

LISS Panel:

Collecting representative data for the Netherlands

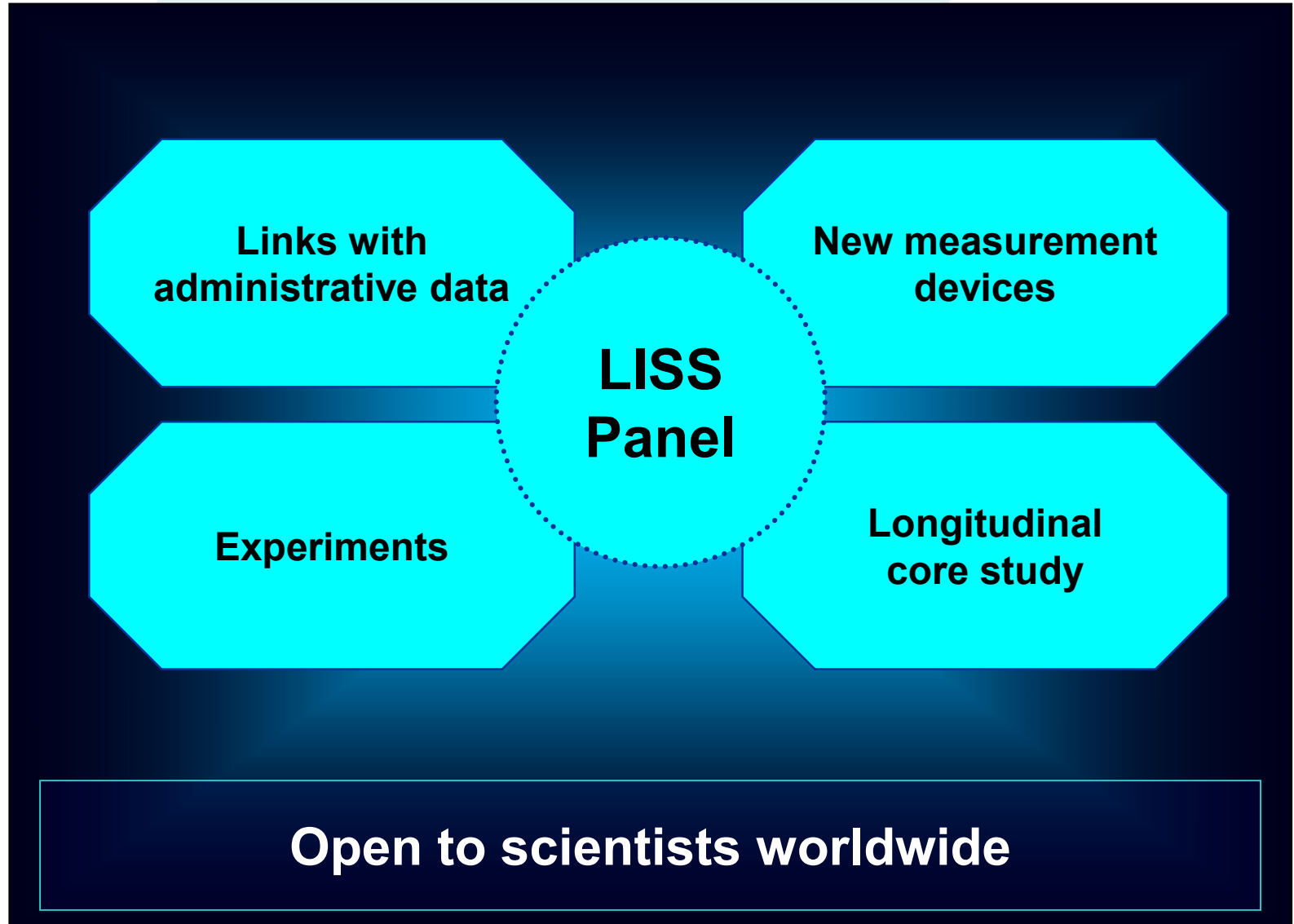
Marcel Das

3MC meeting
28 July 2016, Chicago



CentERdata
Institute for data collection and research

MESS Project: a highly advanced research infrastructure for the Social Sciences





Central element MESS project: LISS panel

- Online panel of 4,400 households
 - 6,500 individuals (≥ 16 years)
- Questionnaires each month, 30 min.
- Incentive 15 euro an hour (average)



