

Whom are we talking about?

Exclusion, noncoverage and nonresponse in social surveys

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Abstract

A key issue in survey methodology is representing the population. Sampling errors, coverage errors and nonresponse errors may cause the final respondents to not fully represent the population under study. In addition, population surveys tend to exclude specific 'difficult' groups from the target population, e.g. children, the (very) elderly, non-native speakers, the homeless and the non-residential population, those who are not able to participate for physical or mental reasons, people living in far-away or hard-to reach reasons, and residents of no-go areas.

This will have an impact on the accuracy of survey estimates. It can also hamper comparability in cross-national surveys and multi-national statistics. Different sampling frames will have an impact on fieldwork and noncoverage. Differences in survey scarcity, survey attitudes and survey traditions will have an impact on nonresponse rates. Different groups will be excluded in different countries. These practices may have a larger or smaller impact depending on the survey mode.

The presentation will give examples of exclusion and underrepresentation from cross-national and comparative surveys, and illustrate how cross-national differences can stand in the way of optimal comparability. Adjusting for cross-cultural or cross-national differences will not always be possible, but at least information on these differences should be available.

Short paper

Social statistics are expected to cover the entire population of each country. However, social surveys – in many cases the source of social statistics – tend to exclude different groups due to different mechanisms. Upper age limits, for instance, will exclude the (very) elderly. This might not be a problem in Labour Force Surveys, but could result in biased estimates of the health of the population. Even when there are no upper age limits, the general practice to exclude the non-residential population from the target population will in practice mean that the very elderly (who more often live in senior housing facilities) are excluded.

Other mechanisms to exclude difficult groups include the use of self-completion questionnaires (problematic for the (functionally) illiterate), the fielding of a survey in the majority language(s) only (exclude non-native speakers), excluding far-away areas or particular neighbourhoods where interviewing is not deemed to be safe (no-go areas), excluding the homeless, and diverging nonresponse rates that can result in an underrepresentation of particular groups.

Including these "difficult" groups, and counteracting these mechanisms is likely to be expensive. In addition, these exclusion mechanisms may have little effects on survey outcomes in total, but they could bias the results for specific groups. One might wonder how relevant health surveys are for the very elderly, for instance, or how well EU-SILC covers the socially excluded and materially deprived.

An additional problem is that the different types of sampling, coverage and nonresponse errors might make cross-national comparison more difficult, e.g., if the very elderly live with their family or a care taker in one country and are mostly institutionalised in another, or if the number of migrants is rather high in one country and not in another.

The European Social Survey (ESS) aims at providing high quality data that allow the comparison of European countries. Still, many factors stand in the way of achieving full comparability across countries, even in a survey that has been developed to allow optimal comparability across countries and over time.

The European Social Survey (ESS, see www.europeansocialsurvey.org) was conceived at the end of the last century to provide high-quality comparative data on social and political attitudes (ESF, 1999). It is an academic biennial face-to-face survey, which started in 2002. The ESS measures the attitudes, beliefs and behaviour patterns of diverse populations in more than thirty nations, and measures change in a world of changing institutions. It focuses specifically on comparing countries and on improving survey methodology. More information on the ESS may be found in Jowell, Kaase, Fitzgerald, and Eva (2007); Koch, Blom, Stoop, and Kappelhof (2009); Stoop, Billiet, Koch, and Fitzgerald (2010); and Stoop and Harrison (2012). The survey data, including documentation and metadata, are publicly available at www.europeansocialsurvey.org.

The focus on methodological quality and optimal comparability is reflected by the use of input harmonisation (Körner and Meyer, 2005). This means that the definition of the target population, sampling procedure, the survey mode, the prescribed field efforts, the questionnaire, coding editing and dissemination are identical in each of the participating countries (see European Social Survey, 2011). Fieldwork is closely monitored in every country by having the interviewer keep detailed call records for each call to the sample person and classify each outcome of each call and each contact.

Despite these centralised and standardised designs and procedures, countries differ and survey conditions differ. Differences across countries comprise differences in the composition of the target population (e.g., the size and composition of the number of non-private households, the number and types of migrants), the availability of sampling frames, interviewer position, training and payment, national languages, response rates, survey traditions and house effects.

As in most social surveys the homeless are excluded from the target population of the ESS as are people living in non-residential households. At present it is studied whether it is fair and necessary to exclude the latter group, or at least those living in senior jousting facilities.

