```stata
1   ********************************************************************************
2   *    UTILITY TO ANALYSE NDNS CPAQ DATA.                                        *
3   *    NOTE: All data for the NDNS CPAQ has been completed using online questionnaires. Data does not need    *
4   *         cleaning beyond entry.                                               *
5   *                                                                              *
6   *    Authors: Lewis Griffiths, Kate Westgate, Soren Brage (MRC Epidemiology Unit, Cambridge, UK)    *
7   *    Version 2.0                                                               *
8   *    Date: 10/07/2023                                                          *
9   ********************************************************************************
10
11  /*
12  Version history:
13  v1.0: Code created to work on Year 12 of NDNS. This was the first implementation of the questionnaire within
14       NDNS. Data were split into _A and _B variables depending on which version of the questionnaire was
15       completed.
16       Code produces inschool and out of school variables by combining the P_/PC_/C_ variables into one
17       output variable. This is due to the fact the questions asked throughout the two questionnaires do not
18       differ greatly. See the questionnaires for the differences.
19       Results at the end should be viewed in their split due to the slight differences.
20       MVPA variables were decided internally as to which activities would count towards MVPA with the guidence
21       of the youth compendium (https://www.nccor.org/tools-youthcompendium/met-view-all-categories/).
22
23  V2.0: Removed _A variables as they could not be harmonised to the newer versions of the questionnaire.
24       Questionnaire only for those aged 4-15 so younger data is now in the UPAQ.
25
26  */
27
28  global ROOT_FOLDER      = "" //Replace with the path of your main PAQ folder
29  global PAQ_YEAR         = "" //Replace with the year you want, e.g. Y15
30  global PROCESSING_F     = "" //Replace with the path of your processing folder, on from ROOT_FOLDER
31  global DATA_FOLDER      = "" //Replace with the path of your data folder, on from ROOT_FOLDER
32  global RESULTS_FOLDER   = "" //Replace with the path of your results folder, on from ROOT_FOLDER
33
34  global CPAQ_DATA_FILE   = "" //Replace with your data file name in your data folder
35  global CPAQ_RESULTS_FILE= "" //Replace with your results file name in your results folder
36
37  ******************
38  *** PROCESSING ***
39  ******************
40
41  use "$ROOT_FOLDER/$PROCESSING_F/$DATA_FOLDER/$CPAQ_DATA_FILE.dta", clear
42
43  qui {
44
45  // MERGING THE PC_CPAQ and C_CPAQ DATA INTO ONE OVERALL VARIABLES TO WORK FROM
46
47      *** COMMUTING VARS (PC_CPAQ [v1.1.0+]/C_CPAQ [V1.1.0+]) ***
48      qui {
49          gen WentToSchool_B = .
50          replace WentToSchool_B = PC_WentSchool_v2 if PC_WentSchool_v2 != -1
51          replace WentToSchool_B = C_WentToSchool if C_WentToSchool != -1 & WentToSchool == .
52
53          *** GETTING TO/FROM SCHOOL ***
54          foreach MODE in Walk Cycle Motorised {
55              foreach TOFROM in To From {
56
57                  //renaming the PC variables to allow for easy processing
58                  rename PC_`MODE'`TOFROM'SchoolDays_v2 PC_`MODE'`TOFROM'SchoolDays
59
60                  //No Of Days
61                  gen TOTDAYS_`MODE'`TOFROM'Schl_B = .
62                  replace TOTDAYS_`MODE'`TOFROM'Schl_B = PC_`MODE'`TOFROM'SchoolDays if PC_`MODE'`TOFROM'SchoolDays !=-1
63                  replace TOTDAYS_`MODE'`TOFROM'Schl_B = C_`MODE'`TOFROM'SchoolDays if C_`MODE'`TOFROM'SchoolDays !=-1 & TOTDAYS_`MODE'`TOFROM'Schl_B == .
64
65                  //Duration
66                  foreach TIME in Hr Min {
67                      gen `MODE'`TOFROM'Schl`TIME'_B = .
68                      replace `MODE'`TOFROM'Schl`TIME'_B = PC_`MODE'`TOFROM'School`TIME'_v2 if PC_`MODE'`TOFROM'School`TIME'_v2 !=-1
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 69                         replace `MODE'`TOFROM'Schl`TIME'_B = C_`MODE'`TOFROM'School`TIME' if C_`MODE'`TOFROM'School`TIME' !=-1 & `MODE'`TOFROM'Schl`TIME' ==.
 70                     }
 71
 72                     // Generating daily total duration for each mode of transport (Hr+Min)
 73                     gen TOTDUR_dy_`MODE'`TOFROM'Schl_B = .
 74                     replace TOTDUR_dy_`MODE'`TOFROM'Schl_B = `MODE'`TOFROM'SchlHr_B*60 if `MODE'`TOFROM'SchlHr_B !=-1 & `MODE'`TOFROM'SchlMin_B ==.
 75                     replace TOTDUR_dy_`MODE'`TOFROM'Schl_B = `MODE'`TOFROM'SchlMin_B if `MODE'`TOFROM'SchlHr_B ==. & `MODE'`TOFROM'SchlMin_B !=-1
 76                     replace TOTDUR_dy_`MODE'`TOFROM'Schl_B = `MODE'`TOFROM'SchlHr_B*60 + `MODE'`TOFROM'SchlMin_B if `MODE'`TOFROM'SchlHr_B !=. & `MODE'`TOFROM'SchlMin_B !=.
