

Surveying Kindergarten Children in the Absence of a Sampling Frame: a Study in Indirect Sampling

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One of the cohorts of the German National Educational Panel Study (NEPS) consists of a sample of kindergarten children. No nationwide frame of kindergartens in Germany was available for sample selection, contrary to the situation for primary schools. Following the works of Deville and Lavallée, we present a solution by indirect sampling, using links between kindergartens and primary schools. We give a short review of the theory of indirect sampling, show that estimators from indirect samples might have smaller variance than the corresponding direct estimators (contrary to some claims in the literature), and discuss some issues that are relevant for applying indirect sampling in practice. We also present some theory for unbiased estimation after an additional subsampling stage. Finally, we describe how this sampling and estimation procedure was applied to construct a kindergarten sample for NEPS.

Key Words: educational survey, generalized weight share method, indirect sampling.