The national samples for the ESS has to be selected using strict random probability methods at every stage. Different sampling frames, designs and procedures have to be used across countries depending on the accessibility and quality of available sampling frames (see Häder & Lynn, 2007). In some countries population registers are used, in other household or register samples, and in still others controlled random walk procedure have been implemented. Depending on the type of sample different groups of people will be excluded. Population registers, for instance, will exclude illegal aliens. Some registers comprise an opt-out register: people can indicate in advance that they are not to be approached for a survey and thus will belong to nonrespondents. Some countries used the telephone register for sampling, until the coverage of this frame deteriorated too much.

Nonresponse, and especially differential nonresponse among different subgroups can also be a threat to representation of the population. Figure 1 gives an overview of those countries that participated in each of the first 6 rounds (and belonged to the first release of round 6). It is clear that response rates differ substantially across countries and that the response pattern within countries also shows remarkably different patterns. It cannot be said, however, that high nonresponse rates necessarily mean larger nonresponse bias.

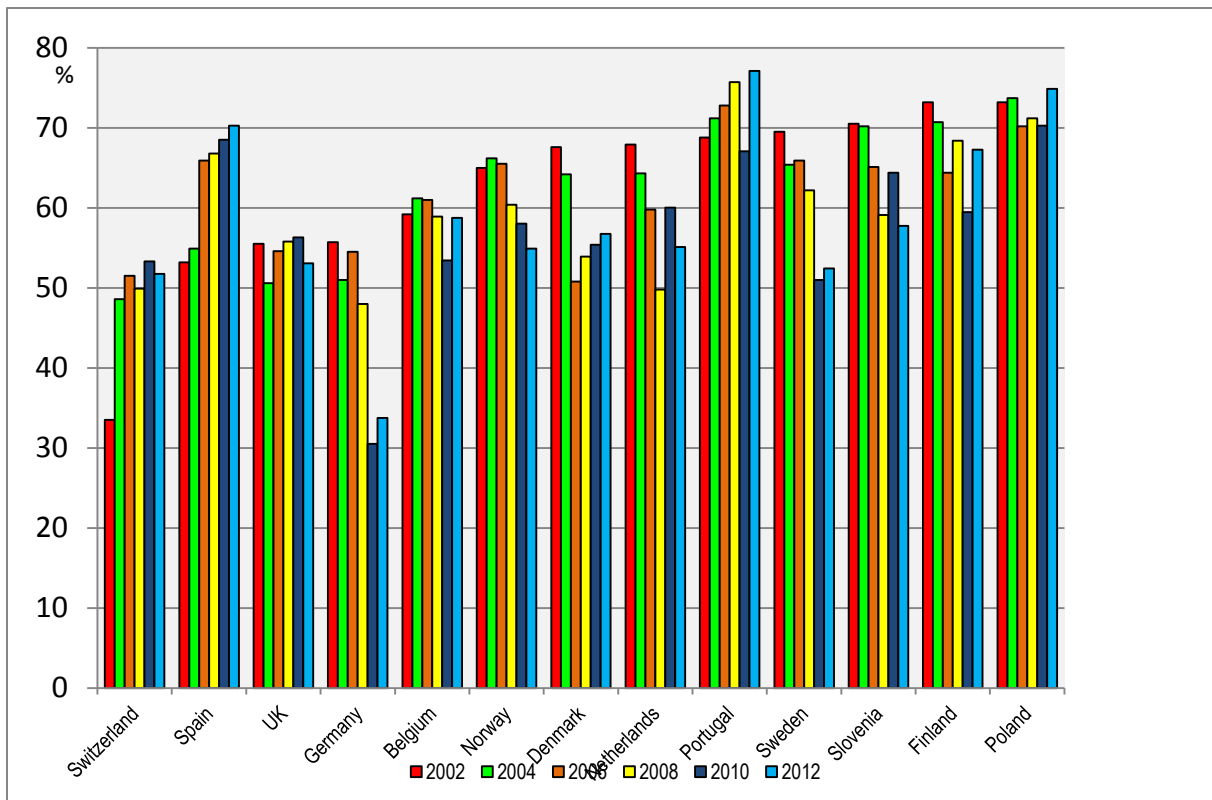


Figure 1. ESS response rates in countries participating in Rounds 1-6 (release 1). European Social Survey (2012, 2014)

Figure 2 shows the response composition for Round 4, again for a selection of countries. Again, it is clear that response rates (“interview”) differ substantially across countries. Non-contact is a relatively minor reason for nonresponse, which will partly be due to the fact that the ESS specifications prescribe at least four visits at different times of the day and different days of the week, and the number of calls is much higher in many countries (see Stoop et al., 2010).