LISS panel

- Online interviews as method, but:
- Probability sample drawn from address sampling frame of Statistics Netherlands
- Includes households without Internet access (less than 15%): CentERdata provides equipment
- Contacted by letter, telephone or visit



simPC



Small and silent

Only the most frequently used functions

Automatic maintenance, safety

Simple operation and readable screens

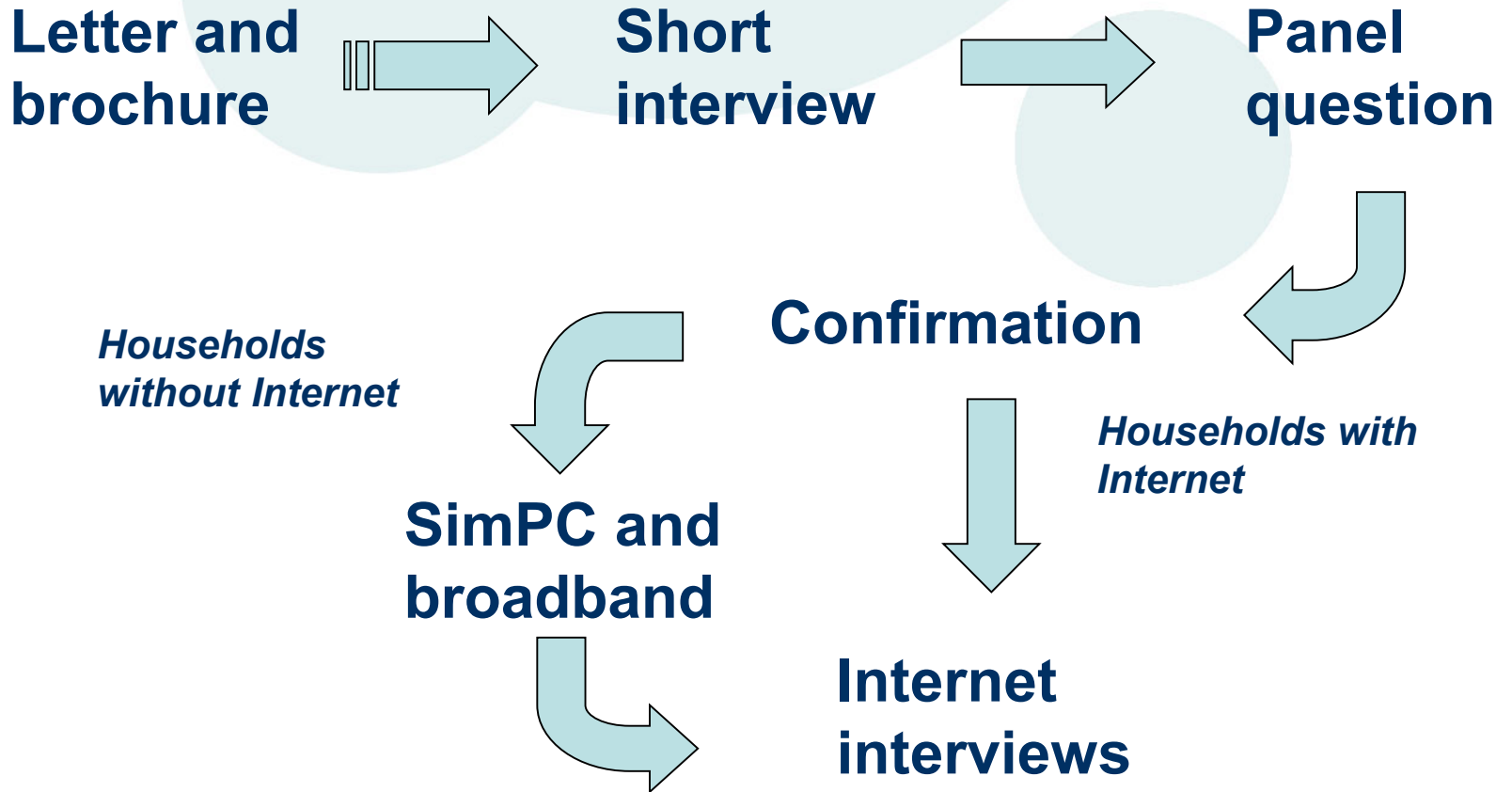
Installation and support



Recruitment of LISS panel



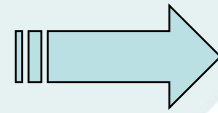
Recruitment





Response

Letter and brochure

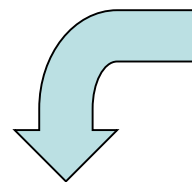


Short interview

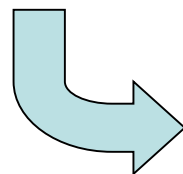


Panel question

Primary response target: 80%



SimPC and broadband



Confirmation



Internet interviews

Secondary response target: 60%

Households with Internet

Tertiary response target: 53%



Recruitment experiment

to optimize factors in the recruitment:

