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1 ****
2 *      UTILITY TO ANALYSE RPAQ DATA, ENTERED AND CLEANED ACCORDING TO MRC EPI UNIT GUIDELINES *
3 *      NOTE: This script uses median values within dataset for missing imputation!
4 *
5 *      Authors: Robert Scott, Marcel den Hoed, Kate Westgate, Soren Brage (MRC Epidemiology Unit, Cambridge, UK) *
6 *      Version NDNS Processing V2.0 (Y12 plus - using MRC webforms)
7 *      Date 19/11/2021
8 ****
9
10 /*
11 Version history:
12 v1.3 - Incorporated version and template differences for Fenland R6 - June 2013
13 v1.4 - Specifically for Fenland R6.1 (merge in R6 dataset to use for median imputation when missing values) - July 2013
14 v1.5 - Generic version for web (removed Fenland specific information) - Oct 2013
15 v2.0 - Updated to include Cambridge Index & process version 10 (web and paper) as well as continue to process versions 8 & 9 - Jul 2018
16     Home and Leisure variables redefined: Household, mowing the lawn, watering the lawn, heavy gardening, weeding and pruning and DIY
17         have been moved from Leisure to Home classification. Leisure also includes ActiveComputerGames
18         and Skiing (added to Version 10).
19     MAJOR UPDATE: Computer use at home has been updated from 1.5 MET to 1 MET due to the inclusion of active computer games.
20
21 Version 3.0: Adapted by LG & KW Jan2021
22 Occupational activity quantified according to the approach outlined by Golubic et al (PLoS One 2014). Average intensity for each
23 work category derived from 12,435 UK adults with RPAQ concurrently with objective assessment of PAEE, estimated from individually
24 calibrated combined heart rate and movement sensing (Lindsay et al, IJBNPA 2019).
25
26 NDNS Processing V2.0 (Y12 plus - using MRC webforms):
27 Updated to process Y12 and above for NDNS RPAQ data.
28 For data harmonisation, Active computer games, household and skiing have been set to 0 when calculating TOTDUR (see
29 line 625). This will leave the original data in the dataset, but removed its values from final calculations.
30
31 The NDNS code is set up to take in the variables _EpiA from the NDNS Archive. These need altering to be able to run through the
32 main processing code using up to line 126 in the code below.
33 EpiA relates to the variables being updated by MRC Epidemiology unit from the original RPAQ variables. This was needed as some
34 earlier processing has been completed and it did not want to be confused. The A relates to the versions of processing code being
35 used (Y2-11: Version 1.0 & Y12, DNAC a above using Version 2.0).
36 */
37
38
39 clear
40 set more off
41 set mem 600m
42 capture log close
43
44 timer clear 1
45 timer on 1
46
47 ****
48 *** GLOBAL VARIABLES ***
49 ****
50 global INPUT_FOLDER = "" //Folder where input file is saved
51 global OUTPUT_FOLDER = "" //Folder where output is directed to
52
53 global INPUT_FILE = "" //Name of CSV file of input (do not include .csv)
54 global OUTPUT_SUFFIX = "" //Suffix of the output file (do not include any extensions). Displayed after each year.
