The problematic estimation of "imitation effects" in multilevel models

Øystein Kravdal

▶ Bookmark this page
▶ Send this article to a friend

Click the icon to view and/or download the PDF file.
Once you are in the PDF file, use your browser back button to return to this page.

Abstract

It seems plausible that a person's demographic behaviour may be influenced by that among other people in the community, for example because of an inclination to imitate. When estimating multilevel models from clustered individual data, some investigators might perhaps feel tempted to try to capture this effect by simply including on the right-hand side the average of the dependent variable, constructed by aggregation within the clusters. However, such modelling must be avoided. According to simulation experiments based on real fertility data from India, the estimated effect of this obviously endogenous variable can be very different from the true effect. Also the other community effect estimates can be strongly biased. An "imitation effect" can only be estimated under very special assumptions that in practice will be hard to defend.

Author's affiliation

Øystein Kravdal
University of Oslo, Norway

Keywords

bias, endogenous, estimation, imitation effect, models, multilevel, simulation, survey

Word count (Main text)

6162

Other Articles by the same author/authors (in *Demographic Research*)

- [18-7] Does income inequality really influence individual mortality?: Results from a 'fixed-effects analysis' where constant unobserved municipality characteristics are controlled
- [17-9] Effects of current education on second- and third-birth rates among Norwegian women and men born in 1964: Substantive interpretations and methodological issues
- [16-15] Does cancer affect the divorce rate?
- [15-1] A simulation-based assessment of the bias produced when using averages from small DHS clusters as contextual variables in multilevel models
- [10-1] Educational differentials in male mortality in Russia and northern Europe: A comparison of an epidemiological cohort from Moscow and St. Petersburg with the male populations of Helsinki and Oslo
- [6-10] The impact of individual and aggregate unemployment on fertility in Norway

Similar Articles (in *Demographic Research*)