**Car ownership – harmonisation notes**

*Studies (wave) with relevant data (n=6)*

ALSPAC (multiple), CLAN (1,2), HEAPS (1,2), PEACH (1,2,3), Pelotas (1,2), SPEEDY (1,2,3).

*Assessment characteristics*

Respondent: Parent, Child.

Constructs: Car ownership, Access to a car.

Timing: No. of waves of assessment, proximity to accelerometry.

*Variable(s) created*

|  |  |
| --- | --- |
| **Name** | **Description / Coding** |
| ICAD\_Car1 | Coding: No car (coded 0)/ At least one car (1) / Missing (999) |
| ICAD\_Car2 | Coding: No car (coded 0) / One car (1) / Two cars (2) / Three or more cars (3) / Missing (999) |
| ICAD\_Car3 | Coding: No car or one car (coded 0) / Two or more cars (1) / Missing (999) |

Variables were derived for all available waves within each study.

*Studies / waves included in each harmonised variable*

|  |  |
| --- | --- |
| **Name** | **Study** |
| ICAD\_Car1 | CLAN (1,2), HEAPS (1,2), PEACH (1,2,3), Pelotas (1,2), SPEEDY (1,3) |
| ICAD\_Car2 | CLAN (1,2), HEAPS (1,2), PEACH (1,2,3), Pelotas (1,2) |
| ICAD\_Car3 | CLAN (1,2), HEAPS (1,2), PEACH (1,2,3), Pelotas (1,2), SPEEDY (1,2,3) |

*Excluded studies / waves*

|  |  |
| --- | --- |
| **Study / wave**  **Variable** | **Rationale** |
| ALSPAC  (all waves) | Car ownership was assessed only at ages 8, 21, 33, 61 months. This was considered too distal to the accelerometer assessments (ages 11, 13, 15 years). |
| SPEEDY / Wave 2  ICAD\_Car1 | The item used at wave 2 assessed ownership of *more than 1 car*. It did not distinguish no car access from ownership of one car. |
| SPEEDY / all waves  ICAD\_Car2 | None of the items used in SPEEDY provided participants with the option to state the number of cars owned, therefore it was not possible to derive ICAD\_Car2 for any time-point. |

*Item selection / prioritisation (where multiple variables within a study / wave were provided)*

* Assuming the same construct was assessed, respondent was prioritised as follows: parent, child.
* Assuming the same respondent, construct was prioritised as follows: car ownership, access to a car.
* A subjective judgement was made as to whether assessment of car ownership was sufficiently proximal to accelerometry to provide reliable information – when the time lag was considered too great, the item was excluded from harmonisation (for the purposes of the variables described in ‘proposed variables’, we are treating car ownership as a correlate of behaviour rather than as a marker of socio-economic position - thus temporal proximity is important).

