

Collecting survey data among the 50+ population during the COVID-19 pandemic: The Survey of Health, Ageing and Retirement in Europe (SHARE)

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While the COVID-19 crisis resulted in a vast number of new research projects springing up like mushrooms everywhere, it had severe consequences for ongoing survey research and in particular for running data collections. The Survey of Health, Ageing and Retirement in Europe (SHARE) was hit by the virus in the middle of its Wave 8 data collection, which had to be suspended in all 28 participating countries. Responding to the evolving crisis situation and taking steps to resume fieldwork was especially challenging for SHARE, since (1) the 50+ population is more severely affected by COVID-19 than younger age groups and (2) the measures taken by governments in response to the outbreak differed across the countries. Against this background, we discuss possible solutions for adaptations regarding the mode of data collection, questionnaire content, sample design, and actual fieldwork.

Keywords: Survey fieldwork; in-person interviewing; telephone interviewing; fieldwork disruption; panel surveys; COVID-19

1 Introduction

COVID-19 has been affecting our health, economy, politics, and social life, and is especially disrupting for the target group of the Survey of Health, Ageing and Retirement in Europe (SHARE): the 50+ population, including people in retirement or nursing homes who have the greatest risk on their health from being infected. SHARE has been studying the life of this group across Europe since 2004, accumulating a wealth of longitudinal data for research and strongly contributing to the understanding of the ageing process in Europe and Israel. The outbreak of COVID-19 hit SHARE in the middle of its Wave 8 data collection, in March 2020. After the suspension of the regular face-to-face interviewing in all 28 participating countries, SHARE is currently resuming fieldwork by changing the interview mode to telephone interviewing using a special “SHARE Corona” questionnaire. In this contribution, we will describe the impact of the pandemic on ongoing data collection. We start with

a short timeline of the events that lead to a change in survey design, then describe the re-designing process and outcomes, and end with an outlook on the next SHARE waves.

2 Short history of events

In October 2019, the data collection for SHARE Wave 8 had started off. All 28 countries which had participated in Wave 7 were included again. However, at the beginning of February 2020, the virus was spreading quickly across Europe, leading to a gradual suspension, country by country, of all the SHARE fieldwork between March 10 and March 23. At this point in time, about 70 percent of all expected longitudinal and 50 percent of all expected refreshment interviews across countries had been done (see Figure 1).

Against this background, all stakeholders involved shared the opinion that SHARE data about the health and living situation of the 50+ population in Europe were now needed more than ever to shed light on the short- and long-term implications of the pandemic. They also agreed that this should be done in two ways. First, SHARE provides as it is an ideal infrastructure to put the consequences of COVID-19 in its proper context. SHARE’s strength is to determine the impact of the pandemic on living conditions that have been routinely recorded: labor market status, income, family and social contacts, inter- and intra-generational help, differentiated by the three age groups in SHARE (still working, young retirees, oldest old). This enables us for instance to trace whether the negative economic, social, and health effects of

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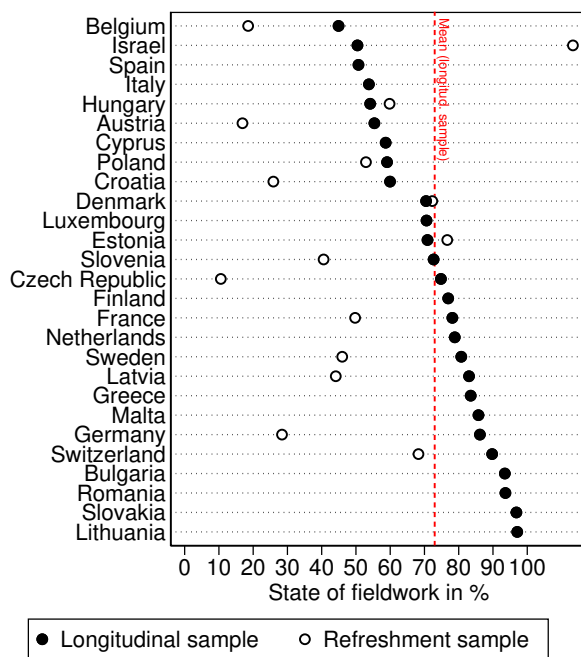


