



On Composite Indicators: The case of European Educational Poverty

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Abstract:

In the last decades, the measurement of complex phenomena progressively changed from traditional measurements based on a single variable to multidimensional approaches. Composite indexes (CIs), as functions of a set of individual indicators measured on the population of interest, represent a fundamental tool of this process. The construction of a CI is a complex task that requires a number of arbitrary choices. Each of them has an impact on the results and it must therefore carefully be taken into account to avoid sources of bias.

Educational Poverty (EP) is an example of a complex phenomenon, and the construction of its CI is the main goal to reach out. In Italy, the expert group of the NGO “Save the Children” in collaboration with researchers from Istat, identified four dimensions of educational deprivation of children and adolescents: Learning to know, referring to the acquisition and the application of knowledge; Learning to be, linked to the development self-management life skills; Learning to live together, linked to interpersonal and social life skills; and Learning to do, related to the practical or skills required to meet day-to-day needs. Along these dimensions, the individual indicators coming from different European surveys are summarized into a single composite index, called Educational Poverty Index (EPI). This latter represents a first operational solution to describe the main facets of EP of youngsters and aggregates them into a single-dimensional measure. This is affected by the settings chosen in the aggregation process.

This work aims to provide an analysis of the effect of some of the most significant settings in the construction of a CI (i.e., normalisation and management of the variability). The goal is to analyse how different choices affect the interpretations of EP in Europe, using data from different European surveys harmonized between Member States.

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