 77                 }
 78
 79             //adding row of to and from school to get commute days and duration for that mode of transport
 80             egen TOTDAYS_SchlComm`MODE'_B = rowtotal(TOTDAYS_`MODE'ToSchl_B TOTDAYS_`MODE'FromSchl_B)
 81             gen TOTDUR_SchlComm`MODE'_B = cond(missing(TOTDUR_dy_`MODE'ToSchl_B), 0, (TOTDUR_dy_`MODE'ToSchl_B*TOTDAYS_`MODE'ToSchl_B))+cond(missing(TOTDUR_dy_`MODE'FromSchl_B), 0, (TOTDUR_dy_`MODE'FromSchl_B*TOTDAYS_`MODE'FromSchl_B))
 82             gen TOTDUR_dy_SchlComm`MODE'_B = TOTDUR_SchlComm`MODE'_B/TOTDAYS_SchlComm`MODE'_B
 83
 84             //replacing any variable with missing that was not answered (as rowtotal can put 0s)
 85             replace TOTDAYS_SchlComm`MODE'_B = . if TOTDAYS_`MODE'ToSchl_B == . & TOTDAYS_`MODE'FromSchl_B == .
 86             replace TOTDUR_SchlComm`MODE'_B = . if TOTDAYS_SchlComm`MODE'_B == . & TOTDUR_dy_`MODE'ToSchl_B == . & TOTDUR_dy_`MODE'FromSchl_B == .
 87             replace TOTDUR_dy_SchlComm`MODE'_B = . if TOTDUR_SchlComm`MODE'_B == . & TOTDAYS_SchlComm`MODE'_B   == .
 88
 89
 90         }
 91     }
 92
 93     *** PE LESSONS (PC_CPAQ [v2+]/C_CPAQ [V1.1+]) ***
 94     qui {
 95         // PE Lessons (minutes). This is asked as a tick box (1-8)
 96         // 1 = 1-14 mins; 2 = 15-29 mins; 3 = 30-44 mins; 4 = 45-59 mins; 5 = 1 hr-1 hr 29 mins; 6 = 1 hr 30 mins-1 hr 59 mins; 7 = 2 hrs-2 hrs 59 mins; 8 = More than 3 hrs
 97         gen DoPELessons_B = .
 98         replace DoPELessons_B = PC_DoPElessons if PC_DoPElessons !=-1
 99         replace DoPELessons_B = C_DoPElessons if C_DoPElessons !=-1 & DoPELessons_B == .
100
101         foreach WDWE in Wday Wend {
102             //No of days (split into weekdays and weekend days)
103             gen TOTDAYS_PE`WDWE'_B = .
104             replace TOTDAYS_PE`WDWE'_B = PC_PElessonsDays`WDWE' if PC_PElessonsDays`WDWE' != -1
105             replace TOTDAYS_PE`WDWE'_B = C_PElessonsDays`WDWE' if C_PElessonsDays`WDWE' != -1 & TOTDAYS_PE`WDWE'_B == .
106
107             //Duration
108             gen TOTDUR_PE`WDWE'_B = .
109             foreach prefix in PC C {
110                 //removing the _v2 from variable name
111                 cap rename `prefix'_PElessonsDur`WDWE'_v2 `prefix'_PElessonsDur`WDWE'
112
113                 //replacing overall time with duration based of off the coding
114                 replace TOTDUR_PE`WDWE'_B =   7 if `prefix'_PElessonsDur`WDWE'_v2 == 1
115                 replace TOTDUR_PE`WDWE'_B =  22 if `prefix'_PElessonsDur`WDWE'_v2 == 2
116                 replace TOTDUR_PE`WDWE'_B =  37 if `prefix'_PElessonsDur`WDWE'_v2 == 3
117                 replace TOTDUR_PE`WDWE'_B =  52 if `prefix'_PElessonsDur`WDWE'_v2 == 4
118                 replace TOTDUR_PE`WDWE'_B =  74 if `prefix'_PElessonsDur`WDWE'_v2 == 5
119                 replace TOTDUR_PE`WDWE'_B = 104 if `prefix'_PElessonsDur`WDWE'_v2 == 6
120                 replace TOTDUR_PE`WDWE'_B = 149 if `prefix'_PElessonsDur`WDWE'_v2 == 7
121
122                 //If PE lesson score = 8 (>=3 hours) the duration is asked in hours and minutes
123                 replace TOTDUR_PE`WDWE'_B = `prefix'_PElessonsDur`WDWE'Hr*60 if `prefix'_PElessonsDur`WDWE'Hr !=-1 & `prefix'_PElessonsDur`WDWE'Min ==-1 & `prefix'_PElessonsDur`WDWE'_v2 == 8
124                 replace TOTDUR_PE`WDWE'_B = `prefix'_PElessonsDur`WDWE'Min if `prefix'_PElessonsDur`WDWE'Hr ==-1 & `prefix'_PElessonsDur`WDWE'Min !=-1 & `prefix'_PElessonsDur`WDWE'_v2 == 8
125                 replace TOTDUR_PE`WDWE'_B = `prefix'_PElessonsDur`WDWE'Hr*60 + `prefix'_PElessonsDur`WDWE'Min if `prefix'_PElessonsDur`WDWE'Hr !=-1 & `prefix'_PElessonsDur`WDWE'Min !=-1 & `prefix'_PElessonsDur`WDWE'_v2 == 8
126             }
127         }
128
129         //Overal PE days and duration (Overall and daily)
130         egen TOTDAYS_PE_B = rowtotal(TOTDAYS_PEWday_B TOTDAYS_PEWend_B)
131         egen TOTDUR_PE_B = rowtotal(TOTDUR_PEWday_B TOTDUR_PEWend_B)
132
133         //replacing any variable with missing that was not answered (as rowtotal can put 0s)
134
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135            replace TOTDAYS_PE_B = . if TOTDAYS_PEWday_B == . & TOTDAYS_PEWend_B == .
136            replace TOTDUR_PE_B = . if TOTDAYS_PE_B == . & TOTDUR_PEWday_B == . & TOTDUR_PEWend_B == .