*Study specific notes*

N/A

**Car ownership – harmonisation table**

**Construct**: Car Ownership

**Variable**: ICAD\_Car1

**Coding**: No car (coded 0)/ At least one car (1) / Missing (999)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Study / Wave** | **Source data** | |  | **Harmonisation** | | |
| Variable(s): name(s), respondent, description | Summary |  | Category | Processing | Summary |
| CLAN  Wave: 1 | Var’ name: W1\_p1q12  Parent-reported  No. of cars in household | 0, n=22  1, n=305  2, n=772  3, n=85  4, n=15  5, n=5  6, n=1  missing, n=15 |  | No car (0) | If [W1\_p1q12] = 0 | n=22 |
|  | At least one car (1) | If [W1\_p1q12] = 1,2,3,4,5,6 | n=1183 |
|  | Missing (999) | If [W1\_p1q12] = missing. | n=15 |
|  |  |  |  |  |  |  |
| CLAN  Wave: 2 | Var’ name: W2\_p2q9  Parent-reported  No. of cars in household | 0, n=7  1, n=128  2, n=356  3, n=72  4, n=13  5, n=4  6, n=2  9, n=2  missing, n=636 |  | No car (0) | If [W2\_p2q9] = 0 | n=7 |
|  | At least one car (1) | If [W2\_p2q9] = 1,2,3,4,5,6,9 | n=577 |
|  | Missing (999) | If [W2\_p2q9] = missing. | n=636 |
|  |  |  |  |  |  |  |
| HEAPS  Wave: 1 | Var’ name: W1\_p1q8  Parent-reported  No. of cars in household | 0, n=26  1, n=388  2, n=1015  3, n=98  4, n=30  5, n=3  7, n=1  missing, n=1 |  | No car (0) | If [W1\_p1q8] = 0 | n=26 |
|  | At least one car (1) | If [W1\_p1q8] = 1,2,3,4,5,7 | n=1535 |
|  | Missing (999) | If [W1\_p1q8] = missing. | n=1 |
|  |  |  |  |  |  |  |
| HEAPS  Wave: 2 | Var’ name: W2\_p2q8  Parent-reported  No. of cars in household | 0, n=1  1, n=76  2, n=265  3, n=37  4, n=9  5, n=2  7, n=1  missing, n=1171 |  | No car (0) | If [W2\_p2q8] = 0 | n=1 |
|  | At least one car (1) | If [W2\_p2q8] = 1,2,3,4,5,7 | n=390 |
|  | Missing (999) | If [W1\_p1q8] = missing. | n=1171 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 1 | Var’ name: W1\_p24  Parent-reported  No. of cars parent has access to | 0, n=73  1, n=354  2, n=311  3, n=20  4, n=2  5, n=1  missing, n=546 |  | No car (0) | If [W1\_p24] = 0 | n=73 |
|  | At least one car (1) | If [W1\_p24] = 1,2,3,4,5 | n=688 |
|  | Missing (999) | If [W1\_p24] = missing. | n=546 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 2 | Var’ name: W2\_p24  Parent-reported  No. of cars parent has access to | 0, n=45  1, n=210  2, n=188  3, n=22  4, n=1  5, n=1  missing, n=840 |  | No car (0) | If [W2\_p24] = 0 | n=45 |
|  | At least one car (1) | If [W2\_p24] = 1,2,3,4,5 | n=422 |
|  | Missing (999) | If [W2\_p24] = missing. | n=840 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 3 | Var’ name: W3\_Q9\_parent\_T3  Parent-reported  No. of cars parent has access to | 0, n=39  1, n=192  2, n=171  3, n=30  4, n=4  5, n=1  missing, n=870 |  | No car (0) | If [W3\_Q9\_parent\_T3] = 0 | n=39 |
|  | At least one car (1) | If [W3\_Q9\_parent\_T3] = 1,2,3,4,5 | n=398 |
|  | Missing (999) | If [W3\_Q9\_parent\_T3] = missing. | n=870 |
|  |  |  |  |  |  |  |
| Pelotas  Wave: 1 | Var’ name: W1a\_car\_number  Parent-reported  No. of cars owned | 0, n=306  1, n=136  2, n=12  3, n=3  Missing, n=4847 |  | No car (0) | If [W1a\_car\_number] = 0 | n=306 |
|  | At least one car (1) | If [W1a\_car\_number] = 1,2,3 | n=151 |
|  | Missing (999) | If [W1a\_car\_number] = missing. | n=4847 |
|  |  |  |  |  |  |  |
| Pelotas  Wave: 3 | Var’ name: W3\_kcarqtos  Self-reported (age 18 survey)  No. of cars owned | 0, n=2208  1, n=1467  2, n=323  3, n=84  4, n=16  5, n=5  6, n=2  missing, n=1199 |  | No car (0) | If [W3\_kcarqtos] = 0 | n=2208 |
|  | At least one car (1) | If [W3\_kcarqtos] = 1,2,3,4,5,6 | n=1897 |
|  | Missing (999) | If [W3\_kcarqtos] = missing. | n=1199 |
|  |  |  |  |  |  |  |
| SPEEDY  Wave: 1 | Var’ name: W1\_ses\_car  Parent-reported  Car ownership | “No”, n=97  “Yes”, n=1823  Missing, n=144 |  | No car (0) | If [W1\_ses\_car] = “No” | n=97 |
|  | At least one car (1) | If [W1\_ses\_car] = “Yes” | n=1823 |
|  | Missing (999) | If [W1\_ses\_car] = missing. | n=144 |
|  |  |  |  |  |  |  |
| SPEEDY  Wave: 3 | Var’ name:  W3\_s3\_q083cnone  W3\_s3\_q083aonevehicle  W3\_s3\_q083bmorethanonevehicle  Parent-reported  Ownership of more than 1 car | W3\_s3\_q083cnone:  0 (no), n=422  1 (yes), n=16  Missing, n=1626  W3\_s3\_q083aonevehicle:  0 (no), n=263  1 (yes), n=175  Missing, n=1626  W3\_s3\_q083bmorethanonevehicle:  0 (no), n=191  1 (yes), n=247  Missing, n=1626 |  | No car (0) | If [W3\_s3\_q083cnone] = 0 | n=16 |
|  | At least one car (1) | If [W3\_s3\_q083aonevehicle] = 1 OR [W3\_s3\_q083bmorethanonevehicle] = 1 | n=422 |
|  | Missing (999) |  | n=1626 |