Figure 1. State of fieldwork across countries in SHARE at the time of the suspension. Number of completed individual interviews divided by the number of expected net interviews given in the survey contract. There was no refreshment sample in Bulgaria, Cyprus, Greece, Italy, Lithuania, Luxembourg, Malta, Netherlands, Romania, and Slovakia. In Finland and Spain, the refreshment sample could not be started. Fieldwork in Portugal could not be started at all due to funding issues; however, Portugal will participate in the COVID-19 CATI. Israel achieved a higher response rate than expected and hence could realize more net interviews in the refreshment sample than previously assumed in the survey contract.

the pandemic are hitting those who were anyway disadvantaged. Second, this wealth of life-course data should be complemented by measurements of the current situation, especially during the lockdown. This led to the development of the SHARE Corona survey.

3 Adaptation of data collection mode

After fieldwork was suspended, it soon became clear that a quick return to the normal face-to-face Computer Assisted Personal Interview (CAPI) was unlikely. After careful considerations of the feasibility of different alternatives for SHARE's target population and the aim of the new SHARE Corona questionnaire, it was decided that SHARE would resume interviewing with a Computer Assisted Telephone Interview (CATI), collecting data on the same topics as in the regular SHARE questionnaire but shortened

and targeted to the COVID-19 living situation of people who are 50 years and older. Other alternatives, such as a Computer Assisted Web Interview (CAWI) or a Paper-And-Pencil Interview (PAPI) were disregarded in the end due to the following reasons: First and foremost, both CAWI and PAPI would imply huge operational and methodological consequences for SHARE, since an interviewer-administered questionnaire would be changed into a self-administered questionnaire. Other studies have shown that mode effects on response behavior and measurement error tend to be larger between interviewer- and self-administered modes than between modes that are both interviewer-administered such as CAPI and CATI (e.g. Couper, 2011; De Leeuw, 2018; Jäckle, Roberts, & Lynn, 2015).

In addition, a short-term change to web interviewing was rejected due to the variation in internet use across countries and especially across age groups in SHARE. Even in countries like Sweden and Denmark, where respondents between 50 and 69 years of age reported high rates of internet usage, those aged 70 and over—especially the 80+ year-olds—reported a much lower rate of usage. These groups are, however, very important target groups in an ageing study like SHARE and should certainly be included in this special study about COVID-19.

Further, a switch to PAPI was also seen as infeasible because in some of the SHARE countries with severe lockdowns postal delivery was (and at the time of writing still is) not possible. Moreover, collecting data in this mode would require respondents to leave their home to post the completed mail questionnaire, or the interviewer to collect it from them at home. During the COVID-19 crisis this could pose a serious risk to elderly respondents and/or interviewers. Also, the data handling is much more difficult and error-prone with PAPI.

In contrast, when using CATI, some of the existing SHARE software tools could be more easily adapted. As these tools were already installed on the interviewers' laptops at the start of Wave 8, interviewers can continue using them by telephone. The most crucial change was that the newly developed SHARE Corona questionnaire had to be programmed anew, translated into the 40 SHARE languages, tested, and distributed to the interviewers. For this, an online survey tool connecting the SHARE Corona questionnaire with the SHARE case management system on the interviewer laptops was used.

4 Adaptation of questionnaire content

As a reaction to the seriousness of the COVID-19 outbreak and the prolonged lockdowns, a special SHARE Corona questionnaire was developed. This new questionnaire covers the most important life domains for the target population and asks specific questions about infections and changes in life during the lockdown:

Health and health behavior General health before and after the COVID-19 outbreak, practice of safety measures (e.g. social distancing, wearing a mask)

Mental health Anxiety, depression, sleeping problems, and loneliness before and after the COVID-19 outbreak

Infections and healthcare COVID-19 related symptoms, SARS-CoV-2 testing and hospitalization, forgone medical treatment, satisfaction with treatments

Changes in work and economic situation

Unemployment, business closures, working from home, changes in working hours and income, financial support

Social networks Changes in personal contacts with family and friends, help given and received, personal care given and received.