55
56 ****
57 *** PROCESSING ***
58 ****
59
60 insheet using "$INPUT_FOLDER/$INPUT_FILE.csv", comma case clear
61
62 //taking the variables from the NDNS archive and renaming to match that of the processing code
63 rename StudyYr_EpiA StudyYr
64 rename template_EpiA template
65 rename *_EpiA* *_CLEAN*
66
67 //If re-creating dataset - remove possible output variables tha have been provided
68 foreach var in TOTMETHRS TOTMETHRS_w_UNACCTime TOTtime TOTALtime ACTMETS ACTMETS_w_UNACCTime ///

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69 HOME_METS WORK_METS LEIS_METS COMMUTE_METS HOME_ACTMETS WORK_ACTMETS LEIS_ACTMETS COMMUTE_ACTMETS PAEE HOME_PAEE ///
70 WORK_PAEE LEIS_PAEE COMMUTE_PAEE SED_INTENSITY LIGHT_INTENSITY MODERATE_INTENSITY VIGOROUS_INTENSITY SEDtime ///
71 LIGHTtime MODERATEtime VIGOROUStime {
72     cap drop `var`*
73 }
74
75 //Replacing converted to frequencies per week back to entry coding for recreational activities
76 foreach activity in swimComp swimLeis swimLeisIn swimLeisOut backPackMountainClimb ///
77 walkPleasure cyclingRacingRough cyclePleasure mowing waterLawn heavyGardening ///
78 weedPrune dIY Household aerobicsHigh aerobicsOther exerciseWeights conditionExercise ///
79 floorExercise dancing compRun jog bowling bowlingIn bowlingOut tennisBadminton ///
80 tennisIn tennisOut badminton squash tableTennis golf footballRugbyHockey ///
81 footRugHockIn footRugHockOut cricket rowing netVolleyBasketBall ///
82 netVolBasketIn netVolBasketOut huntingShootingFish horseBased snookerBillardsDarts ///
83 musicalInstrumentSing iceSkating Skiing sailingWindsurfBoat combatsSports ActiveComputerGames {
84     replace `activity'_CLEAN = `activity'_CLEAN_orig
85     drop `activity'_CLEAN_orig
86
87     //replacing hr + min with missing as when used it will be set to 0 but needed for marking in MISSING code
88     replace `activity'Hr_CLEAN = -1 if `activity'Hr_CLEAN == 0
89     replace `activity'Min_CLEAN = -1 if `activity'Min_CLEAN == 0
90 }
91
92 //This code is designed to run on Years 2-11 only. Dropping anything beyond that
93 keep if StudyYr == "Y12" | StudyYr == "DNAC"
94
95 //Replacing anything that is missing with -1 as this would be how the dataset would be entered
96 foreach var in Gettingabout_CLEAN Screenweekdaypre6pm_CLEAN Screenweekdaypost6pm_CLEAN Screenweekendpre6pm_CLEAN ///
97 Screenweekendpost6pm_CLEAN Stairweekday_CLEAN Stairweekend_CLEAN Paidemployment_CLEAN Work4wkago_CLEAN ///
98 Work4wkagoHr_CLEAN Work4wkagoMin_CLEAN Work4wkagoReason_CLEAN Work3wkago_CLEAN Work3wkagoHr_CLEAN ///
99 Work3wkagoMin_CLEAN Work3wkagoReason_CLEAN Work2wkago_CLEAN Work2wkagoHr_CLEAN Work2wkagoMin_CLEAN ///
100 Work2wkagoReason_CLEAN Work1wkago_CLEAN Work1wkagoHr_CLEAN Work1wkagoMin_CLEAN Work1wkagoReason_CLEAN ///
101 Worktype_CLEAN Wrkmiles_CLEAN Wrkkms_CLEAN Wrktimesperweek_CLEAN Daysweekday_CLEAN Daysweekendday_CLEAN ///
102 HomeWorkerMultipleLocs_CLEAN Wrkbycar_CLEAN Wrkbypubtran_CLEAN Wrkbybicycle_CLEAN Wrkbyfoot_CLEAN swimComp_CLEAN ///
