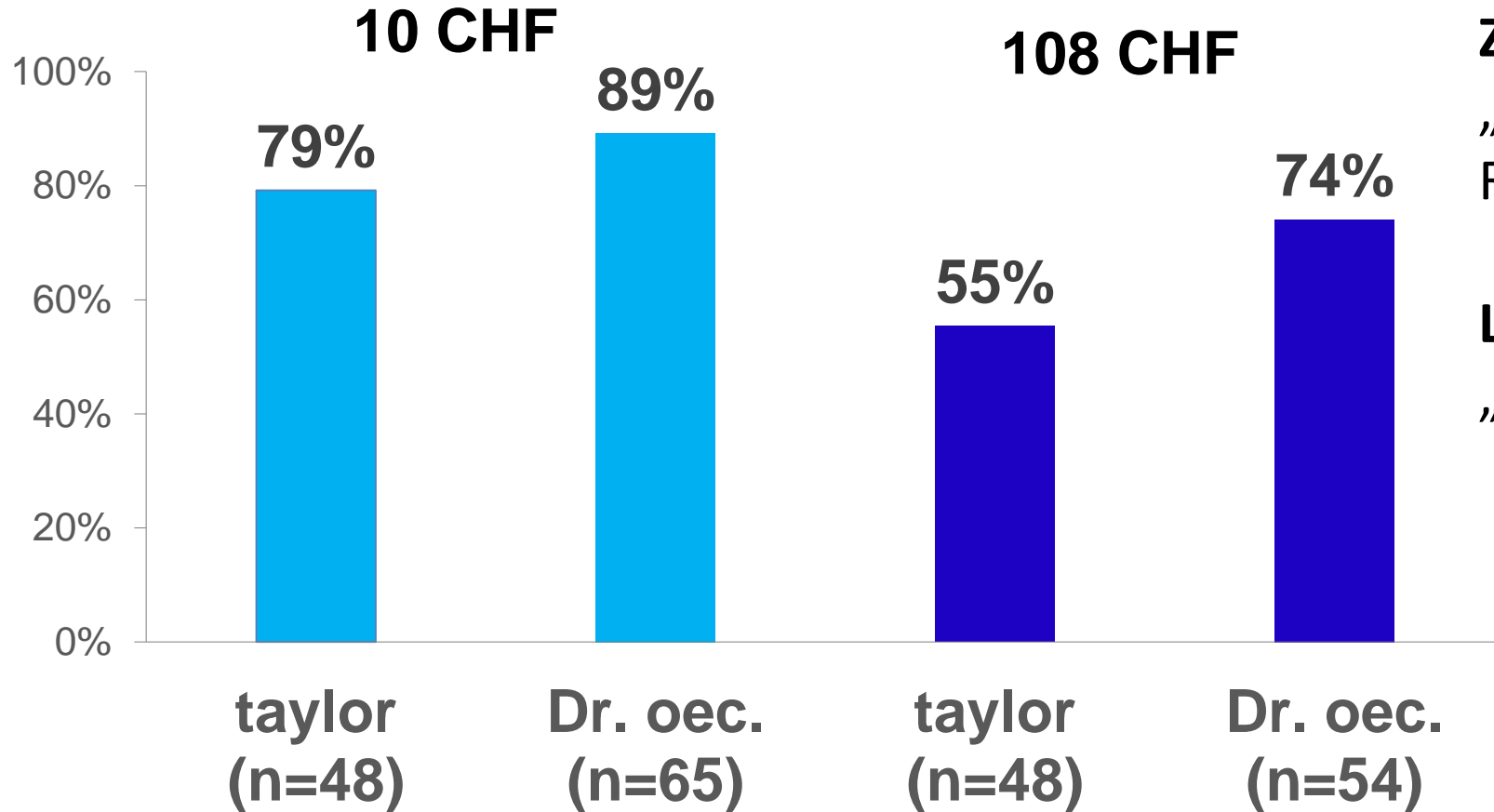
Return rate by name and date



Overall return rate



Zurich: Giving to the rich!