5 Adaptation of sample design

For the new CATI instrument on the COVID-19 outbreak, a sample was selected in each country that includes 1) panel members who had not been interviewed before the suspension of fieldwork and 2) panel members who had already been interviewed face-to-face in Wave 8. In some countries a stratified sample based on region of all panel households had to be selected due to cost reasons, but in most countries the whole longitudinal sample could be fielded (overall, more than 80,000 eligible respondents). Both respondent groups receive the same questionnaire; the only difference is that the panel members who had not been interviewed face-to-face in Wave 8 were asked questions on changes in the household composition since their last interview, while respondents who had already been asked in Wave 8 did not have to answer these questions again.

Re-interviewing offers the possibility to substantively explore changes in the respondents' social networks and health behavior due to the COVID-19 crisis, their self-rated (mental) health, or of their economic situation. In addition, the selection of already/not yet interviewed panel members allows methodological research about effects on (non-)response, measurement error, and survey/fieldwork costs regarding the SHARE Corona questionnaire, which is the basis for reliable empirical results in our field and is particularly important when changing interview mode. In this respect, repeatedly measuring health, for example, in the regular SHARE interview (and thus before the COVID-19 outbreak) and with the SHARE Corona questionnaire (i.e. during/after the COVID-19 crisis) enables several interesting comparisons of the measurement methods, which can help validate the information provided by the respondents.

Other than the longitudinal sample, the recruitment of the Wave 8 refreshment samples was not continued after the

suspension, nor were any of the already-recruited refreshment sample members be re-interviewed. The reason for this choice was that, firstly, telephone numbers are unavailable for most refreshment sample households, with exceptions in a few (Scandinavian) countries. In contrast, the telephone numbers of the longitudinal panel sample members have been collected in previous panel waves already. Secondly, the exceptional value of collecting COVID-19 data in SHARE lies in the merging of these new data with what we already know about the life histories of the panel respondents from previous waves.

In contrast to many other cross-national studies, SHARE includes persons living in nursing homes. It was decided that these panel members should also be asked to participate in the SHARE Corona survey. However, interviewers were instructed to avoid pressing refusal conversion attempts among nursing home respondents, or on the caretaker or staff members of the nursing home if they are hesitant to allow the interview. This was considered ethically undesirable regarding the burden that the COVID-19 outbreak puts on nursing home staff and inhabitants.

6 Adaptation of fieldwork design aspects

To prepare the change from CAPI to CATI fieldwork, several aspects of the normal SHARE fieldwork design, also including amendments to the existing contracts, had to be adapted. However, SHARE's principle of providing the same software tools and programmed questionnaire to all survey agencies in order to harmonize and standardize fieldwork and monitoring (see Börsch-Supan et al., 2013) was also followed for the CATI. Survey agencies were asked to send a new advance letter to the Wave 8 panel members, even if they had already sent one before the suspension. The new advance letter announced the telephone interview and included the standard SHARE data protection statement as well as a reply card that respondents could use to update their telephone number if needed. A condensed read-out version of the data protection statement was prepared for countries where postal services may not work properly.

Survey agencies were also asked to include a monetary incentive in the advance letter when possible. Prepaid unconditional incentives have been shown to be the most effective way of increasing response rates (e.g. Medway & Tourangeau, 2015; Mercer, Caporaso, Cantor, & Townsend, 2015; Singer & Ye, 2013) and could in this case be justified to the respondent as being the simplest (or even only) way to transfer the incentive to them. In countries where sending money by post was not allowed or possible, a link to a gift voucher or other gift was to be used.

Further, SHARE demanded that survey agencies would employ in the CATI fieldwork only interviewers who had received general interviewer training as well as the SHARE-specific interviewer training at the start of Wave 8. In addi-

tion, all interviewers working in the CATI fieldwork received an additional CATI training with the new SHARE Corona survey via webinars (e.g. to train them entering a remark when the cause of death was COVID-19). This national interviewer training was preceded by Train-the-Trainer (TTT) webinars for the survey agency staff, centrally conducted by the SHARE Central coordination team.

