

# FORS



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# **When does adding a survey language make sense?**

Representation bias, response rates, and  
strategic considerations

3MC 2016

28.07.2016, Chicago

Michael Ochsner & Sven E. Hug

# Outline

- The issue: Language and representation bias
- Two surveys adding/reducing survey languages
  - Real-life data: not a clean experimental design
- Results
- Conclusions

# The Issue: Language and Representation Bias

- Minorities are underrepresented
  - Adding languages might help get them in
- Political reasons
  - People might not like the survey when a language is missing
- Adding languages is costly
  - Financial pressures → Change of mode

## Two surveys

- Survey of humanities scholars about research quality
  - Focus on three disciplines
  - First survey two languages (German & English)
  - Second survey four languages (German, English, French, Italian)
- Mixed-Mode Experiment of a population survey in a Swiss city
  - Multilingual survey (6 languages)
  - CATI (severe drops in response rates)
  - Web/Paper Experiment (only one language: German)

# Survey of Scholars: Adding Languages

- Response rate
  - First survey 44%, second survey 39% (usually 15-25%)
  - Language Region:
    - Deviation in first survey: DCH -2%; WCH: 0%
    - Deviation in second survey: DCH: -2%; WCH: 10%
  - Language x Discipline

	1st Survey (2 Lang)		2nd Survey (4 Lang)	
	DCH	WCH	DCH	WCH
German Lit	-0.02	0.09	0.00	0.03
English Lit	-0.09	0.21	-0.12	0.29
Art History	0.10	-0.26	0.00	0.00

# Survey of Scholars: Adding Languages

- Mother tongue of the participants

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	1st Survey (2 Lang)			2nd Survey (4 Lang)		
	German	English	Other	German	English	Other
All	71	13	16	72	13	15
German Lit	100	0	0	96	0	4
English Lit	35	53	12	44	40	16
Art History	61	0	39	54	10	36

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# General Population Survey: Reducing Languages

- Response rates
  - Compensation with mode: Web/Paper vs. CATI
  - 33% RR CATI vs 56% RR Web/Paper
    - Mode stronger than language
- Response bias sample (% deviation of rr)
  - Permit: Deviation CATI: 29%, Web/Paper: 10.5%
  - Total (6 Variables): CATI 100%, Web/Paper: 43%
- Response bias population (incl sample bias)
  - Migration: Swiss: CATI: -1%, Web/Paper: 7%
  - Migration: other: CATI: 16%, Web/Paper: 13%
  - Nation, Age, Education: CATI: 27%, Web/Paper: 26%



# General Population Survey: Reducing Languages

- Language
  - No information on population
  - Web/Paper: higher share of German
  - Web/Paper: more equilibrated share of other languages

# Conclusions

- Adding Language
  - Expensive
  - Translation, Comparability
  - Additional language can reduce bias
- Mode can compensate for language
  - Mode can reduce more bias than language
- When is it worth adding a language?
  - Ethical/political reasons
  - Small or big N (additional cases make a difference)
  - Interest in members of group speaking a language
  - Language is related to concept in question

**Thank You for Your  
Attention!**

- Links:  
[michael.ochsner@fors.unil.ch](mailto:michael.ochsner@fors.unil.ch)
- [sven.hug@gess.ethz.ch](mailto:sven.hug@gess.ethz.ch)
- Contact:  
FORS  
Géopolis  
CH-1015 Lausanne  
Phone: +41 21 692 37 30  
<http://www.forscenter.ch>