Preferred citation style for this presentation

Kowald, Matthias (2009) Collecting data on the link between leisure contacts and travel, Symposium: Frontiers in network science, Berlin.

Collecting data on the link between leisure contacts and travel

Matthias Kowald

IVT ETH Zürich

September 2009





Eidgenössische Technische Hochschule Zürich Swiss Federal Institute of Technology Zurich

Involved Persons

- IVT ETH Zurich
 - Matthias Kowald
 - Andreas Frei
 - Jeremy Hackney
 - Kay Axhausen
- ILS TU Berlin
 - Johannes Illenberger
 - Kai Nagel

Former Projects: Frei and Axhausen, 2006

Personal networks in Zurich city:

- Respondents' mobility biography
- Home location of social contacts

Mode to stay contact

Aims of the study

The integration of network data in agent-based models needs:

Understanding the spatial structure of full leisure networks

Understanding planning processes of joint activities

Surveying personal networks: Questionnaire

- Ego's characteristics
- Name generator
 - Leisure contacts
 - Emotionally important contacts
- Name interpreter
- Sociogram

Surveying personal networks: Diary

Eight days consecutively

Geographical spread of (leisure) activities

Involved persons (actual personal network)

Evolution of (joint) activities

Survey protocol

Step	Ego-seeds	Iteration 1 and 2
Announcement letter	yes	yes
Recruitment call	yes	yes
Post card of Ego	-	if permitted
Interview (+ incentive)	only	-
Written instrument (+ incentive)	if requested	only
Diary survey	only participants	only participants

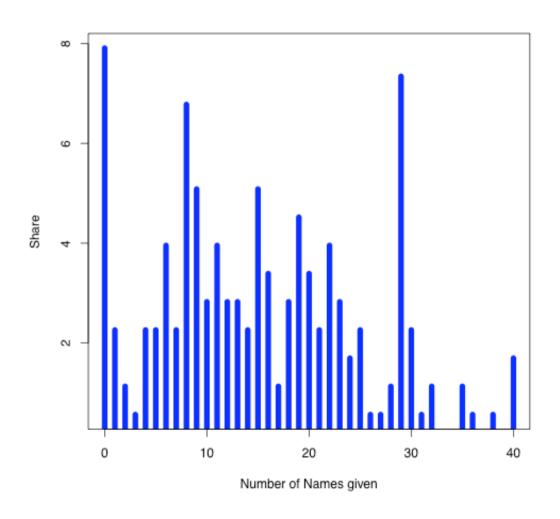
Data validation

- Start with a stratified random sample
- Run several subsamples successively
- Compare with other data
- Compare with data from Swiss Environmental Study

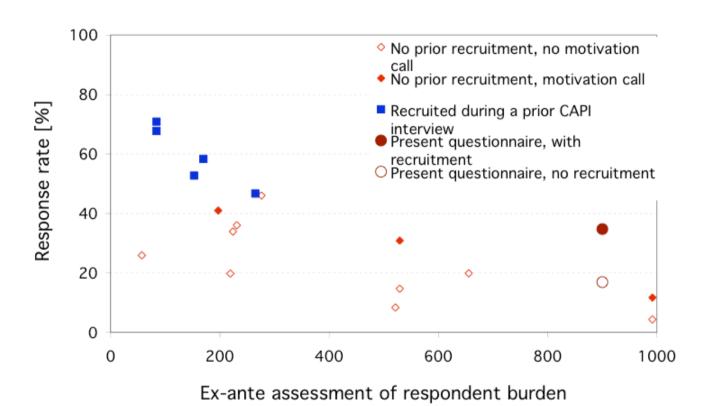
Survey data: Response rate

	Whole sample	9	Ego-se	eeds	Iteration	on 1	Iteration	on 2
	[abs]	[%]	[abs]	[%]	[abs]	[%]	[abs]	[%]
Sample size	1233		140		250		941	
second time	-		-		-		98	
Wrong addresses	272		3		71		198	
Valid addresses	961		137		179		645	
Contacted	742	100.0	137	100.0	179	100.0	426	100.0
Participants	176	23.7	20	14.6	67	37.4	90	21.1

Survey data: Name Generator



Survey data: Response rate and response burden



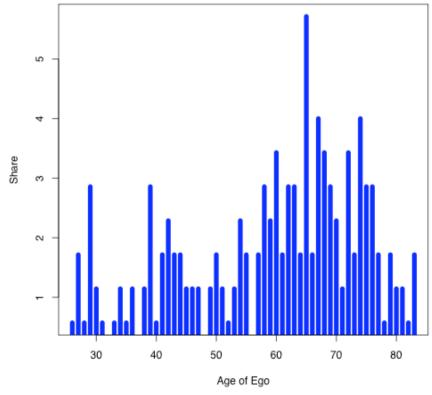
Survey data: Representativeness

	All Egos (n = 176)	All Alters (n=2742)	Microcensus 2005
Sex			
- Male	48.0	45.7	48.7
- Female	52.0	54.3	51.3
Civil status			
- Single	15.9	21.8	29.9
- Married	64.2	62.2	54.5
- Divorced	8.0	8.0	7.6
- Widowed	11.4	7.0	6.6
- Living seperately	0.6	1.0	1.4

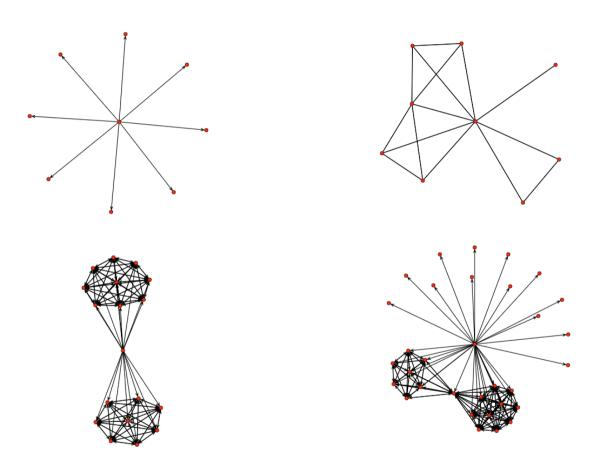
Survey data: "The age problem"

Age	All Egos	All Alters	Microcensus
	(n = 176)	(n=2742)	2005
- Mean	58.7	54.5	42.3

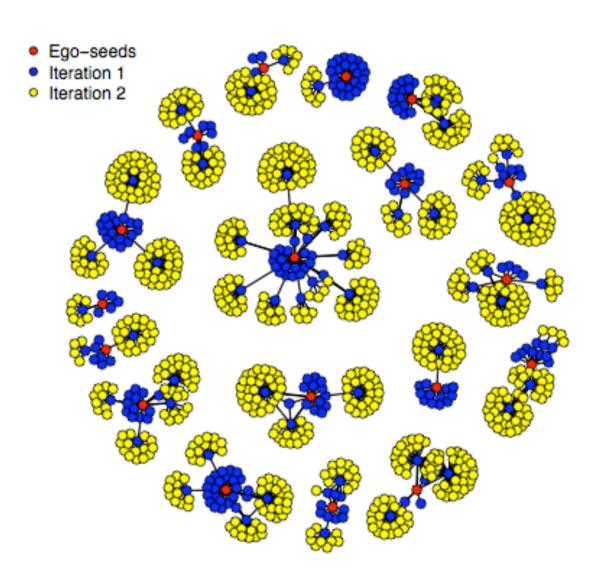
- Median 42.0



Survey data: Types of Egocentric networks



Survey data: Combined egocentic network components



Perspective

Continue with subsample two

Oversample younger persons

Test new electronic instrument