The social sciences are becoming increasingly multidisciplinary as new technology opens up vast new opportunities for measuring and linking data from very different fields. SHARE-MESS will position Dutch social scientists at the forefront of their field and form the hub of an international network of advanced data-collection efforts. Marcel Das

Technology is changing society itself, particularly the way we communicate and interact. Simultaneously, Western societies are ageing fast, with many inherent economic, social and medical challenges. The Roadmap projects SHARE and MESS make it possible to study such significant changes in society using state-of the-art methods. Both SHARE and MESS provide a largescale social science facility, each of a different kind. SHARE collects similar data in 20 countries. Researchers can use them to study the impact of different institutions, policies and policy reforms on health, employment, and wellbeing in different countries. In MESS, researchers from around the world can conduct their own experiments using the LISS panel or immigrant panel and test new measurement devices. The two approaches are now combined in a new large-scale social science facility: SHARE-MESS.

Attractive and cost efficient

The merged facility will build on the results that these two facilities have achieved separately and capitalise on the synergies between them to create a set of state-of-the-art resources for cutting-edge multi-disciplinary work in the social sciences. The SHARE-MESS team will:

- collect longitudinal data for substantive research in the social
- develop, test, and deploy technological innovations in survey tools and measurement techniques;
- conduct experiments;
- incorporate multi-mode interviewing into the SHARE-MESS facility;
- · link survey data to various forms of administrative data;
- increase linkages with other population surveys

The first mission of SHARE-MESS is to develop an infrastructure that exploits new technology, is attractive and cost efficient for collecting survey data in general, and will accommodate numerous major data-collection efforts in the future. Here, the framework is essentially survey methodology. A second mission of SHARE-MESS will be to collect rich longitudinal and experimental data so that researchers may better understand individual and household decision-making, and how decisions and circumstances affect many aspects of life.



MESS uses innovative ways of data collection, for instance accelerometers to objectively measure physical activity photo Dirima

SHARE and MESS join forces in social science facility

Data collection to a new level

MESS Boosting research in the social sciences and related disciplines

Progress in the social sciences relies on highquality data. MESS provides researchers with an active laboratory and forefront environment for collecting data and conducting innovative experiments. The facility is open to the global scientific community, free of charge.

The Advanced Multidisciplinary Facility for Measurement and Experimentation in the Social Sciences (MESS) is a large-scale research infrastructure open to academic researchers worldwide. The project is designed to stimulate and integrate research in the social sciences, life sciences and behavioural sciences. MESS is run by CentERdata (Tilburg University). MESS, a Dutch initiative, is embedded in an international research network that includes the American Life Panel, a similar facility in the US, and comparable enterprises in France and Germany. The central resource in the facility is the

Longitudinal Internet Studies for the Social sciences (LISS) panel. This panel of about 5,000 households is representative of the Dutch-speaking population in the Netherlands aged 16 and over. The recruitment of households is based on a probability sample drawn by Statistics Netherlands from municipal registers. Each month, panel members answer questions online for approximately 30 minutes. Another element of the MESS project is the additional special immigrant panel. The immigrant panel is comprised of approximately 2,400 individuals, 1,700 of which are of non-Dutch origin. The sample was also drawn by Statistics Netherlands from the municipal registers, stratified by country of origin

Researchers can propose new modules, free of charge, ranging from a few questions to longer questionnaires or tailored experiments. All data collected in MESS are published online and are freely available to academic researchers. lissdata.nl

Marcel Das



SHARE An indispensable tool for research on ageing issues

SHARE is part of a global scientific effort involving researchers from around the world working in various disciplines. The synchronised cross-national SHARE data have led to new insights into how public policy affects issues like health, poverty and social exclusion among the older part of the population.

The Survey of Health, Ageing and Retirement in Europe (SHARE) is a large-scale, longitudinal survey of socio-economic status and health among people over 50 years of age in 20 countries, including the Netherlands. The survey covers key areas of life, including household demographics, physical and mental health, health behaviour, socioeconomic status, and family and social networks. The survey data include data from physical tests which the respondents complete during the interviews, such as grip strength and lung force.

Recently, the first experiments to collect dried blood spots using a finger prick have started to facilitate more precise disease risk assessment SHARE provides an indispensable tool for research on ageing-related issues. It aims at increasing knowledge on the sustainability of pension systems, the labour market for older workers, preparation for retirement and savings behaviour, mental and physical health in relation to socio-economic status, and healthcare use. Today, SHARE is part of a consortium of harmo-nised ageing studies in many countries, including the US, Mexico, Japan, China, South Korea and India. This makes SHARE part of a global scientific effort involving researchers from around the world working in diverse disciplines. In March 2011, the EU selected SHARE as the first ever European Research Infrastructure Consortium (ERIC), with a legal status that gives it the advantages of a major international organisation. share-project.nl Marcel Das

Innovative forms of data collection

MESS facilitates a wide range of experimental approaches to link social sciences to life sciences.

Accelerometers

Self-reports on physical activities are usually limited to certain aspects of daily activity such as structured exercise or walking. Daily activities and sedentary behaviour are usually missing. In addition, responses to questionnaires may not be accurate because of the cognitive challenge of estimating frequency and duration of activities, and social desirability bias. The development of accelerometers has opened up new possibilities for studying all intensity levels of physical activity, from completely sedentary to vigorous activity, over periods of several days.

Bathroom scales

Advanced bathroom scales are used to objectively measure the weights and fat percentages of LISS panel respondents. The scales have a wireless internet connection, which immediately transmits all measurements to the database without the need for respondents to report anything. The accurate and steady flow of measurements allows the monitoring of fluctuations in weight and fat percentage over time and in addition provides a unique insight in the reliability of self-reported measures.

Smartphones

Smartphones make it easy to keep a diary of activities multiple times a day simply because people tend to carry their smartphone with them all day. Another advantage of using smartphones for time use data collection is that it enables the collection of additional information on the respondents' reporting behaviour. These so-called 'paradata' include, for example, time of reporting, correction of activities, or the effect of sending reminders to respondents. The time use diary is also combined with GPS registrations of the locations where the reported activities took place, and questions about the mood or emotions of the respondent during the day.

Mobile devices allow researchers to gain insight into the movements of respondents throughout their daily routines. A mobile application is used in the LISS panel to automatically detect detailed trip information of a group of respondents by making use of different location measures, such as GPS, cell tower triangulation and WiFi geo-location. The collected information includes the starting and end points, modes of transportation and in some cases even the purpose of the trip.