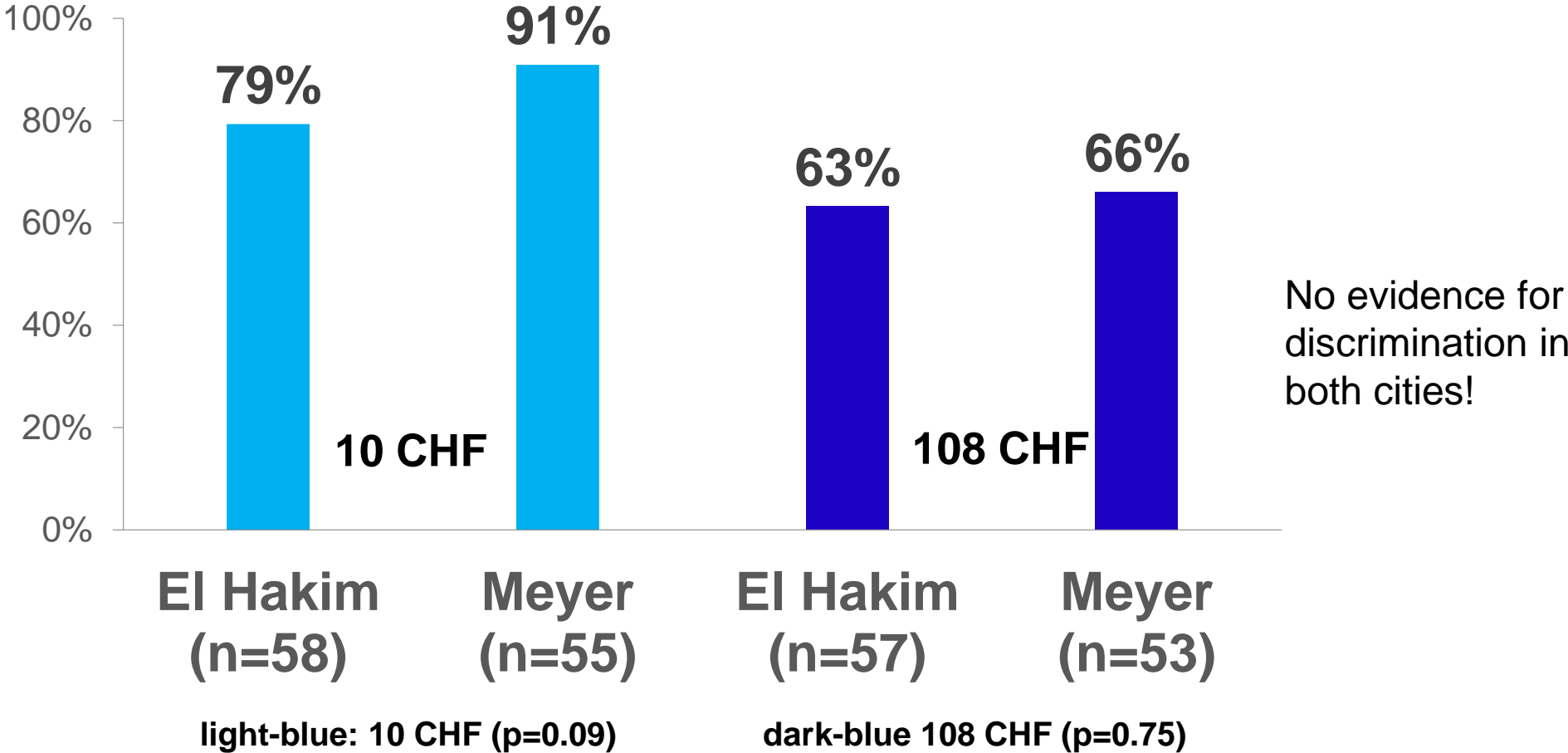
Zurich:
„Giving to the
Rich!“

Leipzig:
„Giving to the
poor!“

light-blue: 10 CHF (p=0.14)

