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Subject: Re: Multilevel Weights

Posted by [dflood011](#) on Mon, 13 Nov 2017 22:12:33 GMT

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Thank you to Tom for his incredibly helpful comments about the challenges in constructing multilevel models with DHS data, on this thread and others.

If I may ask a follow-up question to Tom:

I am interested in building a model to explore the association between maternal contraception and child stunting in a single-country DHS dataset. I originally thought about constructing a mixed model using cluster, household, and individual levels, but given Tom's comments about the unavailability of disaggregated household + cluster weights, I am thinking it would be better to carry out a classic regression in Stata using the examples set forth in Heeringa's text, "Applied Survey Data Analysis."

Yet I'm still drawn to the elegance of a hierarchical model, and when I search PubMed, I find numerous examples of papers in high-quality journals using mixed models for DHS data -- often asserting PSU weight-adjustment. (See examples below.) How is this possible? Are these analysts making errors?

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5291969/>

<http://onlinelibrary.wiley.com/doi/10.1111/mcn.12463/full>

<https://www.ncbi.nlm.nih.gov/pubmed/26378858>

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0037905>