137        }
138
139    *** ACTIVITIES (PC_CPAQ [v2+]/C_CPAQ [V1.1+]) ***
140    // Creating a Duration variable for each of the activities, but inside and out of shcool
141    foreach ACT in Hopscotch Trampoline PlayAround Skate Skipping Football Netball Cricket Dance Run Gym Weights Aerobics ///
142    Tennis SwimLaps SwimSplash Cycle Walk Softplay Housework Other1 Other2 Other3 Other4 Other5 {
143        foreach suff in "" "InSchl" {
144            //Local VN_suff is to add to the end of the variable names so school and out of school can be defined
145            local VN_suff = ""
146            if "`suff'" == "InSchl" {
147                local VN_suff = "Schl" //In School
148            }
149            if "`suff'" == "" {
150                local VN_suff = "OoS" //Out of School
151            }
152
153            *** DO ACTIVITIES ***
154            // Creating blank Do, days and duration for each activity (to join PC and C)
155            gen Do`ACT'_`VN_suff'_B = .
156            gen TOTDAYS_`ACT'Wday_`VN_suff'_B = .
157            gen TOTDUR_`ACT'Wday_`VN_suff'_B = .
158            gen TOTDAYS_`ACT'Wend_`VN_suff'_B = .
159            gen TOTDUR_`ACT'Wend_`VN_suff'_B = .
160
161            //Looping thorugh PC and C variables to replace the new overal variable with an actual answer
162            foreach prefix in PC C {
163                //Dropping original C_ variables for activities (These were for the V1 version of of the questionnaire)
164                //Checking if they are empty. If they are not. Stop the code here
165                if "`prefix'" == "C" {
166                    foreach WDWE in Wday Wend {
167                        capture confirm variable `prefix'_`ACT'Dur`WDWE'`suff'
168                        if !_rc {
169                            su `prefix'_`ACT'Dur`WDWE'`suff'
170                            local OBS = r(N)
171                            if `OBS' == 0 {
172                                drop `prefix'_`ACT'Dur`WDWE'`suff'
173                            }
174                            if `OBS' !=0 {
175                                nois di in red "The original variable (`prefix'_`ACT'Dur`WDWE'`suff') has data in so could not drop"
176                                STOP
177                            }
178                        }
179                    }
180                }
181
182                // Renaming the Do Activity variables to removed _v2 so PC and C can be treated the same
183                cap rename `prefix'_Do`ACT'`suff'_v2 `prefix'_Do`ACT'`suff'
184
185                // Looking for the variable. If present replace the overall with whatever was in PC/C (providing it was not -1 and overall == .)
186                capture confirm variable `prefix'_Do`ACT'`suff'
187                if !_rc {
188                    replace Do`ACT'_`VN_suff'_B = `prefix'_Do`ACT'`suff' if `prefix'_Do`ACT'`suff' !=-1 & Do`ACT'_`VN_suff'_B == .
189                    nois di in yellow "var: `prefix'_Do`ACT'`suff' exist"
190                }
191                else {
192                    di in red "var: `prefix'_Do`ACT'`suff' Does not exist"
193                }
194
195                //looping through the weekday and week end variable, checking if exists and merging into one overall var if there
196                foreach WDWE in Wday Wend {
197
198                    cap rename `prefix'_`ACT'Days`WDWE'`suff'_v2 `prefix'_`ACT'Days`WDWE'`suff'
199                    cap rename `prefix'_`ACT'Dur`WDWE'`suff'_v2 `prefix'_`ACT'Dur`WDWE'`suff'
200
201                    capture confirm variable `prefix'_`ACT'Dur`WDWE'`suff'
202                    if !_rc {
```

```stata
203
204                          //Replacing the number of days with values that are not -1
205                          replace TOTDAYS_`ACT'`WDWE'_`VN_suff'_B = `prefix'_`ACT'Days`WDWE'`suff' if `prefix'_`ACT'Days`WDWE'`suff' !=-1 & TOTDAYS_`ACT'`WDWE'_`VN_suff'_B == .
206
207                          //Replacing the duration with the minutes calculated from the coded input
208                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B =   7 if `prefix'_`ACT'Dur`WDWE'`suff' == 1 & TOTDUR_`ACT'`WDWE'_`VN_suff'_B == .
209                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B =  22 if `prefix'_`ACT'Dur`WDWE'`suff' == 2 & TOTDUR_`ACT'`WDWE'_`VN_suff'_B == .
210                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B =  37 if `prefix'_`ACT'Dur`WDWE'`suff' == 3 & TOTDUR_`ACT'`WDWE'_`VN_suff'_B == .
211                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B =  52 if `prefix'_`ACT'Dur`WDWE'`suff' == 4 & TOTDUR_`ACT'`WDWE'_`VN_suff'_B == .
212                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B =  89 if `prefix'_`ACT'Dur`WDWE'`suff' == 5 & TOTDUR_`ACT'`WDWE'_`VN_suff'_B == .
213                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B = 104 if `prefix'_`ACT'Dur`WDWE'`suff' == 6 & TOTDUR_`ACT'`WDWE'_`VN_suff'_B == .
214                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B = 149 if `prefix'_`ACT'Dur`WDWE'`suff' == 7 & TOTDUR_`ACT'`WDWE'_`VN_suff'_B == .
215
216                          //If Activity score = 8 (over 3 hours) the duration is asked in hours and minutes
217                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B = `prefix'_`ACT'Dur`WDWE'`suff'Hr*60 if `prefix'_`ACT'Dur`WDWE'`suff'Hr !=-1 & `prefix'_`ACT'Dur`WDWE'`suff'Min ==-1 & `prefix'_`ACT'Dur`WDWE'`suff' == 8
218                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B = `prefix'_`ACT'Dur`WDWE'`suff'Min if `prefix'_`ACT'Dur`WDWE'`suff'Hr ==-1 & `prefix'_`ACT'Dur`WDWE'`suff'Min !=-1 & `prefix'_`ACT'Dur`WDWE'`suff' == 8
219                          replace TOTDUR_`ACT'`WDWE'_`VN_suff'_B = `prefix'_`ACT'Dur`WDWE'`suff'Hr*60 + `prefix'_`ACT'Dur`WDWE'`suff'Min if `prefix'_`ACT'Dur`WDWE'`suff'Hr !=-1 & `prefix'_`ACT'Dur`WDWE'`suff'Min !=-1 & `prefix'_`ACT'Dur`WDWE'`suff' == 8
220                      }
221                  }
222              }
223
224          //Adding up weekend and weekday to create an overall no of days and time
225          egen TOTDAYS_`ACT'_`VN_suff'_B = rowtotal(TOTDAYS_`ACT'Wday_`VN_suff'_B TOTDAYS_`ACT'Wend_`VN_suff'_B)
226          egen TOTDUR_`ACT'_`VN_suff'_B = rowtotal(TOTDUR_`ACT'Wday_`VN_suff'_B TOTDUR_`ACT'Wend_`VN_suff'_B)
227
228          //replacing any variable with missing that was not answered (as rowtotal can put 0s)
229          replace TOTDAYS_`ACT'_`VN_suff'_B = . if TOTDAYS_`ACT'Wday_`VN_suff'_B == . & TOTDAYS_`ACT'Wend_`VN_suff'_B == .
