Reflection on Issues of Virtual Nonresponse Rates and Nonresponse Adjustments*

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Questionnaires or surveys are among the most common methods of data collection in statistical research studies. Sometimes, in order to detect possible patterns, errors, and biases, researchers collect responses from participants more than once. One of the common challenges researchers usually encounter is the non-response rate. As my group members and I discovered during second paper when attempting to replicate the research paper by Feldman, Farh, and Wong (2018), we found a high portion of responses to be null during the second data collection period (Figure 1). This indicates a relatively high non-response rate.

To connect the non-response rate aspect of the editorial "Special Virtual Issue on Nonresponse Rates and Nonresponse Adjustments" (n.d.) with Feldman and their colleagues' paper (Feldman, Farh, and Wong 2018), the statistical programming language R (R Core Team 2023) with libraries tidyverse (Wickham et al. 2019), dplyr (Wickham et al. 2022), knitr (Xie 2014), and ggplot2 (Wickham 2016) are used for the purpose of this short writing.

^{*}Code and data are available at: https://github.com/MjChen120/INF312Tutorial8.git

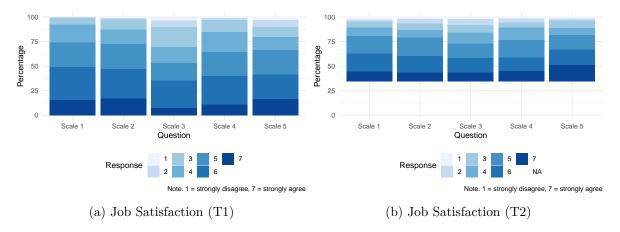


Figure 1: Descriptive summary of Job Satisfaction Likert Scale Responses

According to Williams and Brick (2018), response rates are falling across all modes of data collection overall. Response rates to web modes, as reported in the study, are lower than those for other modes of data collection. The paper also suggests that this trend will likely continue through 2022 and beyond. Since the data set for Study 2 of Feldman, Farh, and Wong (2018) was collected by using an online survey for workers, the trend we detected in terms of the decrease in response rate at the second round of response collection could be explained by the fact that the response rates declining, especially online, for the recent years.

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