Interviewer and Mode Effects in PASS by Means of a Network Size Filter Question

An Analysis Using Multilevel and Latent Class Regression Models

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Abstract.

This paper aims at addressing a methodological research question with regards to interviewer and mode effects in the PASS panel. The research is conducted by means of a network size filter question included in wave 3 of PASS that entailed five follow-up questions for each of the respondent's three closest friends or family members outside the household. Here interviewers could potentially save a considerable amount of time by falsely reducing the reported number of friends and thereby skipping a maximum of 16 follow-up questions. Previous research suggests that interviewers might indeed be tempted to impinge on survey responses if they can benefit from that (Kosyakova 2011, Matschinger et al. 2005, Schnell and Kreuter 2000). This incentive to shorten the interview by cheating should only account for CAPI interviewers who were paid per case, in contrast to telephone interviewers who were paid per hour. My interview sequence hypothesis is that interviewers do not realize this incentive right away but have to exhibit a learning effect first in order to let the number of social contacts drop down after a few conducted interviews.

For the sake of an appropriate use of methods I apply multilevel logistic regression models to separately consider interviewer and respondent variance components. This is important as the homogeneity of respondents assigned to the same interviewer which is introduced by the presumed interviewer cheating behavior has to be taken into account. Furthermore, I can thus include both respondent and interviewer variables in my models. A latent class regression analysis is performed subsequently to discover different types of interviewer behavior across time.

Results show that even under the control of relevant respondent variables explaining the personal network size as well as interviewer characteristics, there is a huge difference in the number of social contacts between CAPI and CATI mode. The drastically lower number of reported friends in CAPI confirms my payment scheme presumption. Moreover, the proportion of variance that can be attributed to the interviewers amounts to remarkable 21 percent. Separate models reveal that, within the CAPI interviewed population, this proportion even comes to 30 percent. However, it has to be taken into account that a potential alternative explanation for this considerably high proportion of interviewer variance is a sample design effect which may emanate from the fact that CAPI interviewers were employed in different geographical regions. Even without using an interpenetrating sample, such a design effect could be ruled out as there is no statistically significant difference between geographical regions among telephone interviewed responses which are assumed to be a valid measurement.

The interview sequence hypothesis of a decreasing network size can't be observed fully as expected. However, as it cannot be assumed that all interviewers behave in the same way across time, a latent class regression was performed subsequently. Here, several subpopulations with different patterns across number of conducted interviews could be identified among CAPI interviewers.

References

- Kosyakova, Y. (2011). Influences of respondent and interviewer incentives on survey responses. an empirical analysis using pass. Master's thesis, University of Bamberg.
- Matschinger, H., Bernert, S., and Angermeyer, M. C. (2005). An analysis of interviewer effects on screening questions in a computer assisted personal mental health interview. *Journal of Official Statistics*, 21(4):657–674.
- Schnell, R. and Kreuter, F. (2000). Untersuchungen zur Ursache unterschiedlicher Ergebnisse sehr ähnlicher Viktimisierungssurveys. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 52(1):96–117.