

Indirect sampling of kindergartens in the National Educational Panel Study: an application of the generalized weight share method

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The National Educational Panel Study (NEPS) was recently launched with samples of different age cohorts. One of the samples consists of children in kindergartens at the age of 4. Since no complete sampling frame of kindergartens in Germany was available, an indirect sample had to be drawn using a complete frame of primary schools and links between schools and kindergartens. As a result, inclusion probabilities for the sampled kindergartens are unknown. In situations like this, the generalized weight share method may be used to construct unbiased estimators. In my talk I will briefly describe the theory of the generalized weight share method, review some recent applications (weighting in household panel surveys, mobile phone surveys and drug user samples) and show that (contrary to some claims in the literature) the resulting indirect sampling estimator does not necessarily have a larger variance compared to the Horvitz-Thompson estimator. Finally, I will present our approach to construct design weights for the kindergarten sample in NEPS, combining the generalized weight share method with an additional sub-sampling step.