- contact mode
- incentive amount
- timing of the incentive
- content of the advance letter
- timing of the panel participation request

Scherpenzeel, A.C. and V. Toepoel (2012). "Recruiting a Probability Sample for an Online Panel: Effects of Contact Mode, Incentives, and Information," *Public Opinion Quarterly*, 76(3), pp 470-490



Set up main recruitment

- Combination CATI – CAPI, follow up CAPI
- Prepaid 10 euro incentive
- Promised extra 10 euro incentive for starting
- Attention to design letter and brochure



Response in recruitment

Recruitment stage (households)	% of total gross sample
	LISS panel
Reached	90
Completed interview or central questions	75
Willing to participate in panel	63
Registered as panel member	48
Total gross sample*	9844

***excluding not usable addresses**



LISS panel compared to population (2008)

Group	LISS Panel %	Population %	Bias
Age ≥ 70	7	13	-6
Living alone	15	20	-5
Non-western immigrant	4	7	-3
Did not vote at election	13	20	-7
Voted SP at election	17	17	0
Voted CDA at election	25	26	-1
Has Internet access	93	85	+8



LISS panel compared to DPES

	LISS Panel Bias	DPES Bias
Group		
Age ≥ 70	-6	1
Living alone	-5	-4
Non-western immigrant	-3	-2
Did not vote at election	-7	-13
Voted SP at election	0	1
Voted CDA at election	-1	1
Has Internet access	8	2

DPES = Dutch Parliamentary Electoral Studies

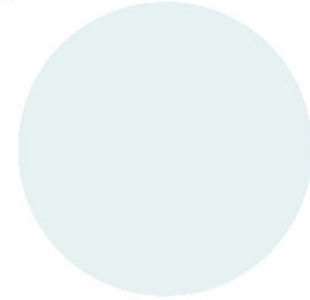


Non-response patterns

Similar to those of other leading scientific panels

Superior to commercial access and volunteer panels:

- no coverage problems
- no self-selection



Attention for difficult groups

Correction by refreshment sample in 2009 (stratified), 2011 (random), 2013 (stratified) in close collaboration with Statistics Netherlands



Use of the LISS panel



Use of infrastructure

- Longitudinal core study (questions on health, work, income, education, ethnicity, political opinion, values, norms, and personality)
- Since 2007 more than 200 projects have been run with the LISS panel

More than 100 institutes worldwide have participated in the proposals (including all Dutch universities, and universities such as Harvard, Stanford, and Michigan)



Disciplines using facility

economics (health, behavioral, marketing, social), business, public administration and political science, psychology, epidemiology, survey statistics / methodology, criminology, decision theory, sociology, dietetics, linguistics, philosophy, demography, religion studies and theology, social geography and planning, communication science, humanities, cultural anthropology, mathematics, medicine, arts and architecture, law

Innovation in data collection

- Internet bathroom scales



- Smartphones (Time Use, with the Netherlands Institute for Social Research (SCP); Mobility, with Twente University)



- Accelerometers





Bathroom scale study (1)

- Wireless bathroom scales
- Uses radio signals through “bridge” and Internet, to send the data
- Measures weight and body fat
- Variability over time: more accurate and more frequent



Design study:

- Longitudinal study (approx. 3 years)
- 950 scales, in last year of study 300 new scales added
- ***Lend to household for at least 1 year***

Bathroom scale study (2)

First empirical analysis is based on almost 80,000 measurements collected in 2011

Subjective self-reports versus objective measurements?

Average self-reported weight is 0.9 kilograms **lower** than average actual weight for men and 0.7 kilograms **lower** for women





More results

Kooreman, P. & A. Scherpenzeel (2014). High frequency body mass measurement, feedback, and health behaviors, *Economics & Human Biology*, 14, pp 141-153

Highlights

- Weight is 0.2 kilograms lower on Fridays than on Mondays; BMI is 0.06 less and fat percentage is 0.03 lower on Fridays.
- The fat-based measure of obesity indicates a three times larger prevalence of obesity (53%) than the BMI-based measure (17%).
- A feedback that includes a recommended weight range increases the temporal variation in individual body weight by about 10%.