230          replace TOTDUR_`ACT'_`VN_suff'_B = . if TOTDAYS_`ACT'_`VN_suff'_B == . & TOTDUR_`ACT'Wday_`VN_suff'_B == . & TOTDUR_`ACT'Wend_`VN_suff'_B == .
231      }
232  }
233
234  *** SEDENTARY ACTIVITIES (PC_CPAQ [v2+]/C_CPAQ [V1.1+]) ***
235  qui {
236      foreach SED in Read Screen Other {
237
238          // Creating blank Do, days and duration for each activity (to join PC and C)
239          gen DoSit`SED'_B = .
240          gen TOTDAYS_Sit`SED'Wday_B = .
241          gen TOTDUR_Sit`SED'Wday_B = .
242          gen TOTDAYS_Sit`SED'Wend_B = .
243          gen TOTDUR_Sit`SED'Wend_B = .
244
245          // Creating duration variables for the sedentary times. Values as below:
246          // 1 = 1-29 mins; 2 = 30-59 min; 3 = 1 hr-1 hr 59 mins; 4 = 2 hr-2 hr 59 mins; 5 = 3 hr-4 hr 59 mins; 6 = 5 hr-6 hr 59 mins
247          // 7 = 7 hr-8 hr 59 mins; 8 = 9 hr-10 hr 59 mins; 9 = 11 hr-12 hr 59 mins; 10 = 13 hr-14 hr 59 mins; 11 = 15 hr-16 hr 59 mins
248          // 12 = 17 hr-18 hr 59 mins; 13 = More than 19 hours
249          foreach prefix in PC C {
250
251              //Dropping original C_ variables for activities (These were for the V1 version of of the questionnaire)
252              //Checking if they are empty. If they are not. Stop the code here
253              if "`prefix'" == "C" {
254                  foreach WDWE in Wday Wend {
255                      capture confirm variable `prefix'_Sit`SED'Dur`WDWE'
256                      if !_rc {
257                          su `prefix'_Sit`SED'Dur`WDWE'
258                          local OBS = r(N)
259                          if `OBS' == 0 {
260                              drop `prefix'_Sit`SED'Dur`WDWE'
261                          }
262                          if `OBS' !=0 {
263                              nois di in red "The original variable (`prefix'_Sit`SED'Dur`WDWE') has data in so could not drop"
264                              STOP
265                          }
266                      }
267                  }
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```stata
268                        }
269                    }
270
271                    //Sorting out Do activities variable
272                    cap rename `prefix'_DoSit`SED'_v2 `prefix'_DoSit`SED'
273                    replace DoSit`SED'_B = `prefix'_DoSit`SED' if `prefix'_DoSit`SED' !=-1 & DoSit`SED' == .
274
275                    //Looping through each Weekday and Weekend within PC C and to convert to Duration (minutes)
276                    foreach WDWE in Wday Wend {
277                        cap rename `prefix'_Sit`SED'Days`WDWE'_v2 `prefix'_Sit`SED'Days`WDWE'
278                        cap rename `prefix'_Sit`SED'Dur`WDWE'_v2 `prefix'_Sit`SED'Dur`WDWE'
279
280
281                        //Replacing the number of days with values that are not -1
282                        replace TOTDAYS_Sit`SED'`WDWE'_B = `prefix'_Sit`SED'Days`WDWE' if `prefix'_Sit`SED'Days`WDWE' !=-1 & TOTDAYS_Sit`SED'`WDWE'_B == .
