

Understanding Society User Support - Support #2058

Using longitudinal weights when combining Covid-19 waves and mainstage waves of UKHLS

02/22/2024 04:48 PM - James Laurence

Status:	Resolved	Start date:	02/22/2024
Priority:	Normal	% Done:	100%
Assignee:	Olena Kaminska		
Category:	Weights		

Description

Hi there,

I was just hoping to get some more advice regarding correctly weighting my analysis combining the mainstage and Covid-19 waves of the UKHLS. You kindly helped with a previous weighting issue I had for treating the data as repeated cross-sections. However, I am also hoping to conduct some fixed effects panel data analysis of the combined mainstage and Covid-19 waves (web survey only).

As a basic set-up, I am combining wave 9 of the UKHLS mainstage survey (the last mainstage survey that doesn't cover the pandemic) with waves 1 to 9 of the COVID-19 survey. The data are in long format. As I would like to do some fixed effects longitudinal analysis, I believe I need to use the longitudinal weights. From my reading, I need to choose the longitudinal weight from the last wave of the survey I will be using – in this case wave 9 of the Covid-19 survey: `ci_betaindin_lw`

Applying this weight [`ci_betaindin_lw`] will give me a balanced panel, restricting the sample to everyone who participated in all 9-waves of the Covid-19 survey. However, I would also like to analyse wave 9 of the mainstage survey as part of a longitudinal, fixed effects analysis covering mainstage wave 9 and Covid survey waves 1-9. Is this possible? If so, is one approach to feed back the `ci_betaindin_lw` weight so that the people who were in wave 9 of the mainstage survey who were also present in all 9-waves of the Covid-19 survey have the weight value of `ci_betaindin_lw`? Therefore, the `ci_betaindin_lw` weight would cover the mainstage wave 9 sample and the Covid-19 sample.

In case it's not clear, to make-up an example of the data in long-format, which contains wave 9 of the mainstage survey and waves 1-9 of the Covid survey. Pidp no. 111111 was present in wave 9 of the mainstage survey and all 9 waves of the Covid survey and had a value of 1.5 for their longitudinal weight at wave 9 of the covid survey (`ci_betaindin_lw`). So, my data would just look like this:

[PIDP][WAVE]	[Value of <code>ci_betaindin_lw</code>]
111111 Mainstage wave 9	<i>Missing Value</i>
111111 COVID wave 1	1.5
111111 COVID wave 2	1.5
111111 COVID wave 3	1.5
111111 COVID wave 4	1.5
111111 COVID wave 5	1.5
111111 COVID wave 6	1.5
111111 COVID wave 7	1.5
111111 COVID wave 8	1.5
111111 COVID wave 9	1.5

Is just feeding back the value of `ci_betaindin_lw` (1.5) what I need to do? So, it would now look like:

[PIDP][WAVE]	[Value of <code>ci_betaindin_lw</code>]
111111 Mainstage wave 9	1.5
111111 COVID wave 1	1.5
111111 COVID wave 2	1.5
111111 COVID wave 3	1.5
111111 COVID wave 4	1.5
111111 COVID wave 5	1.5
111111 COVID wave 6	1.5
111111 COVID wave 7	1.5
111111 COVID wave 8	1.5
111111 COVID wave 9	1.5

If so, could this method apply if I wanted to include more mainstage waves of data? So, if I wanted to include waves 6, 7, 8 and wave 9 of the mainstage survey alongside waves 1-9 of the Covid survey - would I just feed back an individuals' weight value for `ci_betaindin_lw` back so the individual have that weight value for mainstage waves, 6, 7, 8 and 9?

I may be completely misunderstanding how to use the longitudinal weights, or have missed something crucial meaning you can't applying the Covid longitudinal weights to the pre-Covid survey mainstage waves. If so, apologies in advance and any advice would

be hugely appreciated.

Best wishes,

James

History

#1 - 02/23/2024 10:15 AM - Understanding Society User Support Team

- *Category set to Weights*

- *Assignee changed from Understanding Society User Support Team to Olena Kaminska*

#2 - 02/26/2024 11:37 AM - Olena Kaminska

James,

In short Covid weights are based on wave 9 of the mainstage of UKHLS, so you can use them as they are for analysis of mainstage wave 9 and Covid data.

Nevertheless, if you use Covid data with previous information from other waves (wave 6-9, for example), you would need to account for additional missingness in these waves. It may not be large, so double check the proportion of missingness first. If it is substantial it is best to create a tailored weight. The base weight can be either a Covid weight or wave 6 mainstage weight.

Hope this helps,
Olena

#3 - 02/27/2024 12:43 PM - James Laurence

Hi Olena,

That's great. Thanks so much for the helpful insights.

Best wishes,

James

#4 - 03/26/2024 10:53 AM - Understanding Society User Support Team

- *Status changed from New to Resolved*

- *% Done changed from 0 to 100*

- *Private changed from Yes to No*