

Report on the Project “Development of Tools to Detect Interviewer Falsification”

In this report, we would like to summarize the progress of the project “Development of Tools to Detect Interviewer Falsification” funded by The Charles Cannell Fund in Survey Methodology. The researchers participating in the project are applicant Yuliya Kosyakova¹, Joseph Sakshaug², and Silvia Schwanhäuser³. Moreover, two Master’s students (Lukas Olbrich, Christina Reisinger), who were funded through the Cannell Fund, participated in this project and wrote their theses on deviant interviewer behavior under the guidance of the main researchers.

The goal of the project was the development of new methods to identify falsifying interviewers. Therefore, we used data from the IAB-BAMF-SOEP Survey of Refugees in Germany 2016 which contains a verified falsification (IAB, 2017). To develop new methods, we proceeded in the following way. First, we conducted a literature review to find indicators of interviewer falsification. These indicators were evaluated using the data at hand. Furthermore, new indicators were developed and evaluated. Second, previously applied detection methods (Benford’s Law, variability method, cluster analysis) were implemented and evaluated. Third, we developed new methods to detect falsifying interviewers, which include the construction of a meta-indicator and the estimation of multilevel models.

The application of both, existing and new methods, allowed for the identification of further falsified interviews in the first wave of the IAB-BAMF-SOEP Survey of Refugees in Germany. As a result of our project, the data collected from the identified falsifiers were deleted and the data were revised. Due to the great success of the applied and developed methods, they were directly used as quality control tools for the second wave data. As further deviant interviewers were detected, we could prevent data users from conducting research and policy advice using falsified data. After the detection of falsifications in the first and second wave, Kantar Public improved their interviewer control processes in accordance with our methods and introduced new interviewer control methods for the third wave (IAB et al.,

¹ Yuliya Kosyakova, PhD, is Senior Researcher in the Department of Migration and International Labour Studies at the German Institute for Employment Research (IAB) in Nuremberg and associate lecturer with the University of Mannheim, Baden-Württemberg, Germany; and Otto-Friedrich University of Bamberg, Bamberg, Germany. Her research interests relate to labour market and employment research, migration and refugee research, and social inequality of educational opportunities.

² Joseph W. Sakshaug, PhD, is a Professor of Statistics with the German Institute for Employment Research (IAB) in Nuremberg; the University of Mannheim, Baden-Württemberg, Germany; and Ludwig-Maximilian University of Munich, Germany. His research focuses on data quality issues in complex surveys (e.g. nonresponse, measurement error), the integration of multiple data sources, and empirical research methods.

³ Silvia Schwanhäuser, MSc, is Researcher at the Statistical Methods Research Department at the German Institute for Employment Research (IAB) in Nuremberg and part of the joint Graduate Programme of IAB and the School of Business and Economics of the University of Erlangen-Nuremberg. Her research focuses on the development of interviewer falsification prevention and statistical detection methods in survey research.

2019). The project was thus able to contribute towards improving general quality controls in practical use. Below, we describe the project's achievements in more detail:

First, the project required continuous communication with Kantar Public, the survey organization responsible for the IAB-BAMF-SOEP Survey of Refugees. This included writing short reports, which summarized the applied methods and evidence for further falsifications in the data. Yuliya Kosyakova also attended a meeting at Kantar Public where the interviewer control procedures for the third wave were presented. In November 2019, we presented our results at the IAB-BAMF-SOEP Workshop to the survey stakeholders and Kantar Public. In addition, Silvia Schwanhäuser is closely working with infas Institute for Applied Social Sciences to implement the developed methods for further IAB studies. Silvia Schwanhäuser also presented the results of the project to the heads of departments at the IAB, in her doctoral program seminar, and held a short internal training course (the so-called KEM Learning Hour) on the topic.

Second, Silvia Schwanhäuser presented some results of the project to the professional audience at the 2019 Workshop on "Interviewers and Their Effects from a Total Survey Error Perspective" in Lincoln, Nebraska. Participants were international scientists, representatives of official statistical institutes, and practitioners. This contribution was selected by the organizing committee for inclusion in the edited volume, *Interviewer Effects from a Total Survey Error Perspective* (Schwanhäuser et al., 2020). Furthermore, we presented the results of the project in three presentations at the 2019 ESRA Conference in Zagreb and in two presentations at the AAPOR Conference 2020.

Third, we published a methods report on the identification of interviewer falsification (Kosyakova et al., 2019). This report contains a description of the methods and results of the intense quality control for the IAB-BAMF-SOEP Survey of Refugees in Germany. This report is publicly available on the IAB website. A further short report on control procedures in the 4th wave of the IAB-BAMF-SOEP Survey of Refugees was published in 2020 (Olbrich et al., 2020).

Fourth, we are working on publishing our results in academic journal. We recently published an article in the *Journal of Survey Statistics and Methodology* (Kosyakova et al., 2021). In the paper, we investigate whether decreasing interview duration over the field period is driven by increased interviewer efficiency or deviant interviewer behavior. Our findings show that increased efficiency is the main reason for decreasing interviewer duration. In 2022, we published an article in *Public Opinion Quarterly* (Schwanhäuser et al., 2022). Here, we evaluate and compare a variety of statistical methods to identify interviewer falsification, including cluster analyses and a newly developed multivariate detection method. Combining multiple falsification indicators, we find that the multivariate methods do similarly well in identifying falsifications.

Literature

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