283
284                        //Replacing duration with a time variable based off of coded entry
285                        replace TOTDUR_Sit`SED'`WDWE'_B =   15 if `prefix'_Sit`SED'Dur`WDWE' == 1
286                        replace TOTDUR_Sit`SED'`WDWE'_B =   45 if `prefix'_Sit`SED'Dur`WDWE' == 2
287                        replace TOTDUR_Sit`SED'`WDWE'_B =   90 if `prefix'_Sit`SED'Dur`WDWE' == 3
288                        replace TOTDUR_Sit`SED'`WDWE'_B =  150 if `prefix'_Sit`SED'Dur`WDWE' == 4
289                        replace TOTDUR_Sit`SED'`WDWE'_B =  240 if `prefix'_Sit`SED'Dur`WDWE' == 5
290                        replace TOTDUR_Sit`SED'`WDWE'_B =  360 if `prefix'_Sit`SED'Dur`WDWE' == 6
291                        replace TOTDUR_Sit`SED'`WDWE'_B =  480 if `prefix'_Sit`SED'Dur`WDWE' == 7
292                        replace TOTDUR_Sit`SED'`WDWE'_B =  600 if `prefix'_Sit`SED'Dur`WDWE' == 8
293                        replace TOTDUR_Sit`SED'`WDWE'_B =  720 if `prefix'_Sit`SED'Dur`WDWE' == 9
294                        replace TOTDUR_Sit`SED'`WDWE'_B =  840 if `prefix'_Sit`SED'Dur`WDWE' == 10
295                        replace TOTDUR_Sit`SED'`WDWE'_B =  960 if `prefix'_Sit`SED'Dur`WDWE' == 11
296                        replace TOTDUR_Sit`SED'`WDWE'_B = 1080 if `prefix'_Sit`SED'Dur`WDWE' == 12
297
298                        //If Sed score = 13 (>=19 hours sed) the duration is asked in hours and minutes
299                        replace TOTDUR_Sit`SED'`WDWE'_B = `prefix'_Sit`SED'Dur`WDWE'Hr*60 if `prefix'_Sit`SED'Dur`WDWE'Hr !=-1 & `prefix'_Sit`SED'Dur`WDWE'Min ==-1 & `prefix'_Sit`SED'Dur`WDWE' == 13
300                        replace TOTDUR_Sit`SED'`WDWE'_B = `prefix'_Sit`SED'Dur`WDWE'Min if `prefix'_Sit`SED'Dur`WDWE'Hr ==-1 & `prefix'_Sit`SED'Dur`WDWE'Min !=-1 & `prefix'_Sit`SED'Dur`WDWE' == 13
301                        replace TOTDUR_Sit`SED'`WDWE'_B = `prefix'_Sit`SED'Dur`WDWE'Hr*60 + `prefix'_Sit`SED'Dur`WDWE'Min if `prefix'_Sit`SED'Dur`WDWE'Hr !=-1 & `prefix'_Sit`SED'Dur`WDWE'Min !=-1 & `prefix'_Sit`SED'Dur`WDWE' == 13
302
303                        }
304
305                    }
306
307                egen TOTDAYS_Sit`SED'_B = rowtotal(TOTDAYS_Sit`SED'Wday_B TOTDAYS_Sit`SED'Wend_B)
308                egen TOTDUR_Sit`SED'_B = rowtotal(TOTDUR_Sit`SED'Wday_B TOTDUR_Sit`SED'Wend_B)
309
310                //replacing any variable with missing that was not answered (as rowtotal can put 0s)
311                replace TOTDAYS_Sit`SED'_B = . if TOTDAYS_Sit`SED'Wday_B == . & TOTDAYS_Sit`SED'Wend_B == .
312                replace TOTDUR_Sit`SED'_B = . if TOTDAYS_Sit`SED'_B == . & TOTDUR_Sit`SED'Wday_B == . & TOTDUR_Sit`SED'Wend_B == .
313            }
314        }
315    }
316
317    sort VersionNumber Q_type START
318
319    //dropping not needed variables:
320    drop DoOther*_Schl* TOTDAYS_Other*_Schl* TOTDUR_Other*_Schl* //Other activities not done at school so dropping here
321    drop *Cycle*_Schl* *Walk*_Schl* *Housework*_Schl* *Softplay*_Schl* //cycle, walk, housework and softplay not done at school - drop here
322    rename *Other*_OoS_B *Other*_B
323
324
325    /* No ending for PC_ and C_ (>=1.1).
326    Commute: Mins/day (already daily)
327    PE, Activities and Sedentary: Total Mins of all acts
328    */
329
330    ********************
331    *** OVERALL TOTALS ***
332    ********************
333    /* As variables have now been combined, the overall totals can be calculated*/
334
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335    //Generating Total School Commuting time
336    egen TOTDUR_AllSchlComm_B = rowtotal(TOTDUR_`VN_midd'SchlCommWalk_B TOTDUR_`VN_midd'SchlCommCycle_B ///
337                                  TOTDUR_`VN_midd'SchlCommMotorised_B)
338    //replacing variable with missing if none of the totdurs were ever answered
339    replace TOTDUR_AllSchlComm_B = . if TOTDUR_`VN_midd'SchlCommWalk_B == . & TOTDUR_`VN_midd'SchlCommCycle_B == . ///
340                                  & TOTDUR_`VN_midd'SchlCommMotorised_B == .
341
342    //Generating Total in School activities (Including PE)
343    egen TOTDUR_AllSchlActs_B = rowtotal(TOTDUR_`VN_midd'Hopscotch_Schl_B TOTDUR_`VN_midd'Trampoline_Schl_B ///
344                                  TOTDUR_`VN_midd'PlayAround_Schl_B TOTDUR_`VN_midd'Skate_Schl_B ///
345                                  TOTDUR_`VN_midd'Skipping_Schl_B TOTDUR_`VN_midd'Football_Schl_B ///
346                                  TOTDUR_`VN_midd'Netball_Schl_B TOTDUR_`VN_midd'Cricket_Schl_B ///
347                                  TOTDUR_`VN_midd'Dance_Schl_B TOTDUR_`VN_midd'Run_Schl_B ///
348                                  TOTDUR_`VN_midd'Gym_Schl_B TOTDUR_`VN_midd'Weights_Schl_B ///
349                                  TOTDUR_`VN_midd'Aerobics_Schl_B TOTDUR_`VN_midd'Tennis_Schl_B ///
350                                  TOTDUR_`VN_midd'SwimLaps_Schl_B TOTDUR_`VN_midd'SwimSplash_Schl_B ///
351                                  TOTDUR_`VN_midd'PE_B)
352
353    //replacing variable with missing if none of the totdurs were ever answered
354    replace TOTDUR_AllSchlActs_B = . if TOTDUR_`VN_midd'Hopscotch_Schl_B == . & TOTDUR_`VN_midd'Trampoline_Schl_B == . ///
355                                  & TOTDUR_`VN_midd'PlayAround_Schl_B == . & TOTDUR_`VN_midd'Skate_Schl_B == . ///
356                                  & TOTDUR_`VN_midd'Skipping_Schl_B == . & TOTDUR_`VN_midd'Football_Schl_B == . ///
357                                  & TOTDUR_`VN_midd'Netball_Schl_B == . & TOTDUR_`VN_midd'Cricket_Schl_B == . ///
358                                  & TOTDUR_`VN_midd'Dance_Schl_B == . & TOTDUR_`VN_midd'Run_Schl_B == . ///
359                                  & TOTDUR_`VN_midd'Gym_Schl_B == . & TOTDUR_`VN_midd'Weights_Schl_B == . ///
360                                  & TOTDUR_`VN_midd'Aerobics_Schl_B == . & TOTDUR_`VN_midd'Tennis_Schl_B == . ///
361                                  & TOTDUR_`VN_midd'SwimLaps_Schl_B == . & TOTDUR_`VN_midd'SwimSplash_Schl_B == . ///
362                                  & TOTDUR_`VN_midd'PE_B == .
