Subject: Re: Multilevel modeling with svy and domestic violence weights Posted by Bridgette-DHS on Fri, 29 Oct 2021 19:42:19 GMT View Forum Message <> Reply to Message

Following is another response from DHS Senior Sampling Specialist, Mahmoud Elkasabi:

Yes, this is correct because the DV weight is calculated on the individual level and not on the cluster level as other weights. I would suggest approximating the wt2 using the women weight or the HH weight and then calculating wt1 based on d005 and the approximated wt2. See the Stata code below as an example.

```
gen DHSwt = v005 / 1000000
```

```
*****
* Stage B *** Approximate Levels-weight ***
           * Steps to approximate Level-1 and Level-2 weights from Household or Individual Weights
*Step 1. De-normalize the final weight, using approximated normalization factor
gen d HH = DHSwt * (M/m c)
gen dv HH = (d005/1000000) * (M/m c)
*Step 2. Approximate the Level-2 weight
* f the variation factor
gen f = d_HH / ((A_h/a_c_h) * (M_h/S_h))
* Calculating the levels-weight based on different values of alpha
local alphas 0 0.1 .25 .50 .75 0.90 1
local i = 1
foreach dom of local alphas{
gen wt2_i' = (A_h/a_c_h)^*(f^dom')
gen wt1_`i' = d_HH/wt2 `i'
gen d1_`i' = dv_HH/wt2_`i'
local ++i
}
svyset v001, weight(wt2_2) strata(v022), singleunit(centered) || _n, weight(d1_5)
svy: melogit cumodern age secondary urban i.children || v001:
estimates store model2
```