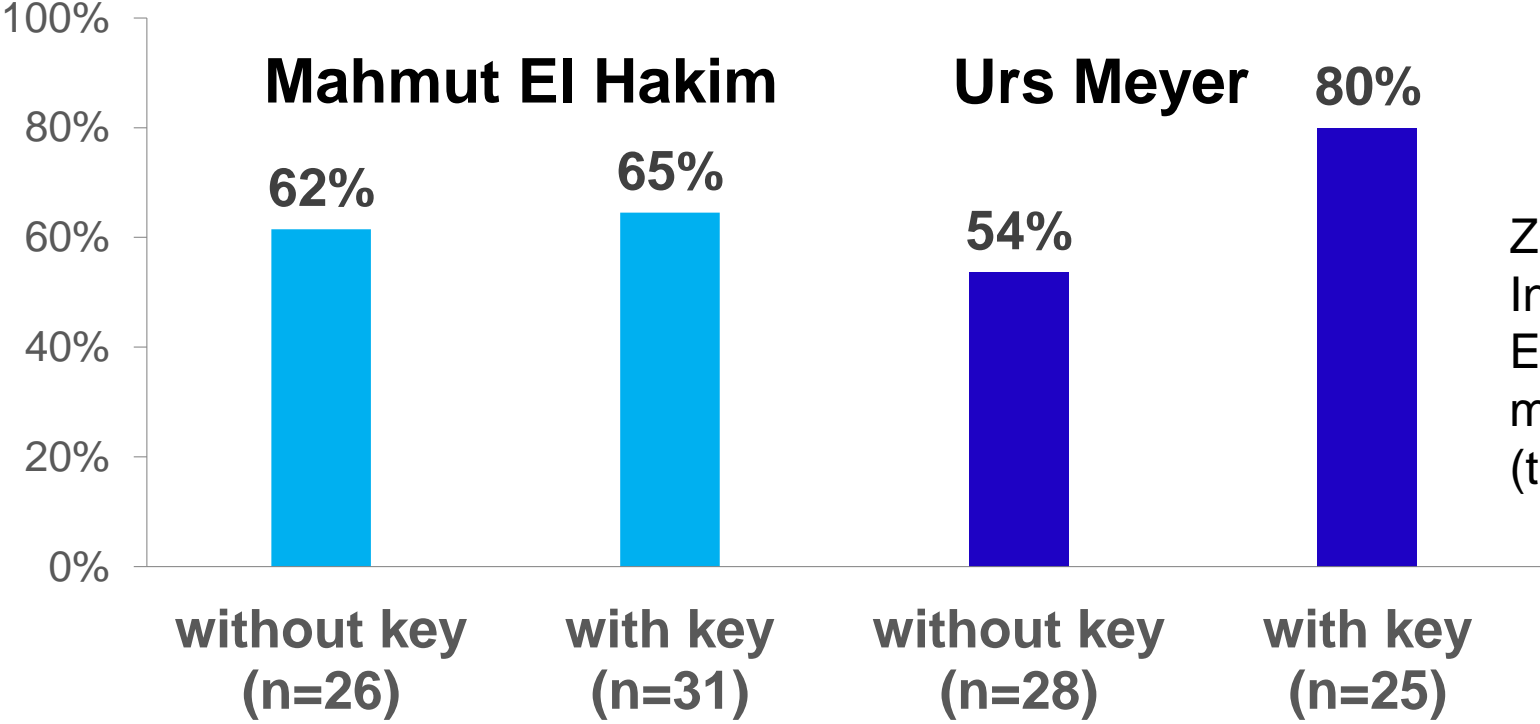
dark-blue 108 CHF (p=0.04)

Return rate by monetary incentive and name



Return rate by name and key

(data: 108 CHF experiment only)

