Subject: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by Sarah-DHS on Fri, 08 May 2015 17:56:22 GMT
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Wondering when to weight your DHS data? Struggling with sampling weights in multilevel analyses?

Join us for The DHS Program Analysis Webinar on June 3, 2015 at 10-11 am EST (UTC/GMT-4). Panelists include:
-Tom Pullum, PhD, Senior Advisor for Research and Analysis
- Ruilin Ren, PhD, Senior Sampling Technician
- Mahmoud Elkasabi, PhD, Sampling Statistician

Submit your questions in advance on the User Forum, here.
Then, join us live June 3rd 10-11am EST(UTC/GMT-4) via Adobe Connect, here, to hear the answers to your questions and more!

The webinar will be recorded and posted on the User Forum for those who cannot join us live on June 3, 2015, and a summary of the questions and answers will be added to the User Forum for easy searching.

For more information, contact Erica Nybro erica.nybro@icfi.com

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by alianandi on Fri, 08 May 2015 18:22:33 GMT
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If you could address the following in the webinar, I would be grateful:

1. When combining surveys for a single country spanning multiple years, with the intention of making comparisons across years, how do you properly weight the data? If you could provide a worked example with Stata code, that would be exceedingly helpful.

2. Suppose I am fitting a regression model in Stata, and I use pweight with vce(cluster). Under what conditions would that be "good enough" in comparison to svy weighting the data? Frequently I am conducting analyses for which there are no svy analogues, so I just use pweight & vce(cluster), but often journal referees will complain about this and I do not have a technical response that can satisfy them.

Thank you!

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design

Posted by Sarah-DHS on Fri, 08 May 2015 19:02:55 GMT
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Dear alitasso,

Thank you for your response. We will do our best to include your questions in our June 3rd webinar.

Sarah-DHS

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by philiobas on Sat, 09 May 2015 09:59:09 GMT
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Please address this problem in the forth coming webinar:

I am applying a two stage stratified sampling techniques for my survey:
At the first stage, we have 6 sectors with their populations known and 4 sectors were selected. At the second stage with each of the 4 selected sectors having varied sub-divisions and a total of 24 number subdivisions are to be selected but the population of the each subdivision is unknown. These subdivisions shall be my PSU. Do I collect equal sample from each of the selected PSU (subdivisions) to make up my total sample size? If I do that, what weighting techniques do I apply to correct for under and over sampling. Please I want to understand how to do this weighting techniques. Thanks

Phillips

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by MBruederle on Mon, 11 May 2015 07:49:11 GMT
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Dear panelists,
I would be grateful if you could address the following questions:

Even though the sampling is usually designed for the data to be representative only at national level, I would like to use DHS data to calculate development outcomes at the local level (clusters or sub-national administrative areas). For example, I want to analyze how local environmental conditions are associated with development indicators as measured by DHS data.
Is it justified to consider over- / undersampling of certain strata in certain localities as noise (considering that my analysis covers an entire country)?
Should I still apply sampling weights to reduce the risk of bias? Or do the weights make no sense if I analyze the data at subnational level?

In general, where do I find information on which covariates underlie the sample selection for each

survey? Next to geographic distribution and urban / rural, are households selected (and weights assigned) based on other covariates like ethnicity, family size, ..., to ensure that the sample is nationally representative?

Many thanks.
Anna Brüderle

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by owraza on Mon, 11 May 2015 13:34:19 GMT
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Dear Moderator,

I would be glad if you can put forward this question:

In "Guide to DHS Statistics", it is not recommended to do weighted analysis if one is attempting regression analysis, but I have come across another point of view that in STATA, if one ignores weight in regression, one can end up having biased estimate and standard errors. According to this website http:// www.cpc.unc.edu/research/tools/data_analysis/statatutorial/s ample_surveys/weight_syntax, sampling and analytical weights are recommended.

Thanks
Owais Raza.

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by emheninthesun on Wed, 13 May 2015 14:31:34 GMT
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Dear Moderator,

I would appreciate hearing suggestions for how to use the weights when sub-sampling the samples for analyses (e.g., only using data from women of a specific age range, only using data from primiparous women).

Thank you.

