## **JPSM MPSDS Seminar Series**

October 18, 2023 12:00 – 1:00 pm EDT

## Implementing and Adjusting a Non-probability Web Survey: Experiences of EVENs (Survey on the Impact of COVID19 on Ethnic Minorities in the United Kingdom)

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This is joint work with Andrea Aparcio-Castro, Daniel Ellingworth, Angelo Moretti, Harry Taylor, Nissa Finney and James Nazroo

We discuss the challenges of implementing and adjusting a large-scale nonprobability web survey. For the application, we focus on the 2021 Evidence for Equality National Survey (EVENS) which was led by the Centre on Dynamics of Ethnicity (CoDE) at the University of Manchester in the United Kingdom, in partnership with Ipsos-MORI. The aim was to understand the impact of the COVID19 pandemic on ethnic and religious minority groups in the UK. Standard probabilitybased surveys, even with ethnic minority group boosts, do not have the sample sizes required to obtain reliable estimates for small group statistics. We therefore designed a non-probability web survey of ethnic minority groups to overcome these limitations. We formed partnerships with community organizations and used innovative recruitment strategies, including digital and social media. Daily monitoring of the data collection against desired sample sizes and R-indicator calculations allowed the team to focus attention on the recruitment of specific groups in a responsive data collection mode. We also supplemented the sample with existing members in both established non-probability and probability-based panels in the UK. We describe the measures applied to improve the quality of the collected data and the statistical adjustments to correct for selection and coverage biases based on estimating the probability of participation in the non-probability combined probability reference samples followed by calibration to sample using auxiliary information from the UK Census 2021. We demonstrate how a pseudopopulation bootstrap approach can be designed to obtain bootstrap weights to allow for statistical analyses and inference.

**Natalie Shlomo** is Professor of Social Statistics at the University of Manchester and publishes widely in the area of survey statistics, including small area estimation, adaptive survey designs, non-probability sampling, confidentiality and privacy, data linkage and integration. She has over 70 publications and refereed book chapters and a track record of generating external funding for her research. She is an elected member of the International Statistical Institute (ISI), a fellow of the Royal Statistical Society, a fellow of the Academy of Social Sciences and President 2023-2025 of the International Association of Survey Statisticians. She also serves on national and international Methodology Advisory Boards at National Statistical Institutes.

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