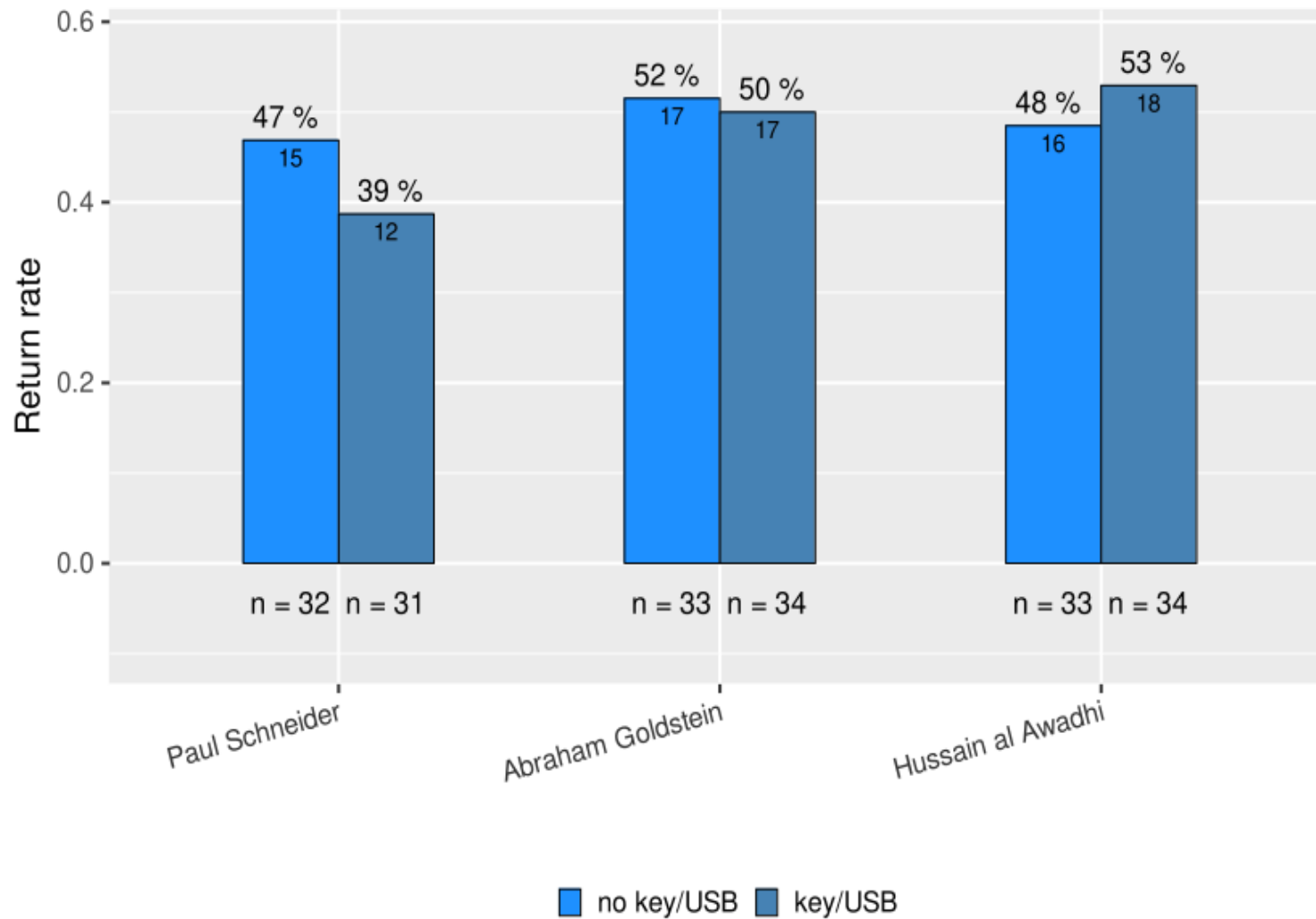


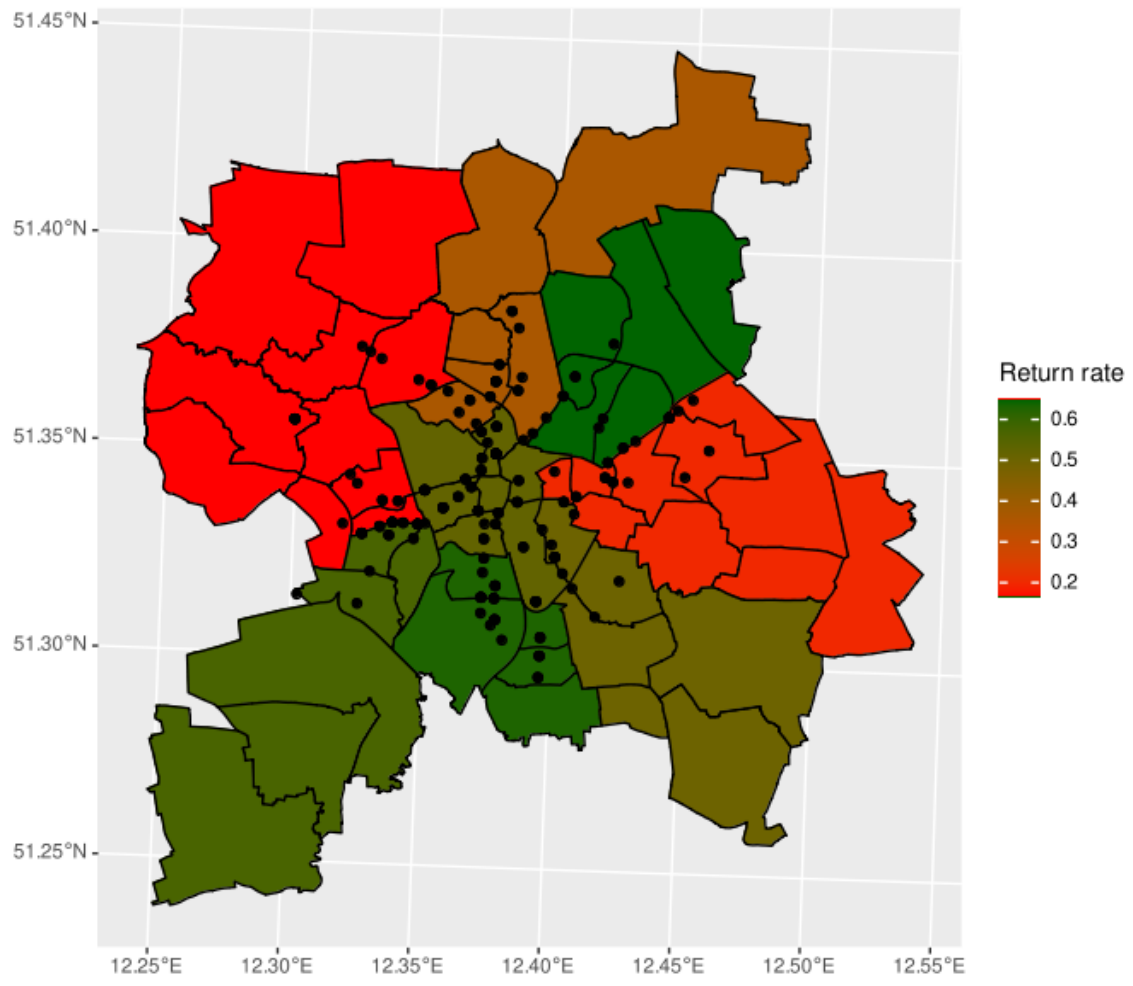
Zurich:
Interaction:
Empathy with
majority group
(tendency)