7 The future of SHARE

The continuation of SHARE Wave 8 by asking a special SHARE Corona questionnaire over the phone is being carried out in 27 European countries and Israel from June until August 2020. Whether a normal CAPI data collection will be possible again in Wave 9, or even whether returning to CAPI data collection among older or nursing home respondents will ever be feasible again is an open question. Therefore, earlier-developed plans to move SHARE gradually towards new and mixed ways of data collection might now be accelerated. In addition, SHARE will include parts of the SHARE Corona questionnaire also in the following panel waves in order to study the long-term impact of COVID-19. This will for example allow to compare how the high-risk group of older respondents coped with the crisis, how the national healthcare and social systems responded to the pandemic, and which lessons for the future should be drawn from the very different political reactions of the SHARE countries (e.g. in Sweden) towards the pandemic. Moreover, the use of data from previous SHARE waves allows for comparing this crisis' socio-economic impact with previous hardships, for example the economic crisis in 2008.

Therefore, the greatest strength of SHARE is the enrichment of the newly collected data on COVID-19 with the extensive background information about the panel members and their response behavior in previous SHARE waves. This combination of data offers huge potential for substantive analyses and cross-national comparisons regarding health, social, and economic developments and outcomes. In this respect, SHARE can add important insights to recent clinical studies, which primarily focus on the prevalence, incidence, and case fatality rates but are purely medical and frequently restricted to the national level. The COVID-19 pandemic and its ensuing economic crisis provide a perfect example how important it is to collect multidisciplinary and internationally comparable data to support evidence-based policy-making, especially targeting health- and employment-related policies—a central aim of SHARE.

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Commentary

The paper “Collecting survey data among 50+ population during the COVID-19 outbreak: The Survey of Health, Ageing and Retirement in Europe (SHARE)” addresses the effects the outbreak of the COVID-19 pandemic had on the data collection of the 8th wave of the multi-country panel study SHARE, discusses solutions for the data collection during the outbreak as well as possible opportunities for further waves.

The COVID-19 outbreak disrupted the data collection during the field work in March 2020 and lead to suspending the face-to-face field in all 28 countries. At this point, approx. 70% of the longitudinal sample and 50% of the refreshment sample had been realised, however, with a large variation across countries. The decision to switch the mode to a Computer Assisted Telephone Interview (CATI) is discussed convincingly and justified with methodological considerations and practical restrictions due to the COVID-19 outbreak and also considers that the target population (aged 50+) has less access to e.g. online alternatives.

The main aim was not to continue the wave as planned and to achieve the highest possible response rate but to use the disruption as an opportunity to analyse the effects of COVID-19 during the pandemic itself. Splitting the sample and re-interviewing survey respondents that had already been surveyed in the 8th wave as well as interviewing survey respondents who had not been interviewed offers interesting opportunities to not only learn more about the effects of COVID-19 on different topics but also as a methodological quasi-experiment. The SHARE Corona questionnaire covers important issues to assess the effects of the COVID-19 outbreak on this target population such as effects on (mental) health and work-related and economic changes as well as changes on social networks. However, we were wondering

how retrospective questions are implemented that concern the situation before the COVID-19 outbreak and whether the survey respondents' perception would not be too strongly influenced by the current situation. This concerns, for example, the health status, especially regarding mental health. This would also affect the comparability with the data collected before the suspension.

The fast implementation of the mode switch is impressive, in particular as the new instrument was translated into 40 survey languages and had to be coordinated among different countries. Large country differences in the response rate achieved up to the suspension are mentioned and displayed in Figure 1. Some reflection on what this means for the data analysis in cross-country comparisons and for further waves of the SHARE study would be helpful, also against the background that the refreshment could unfortunately not be continued after the breakout of COVID-19. Furthermore, it would be interesting to learn more about possible country-specific challenges with the data collection due to vast difference how the countries are affected by the Corona pandemic. Opportunities for further waves such as to implement multiple modes are mentioned. The differences between participating countries in terms of access to and use of the internet will be a major challenge here. We would, however, also like to know more about possible other effects on the data collection and analysis for following waves such as effects that might occur because some respondents answered the Corona questionnaire and others did not.

To conclude, the adaption of the data collection during the COVID-19 outbreak, the introduction of a Corona questionnaire, the country-comparative longitudinal design, and the particular focus on people 50+ are indeed promising a rich data base to analyse short- and long-term effects of COVID-19.

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