103 swimCompHr_CLEAN swimCompMin_CLEAN swimLeis_CLEAN swimLeisHr_CLEAN swimLeisMin_CLEAN backPackMountainClimb_CLEAN ///
104 backPackMountainClimbHr_CLEAN backPackMountainClimbMin_CLEAN walkPleasure_CLEAN walkPleasureHr_CLEAN ///
105 walkPleasureMin_CLEAN cyclingRacingRough_CLEAN cyclingRacingRoughHr_CLEAN cyclingRacingRoughMin_CLEAN ///
106 cyclePleasure_CLEAN cyclePleasureHr_CLEAN cyclePleasureMin_CLEAN mowing_CLEAN mowingHr_CLEAN mowingMin_CLEAN ///
107 waterLawn_CLEAN waterLawnHr_CLEAN waterLawnMin_CLEAN heavyGardening_CLEAN heavyGardeningHr_CLEAN ///
108 heavyGardeningMin_CLEAN weedPrune_CLEAN weedPruneHr_CLEAN weedPruneMin_CLEAN dIY_CLEAN dIYHr_CLEAN dIYMin_CLEAN ///
109 Household_CLEAN HouseholdHr_CLEAN HouseholdMin_CLEAN aerobicsHigh_CLEAN aerobicsHighHr_CLEAN aerobicsHighMin_CLEAN ///
110 aerobicsOther_CLEAN aerobicsOtherHr_CLEAN aerobicsOtherMin_CLEAN exerciseWeights_CLEAN exerciseWeightsHr_CLEAN ///
111 exerciseWeightsMin_CLEAN conditionExercise_CLEAN conditionExerciseHr_CLEAN conditionExerciseMin_CLEAN ///
112 floorExercise_CLEAN floorExerciseHr_CLEAN floorExerciseMin_CLEAN dancing_CLEAN dancingHr_CLEAN dancingMin_CLEAN ///
113 compRun_CLEAN compRunHr_CLEAN compRunMin_CLEAN jog_CLEAN jogHr_CLEAN jogMin_CLEAN bowling_CLEAN bowlingHr_CLEAN ///
114 bowlingMin_CLEAN tennisBadminton_CLEAN tennisBadmintonHr_CLEAN tennisBadmintonMin_CLEAN squash_CLEAN squashHr_CLEAN ///
115 squashMin_CLEAN tableTennis_CLEAN tableTennisHr_CLEAN tableTennisMin_CLEAN golf_CLEAN golfHr_CLEAN golfMin_CLEAN ///
116 footballRugbyHockey_CLEAN footballRugbyHockeyHr_CLEAN footballRugbyHockeyMin_CLEAN cricket_CLEAN ///
117 cricketHr_CLEAN cricketMin_CLEAN rowing_CLEAN rowingHr_CLEAN rowingMin_CLEAN netVolleyBasketBall_CLEAN ///
118 netVolleyBasketBallHr_CLEAN netVolleyBasketBallMin_CLEAN huntingShootingFish_CLEAN huntingShootingFishHr_CLEAN ///
119 huntingShootingFishMin_CLEAN horseBased_CLEAN horseBasedHr_CLEAN horseBasedMin_CLEAN snookerBillardsDarts_CLEAN ///
120 snookerBillardsDartsHr_CLEAN snookerBillardsDartsMin_CLEAN musicalInstrumentSing_CLEAN musicalInstrumentSingHr_CLEAN ///
121 musicalInstrumentSingMin_CLEAN Skiing_CLEAN SkiingHr_CLEAN SkiingMin_CLEAN iceSkating_CLEAN iceSkatingHr_CLEAN ///
122 iceSkatingMin_CLEAN sailingWindsurfBoat_CLEAN sailingWindsurfBoatHr_CLEAN sailingWindsurfBoatMin_CLEAN ///
123 combatsSports_CLEAN combatsSportsHr_CLEAN combatsSportsMin_CLEAN ActiveComputerGames_CLEAN ///
124 ActiveComputerGamesHr_CLEAN ActiveComputerGamesMin_CLEAN {
125     replace `var' = -1 if `var' == .
126 }
127
128 //Processing split into the different years so any means used can be from that year:
129 levelsof StudyYr, local(YEARS)
130
131 qui foreach YEAR in `YEARS' {
132     noiis di ``YEAR''
133
134     preserve
135
136

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137  keep if StudyYr == "YEAR"
138  count
139
140  local N=r(N)
141  if `N'<1000 {
142    * This dataset includes less than 1000 individuals.
