

Special Issue Survey Methods: Insights from the Field (SMIF)

Probability and Nonprobability Sampling: Representative Surveys of Hard to reach and hard to ask populations

Current surveys in the field of tension between theory and practice

Editors: Johann Bacher (Johannes Kepler University Linz, PUMA representative in SMIF Board, johann.bacher@jku.at), Johannes Lemcke (Robert Koch Institut, <u>lemckej@rki.de</u>), Andreas Quatember (Johannes Kepler University Linz, Member of the PUMA Steering Committee; <u>andreas.quatember@jku.at</u>); Patrick Schmich (Robert Koch Institut, <u>schmichp@rki.de</u>)

Sample Surveys are conducted with the aim of obtaining information on characteristics such as attitudes and behaviors of an interesting target population. With respect to the sample selection, two approaches are distinguished: probability and nonprobability sampling. While within survey research there is still a dispute between the representatives of probability and non-probability sampling, research has long since been overtaken by reality. For example, serious and influential newspapers are now also using non-probability samples for their surveys. The cases of the New York Times in the USA and Spiegel Online in Germany are just two famous examples (Cohn, 2014). Considered under real conditions, inferences from such differently drawn samples have more in common than one would expect.

Numerous factors have caused that surveys are faced with decreasing cooperation rates in general, and with problems such as hard to reach and hard to ask target groups in particular, raising concerns about systematically biased instead of representative results. The reasons may be demographic change and immigration. Surveys are faced with an increasing proportion of respondents older than 80, probably with some handicaps, perhaps easy to reach, but refusing the interview or at least hard to be asked and also with a non-negligible part of elements, who may not be able to speak a country's language.

Other groups may be hard to reach, e.g. well educated young people who are working around the world. Surveys have also become international and are faced with the problem of translations of questionnaire and of intercultural comparability. Additionally, there is an increasing demand to gather data for special groups, like refugees, sex workers, mentally impaired people, physically handicapped people, children, minorities etc. with their particular survey problems. Roger Tourangeau summarized these problems in five theoretical categories, which also describe the







Survey Methods: Insights from the Field

different phases of a survey (Tourangeau, 2014). In this sense we can differentiate survey populations as follows: populations that are **hard to sample, hard to identify, hard to find or contact, hard to persuade** to participate in the survey and those who are **hard to interview**.

Different strategies have been developed to handle these survey problems. Some of them were discussed in the last PUMA-Symposium 2017 (http://www.puma-plattform.at/puma-symposium-2017/). Besides statistical techniques such as subsampling or weighting adjustment one approach are tailored questioning designs, asking one group, for instance, in a face-to-face and the other via an online survey. Another attempt is adaptive sampling, where the sampling frame is adapted during the field work in order to meet a required structure. In order to ask special groups, special instruments, like easy to understand questionnaires, audio-visual web-surveys etc., are developed. Sometimes, the researchers decide to use a qualitative design, but nonetheless try to reach a certain sample size for generalization. In the case of missing address lists, sampling may be based on quota sampling or sampling on central places, where elements of the target group can be found and so on. A completely different challenge is the use of big data, usually not collected with the intention of drawing conclusions on some target populations.

All these strategies have their advantages and disadvantages. The tasks of these special issues are:

- To collect and to describe approaches that were used to handle the problems described above.
- To evaluate these approaches using standard criteria of survey methodology, like representativeness, validity, objectivity, reliability etc.
- To present a "theory" for methods, that are used to handle the problems, like "theories" of quota sampling, sampling on central places or generalization of qualitative designs
- To discuss models under which probability and non-probability sampling schemes can yield representative survey results.
- To report and analyze the quality of special designed questionnaires.

Papers that contribute to these goals are welcome.

According to the standards of SMIF, each paper will be peer reviewed

The paper must be submitted to until 1st September. Please use fur submission the platform for authors of SMIF <u>https://surveyinsights.org/?page_id=531</u>

Two reviewers will evaluate the paper.

In the case of positive evaluation the paper will be published 2019.









Schedule

- > 25th April 2018 Call for Paper
- > Submissions due 1st September 2018
- Initial Decisions: November 2018
- Revised Manuscripts: January 2019
- Publication: March 2019