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by geoK on Thu, 28 May 2015 13:51:40 GMT
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Dear Moderator, thanks for this opportunity.
It would be very much appreciated if you could please touch the following topics:
1- when to use individual(person) level weights in subpopulation analysis as well as household level weights;
2- how to deal with sampling weights and design in case of conducting spatial interpolating with DHS data.
Regards.

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by colinodden on Thu, 28 May 2015 14:46:26 GMT
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Dear DHS Panel,

I'd be grateful if you could address the following, which dovetails with a previous poster's question (pooling surveys within country). Many thanks in advance for whatever advice you're able to provide in the limited time you have during the webinar.

(1) The birth histories are very valuable. However, weights are intended to make respondents representative of the population at time of interview, yet births are not occurring at that time. Is this problematic for birth history analyses, and is there a clear resolution? Further, births are not 1:1 with respondents, so the mean weight of births (when applying the respondent's weight to each birth) will not equal 1. On face it seems sensible to weight births by the respondent's weight divided by parity of time at interview, but this of course down-weights births to higher-parity respondents.

(2) Another poster raised the question of how to weight when pooling surveys within country. Pooling surveys within country compounds the benefits of the birth history data, too (we can obtain birth histories spanning up to several decades), but perhaps compounds the problem I indicate in #1 above. In fact, pooling surveys can (and often does) lead to overlapping birth histories, that is, births within an historical period occurring to women in different surveys. Do you have recommendations for how to sensibly weight births when histories overlap surveys?

Cheers!
Colin Odden
Ohio State University

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by MissJibo on Sun, 31 May 2015 17:21:51 GMT
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Hi

Thank you for doing this.

I am using STATA to analyze the relationship between wealth quintiles and DPT3 vaccination in 8 different countries, DHS V and VI.
After I have declared my survey design for analysis, some of the strata had a single sampling unit, and as a result there are no standard errors reported during my regression analysis. How do I correct that? I asked STATA to treat single units as certainty units which seemed to work but I do not know if that is correct considering the survey design.

2. I do not know if you will cover this but..What is the method for variance estimation? Were there FPC or post-stratification used?

Thank you very much again.

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by cp284 on Mon, 01 Jun 2015 12:05:46 GMT
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Thank you for conducting this webinar.

My co-author and I have pooled data for married couples across 54 countries. We have selected one survey from each country (either the most recent survey or the survey that contains couple data). We are conducting analyses at both the country and regional levels (for example, West Africa). How do we incorporate the country specific weights for this kind of sample?

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by AZett on Tue, 02 Jun 2015 16:38:41 GMT
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Dear DHS panel,

For me it is the first time to work with DHS data, so I would appreciate if you could also clarify some of the basics that need to be accounted for when using DHS data.
Working in Stata, my understanding of the DHS weights so far is, that I need to use survey (svy) commands in order to be able to use p-weights (please correct me if using p-weights is wrong).

However, it is unclear to me how to find out how to correctly svy set the data, as I do not know what the correct strata(s) and PSU and SSU would be and whether I need to use FPC. How can I find out which would be correct?
I plan to use data on several countries, can I rely on the assumption that the strata(s) and PSU will be the same for different countries?

Another questions on the weights: Can weighted data still be considered representative when looking at (sub)regions?
If representativity at the subnational scale can not ne guaranteed by using the weights, are poor households systematically oversampled (or undersampled) in general, but more specifically in some regions, so that using unweighted regional data would lead to a clearly misleading picture or are sampling techniques likely "random enough" to reflect general regional patterns in the unweighted data?

Thank you very much in advance.
Looking forward to the webinar tomorrow.

Subject: Re: June 3rd Webinar Analyzing DHS Data: Weights and other adjustments for the survey design
Posted by lkondos on Wed, 03 Jun 2015 15:24:40 GMT
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Dear Sarah,
Thank you for the webinar. I had a follow up question about the independence assumption violation referred to by Dr. Pullum - I have heard others say that the DHS surveys are not independent over time also but I don't understand this: while you may not have an independent probability of being selected within an EA during a DHS in 2011 for example, another DHS in 2015 may not use the same sampling frames which would make the essentially keep each DHS independent of each other. I am asking because we want to look at multiple DHS over time (both across individual countries over time and across multiple countries, comparing them over time but not pooling the data), I make the assumption that each DHS in independent of the one before it but I have been told I need to adjust for repeated measures. Is this accurate?