2 The SHARE Development Process

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This chapter describes the development process — the iteration between questionnaire development and data collection. The chapter is structured according to the stages of this process. After the initial design stage, data has been collected in three stages. First, pilots were performed on the basis of small quota samples. Second, a full "dress-rehearsal" pre-test has been run. Based on these experiences the main survey — still designed to be a test survey for a future larger SHARE — was held in all participating countries from April 2004 to September 2004, with some additional data collection lasting until July 2005. The last stage is dissemination: the first public release of the preliminary data base took place in April 2005, and a final data release is planned for 2006.

2.1 The initial design stage

In the initial design stage, *eleven cross-national working groups* produced the survey instrument and initially eight, then *eleven country teams* implemented the actual survey. The cross-national working groups and the country teams together formed a *matrix* as depicted below. Their work was co-ordinated by a small core management group which decided on major design and procedural issues. In addition to the co-ordinator, it consisted of six members (Agar Brugiavini, Arie Kapteyn, Stefania Maggi, Sir Michael Marmot, James Nazroo, and Jean-Marie Robine).

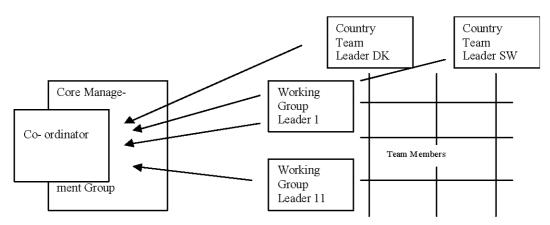


Figure 2.1: SHARE Management

The working groups consisted of specialists in their fields, see Appendix A. Their task was to design a draft questionnaire. Point of departure in January 2002 was the US Health and Retirement Study (HRS), the English Longitudinal Survey on Ageing (ELSA) and other survey instruments which have addressed questions relevant also for the SHARE agenda (in particular ageing-related surveys in Germany, Italy and Sweden). From this pool of questions, a first English-language draft questionnaire was constructed. The entire team met in plenary sessions during this process to test ideas, to ensure that the proposed questions are likely to be viable in all participating countries, and, most importantly, to find a compromise between a comprehensive coverage of the many health, economic and family issues relevant for SHARE and a reasonable questionnaire length (80 minutes). Three main criteria for inclusion had to be met: multidisciplinarity (every question must be of interest to more than one field), cross-nationality (every question must be applicable to all participating

countries), and longitudinality (every question must make sense in a long-term panel). Two more versions were created, until finally the fourth version of the questionnaire was ready in September 2002 for piloting in an English-speaking country. Researchers of HRS and ELSA gave advice throughout this first critical stage of the project, as they did through the entire development process. Their experience was a key source of information for this project.

Eleven country teams were responsible for the implementation of the project in each SHARE country. The country team leaders proposed the field agencies to be subcontracted and negotiated the contract together with the Mannheim coordinating team, they signed off the country- and language-specific survey instruments before they went into the field, and they were responsible for observing legal requirements such as safety and confidentiality regulations. Most country teams involved local advisors. The actual field work was carried out by professional survey agencies under the supervision of the country team leaders and the co-ordinating team at MEA. Survey agencies included IMAS (AT), PSBH - University of Liège and PSBH -University of Antwerp (BE), MIS Trend (CH), Infas (DE), SFI Survey (DK), Demoscopia (ES), INSEE (FR), KAPA Research (GR), DOXA (IT), TNS NIPO (NL), Intervjubolaget (SE) and NatCen (UK). In addition, we hired professional services from CentERdata at Tilburg which designed a set of innovative software tools and programmed all questionnaire versions as CAPI (Computer-Aided Personal Interview) survey instruments in the Blaise language (see Chapter 3); from the Survey Research Center (SRC) of the University of Michigan at Ann Arbor which developed the Train-the-Trainer programme (see Chapter 6); and from the Zentrum für Umfragen, Methoden und Analysen (ZUMA) at Mannheim which provided us with professional help in survey organisation and survey translation (see Chapter 4).

2.2 The pilot stage

Pilots tested critical aspects of this draft questionnaire during year 2002. We started with an English language pilot that was tested in the UK with the help of the National Centre for Social Research (NatCen, London) in September 2002. Some 80 British households (120 individuals) representative of our sample (age range 50-96) were interviewed. The debriefing of these pilot interviews was attended by the entire coordination team and a group of ELSA advisors. This pilot was a great success insofar as item non-response rates were low and the willingness to participate high. We attribute this success to great care in interviewer training and motivation, and the timeliness and relevance of the questions asked to economic and social policy. As a major innovation, we introduced the grip strength measure of physical health in a general-purpose social survey with great acceptance by the respondents. In the UK pilot, only 6 percent of all respondents (aged 50-96) and 12 percent of those above 80 were unable to take the test. This success convinced both HRS and ELSA to follow our approach in health measurement.

Small-scale cognitive interviews in Germany and Italy followed to test the electronic language management utility (LMU) and the translation procedures, see Chapters 3 and 4. Moreover, the questionnaire was cut down to 80 minutes length following the average interviewing times in the English-language pilot and the German and Italian interviews. In the meantime, country team leaders finalised their negotiations with the survey agencies along model contracts designed by the coordination team.

By the end of March 2003 this 5th version of the survey instrument was finalised and the second version of the LMU was released. The countries could then start to translate the 5th version of the instrument into all member languages. Meanwhile

CentERdata was working on an interface for the different sample management systems of the agencies which later was transformed in a genuine stand-alone case management system (CMS), see Chapter 3.