**Construct**: Car Ownership

**Variable**: ICAD\_Car2

**Coding**: No car (coded 0) / One car (1) / Two cars (2) / Three or more cars (3) / missing (999)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Study / Wave** | **Source data** | |  | **Harmonisation** | | |
| Variable(s): name(s), respondent, description | Summary |  | Category | Processing | Summary |
| CLAN  Wave: 1 | Var’ name: W1\_p1q12  Parent-reported  No. of cars in household | 0, n=22  1, n=305  2, n=772  3, n=85  4, n=15  5, n=5  6, n=1  missing, n=15 |  | No car (0) | If [W1\_p1q12] = 0 | n=22 |
|  | One car (1) | If [W1\_p1q12] = 1 | n=305 |
|  | Two cars (2) | If [W1\_p1q12] = 2 | n=772 |
|  | Three or more cars (3) | If [W1\_p1q12] = 4,5,6 | n=106 |
|  | Missing (999) | If [W1\_p1q12] = missing | n=15 |
|  |  |  |  |  |  |  |
| CLAN  Wave: 2 | Var’ name: W2\_p2q9  Parent-reported  No. of cars in household | 0, n=7  1, n=128  2, n=356  3, n=72  4, n=13  5, n=4  6, n=2  9, n=2  missing, n=636 |  | No car (0) | If [W2\_p2q9] = 0 | n=7 |
|  | One car (1) | If [W2\_p2q9] = 1 | n=128 |
|  | Two cars (2) | If [W2\_p2q9] = 2 | n=356 |
|  | Three or more cars (3) | If [W2\_p2q9] = 3,4,5,6,9 | n=93 |
|  | Missing (999) | If [W2\_p2q9] = missing | n=636 |
|  |  |  |  |  |  |  |
| HEAPS  Wave: 1 | Var’ name: W1\_p1q8  Parent-reported  No. of cars in household | 0, n=26  1, n=388  2, n=1015  3, n=98  4, n=30  5, n=3  7, n=1  missing, n=1 |  | No car (0) | If [W1\_p1q8] = 0 | n=26 |
|  | One car (1) | If [W1\_p1q8] = 1 | n=388 |
|  | Two cars (2) | If [W1\_p1q8] = 2 | n=1015 |
|  | Three or more cars (3) | If [W1\_p1q8] = 3,4,5,7 | n=132 |
|  | Missing (999) | If [W1\_p1q8] = missing | n=1 |
|  |  |  |  |  |  |  |
| HEAPS  Wave: 2 | Var’ name: W2\_p2q8  Parent-reported  No. of cars in household | 0, n=1  1, n=76  2, n=265  3, n=37  4, n=9  5, n=2  7, n=1  missing, n=1171 |  | No car (0) | If [W2\_p2q8] = 0 | n=1 |
|  | One car (1) | If [W2\_p2q8] = 1 | n=76 |
|  | Two cars (2) | If [W2\_p2q8] = 2 | n=265 |
|  | Three or more cars (3) | If [W2\_p2q8] = 3,4,5,7 | n=49 |
|  | Missing (999) | If [W2\_p2q8] = missing | n=1171 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 1 | Var’ name: W1\_p24  Parent-reported  No. of cars parent has access to | 0, n=73  1, n=354  2, n=311  3, n=20  4, n=2  5, n=1  missing, n=546 |  | No car (0) | If [W1\_p24] = 0 | n=73 |
|  | One car (1) | If [W1\_p24] = 1 | n=354 |
|  | Two cars (2) | If [W1\_p24] = 2 | n=311 |
|  | Three or more cars (3) | If [W1\_p24] = 3,4,5 | n=23 |
|  | Missing (999) | If [W1\_p24] = missing | n=546 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 2 | Var’ name: W2\_p24  Parent-reported  No. of cars parent has access to | 0, n=45  1, n=210  2, n=188  3, n=22  4, n=1  5, n=1  missing, n=840 |  | No car (0) | If [W2\_p24] = 0 | n=45 |
|  | One car (1) | If [W2\_p24] = 1 | n=210 |
|  | Two cars (2) | If [W2\_p24] = 2 | n=188 |
|  | Three or more cars (3) | If [W2\_p24] = 3,4,5 | n=24 |
|  | Missing (999) | If [W2\_p24] = missing | n=840 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 3 | Var’ name: W3\_Q9\_parent\_T3  Parent-reported  No. of cars parent has access to | 0, n=39  1, n=192  2, n=171  3, n=30  4, n=4  5, n=1  missing, n=870 |  | No car (0) | If [W3\_Q9\_parent\_T3] = 0 | n=39 |
|  | One car (1) | If [W3\_Q9\_parent\_T3] = 1 | n=192 |
|  | Two cars (2) | If [W3\_Q9\_parent\_T3] = 2 | n=171 |
|  | Three or more cars (3) | If [W3\_Q9\_parent\_T3] = 3,4,5 | n=35 |
|  | Missing (999) | If [W3\_Q9\_parent\_T3] = missing | n=870 |
|  |  |  |  |  |  |  |
| Pelotas  Wave: 1 | Var’ name: W1a\_car\_number  Parent-reported  No. of cars owned | 0, n=306  1, n=136  2, n=12  3, n=3  Missing, n=4847 |  | No car (0) | If [W1a\_car\_number] = 0 | n=306 |
|  | One car (1) | If [W1a\_car\_number] = 1 | n=136 |
|  | Two cars (2) | If [W1a\_car\_number] = 2 | n=12 |
| Three or more cars (3) | If [W1a\_car\_number] = 3 | n=3 |
| Missing (999) | If [W1a\_car\_number] = missing | n=4847 |
|  |  |  |  |  |  |  |
| Pelotas  Wave: 3 | Var’ name: W3\_kcarqtos  Self-reported (age 18 survey)  No. of cars owned | 0, n=2208  1, n=1467  2, n=323  3, n=84  4, n=16  5, n=5  6, n=2  missing, n=1199 |  | No car (0) | If [W3\_kcarqtos] = 0 | n=2208 |
|  | One car (1) | If [W3\_kcarqtos] = 1 | n=1467 |
|  | Two cars (2) | If [W3\_kcarqtos] = 2 | n=323 |
|  | Three or more cars (3) | If [W3\_kcarqtos] = 3,4,5,6 | n=107 |
|  | Missing (999) | If [W3\_kcarqtos] = missing | n=1199 |

