## Subject: Weighting of Individuals Listed in Household Rosters Posted by sylvan on Fri, 05 Feb 2021 23:39:21 GMT

View Forum Message <> Reply to Message

Hello,

I am working on a project with some colleagues and we are doing an analysis that uses all individuals listed in the household rosters and who were in the eligible age range to be interviewed in the individual interviews. Because not everyone eligible to be interviewed actually IS interviewed (non-response of ~3-5% across different surveys), we don't have individual weights for these "missing" individuals. Additionally, since individual weights are affected, in part, by the response rates of those in their surrounding areas, we can't just use the individual weights from the individual surveys either, even for those who were reached.

Is there a way to construct or assign an appropriate weight for all individuals included in the household rosters (in the appropriate age range)?

Thank you in advance! Sylvan

Subject: Re: Weighting of Individuals Listed in Household Rosters Posted by Bridgette-DHS on Tue, 09 Feb 2021 13:19:51 GMT View Forum Message <> Reply to Message

Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

I don't quite understand the question. In the household files (HR and PR) we have hv005, and it's the weight to use for data coming from the household survey. It's definitely true that some people who are eligible for the IR and MR files do not appear in those files. The weights v005 and mv005 adjust for that non-response. Can you be more specific about what you want to do?

Subject: Re: Weighting of Individuals Listed in Household Rosters Posted by sylvan on Tue, 09 Feb 2021 14:28:22 GMT View Forum Message <> Reply to Message

Thank you both for the quick response.

We are using the demographic data captured only in the household rosters. We are doing this intentionally to understand whether climate shocks impact non-response. Therefore we would like the full household listing of eligible members to be representative of overall populations (of people with the same criteria) and not just those who were successfully reached and interviewed. Because weights are only calculated and provided for those who were successfully interviewed, we don't have weights to attribute to those in the household roster who were eligible to be interviewed but for whatever reason were missed.

Is this clearer? We imagined maybe we could calculate and assign the same weight for these missed individuals as others in the local sampling area... But those weights explicitly account for the non-success rate (as we understand it). So maybe we take those weights but remove the attrition adjustments? We weren't sure...

Thank you again in advance! Sylvan

Subject: Re: Weighting of Individuals Listed in Household Rosters Posted by Bridgette-DHS on Tue, 09 Feb 2021 15:29:49 GMT View Forum Message <> Reply to Message

Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

In the household rosters, all the information comes from a single person, the household respondent. That's the person identified with hv003. In the household roster, hv117 and hv118 are coded "1" for the women and men, respectively, who satisfy the age/sex/residency criteria for the interview of women and men Individual-level nonresponse refers to women who have hv117=1 but they are not found in the IR file, or to men who have hv118=1 but they are not found in the MR file. You identify individual-level non-response by merging the IR and MR files with the PR file (restricted to cases with hv117=1 or hv118=1), and seeing who falls out.

Everyone in the same cluster (PSU) has the same weight.

If you want to re-weight the data to match some reference distribution of age, etc., you certainly can do that. I'd think of this as a type of standardization. I doubt that there will be much of an impact on your results, but you could probably provide a motivation for doing it.

Subject: Re: Weighting of Individuals Listed in Household Rosters Posted by sylvan on Tue, 09 Feb 2021 15:38:44 GMT View Forum Message <> Reply to Message

Thank you Tom,

You have exactly characterized our process.

"Everyone in the same cluster (PSU) has the same weight." From this I am gathering that you think it would be reasonable to apply the same weight to these "missed" individuals as others in the PSU?

Our concern with this was that if the weights compensate for PSU attrition levels, then this could then lead to over-representing PSUs that had higher attrition. Presumably this distortion would be fairly small, but sounds like it would at least be a reasonable first pass.

Thank you again for your careful thought and quick responses.

Sylvan

Subject: Re: Weighting of Individuals Listed in Household Rosters Posted by Bridgette-DHS on Tue, 09 Feb 2021 15:59:55 GMT View Forum Message <> Reply to Message

Following is a response from DHS Research & Data Analysis Director, Tom Pullum:

Yes, you could give them the same weight, for simplicity, but as you say this is a slight distortion. If the target number of cases in the PSU is A and the number with responses is B, then the original weight for the cluster has been inflated by a factor A/B. If you add those nonresponse cases back in, you are in effect increasing the number of cases in the cluster to be more than A. An alternative would be to multiply the weights in the data file by B/A, neutralizing the previous factor, and then add the nonresponse cases back in with the same weight. Does that make sense?

Subject: Re: Weighting of Individuals Listed in Household Rosters Posted by sylvan on Tue, 09 Feb 2021 16:03:51 GMT View Forum Message <> Reply to Message

Yes. This follows our intuition and makes a lot of sense. Thank you so much for the clarification and guidance.

Warm regards, Sylvan

Subject: methodology for calculation of DV weights Posted by ashish.hss on Mon, 26 Jul 2021 10:49:20 GMT View Forum Message <> Reply to Message

Dear Sir/ Madam,

I would like to know the complete procedure of weighting of the women selected for the domestic violence module.

Request you to please share the relevant document on this.

Thank you very much!

Subject: Re: methodology for calculation of DV weights Posted by Bridgette-DHS on Mon, 26 Jul 2021 14:52:53 GMT

View Forum Message <> Reply to Message

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

We do not have a specific document that explains the calculation of the DV weight. Also, unfortunately, it is not explained in detail in the sampling manual, https://dhsprogram.com/pubs/pdf/DHSM4/DHS6\_Sampling\_Manual\_S ept2012\_DHSM4.pdf

However, users can use the same approach as for the individual's weight, except that the design weight dhi in page 23 of the manual should be adjusted for the within-household selection. This can be simply done by multiplying dhi for each household by the number of women 15-49 in that household. Then the weight can be adjusted for nonresponse for the DV module similarly to how the women's weight is adjusted.

Also, going back to the earlier exchange, you could just use hv005; v005 will slightly over-represent the non-respondents.

Subject: Re: methodology for calculation of DV weights Posted by sylvan on Mon, 26 Jul 2021 15:33:25 GMT

View Forum Message <> Reply to Message

Thank you for the helpful response!