Revision to HHMLSRP

Homelessness in Journeys Home Reference Period

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Introduction

The *Journeys Home* (JH) survey is a longitudinal, interview-administered survey of 1,682 Australians who were in receipt of income support during April 2011. JH followed these subjects through six waves of interviews, spaced approximately six months apart, that allowed research to measure housing instability and consider its antecedents and consequences. To enable a consistent measure of housing instability a derived variable was created in the JH data indicating whether the subject had experienced homelessness in the period between interviews: HHMLSRP 'Experienced homelessness in reference period'. This variable was defined as follows (see Bevitt et al. 2014):

HHMLSRP   DV: Experienced homelessness in reference period

        0 = No
        1 = Yes

        Coded as yes if respondent was primary, secondary or tertiary homeless (HSTATUS2) at date of interview or spent any time between interviews living:

        a)   In the primary homeless categories; or
        b)   In a caravan, hotel, boarding house or in crisis accommodation; or
        c)   With friends, family or other relatives but not for more than 6 months.

During 2016 a programming error was uncovered affecting the interpretation of condition (c) and the treatment of unknown accommodation types and/or spell length.

The original HHMLSRP programming calculated the length of time living with *friends, family or other relatives* using the derived variables HXTH2R (weeks of the reference period spent in parents' home), HXTH3R (weeks of reference period spent in homes of other relatives) and HXTH4R (weeks of reference period spent in homes of friends). These variables measure amount of time living with friends, family or other relatives within the reference period. However, they will not account for the entire duration of the accommodation spell if the spell was on-going as of the start of the reference period (for example, a seven-month spell of living with a friend that began four months before the start of the reference period and ended three months into the reference period). This may over count the occurrence of condition (c). Additionally, they may aggregate multiple short spells of similar but separate accommodation experiences (for example, a four-month spell with one friend immediately followed by a three-month spell with another friend) into one long period of an accommodation type. This may undercount the occurrence of condition (c). Finally, the maximum classification is 'More than 24 weeks' which may undercount the occurrence of condition (c) where the duration of the spell is between 24 and 26 weeks.

The original programming also treated missing accommodation types and missing spell lengths as indicators of homelessness. This is not in line with the definition of homelessness and in part requires considering missing values as a good proxy for housing insecurity.

We have written programs in STATA (jh_hhmlsrp2.do) and SAS (jh_hhmlsrp2.sas) that use measures from the JH accommodation calendar, rather than the derived HXTH2R, HXTH3R, and HXTH4R measures, to create a revised derived variable (HHMLSRP2) coded correctly to match the above definition. The new variable adopts the same value labels as the original variable.

For the purposes of condition (c): More than 6 months means greater than or equal to 183 days.

Where the spell start date is unknown and the spell spans multiple reference periods, an additional check has been performed to see whether the 183 day condition is satisfied by the time from the reporting interview date through to the spell end date. Where the 183 day condition is satisfied, the spell is considered to have a lower bound length of this duration, and is subsequently not homeless in reference periods following after the reference period in which the spell began. Where the 183 day condition is not satisfied by this time period, the spell is considered to have an unknown duration. Spells with unknown start dates which span 3 or more reference periods will always satisfy the 183 day condition in the third, and subsequent, reference periods due to the biannual nature of JH interviews.

Description of coding error cases

Table 1 compares the old and new variables and changes are outlined in the following section. The (a), (b), (c), (d), (e), (f) refer to the explanations in the following section.

Table 1 Cross tabulation of HHMLSRP and HHMLSRP2

	HHMLSRP2		
HHMLSRP	Unknown (-1)	No (0)	Yes (1)
Unknown (-1)	62	32 (a)	27 (b)
No (0)	3 (c)	3965	129 (d)
Yes (1)	45 (e)	382 (f)	2649

There are six classes of mis-categorisation, the majority of these are classes (d) and (f):

a) There are 32 observations previously coded as unknown which are now coded as not being homeless during the reference period: these are observations where the subject lived in his or her own place (MCACC=1), foster care (=8), stayed in a hospital (=12) or prison (=13), or other accommodation (=97), and the spell length is unknown. In the original programming an unknown proportion of time was interpreted as an indicator for homelessness, however these accommodation types are not part of the definition of homelessness and should be excluded.

b) There are 27 observations previously coded as unknown which are now coded as homeless: these are observations similar to (a) except where the subject stayed in a caravan (MCACC=5), boarding house (=6), hotel/motel (=7) or emergency accommodation (=10); squatted (=9) or slept rough (=11), and the spell length is unknown. These accommodation types are always considered as homeless irrespective of the spell length.

c) There are 3 observations previously coded as not being homeless which are now coded as unknown: these are observations where the duration of the spell as measured by HXTH2R, HXTH3R, or HXTH4R is more than 24 weeks, but the actual duration is less than 183 days.

These observations did not change accommodation in the reference period in question, so HXTH8R could be coded by knowing they lived/stayed in the same place for 100% of the reference period. Unfortunately the reference period for these three cases is less than 183 days and, as all three reported unknown spell start dates in the preceding interview, the total spell length is unknown.

d) There are 129 observations previously coded as not being homeless which are now coded as being homeless. In these cases the subjects reported multiple spells living with friends, family or other relatives and the aggregate duration for all spells exceeded 183 days (6 months). However, at least one spell was less than 183 days, indicative of a spell of homelessness.

e) There are 45 observations previously coded as being homeless which are now coded as unknown. This category consists of two subcategories, however both are related to the handling of unknown proportions of time as in (a) and (b):

    i. Lived with friends (MCACC=4), family (=2) or other relatives (=3) for an unknown length of time (and where no other spells exist with duration less than 183 days). These were coded as being homeless, assuming an unknown spell length was a reasonable proxy for homelessness. However, as with (a) and (b) an unknown proportion of time is not specifically part of the definition of homelessness.

    ii. Lived in an unknown accommodation type (MCACC=-1). The effect of an unknown accommodation type in the original programming is that all proportions of time are considered unknown. These were coded as being homeless assuming unknown accommodation was a reasonable proxy for homelessness.

f) There are 382 observations previously coded as homeless which are now coded as not being homeless. These are cases where i) the HXTH2R, HXTH3R, or HXTH4R measure captured an accommodation spell length that was on-going at the start of the reference period, ii) the amount of time that type of accommodation was less than 183 day (6 months) within the reference period, but iii) the total duration of the accommodation spell, including the time spent prior to the reference period, was 183 days or more.

Running the programs

The STATA version of the program is jh_hhmlsrp2.do, and the SAS version is jh_hhmlsrp2.sas. To run the programs you need to modify the data directory names at the beginning of the programs. In STATA you need to modify the global macro, and in SAS you need to modify the libname. By default the programs will copy the data files, creating a new data file with '_hhmlsrp2' added to the file name. If you would prefer a different suffix modify the 'output_suffix' macro directly after the data directory.

When the program has finished running it will write a set of new data files to the JH data directory: one file for each of the cross sectional data files and one for the longitudinal data file. These data files will match the existing data files in all variables, however will have the extra HHMLSRP2 variable added next to HHMLSRP. The label of HHMLSRP will also be updated.

The program also outputs a cross-tab of the two variables, this should match Table 1.

If you have more than one release of JH data (in the same directory) the program will update all versions of the data.

References

Bevitt, Andrew, Abraham Chigavazira, Rosanna Scutella, Yi-Ping Tseng, and Nicole Watson. 2014. *Journeys Home User Manual: User Manual Version: 6.0.2*. Melbourne: Melbourne Institute of Applied Economic and Social Research.