**Construct**: Car Ownership

**Variable**: ICAD\_Car3

**Coding**: No car or one car (coded 0) / Two or more cars (1) / Missing (999)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Study / Wave** | **Source data** | |  | **Harmonisation** | | |
| Variable(s): name(s), respondent, description | Summary |  | Category | Processing | Summary |
| CLAN  Wave: 1 | Var’ name: W1\_p1q12  Parent-reported  No. of cars in household | 0, n=22  1, n=305  2, n=772  3, n=85  4, n=15  5, n=5  6, n=1  missing, n=15 |  | No car or one car (0) | If [W1\_p1q12] = 0,1 | n=327 |
|  | Two or more cars (1) | If [W1\_p1q12] = 2,3,4,5,6 | n=878 |
|  | Missing (999) | If [W1\_p1q12] = missing. | n=15 |
|  |  |  |  |  |  |  |
| CLAN  Wave: 2 | Var’ name: W2\_p2q9  Parent-reported  No. of cars in household | 0, n=7  1, n=128  2, n=356  3, n=72  4, n=13  5, n=4  6, n=2  9, n=2  missing, n=636 |  | No car or one car (0) | If [W2\_p2q9] = 0,1 | n=135 |
|  | Two or more cars (1) | If [W2\_p2q9] = 2,3,4,5,6,9 | n=449 |
|  | Missing (999) | If [W2\_p2q9] = missing. | n=636 |
|  |  |  |  |  |  |  |
| HEAPS  Wave: 1 | Var’ name: W1\_p1q8  Parent-reported  No. of cars in household | 0, n=26  1, n=388  2, n=1015  3, n=98  4, n=30  5, n=3  7, n=1  missing, n=1 |  | No car or one car (0) | If [W1\_p1q8] = 0,1 | n=414 |
|  | Two or more cars (1) | If [W1\_p1q8] = 2,3,4,5,7 | n=1147 |
|  | Missing (999) | If [W1\_p1q8] = missing. | n=1 |
|  |  |  |  |  |  |  |
| HEAPS  Wave: 2 | Var’ name: W2\_p2q8  Parent-reported  No. of cars in household | 0, n=1  1, n=76  2, n=265  3, n=37  4, n=9  5, n=2  7, n=1  missing, n=1171 |  | No car or one car (0) | If [W2\_p2q8] = 0,1 | n=77 |
|  | Two or more cars (1) | If [W2\_p2q8] = 2,3,4,5,7 | n=314 |
|  | Missing (999) | If [W2\_p2q8] = missing. | n=1171 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 1 | Var’ name: W1\_p24  Parent-reported  No. of cars parent has access to | 0, n=73  1, n=354  2, n=311  3, n=20  4, n=2  5, n=1  missing, n=546 |  | No car or one car (0) | If [W1\_p24] = 0,1 | n=427 |
|  | Two or more cars (1) | If [W1\_p24] = 2,3,4,5 | n=334 |
|  | Missing (999) | If [W1\_p24] = missing. | n=546 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 2 | Var’ name: W2\_p24  Parent-reported  No. of cars parent has access to | 0, n=45  1, n=210  2, n=188  3, n=22  4, n=1  5, n=1  missing, n=840 |  | No car or one car (0) | If [W2\_p24] = 0,1 | n=255 |