363    //Generating Total in School activities (Excluding PE)
364    egen TOTDUR_AllSchlActs_NoPE_B = rowtotal(TOTDUR_`VN_midd'Hopscotch_Schl_B TOTDUR_`VN_midd'Trampoline_Schl_B ///
365                                  TOTDUR_`VN_midd'PlayAround_Schl_B TOTDUR_`VN_midd'Skate_Schl_B ///
366                                  TOTDUR_`VN_midd'Skipping_Schl_B TOTDUR_`VN_midd'Football_Schl_B ///
367                                  TOTDUR_`VN_midd'Netball_Schl_B TOTDUR_`VN_midd'Cricket_Schl_B ///
368                                  TOTDUR_`VN_midd'Dance_Schl_B TOTDUR_`VN_midd'Run_Schl_B ///
369                                  TOTDUR_`VN_midd'Gym_Schl_B TOTDUR_`VN_midd'Weights_Schl_B ///
370                                  TOTDUR_`VN_midd'Aerobics_Schl_B TOTDUR_`VN_midd'Tennis_Schl_B ///
371                                  TOTDUR_`VN_midd'SwimLaps_Schl_B TOTDUR_`VN_midd'SwimSplash_Schl_B)
372
373    //replacing variable with missing if none of the totdurs were ever answered
374    replace TOTDUR_AllSchlActs_NoPE_B = . if TOTDUR_`VN_midd'Hopscotch_Schl_B == . & TOTDUR_`VN_midd'Trampoline_Schl_B == . ///
375                                  & TOTDUR_`VN_midd'PlayAround_Schl_B == . & TOTDUR_`VN_midd'Skate_Schl_B == . ///
376                                  & TOTDUR_`VN_midd'Skipping_Schl_B == . & TOTDUR_`VN_midd'Football_Schl_B == . ///
377                                  & TOTDUR_`VN_midd'Netball_Schl_B == . & TOTDUR_`VN_midd'Cricket_Schl_B == . ///
378                                  & TOTDUR_`VN_midd'Dance_Schl_B == . & TOTDUR_`VN_midd'Run_Schl_B == . ///
379                                  & TOTDUR_`VN_midd'Gym_Schl_B == . & TOTDUR_`VN_midd'Weights_Schl_B == . ///
380                                  & TOTDUR_`VN_midd'Aerobics_Schl_B == . & TOTDUR_`VN_midd'Tennis_Schl_B == . ///
381                                  & TOTDUR_`VN_midd'SwimLaps_Schl_B == . & TOTDUR_`VN_midd'SwimSplash_Schl_B == .
382
383    //Generating Total Out of School Activities (Incl Cycl, walk and Softplay & Housework)
384    egen TOTDUR_AllOoSActs_B = rowtotal(TOTDUR_`VN_midd'Hopscotch_OoS_B TOTDUR_`VN_midd'Trampoline_OoS_B ///
385                                  TOTDUR_`VN_midd'PlayAround_OoS_B TOTDUR_`VN_midd'Skate_OoS_B ///
386                                  TOTDUR_`VN_midd'Skipping_OoS_B TOTDUR_`VN_midd'Football_OoS_B ///
387                                  TOTDUR_`VN_midd'Netball_OoS_B TOTDUR_`VN_midd'Cricket_OoS_B ///
388                                  TOTDUR_`VN_midd'Dance_OoS_B TOTDUR_`VN_midd'Run_OoS_B ///
389                                  TOTDUR_`VN_midd'Gym_OoS_B TOTDUR_`VN_midd'Aerobics_OoS_B ///
390                                  TOTDUR_`VN_midd'Tennis_OoS_B TOTDUR_`VN_midd'SwimLaps_OoS_B ///
391                                  TOTDUR_`VN_midd'SwimSplash_OoS_B TOTDUR_`VN_midd'Cycle_OoS_B ///
392                                  TOTDUR_`VN_midd'Walk_OoS_B TOTDUR_`VN_midd'Softplay_OoS_B ///
393                                  TOTDUR_`VN_midd'Housework_OoS_B)
394
395
396    //replacing variable with missing if none of the totdurs were ever answered
397    replace TOTDUR_AllOoSActs_B = . if TOTDUR_`VN_midd'Hopscotch_OoS_B == . & TOTDUR_`VN_midd'Trampoline_OoS_B  == . ///
398                                  & TOTDUR_`VN_midd'PlayAround_OoS_B == . & TOTDUR_`VN_midd'Skate_OoS_B == . ///
399                                  & TOTDUR_`VN_midd'Skipping_OoS_B == . & TOTDUR_`VN_midd'Football_OoS_B == . ///
400                                  & TOTDUR_`VN_midd'Netball_OoS_B == . & TOTDUR_`VN_midd'Cricket_OoS_B == . ///
401                                  & TOTDUR_`VN_midd'Dance_OoS_B == . & TOTDUR_`VN_midd'Run_OoS_B == . ///
402                                  & TOTDUR_`VN_midd'Gym_OoS_B == . & TOTDUR_`VN_midd'Aerobics_OoS_B == . ///
```

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403                             & TOTDUR_`VN_midd'Tennis_OoS_B == . & TOTDUR_`VN_midd'SwimLaps_OoS_B == . ///
404                             & TOTDUR_`VN_midd'SwimSplash_OoS_B == . & TOTDUR_`VN_midd'Cycle_OoS_B == . ///
405                             & TOTDUR_`VN_midd'Walk_OoS_B == . & TOTDUR_`VN_midd'Softplay_OoS_B == . ///
406                             & TOTDUR_`VN_midd'Housework_OoS_B == .
