

Nonresponse Rates and Nonresponse Adjustments*

Quang Mai

March 6, 2024

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1 Introduction

Please consider the Special Virtual Issue on Nonresponse Rates and Nonresponse Adjustments of the Journal of Survey Statistics and Methodology. Focus on one aspect of the editorial, and with reference to relevant literature, please discuss it in at least two pages. Use Quarto, and include an appropriate title, author, date, link to a GitHub repo, and citations. Submit a PDF.

This discussion paper was generated using the open-source statistical programming language R (R Core Team 2022).

The editorial of “Special Virtual Issue on Nonresponse Rates and Nonresponse Adjustments” from the Journal of Survey Statistics and Methodology mainly talks about ways to go about unit and item nonresponse in data collection (Survey Statistics and Methodology 2019). To be specific, unit nonresponse occurs when a member of the data sample doesn’t respond to the survey, while item nonresponse happens when a member of the data sample fails to respond to one or more survey items that they are eligible to answer.

In order to negate unit and item non-response, the editorial stresses on the importance of understanding “survey response mechanism” (Survey Statistics and Methodology 2019). This

*Data is at: <https://github.com/ponolite/tutorial8.git>

is crucial when current trends point towards decreasing response rates accross various data collection modes due to the prominence of web surveys. To address nonresponse bias, the editorial stresses identifying “auxiliary variables” that mediate both nonresponse and key survey variables (Survey Statistics and Methodology 2019). The editorial thus curates a list of papers that tackle the topic of nonresponse adjustments. From nonresponse propensity models, mutiple imputations (meaning replacing missing values with plausible numbers derived from distributions of observed variables in the data set) to post-data collection adjustments (e.g. calibration weighting), the editorial highlights the need for non-response adjustments.

One paper in particular, “A Propensity-score-adjustment Method for Nonignorable Nonresponse” is interesting as it tackles ‘nonignorable’ nonresponse in surveys and how to address them in data collection (Minsun Kim Riddles 2016).

References

- Minsun Kim Riddles, Jongho Im, Jae Kwang Kim. 2016. “A Propensity-Score-Adjustment Method for Nonignorable Nonresponse.” *Journal of Survey Statistics and Methodology* 4: 215–45. <https://doi.org/https://doi.org/10.1093/jssam/smv047>.
- R Core Team. 2022. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.
- Survey Statistics, Journal of, and Methodology. 2019. “Special Virtual Issue on Nonresponse Rates and Nonresponse Adjustments.” *Journal of Survey Statistics and Methodology*. <https://academic.oup.com/jssam/pages/special-virtual-issue-on-nonresponse-rates-and-nonresponse-adjustments>.