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Subject: Random effects with survey design adjustment?

Posted by [lmcdougal](#) on Thu, 20 Jun 2013 18:01:49 GMT

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I'm working on an analysis of predictors of wasting in South Asia. My sample is children under 5 whose mothers also have individual interview data, and I'm using a multinomial logistic regression.

It seems like I should include mothers as a random effect in this model, to account for unmeasured differences by mother. Does anyone have suggestions as to how to accomplish this in Stata (or SAS, for that matter) while still taking into account the survey design features of the DHS? I can't find a Stata command that accepts both random effects and the "svy" prefix.

Thanks so much!

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Subject: Re: Random effects with survey design adjustment?

Posted by [Bridgette-DHS](#) on Mon, 15 Jul 2013 17:06:28 GMT

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It sounds like you need a multilevel model with random effects at two levels--the mother and the cluster. I believe this is possible in the new version of Stata (13) but have not used it yet. A high proportion of women have only one child under five, and provide no information about within-mother variation. Even if the mother is the only level of clustering, you need to deal with that. This issue is not specific to DHS data. You may want to re-post in a Stata users forum or in a forum where multilevel models are discussed.

Response from: Sarah Bradley, DHS Stata Expert

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