In the first half of May 2003, the translated versions of the questionnaire were tested, edited and corrected and then converted into a multilingual survey instrument in order to prepare the first "Train-The-Trainers" session (TTT 1), see Chapter 6, which was held in Venice at the end of May 2003. In collaboration with the Survey Research Center (SRC) at the University of Michigan in Ann Arbor, which designed the TTT programme (as well as training programmes for HRS interviewers), the MEA-team prepared a 134-page Interviewer Manual which was translated into all project members' languages for the purpose of their pilots.

Pilots were then conducted in all participating countries in June 2003. These pilot interviews aimed at cognitive testing to ensure that the questions are understood and answered as intended in each country. In all countries, about 50 households were interviewed. After a thorough local training session for the interviewers, which was attended by the country team leaders and their "operators" (themselves prepared through the TTT 1 meeting), the interviewers had one month to finish the interviews.

The pilot was well received by the respondents in the various countries and much feedback both from interviewers and respondents was collected and discussed at the debriefings in every country. The country team leaders, their operators and a representative of the co-ordination group attended the debriefings. As it turned out, however, the questionnaire was still about 15% longer than the envisaged 80 minutes.

In July and August, the data of the pilots were analysed as part of the AMANDA project. The results and analyses were discussed in September 2003 in a plenary meeting. The results of that meeting produced the 6th version of the Englishlanguage draft questionnaire, targeted to stay safely within the 80 minute limit.

In the period until October 2003, parallel work was done on improving details in the country specifics and on optimising content and text of the English-language version. In addition, test cases were developed and the entire instrument was thoroughly checked for routing errors. This was the basis for the English-language version 7. After that the LMU was updated with translations into the various member languages.

In November 2003 these translations were reviewed checked by outside referees, then adjudicated by the country team leaders. We spent much effort to ensure functional equivalence both in relation to the concepts and phrases deployed, see Chapter 4. In addition, a plenary conference with all working groups and country teams ensured cross-national equivalence.

In addition to the CAPI instrument, we also developed a self-completion ("drop off") questionnaire with additional questions that commanded special privacy. It was finalised during November 2003. Yet other pieces of material to be developed in English and then to be translated were the show cards accompanying the CAPI instrument, the interviewer manuals, pamphlets and letters introducing SHARE to the participants. End of November 2003, these materials and the LMU for version 7 was completed and the conversion into the CAPI instrument done.

2.3 The pre-test stage

The month of December 2003 was used for testing, remaining routing errors were corrected, resulting in yet another version, now the 8th. It formed the basis for the

second train the trainer session (TTT 2) mid December 2003 in Mannheim as a preparation for the pre-test at the beginning of 2004.

The *pre-test of SHARE* was held in January and February 2004 using genuine probability samples (n = 100 primary respondents per country plus their spouses) in all countries. The aim was to allow predictions to be made of the reliability and validity of the full questionnaire, including more "problematic" respondents than to be expected using a quota sample. In addition, this pre-test also tested the country-specific procedures to achieve a probability sample, and to test the survey and sample management.

By the end of February 2004, all pre-test data were converted into SPSS and STATA files and made available to the researchers in the project, debriefings were held, and an extensive statistical analysis of the pre-test data was performed in order to once more revise the questionnaire. In a plenary meeting in March 2004, results from these analyses were presented and changes were agreed upon for the final questionnaire.

At the beginning of April 2004, this almost final version of the questionnaire (version 9) was assembled in the English base version and then translated in all members languages. Also the drop off questionnaire was finalised and translated in all languages.

The translations were once again cross-checked along with the comments of the working groups provided input for a new round of fine-tuning of the national versions of the instrument. This resulted into the final version of the questionnaire. This 10th version was then the basis for the main data collection effort and subsequent data releases.

2.4 The main survey stage

The main survey stage consisted of a *medium-scale survey* of this final questionnaire (n = 1,500 primary respondents per country plus their spouses, totalling more than 25,000 respondents), beginning on April 24, 2004, and in most countries lasting through October 2004.

The survey stage began with a third train-the-trainers session (TTT 3), again in cooperation with SRC and sponsored by NIA. Much attention was paid to the techniques for gaining respondent co-operation and to the way to involve more representatives of the Oldest Old group. The documentation for the TTT programme was extended and improved, e.g. now also containing video examples of how to approach respondents.

During the field period, CAPI and CMS data was transferred to the co-ordination group and put on a secure website such that all team members and the survey agencies could analyse the data as it was collected, see Chapter 7. Logs of the number of households contacted and preliminary response and refusal rates were taken biweekly. Due to these real-time monitoring procedures, problems and errors could be detected early on, and consequences could be drawn still during field work.

Some countries which joined the SHARE process later than the original eight SHARE countries kept collecting data past September 2004. In addition, extra samples were taken in parallel to the main survey in order to collect a special drop-off with anchoring vignette questions designed to improve cross-national comparability. This additional data collection lasted until July 2005.

2.5 Data release

Aim of the main test survey is to deliver a prototype for the planned multi-year panel. It serves as a demonstration object to the European Commission in order to

show the feasibility of running a strictly cross-nationally comparable survey, and to demonstrate its usefulness to the scientific community. SHARE therefore adapted an unusual early-data-release policy.

An interim data release for testing and checking ("Release 0") was provided mid November 2004 for confidential use of all SHARE and AMANDA researchers. These data were basis for the SHARE First Release Book. In the process of writing the papers for this book, data were cleaned, helpful new variables generated and missing data items imputed (see Chapters 10-12). These improvements were important for the first publicly accessible data. The release of this data base ("Release 1" scientific use file) took place end of April 2005 in Brussels in the presence of members from the European Commission and the US National Institute on Aging. Scientific use files are accessible to all researchers from academics and publicly financed research institutes. A final release ("release 2") is planned for 2006, coinciding with the end of the EU-sponsored AMANDA project.