Time use project: app diary (1)

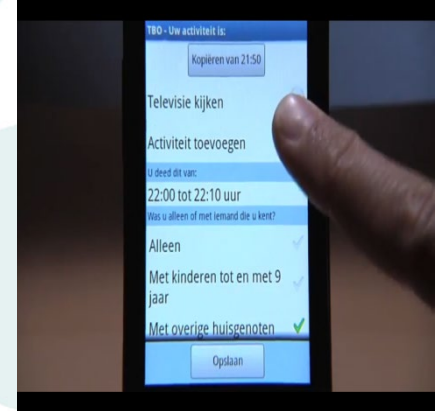
Time Use Application

Similarities to paper version

- 10 minutes time slots
- 4am to 4am next day
- first important activity, second activity
- with whom

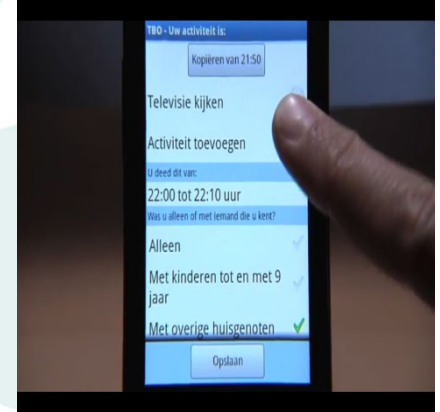
Differences to paper version

- Closed answers: codes for activities
- Repeated activities can be copied from previous time slot
- Activities sleeping & working can be filled in for longer time periods



Time use project: app diary (2)

- Developed by CentERdata
- Can be used any time
- Notifications (reminders)
- Experience sampling: 3 popup questions on feelings, random moments





Design study

- In close collaboration with the Netherlands Institute for Social Research
- 12 months data collection
- 170 panel members per month, 2,000 total
- Panel member completes two days
- ***200 loan smartphones, lend for 7 days***



More information

Report: *Using smartphones in survey research: a multifunctional tool*. Available at www.scp.nl/smartphone

Fernee, H. & N. Sonck (2013). Is everyone able to use a smartphone in survey research? *Survey Practice*, 6(4)

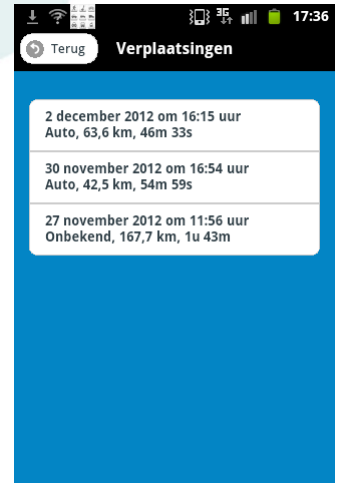
Scherpenzeel, A. and H. Fernee (2013). New and Emerging Methods: The smartphone in survey research: experiments for time use data. *The Survey Statistician*, 67, pp 9-25

Mobility App

- Developed by Novay (The Netherlands)
- Uses GPS and Mobile Networks
- Algorithm: distance, mode (speed), time
- Webinterface: respondents check and adapt
- Privacy issue: Consent procedure

Design study

- 3 waves spread over 3 years
- 500 panel members per wave
- 4 - 6 weeks measurement per wave
- **200 loan smartphones, lend for 4 weeks**





More information

Thomas, T. et al. (2014). Hoe mobiel zijn we eigenlijk? Eerste inzichten uit het Mobiele Mobiliteitspanel. *Tijdschrift Vervoerswetenschap*, 50, pp 138-154

Geurs, K.T. et al. (2015). Automatic trip and mode detection with MoveSmarter: first results from the Dutch Mobile Mobility Panel, *Transportation Research Procedia*, 11, pp 247-262



LISS Data Archive

- An innovative data archive is easily available through a web tool on a dedicated LISS website (<http://www.lissdata.nl>)
- Researchers worldwide have accessed the LISS Data Archive for use in scientific, policy, and societal studies
- Currently: more than **1,700** registered users and more than **350** publications based on LISS data



www.lissdata.nl



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