143    * Please note that in many cases, missing values will be imputed using in-sample median values for those particular variables.
144    * If you are happy with this approach, just comment out the stop line below (add "*" at beginning of line) and rerun the script.
145    *stop
146  }
147
148 /*
149 //variables removed from earlier RPAQ processing as now have Screen time variables for V11 +
150 MediawEEKDAYpre6pm_CLEAN MediawEEKDAYpost6pm_CLEAN MediawEEKENDpre6pm_CLEAN MediawEEKENDpost6pm_CLEAN ///
151 ComputerWEEKDAYpre6pm_CLEAN ComputerWEEKDAYpost6pm_CLEAN ComputerWEEKENDpre6pm_CLEAN ComputerWEEKENDpost6pm_CLEAN ///
152 */
153
154 *replace data entered as invalid (contains bracket) with system missing value
155 foreach var in QVersion_CLEAN Gettingabout_CLEAN ///
156 ScreenWEEKDAYpre6pm_CLEAN ScreenWEEKDAYpost6pm_CLEAN ScreenWEEKENDpre6pm_CLEAN ScreenWEEKENDpost6pm_CLEAN ///
157 StairWEEKDAY_CLEAN StairWEEKEND_CLEAN Work4wkago_CLEAN Work3wkago_CLEAN Work2wkago_CLEAN Work1wkago_CLEAN Worktype_CLEAN ///
158 Wrkmiles_CLEAN Wrkkms_CLEAN Wrktimeperweek_CLEAN Wrkbycar_CLEAN Wrkbypubtran_CLEAN Wrkbybicycle_CLEAN Wrkbyfoot_CLEAN ///
159 swimComp_CLEAN swimCompHr_CLEAN swimCompMin_CLEAN swimLeis_CLEAN swimLeisHr_CLEAN swimLeisMin_CLEAN ///
160 backPackMountainClimb_CLEAN backPackMountainClimbHr_CLEAN backPackMountainClimbMin_CLEAN walkPleasure_CLEAN walkPleasureHr_CLEAN walkPleasureMin_CLEAN ///
161 cyclingRacingRough_CLEAN cyclingRacingRoughHr_CLEAN cyclingRacingRoughMin_CLEAN cyclePleasure_CLEAN cyclePleasureHr_CLEAN cyclePleasureMin_CLEAN ///
162 mowing_CLEAN mowingHr_CLEAN mowingMin_CLEAN waterLawn_CLEAN waterLawnHr_CLEAN waterLawnMin_CLEAN ///
163 heavyGardening_CLEAN heavyGardeningHr_CLEAN heavyGardeningMin_CLEAN weedPrune_CLEAN weedPruneHr_CLEAN weedPruneMin_CLEAN ///
164 dIY_CLEAN dIYHr_CLEAN dIYMin_CLEAN Household_CLEAN HouseholdHr_CLEAN HouseholdMin_CLEAN aerobicsHigh_CLEAN aerobicsHighHr_CLEAN aerobicsHighMin_CLEAN ///
165 aerobicsOther_CLEAN aerobicsOtherHr_CLEAN aerobicsOtherMin_CLEAN exerciseWeights_CLEAN exerciseWeightsHr_CLEAN exerciseWeightsMin_CLEAN ///
166 conditionExercise_CLEAN conditionExerciseHr_CLEAN conditionExerciseMin_CLEAN floorExercise_CLEAN floorExerciseHr_CLEAN floorExerciseMin_CLEAN ///
167 dancing_CLEAN dancingHr_CLEAN dancingMin_CLEAN compRun_CLEAN compRunHr_CLEAN compRunMin_CLEAN jog_CLEAN jogHr_CLEAN jogMin_CLEAN ///
168 bowling_CLEAN bowlingHr_CLEAN bowlingMin_CLEAN tennisBadminton_CLEAN tennisBadmintonHr_CLEAN tennisBadmintonMin_CLEAN ///