light-blue: Mahmut El Hakim (p=0.81)
data: CHF 108 experiment only

dark-blue: Urs Meyer (p=0.04)

Return rate by name and key/USB





Pretest

10 Names * 3 groups of ethnic/religious origin * 2 status groups = 60 Identities

Presentation of business cards (vignettes)

Four questions:

- Perceived origin
- Perceived confession
- Status
- Intention of helping

N = 1400 respondents, Prolific.org

Results

- Paul Schneider – 90,1% German name
- Hussain al Awadhi – 87,3% Arab name
- Abraham Goldstein – 78,4% Jewish name

Pre-registered with OSF <https://osf.io/jwhm4>

Study Information

Hypotheses

H1: **Status effect:** The probability that finder will return wallets to high status individuals is larger than for low status individuals.

H2: **Stake effect:** The return rate is negatively correlated with the amount of money in the wallet.

H3: **Cultural background effect (discrimination):** A wallet with a typical German name on the inserted business card is more likely returned than a name that indicates a cultural or religious minority.

H4: **Empathy hypothesis (main effect):** A wallet that contains an object that is valuable only to the owner (e.g. a key or an USB-stick with seemingly important information) will be returned with higher likelihood than a wallet without such an object.

H5: **Empathy hypothesis (interaction effect):** A wallet that contains an object that is valuable only to the owner (e.g. a key or an USB-stick with seemingly important information) will be returned with higher likelihood than a wallet without such an object. This effect is larger for the majority group than for cultural or religious minorities.

OSF <https://osf.io/jwhm4>

Randomization

- We will use a stepwise randomization. Each day of the experiment a tram line will be randomly assigned, on which stops within a certain radius from the city will have a chance of selection.
 - For each of the randomly selected stops a combination of background*status*money*key_usb amount will be randomly selected.
 - Also direction of travel will be randomly assigned to each stop. The sampling will be implemented in a therefore designed R script.
- The aim of the study is to gather data from at least 180 experimental runs

Sampling

Experimental conditions were completely planned ahead

- 33 trials * 3 origins * 2 status → 198 trials
- 50% of each origin*status combination → high stakes (100€)
- 50% of each origin*status combination → key/USB stick

Tramstops are assigned to experimental conditions via multilevel sampling

- 1) 198 planned trials → 33 experimental days
- 2) Experimental day → tramline
- 3) Experiment at experimental day → tramstop from the line

Study design OSF <https://osf.io/jwhm4>

- Wallets including business cards, cash and various other "normal" material will be systematically lost at stops of public transport all over Leipzig.
- The business cards are used to indicate the status and cultural background of the owner. The design will be a 3x2x2x2 design.
- **3 cultural backgrounds**, 2 different **status groups**, 2 different amounts of **money** and 2 treatments **with and without key/USB-stick**.
- To ensure statistical power, not all conditions will be fully crossed (see formulated hypothesis and sampling plan)

OSF <https://osf.io/jwhm4>

The aim of the study is to gather data from at least 180 experimental runs, so that the size of each cultural*status cell is at least 30 and each cultural*key/usb cell is at least 30. If the return rate of money within the wallets is high enough it is possible to run more experimental sessions.