407
408     //Generating OtherAct total time
409     egen TOTDUR_OtherAll_B = rowtotal(TOTDUR_`VN_midd'Other1_B TOTDUR_`VN_midd'Other2_B ///
410                             TOTDUR_`VN_midd'Other3_B TOTDUR_`VN_midd'Other4_B ///
411                             TOTDUR_`VN_midd'Other5_B)
412
413     //replacing variable with missing if none of the totdurs were ever answered
414     replace TOTDUR_OtherAll_B = . if TOTDUR_`VN_midd'Other1_B == . & TOTDUR_`VN_midd'Other2_B == . ///
415                             & TOTDUR_`VN_midd'Other3_B == . & TOTDUR_`VN_midd'Other4_B == . ///
416                             & TOTDUR_`VN_midd'Other5_B == .
417
418     //Generating Total Sitting time
419     egen TOTDUR_SittingTime_B = rowtotal(TOTDUR_`VN_midd'SitRead_B TOTDUR_`VN_midd'SitScreen_B ///
420                             TOTDUR_`VN_midd'SitOther_B)
421
422     //replacing variable with missing if none of the totdurs were ever answered
423     replace TOTDUR_SittingTime_B = . if TOTDUR_`VN_midd'SitRead_B == . & TOTDUR_`VN_midd'SitScreen_B == . ///
424                             & TOTDUR_`VN_midd'SitOther_B == .
425
426     //Generating overall total active time (Exc other and Sitting activities)
427     egen TOTDUR_AllActiveTime_B = rowtotal(TOTDUR_AllSchlComm_B TOTDUR_AllSchlActs_B ///
428                             TOTDUR_`midd'AllOoSActs_B)
429
430     //replacing variable with missing if none of the totdurs were ever answered
431     replace TOTDUR_AllActiveTime_B = . if TOTDUR_AllSchlComm_B == . & TOTDUR_AllSchlActs_B == . ///
432                             & TOTDUR_AllOoSActs_B == .
433
434     //Generating overall total of all time (Exc Other)
435     egen TOTDUR_ALL_B = rowtotal(TOTDUR_AllSchlComm_B TOTDUR_AllSchlActs_B ///
436                         TOTDUR_AllOoSActs_B TOTDUR_SittingTime_B)
437
438     //replacing variable with missing if none of the totdurs were ever answered
439     replace TOTDUR_ALL_B = . if TOTDUR_AllSchlComm_B == . & TOTDUR_AllSchlActs_B == . ///
440                     & TOTDUR_AllOoSActs_B == . & TOTDUR_SittingTime_B == .
441
442     //Generating overall total of all time (Inc Other)
443     egen TOTDUR_ALL_Ot_B = rowtotal(TOTDUR_AllSchlComm_B TOTDUR_AllSchlActs_B ///
444                             TOTDUR_AllOoSActs_B TOTDUR_SittingTime_B ///
445                             TOTDUR_OtherAll_B)
446
447     replace TOTDUR_ALL_Ot_B = . if TOTDUR_AllSchlComm_B == . & TOTDUR_AllSchlActs_B == . ///
448                             & TOTDUR_AllOoSActs_B ==. & TOTDUR_SittingTime_B == . ///
449                             & TOTDUR_OtherAll_B == .
450
451     //Generating MVPA from all activities (might be able to work from some of the grouping)
452     egen TOTDUR_MVPA_B = rowtotal(TOTDUR_`VN_midd'SchlCommWalk_B TOTDUR_`VN_midd'SchlCommCycle_B ///
453                                 TOTDUR_`VN_midd'Hopscotch_Schl_B TOTDUR_`VN_midd'Trampoline_Schl_B ///
454                                 TOTDUR_`VN_midd'PlayAround_Schl_B TOTDUR_`VN_midd'Skate_Schl_B ///
455                                 TOTDUR_`VN_midd'Skipping_Schl_B TOTDUR_`VN_midd'Football_Schl_B ///
456                                 TOTDUR_`VN_midd'Netball_Schl_B TOTDUR_`VN_midd'Cricket_Schl_B ///
457                                 TOTDUR_`VN_midd'Dance_Schl_B TOTDUR_`VN_midd'Run_Schl_B ///
458                                 TOTDUR_`VN_midd'Gym_Schl_B TOTDUR_`VN_midd'Weights_Schl_B ///
459                                 TOTDUR_`VN_midd'Aerobics_Schl_B TOTDUR_`VN_midd'Tennis_Schl_B ///
460                                 TOTDUR_`VN_midd'SwimLaps_Schl_B TOTDUR_`VN_midd'SwimSplash_Schl_B ///
461                                 TOTDUR_`VN_midd'PE_B TOTDUR_`VN_midd'Hopscotch_OoS_B ///
462                                 TOTDUR_`VN_midd'Trampoline_OoS_B TOTDUR_`VN_midd'PlayAround_OoS_B ///
463                                 TOTDUR_`VN_midd'Skate_OoS_B TOTDUR_`VN_midd'Skipping_OoS_B ///
464                                 TOTDUR_`VN_midd'Football_OoS_B TOTDUR_`VN_midd'Netball_OoS_B ///
465                                 TOTDUR_`VN_midd'Cricket_OoS_B TOTDUR_`VN_midd'Dance_OoS_B ///
466                                 TOTDUR_`VN_midd'Run_OoS_B TOTDUR_`VN_midd'Gym_OoS_B ///
467                                 TOTDUR_`VN_midd'Aerobics_OoS_B TOTDUR_`VN_midd'Tennis_OoS_B ///
468                                 TOTDUR_`VN_midd'SwimLaps_OoS_B TOTDUR_`VN_midd'SwimSplash_OoS_B ///
