Subject: Inconsistencies in heights between NFHS-3 NFHS-4 Posted by MaryH on Tue, 15 Mar 2022 17:16:49 GMT View Forum Message <> Reply to Message

Hi all,

I was hoping someone might be able to help explain some inconsistencies we found when working on the 2005/06 and 2015/16 DHS Surveys for India (NFHS-3 and NFHS-4) with regards to average heights by birth cohort.

When plotting (weighted) national-level average heights for men (e.g. aged 23-50) for each year of birth for both waves, it is evident, that the line obtained using NFHS-4 data consistently lies 2 cm below the curve obtained from using data of the NFHS-3. For instance, the average height for people born in 1980 is 163.5cm according to NFHS-4 but 165cm according to the NFHS-3. Yet, the two lines do not converge for "younger" cohorts suggesting that this difference is unlikely to be driven by an age-effect (which usually sets in after age 40). Furthermore, height appears to be measured in the same way for both waves and the same cannot be observed for women's height. I unfortunately was not able to find any information in the corresponding DHS-reports or online. Does someone have an idea how this may come about?

Thank you in advance for your time and comment! Mary

File Attachments
1) F1\_height\_yob\_mean\_nat\_men\_23-50.png, downloaded 870 times

Subject: Re: Inconsistencies in heights between NFHS-3 NFHS-4 Posted by MaryH on Sun, 15 May 2022 18:59:20 GMT View Forum Message <> Reply to Message

Dear All,

a few weeks ago I noted that there appear to be discrepancies in (male) height between NFHS-3 and NFHS-4. Since the same pattern curiously also emerges when comparing NFHS-4 to NFHS-5, I thought I would update this post and hope that someone might have an explanation.

Below the plot for men suggests that male height in NFHS-4 consistently lies 2 cm below male height in NFHS-3. And again, male height in NFHS-5 consistently lies 1 cm below average male height from NFHS-4. This means that, taking all men born in any given year, they appear shorter in each successive wave. In contrast, for women, there is no wave-related discrepancy in height. Instead the curves are overlaid and any differences appear consistent with sampling variation.

I wondered if someone might have any clues on why male height appears to be falling over time? Should the level-differences be subject to some sort of re-scaling? File Attachments

00\_Height\_yob\_bywave\_Men23-45.png, downloaded 266 times
 00\_Height\_yob\_bywave\_Women23-45.png, downloaded 238 times

Subject: Re: Inconsistencies in heights between NFHS-3 NFHS-4 Posted by Janet-DHS on Fri, 27 May 2022 16:20:13 GMT View Forum Message <> Reply to Message

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

We have confirmed the pattern you observed, with an inconsistency between men's heights (for men in same birth cohorts) in the NFHS 3, 4, and 5. We also agree that it's not found for women. Thus far we have been unable to identify the source of the inconsistency. It is unlikely that the change is real--it's more likely the result of some change in procedures or adjustments during fieldwork, but why it should appear only for men is a mystery. Please raise the issue again if you do not see a better explanation in the next month or so.

Subject: Re: Inconsistencies in heights between NFHS-3 NFHS-4 Posted by sneha9592@gmail.com on Tue, 17 Jan 2023 16:48:24 GMT View Forum Message <> Reply to Message

Hi,

I was wondering if there is an update on the possible source of the inconsistency across survey rounds.

Thank you in advance for your time!

Best, Sneha

Subject: Re: Inconsistencies in heights between NFHS-3 NFHS-4 Posted by Bridgette-DHS on Wed, 18 Jan 2023 13:34:49 GMT View Forum Message <> Reply to Message

Following is a response from Senior DHS staff member, Tom Pullum:

We have not been able to resolve this issue.