169 squash_CLEAN squashHr_CLEAN squashMin_CLEAN tableTennis_CLEAN tableTennisHr_CLEAN tableTennisMin_CLEAN golf_CLEAN golfHr_CLEAN golfMin_CLEAN ///
170 footballRugbyHockey_CLEAN footballRugbyHockeyHr_CLEAN footballRugbyHockeyMin_CLEAN cricket_CLEAN cricketHr_CLEAN cricketMin_CLEAN ///
171 rowing_CLEAN rowingHr_CLEAN rowingMin_CLEAN netVolleyBasketBall_CLEAN netVolleyBasketBallHr_CLEAN netVolleyBasketBallMin_CLEAN ///
172 huntingShootingFish_CLEAN huntingShootingFishHr_CLEAN huntingShootingFishMin_CLEAN horseBased_CLEAN horseBasedHr_CLEAN horseBasedMin_CLEAN ///
173 snookerBillardsDarts_CLEAN snookerBillardsDartsHr_CLEAN snookerBillardsDartsMin_CLEAN musicalInstrumentSing_CLEAN musicalInstrumentSingHr_CLEAN ///
174 musicalInstrumentSingMin_CLEAN iceSkating_CLEAN iceSkatingHr_CLEAN iceSkatingMin_CLEAN Skiing_CLEAN SkiingHr_CLEAN SkiingMin_CLEAN ///
175 sailingWindsurfBoat_CLEAN sailingWindsurfBoatHr_CLEAN sailingWindsurfBoatMin_CLEAN combatsSports_CLEAN combatsSportsHr_CLEAN ///
176 combatsSportsMin_CLEAN Paidemployment_CLEAN ActiveComputerGames_CLEAN ActiveComputerGamesHr_CLEAN ActiveComputerGamesMin_CLEAN {
177
178   capture replace `var' = "" if substr(`var',1,1) == "("
179   capture replace `var' = . if substr(`var',1,1) == ")"
180   destring `var', replace
181
182 }
183 ****
184 /* Derivation of variables */
185 ****
186
187 * MISSINGA, data on TV-viewing, computer use and stairclimbing
188 gen MISSINGA = 2
189 * Default is no missingness: MISSINGA=2
190 /*
191 MediawEEKDAYpre6pm_CLEAN < 1 & MediawEEKDAYpost6pm_CLEAN < 1 & ///
192 MediawEEKENDpre6pm_CLEAN < 1 & MediawEEKENDpost6pm_CLEAN < 1 & ComputerWEEKDAYpre6pm_CLEAN < 1 & ///
193 ComputerWEEKDAYpost6pm_CLEAN < 1 & ComputerWEEKENDpre6pm_CLEAN < 1 & ComputerWEEKENDpost6pm_CLEAN < 1 & ///
194 */
195 replace MISSINGA = 1 if Gettingabout_CLEAN < 1 & ScreenWEEKDAYpre6pm_CLEAN < 1 & ScreenWEEKDAYpost6pm_CLEAN < 1 & ///
196 ScreenWEEKENDpre6pm_CLEAN < 1 & ScreenWEEKENDpost6pm_CLEAN < 1 & ///
197 StairWEEKDAY_CLEAN < 1 & StairWEEKEND_CLEAN < 1
198 * If all data is missing, then MISSINGA=1
199
200 /* MISSINGJOB AND EMPLOYED */
201 gen MISSINGJOB = 2
202 * Default is no missingness: MISSINGJOB=2 */
203 *MISSINGJOB == 1 also includes individuals who report being (un)employed and who record no work activities. i.e. they are still seen as missing.
204 replace MISSINGJOB = 1 if (Work4wkago_CLEAN < 0 & Work3wkago_CLEAN < 0 & ///

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205 Work2wkago_CLEAN < 0 & Work1wkago_CLEAN < 0 & (Worktype_CLEAN < 1 | Worktype_CLEAN == .))