469                                 TOTDUR_`VN_midd'Cycle_OoS_B TOTDUR_`VN_midd'Walk_OoS_B ///
470                                 TOTDUR_`VN_midd'Softplay_OoS_B)
```

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471
472    //replacing the variable with missing if all variables are missing (safety catch)
473    replace TOTDUR_MVPA_B = . if TOTDUR_`VN_midd'SchlCommWalk_B == . & TOTDUR_`VN_midd'SchlCommCycle_B == . ///
474                             & TOTDUR_`VN_midd'Hopscotch_Schl_B == . & TOTDUR_`VN_midd'Trampoline_Schl_B == . ///
475                             & TOTDUR_`VN_midd'PlayAround_Schl_B == . & TOTDUR_`VN_midd'Skate_Schl_B == . ///
476                             & TOTDUR_`VN_midd'Skipping_Schl_B == . & TOTDUR_`VN_midd'Football_Schl_B == . ///
477                             & TOTDUR_`VN_midd'Netball_Schl_B == . & TOTDUR_`VN_midd'Cricket_Schl_B == . ///
478                             & TOTDUR_`VN_midd'Dance_Schl_B == . & TOTDUR_`VN_midd'Run_Schl_B == . ///
479                             & TOTDUR_`VN_midd'Gym_Schl_B == . & TOTDUR_`VN_midd'Weights_Schl_B == . ///
480                             & TOTDUR_`VN_midd'Aerobics_Schl_B == . & TOTDUR_`VN_midd'Tennis_Schl_B == . ///
481                             & TOTDUR_`VN_midd'SwimLaps_Schl_B == . & TOTDUR_`VN_midd'SwimSplash_Schl_B == . ///
482                             & TOTDUR_`VN_midd'PE_B == . & TOTDUR_`VN_midd'Hopscotch_OoS_B == . ///
483                             & TOTDUR_`VN_midd'Trampoline_OoS_B == . & TOTDUR_`VN_midd'PlayAround_OoS_B == . ///
484                             & TOTDUR_`VN_midd'Skate_OoS_B == . & TOTDUR_`VN_midd'Skipping_OoS_B == . ///
485                             & TOTDUR_`VN_midd'Football_OoS_B == . & TOTDUR_`VN_midd'Netball_OoS_B == . ///
486                             & TOTDUR_`VN_midd'Cricket_OoS_B == . & TOTDUR_`VN_midd'Dance_OoS_B == . ///
487                             & TOTDUR_`VN_midd'Run_OoS_B == . & TOTDUR_`VN_midd'Gym_OoS_B == . ///
488                             & TOTDUR_`VN_midd'Aerobics_OoS_B == . & TOTDUR_`VN_midd'Tennis_OoS_B == . ///
489                             & TOTDUR_`VN_midd'SwimLaps_OoS_B == . & TOTDUR_`VN_midd'SwimSplash_OoS_B == . ///
490                             & TOTDUR_`VN_midd'Cycle_OoS_B == . & TOTDUR_`VN_midd'Walk_OoS_B == . ///
491                             & TOTDUR_`VN_midd'Softplay_OoS_B == .
492
493
494    *** FLAGGING HIGH REPORTERS ***
495    //Flaggint those that have reported more than 960 mins of sitting time or 960 mins of total time.
496    gen FLAG_High_Sitting = 1 if TOTDUR_SittingTime_B >= 960 & TOTDUR_SittingTime_B !=.
497    gen FLAG_High_Total = 1 if TOTDUR_ALL_Ot_B >=960 & TOTDUR_ALL_Ot_B !=.
498
499    gen Note_NoSchlCommDur = 0
500    gen Note_NoSchlActsDur = 0
501    gen Note_NoOoSActsDur = 0
502    gen Note_NoSittingDur = 0
503
504    *** CREATING FLAG VARIABLES ***
505    foreach var in Walk Cycle Motorised {
506        gen FLAG_COMM`var'_DAYS_ONLY_B = 0
507        replace FLAG_COMM`var'_DAYS_ONLY_B = 1 if TOTDAYS_SchlComm`var'_B !=. & TOTDUR_SchlComm`var'_B == 0
508
509        gen FLAG_COMM`var'_DUR_ONLY_B = 0
510        replace FLAG_COMM`var'_DUR_ONLY_B = 1 if TOTDAYS_SchlComm`var'_B ==. & TOTDUR_SchlComm`var'_B != .
511    }
512
513    replace Note_NoSchlCommDur = 1 if TOTDUR_AllSchlComm_B == . & TOTDUR_ALL_Ot_B !=.
514    replace Note_NoSchlActsDur = 1 if TOTDUR_AllSchlActs_B == . & TOTDUR_ALL_Ot_B !=.
515    replace Note_NoOoSActsDur = 1  if TOTDUR_AllOoSActs_B  == . & TOTDUR_ALL_Ot_B !=.
516    replace Note_NoSittingDur =1   if TOTDUR_SittingTime_B == . & TOTDUR_ALL_Ot_B !=.
517
518
519    *** CREATING CONSOLDATED VARIABLES ***
520    gen code_used = 2
521    cap label variable code_used "1 = Daily Durs for Acts & Sed. 2 = Total Durs for Act & Sed."
522
523    //adding in prcoessing information comment
524    gen process_comment = ""
525    replace process_comment = "PC_ vars ages 4/5-10 [v1.1.0+]. v1.1.0 could not enter commute duration. Ok v2+. Softplay asked. No weights or housework. Total durations asked for Acts & Sed." if Q_type ==
"PC_CPAQ"
526    replace process_comment = "C_ vars ages 11-15 [v1.1.0+]. v1.1.0 could not enter commute duration. Ok v2+. Total duration asked for Acts & Sed." if Q_type == "CPAQ" | Q_type == "C_CPAQ"
527
528    *** SAVING THE FILE ***
529    save "$ROOT_FOLDER/$PROCESSING_F/$RESULTS_FOLDER/$CPAQ_RESULTS_FILE.dta", replace
```