

Case

An issue with insufficient data in the survey-resulting in a non-representative sample.

John Smith is a PhD student and needs to publish three original research papers to obtain the doctoral degree. John and his mentor decide that they should start the three-paper project by mapping the stakeholder needs in the research topic, so his mentor suggests conducting a survey. John Smith designed a survey, which was approved by his mentor. They obtained ethical approval and post the survey online, with the information that the survey link can be shared on different websites and social media. After a month, they downloaded the survey results. When John is ready to analyze the data, his mentor suggests using only the participants who have answered all survey questions. When John Smith looks at the data, he sees that about three quarters of the responses do not have answers to all questions. On top of that, at least a half of the respondents had not completed the survey but stopped answering in the process. Seeing that, John Smith and mentor decide they will change the focus of their research and use only the first part of the survey questions in analysis because the outcomes of interest were placed at the end of the survey and were not completed by most of the sample. After completing the data analysis, they write a manuscript and submit it to a journal. After some time, the journal rejects the manuscript, based on two peer review reports. The reviewers ask for a statement on the target population and response rate for the survey. They also comment that it is unusual to only include respondents with full survey answers since it is normal that there are missing answers in a survey. The reviewers also hypothesize that the inclusion of respondents with missing answers might change the results. Also, they doubt the scientific novelty of the study, since the survey focuses mostly on demographic data, with only a few questions that examine the outcome of interest. John's supervisor admits that reviewers had valid criticism and asks John to repeat the survey, telling him that they have to make a better plan for the next survey.