

Bias due to Nonresponse in Noise Annoyance Surveys?

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ABSTRACT

Most studies on noise annoyance are based on surveys. However, typical survey response rates range between 15 and 35%. This leads to the question how this affects the results. Is there self-selection of participants that is correlated to noise exposure?

At the time of writing, we are preparing a data set that will allow looking into such questions in more detail: We are running a study on environmental justice in two major Swiss cities. The core of the study is a paper-and-pencil survey that has been sent to 4,000 randomly selected persons from the cities' population registers. We will geocode their residential addresses and link them to both spatial data on road traffic noise and to data from the official register of buildings and dwellings. Doing so will allow comparing those who responded to the survey and those who did not with regards to actual noise levels, properties of the buildings and apartments they live in as well as nationality, country of birth, age, gender and duration of their residency.