
MEASUREMENT ERROR IN SELF- AND PROXY REPORTS OF EDUCATIONAL QUALIFICATIONS: A VALIDATION USING ADMINISTRATIVE DATA

Fiona MÜLLER (*), Caroline ROBERTS (**)

(*) Office fédéral de la statistique, Suisse

(**) Université de Lausanne, Suisse

caroline.roberts@unil.ch

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Abstract

Measures of people's educational qualifications play an important role in survey research. They are not only key to describing populations, and hence evaluating and adjusting the representativeness of survey samples, they also serve as important explanatory variables for diverse phenomena. As such, it is standard practice to ask survey respondents to report their level of education, their qualifications, or the number of years they have spent in education, and frequently, to also do so for other family and household members. This practice rests on the assumption that self- and proxy reports of education are largely error-free, yet opportunities to verify this assumption are rare. In this paper, we investigate the extent of measurement error in reports of educational qualifications in the Structural Survey of the Swiss Federal Statistical Office, which is a key component of the Population Census, using linked administrative data from records of current registrations in educational institutions and recent qualifications. Using this unique dataset, we analyse the extent and nature of bias introduced by misreporting, as well as possible mechanisms accounting for any observed errors, under the assumption that the register data provide 'true values' against which the self- and proxy reports can be validated. Comparing the two data sources at the aggregate level, we find broadly similar estimates of distributions across educational qualifications. However, we find between 11% and 16% of the survey reports differ from official records due to respondents misreporting their own or others' educational qualifications. The results suggest that over-reporting is more prevalent than underreporting and that the rate of misreporting is higher for respondents with lower educational levels, who have studied abroad, or who speak none of the Swiss national languages. There is little evidence of specification error, or problems associated with particular response categories, thus we tentatively attribute the observed errors to forward telescoping and social desirability bias. However, we discuss the conclusions in light of the challenges involved in validating survey responses using administrative data.