**Age – harmonisation notes**

*Studies (waves) with relevant data (ALL)*

ALSPAC (1,2,3,4), Ballabeina (1,2), Belgian Preschool 1, Belgian Preschool 2, Belgian Preschool 3, CHAMPS UK, CHAMPS US, CLAN (1,2,3), CoSCIS (1,2,3), EYHS Denmark (1,2,3), EYHS Estonia, EYHS Norway (1,2), EYHS Portugal (1,2), HEAPS (1,2), IBDS (1-7), KISS (1,2,3), MAGIC, NHANES 2003-04, NHANES 2005-06, PEACH (1,2,3), Pelotas (1,2,3), SPEEDY (1,2,3), TAAG (1,2,3).

*Variable(s) created*

|  |  |
| --- | --- |
| **Name** | **Description / Coding** |
| ICAD\_Age | Participant age in years.Missing coded as ‘999’ |
| ICAD\_AgeNotes | Information on how age variable was derived.Coding: Derived from DoB\* and date of measurement (coded 0)Derived from other information (1)Missing (999) |

Variable derived for all available waves within each study.

\*Date of birth.

ICAD\_Age was derived preferentially as elapsed time (in years) between participant date of birth and the date of accelerometer assessment for each available wave. Where an assessment wave did not include accelerometry or date of accelerometer assessment was otherwise missing, ICAD\_Age was derived from an age variable provided by the study investigators. The source of information used in ICAD\_Age is indicated in ICAD\_AgeNotes.

Kinesoft outputs two variables (HeaderStartDate, FinalStartDate) that indicate the date on which accelerometer assessment took place. These are both provided in the ‘Vitals’ group of accelerometer variables. HeaderStartDate indicates the date on which the device was initialised. FinalStartDate indicates the date on which the first valid day of accelerometer data was collected. FinalStartDate was used preferentially when deriving the age variable. In cases where FinalStartDate was missing (n≈200) HeaderStartDate was used instead. The format of HeaderStartDate is inconsistent between and within studies (sometimes dd/mm/yyyy, sometimes mm/dd/yyyy). The Stata code used to ensure that day/month of assessment was coded appropriately is available on request. In most cases, the difference between HeaderStartDate and FinalStartDate was only a few days.

The table below indicates the source of information used in ICAD\_Age for each study/wave.

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| --- |
| **Date of birth / Date of measurement only** |
| SPEEDY, waves 2 and 3; CLAN, waves 1-3; CoSCIS, wave 2; EYHS Norway, wave 2; HEAPS, waves 1 and 2; Pelotas, wave 1; Belgian Preschool 2;  |
| **Date of birth / Date of measurement AND study-supplied age** |
| SPEEDY, wave 1; PEACH, waves 1-3; ALSPAC, waves 1-3; Ballabeina, waves 1 and 2; CHAMPS US; CoSCIS, waves 1 and 3; EYHS Denmark, waves 1-3; EYHS Estonia; EYHS Norway, wave 1; EYHS Portugal, waves 1 and 2; KISS, waves 1 and 2; MAGIC; TAAG, waves 1-3; CHAMPS UK;  |
| **Study supplied age only** |
| ALSPAC, wave 4; Pelotas, waves 2 and 3; IBDS, all waves; NHANES 2003-04; NHANES 2005-06, Belgian Preschool 1; Belgian Preschool 3; KISS, wave 3 |

Short explanatory notes are provided below (‘*study specific notes’)* for those studies / waves that used only study-supplied age to populate ICAD\_Age.

*Study specific notes*

**ALSPAC** – Wave 4 was conducted when participants were approximately 17 years of age (Assessment name: Teen Focus 4). Accelerometry was not included as part of this assessment. For this wave, ICAD\_Age was derived from a variable indicating age in months at the time of the clinic visit undertaken as part of the Teen Focus 4 assessment. This was divided by 12 for use in ICAD\_Age. All responses with age data for wave 4 are coded 1 in ICAD\_AgeNotes.

**Pelotas** –Wave 2 of Pelotas (conducted at approx’ age 15 years) did not include accelerometer assessment. ICAD\_Age for wave 2 was calculated as elapsed time (in years) between participant date of birth and the date on which the participant completed the questionnaire as part of the wave 2 survey. Wave 3 of Pelotas (conducted at approx’ age 18 years) did include accelerometry but this data was not included in ICAD. The study investigators provided a variable indicating participant age at completion of wave 3. All age observations for waves 2 and 3 were coded 1 in ICAD\_AgeNotes.

**IBDS** - Information on participant date of birth was not provided by the study investigators. However, age at the point of accelerometer assessment was provided for each of the six waves of data collection. All observations were coded 1 in ICAD\_AgeNotes.

**NHANES 2003-04 / 2005-06** - NHANES does not include participant date of birth in its downloadable data releases. Age in months at the point of completing the screening interview is available. This was divided by 12 for use in ICAD\_Age. All observations were coded 1 in ICAD\_AgeNotes.

**Belgian Preschool 1/3** - Information was provided on year of birth only. Participant age at the time of assessment was provided by the study investigators. All observations were coded 1 in ICAD\_AgeNotes.

**KISS** – For wave 3, all age responses were derived from a study-submitted age variable. Accelerometer data for wave 3 of KISS is not currently included in ICAD. All wave 3 age responses are coded 1 in ICAD\_AgeNotes.