The main reason for nonresponse is “refusal”, but most interesting here is the fairly large percentage of people who were not able to participate or did not respond for other reasons. Being not able can be due to language problems, or to mentally or physically not being able to participate. Nonresponse for other reasons could occur because the prospective respondent is away during the entire fieldwork period, or because, e.g., the sample person was willing to be interviewed on the telephone but no appointment could be arranged.

Further analyses of these “other” reasons shows that there are large differences (again) between countries, some of which may be due to differences in keeping the call records and filling in the contact forms, but may also be the result of house effects, despite the detailed specifications and the detailed contact forms.

These examples show that there are many different reasons why people do not participate in social surveys and thus are not represented in social statistics. They also show that it is very difficult to

exactly find out what the effects of these exclusion mechanisms are, and how they hamper the comparability of cross-national surveys and multi-national statistics.

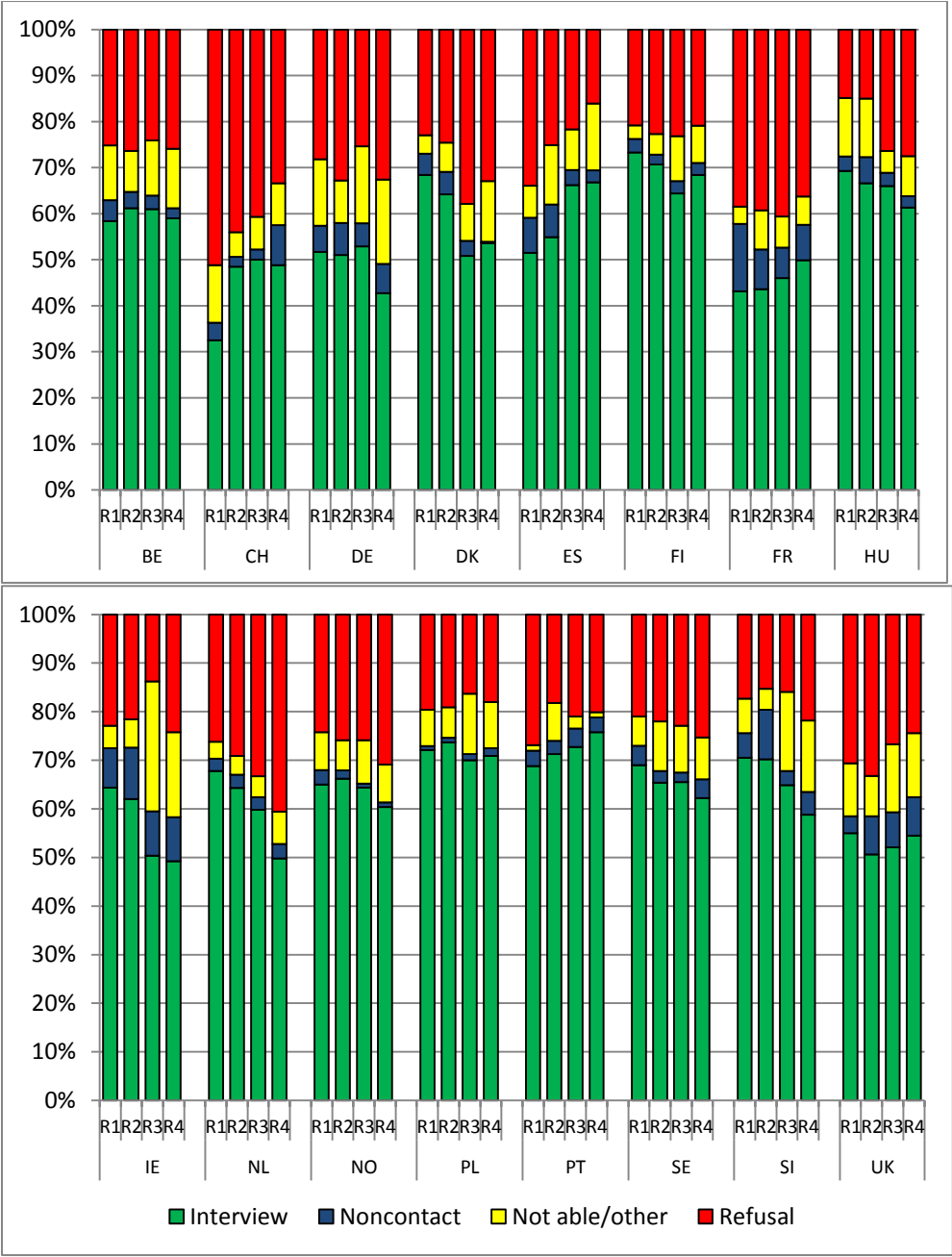


Figure 2. ESS response composition in Round 4. European Social Survey (2008)

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