## Subject: Re: Response rate and weights

 Posted by Bridgette-DHS on Fri, 31 Mar 2023 16:01:13 GMTView Forum Message <> Reply to Message
Following is a response from Senior DHS staff member, Tom Pullum:
Recently I posted a program to merge all the data for children, mothers, and fathers. It may go beyond what you need, but it combines the data in the BR ((and KR), PR, IR, and MR files with children age $0-17$ as cases. For the NFHS-4 and -5 surveys, which had only a $1 / 6$ subsample of men, you will lose a lot of children and mothers in order to get the fathers, but yes, you will still have a representative sample. The estimates will be unbiased. And because these surveys were so large, you will still have a large sample.

If you want to compare the significance of effects for the mothers and fathers, you need to be careful. To take a simple example, say you wanted to look at the effects of maternal and paternal education on child survival. If you use the full sample to estimate the maternal effect, and the $1 / 6$ sample to estimate the paternal effect, both coefficients will be unbiased, and comparable. However, even if the effects were equal the $t$ or $z$ score for the mothers would be about sqrt(6)=2.4 times as large as the one for men, with much more potential to be statistically significant. You'd have to take that difference in statistical power into account if you inferred that the mother's education was significant, but the father's education was NOT.

File Attachments

1) merge_children_mothers_fathers_do_14Feb2023.txt, downloaded 109 times