|  | Two or more cars (1) | If [W2\_p24] = 2,3,4,5 | n=212 |
|  | Missing (999) | If [W2\_p24] = missing. | n=840 |
|  |  |  |  |  |  |  |
| PEACH  Wave: 3 | Var’ name: W3\_Q9\_parent\_T3  Parent-reported  No. of cars parent has access to | 0, n=39  1, n=192  2, n=171  3, n=30  4, n=4  5, n=1  missing, n=870 |  | No car or one car (0) | If [W3\_Q9\_parent\_T3] = 0,1 | n=231 |
|  | Two or more cars (1) | If [W3\_Q9\_parent\_T3] = 2,3,4,5 | n=206 |
|  | Missing (999) | If [W3\_Q9\_parent\_T3] = missing. | n=870 |
|  |  |  |  |  |  |  |
| Pelotas  Wave: 1 | Var’ name: W1a\_car\_number  Parent-reported  No. of cars owned | 0, n=306  1, n=136  2, n=12  3, n=3  Missing, n=4847 |  | No car or one car (0) | If [W1a\_car\_number] = 0,1 | n=442 |
|  | Two or more cars (1) | If [W1a\_car\_number] = 2,3 | n=15 |
|  | Missing (999) | If [W1a\_car\_number] = missing. | n=4847 |
|  |  |  |  |  |  |  |
| Pelotas  Wave: 3 | Var’ name: W3\_kcarqtos  Self-reported (age 18 survey)  No. of cars owned | 0, n=2208  1, n=1467  2, n=323  3, n=84  4, n=16  5, n=5  6, n=2  missing, n=1199 |  | No car or one car (0) | If [W3\_kcarqtos] = 0,1 | n=3675 |
|  | Two or more cars (1) | If [W3\_kcarqtos] = 2,3,4,5,6 | n=430 |
|  | Missing (999) | If [W3\_kcarqtos] = missing. | n=1199 |
|  |  |  |  |  |  |  |
| SPEEDY  Wave: 1 | Var’ name: W1\_carown  Child-reported  Car ownership | “No”, n=115  “Yes; 1 car”, n=742  “Yes; >1 car”, n=1207 |  | No car or one car (0) | If [W1\_carown] = “No”, “Yes, 1 car” | n=857 |
|  | Two or more cars (1) | If [W1\_carown] = “Yes; >1 car” | n=1207 |
|  | Missing (999) | No missing data |  |
|  |  |  |  |  |  |  |
| SPEEDY  Wave: 2 | Var’ name: W2\_s2\_a3acars\_cleaned  Child-reported  Ownership of more than 1 car | 0 (no), n=338  1 (yes), n=573  missing, n=1153 |  | No car or one car (0) | If [W2\_s2\_a3acars\_cleaned] = 0 | n=338 |
|  | Two or more cars (1) | If [W2\_s2\_a3acars\_cleaned] = 1 | n=573 |
|  | Missing (999) | If [W2\_s2\_a3acars\_cleaned] = missing | n=1153 |
|  |  |  |  |  |  |  |
| SPEEDY  Wave: 3 | Var’ name: W3\_s3\_q083bmorethanonevehicle  Parent-reported  Ownership of more than 1 car | 0 (no), n=191  1 (yes), n=247  missing, n=1626 |  | No car or one car (0) | If [W3\_s3\_q083bmorethanonevehicle] = 0 | n=191 |
|  | Two or more cars (1) | If [W3\_s3\_q083bmorethanonevehicle] = 1 | n=247 |
|  | Missing (999) | If [W3\_s3\_q083bmorethanonevehicle] = missing | n=1626 |