206 *rpaqversion 8 has no data on work hours or employment status, but does have worktype data
207 replace MISSINGJOB = 1 if QVersion_CLEAN == 8 & (Worktype_CLEAN < 1 | Worktype_CLEAN == .)
208 gen EMPLOYED = .
209 replace EMPLOYED = 2 if Paidemployment_CLEAN == 2
210 replace EMPLOYED = 1 if Paidemployment_CLEAN == 1 | MISSINGJOB == 2
211 * EMPLOYED = 1 if they are in employment
212 * NDNS Y9-11 data entry for Paidemployment was the same as electronic entry (1 = Yes & 2 = No). Y12 Plus was electronic which
213 * is the same as above.
214
215
216 /* MISSINGCOMMUT */
217 gen MISSINGCOMMUT = 2
218 replace MISSINGCOMMUT = 1 if Wrktimesperweek_CLEAN < 0 & Wrkbycar_CLEAN < 1 & Wrkbypubtran_CLEAN < 1 & ///
219 Wrkbybicycle_CLEAN < 1 & Wrkbyfoot_CLEAN < 1
220
221 /* MISSINGC */
222 gen MISSINGC = 2
223
224 /*
225 As questions filled in online, nothing can be left without an answer. If using for a different
226 dataset the code below will need to be unstarred. From the online questionnaire volunteers are asked if they
227 so the activity, so binary check can be used. As by this point all incomplete participants have been removed
228 can leave missing C as 2.
229 */
230
231 /*
232 replace MISSINGC = 1 if ///
233 swimComp_CLEAN < 1 & swimCompHr_CLEAN < 0 & swimCompMin_CLEAN < 0 & ///
234 swimLeis_CLEAN < 1 & swimLeisHr_CLEAN < 0 & swimLeisMin_CLEAN < 0 & ///
235 backPackMountainClimb_CLEAN < 1 & backPackMountainClimbHr_CLEAN < 0 & backPackMountainClimbMin_CLEAN < 0 & ///
236 walkPleasure_CLEAN < 1 & walkPleasureHr_CLEAN < 0 & walkPleasureMin_CLEAN < 0 & ///
237 cyclingRacingRough_CLEAN < 1 & cyclingRacingRoughHr_CLEAN < 0 & cyclingRacingRoughMin_CLEAN < 0 & ///
238 cyclePleasure_CLEAN < 1 & cyclePleasureHr_CLEAN < 0 & cyclePleasureMin_CLEAN < 0 & ///
239 mowing_CLEAN < 1 & mowingHr_CLEAN < 0 & mowingMin_CLEAN < 0 & ///
240 waterLawn_CLEAN < 1 & waterLawnHr_CLEAN < 0 & waterLawnMin_CLEAN < 0 & ///
241 heavyGardening_CLEAN < 1 & heavyGardeningHr_CLEAN < 0 & heavyGardeningMin_CLEAN < 0 & ///
242 weedPrune_CLEAN < 1 & weedPruneHr_CLEAN < 0 & weedPruneMin_CLEAN < 0 & ///
243 dIY_CLEAN < 1 & dIYHr_CLEAN < 0 & dIYMin_CLEAN < 0 & ///
244 Household_CLEAN < 1 & HouseholdHr_CLEAN < 0 & HouseholdMin_CLEAN < 0 & ///
245 aerobicsHigh_CLEAN < 1 & aerobicsHighHr_CLEAN < 0 & aerobicsHighMin_CLEAN < 0 & ///
246 aerobicsOther_CLEAN < 1 & aerobicsOtherHr_CLEAN < 0 & aerobicsOtherMin_CLEAN < 0 & ///
247 exerciseWeights_CLEAN < 1 & exerciseWeightsHr_CLEAN < 0 & exerciseWeightsMin_CLEAN < 0 & ///
248 conditionExercise_CLEAN < 1 & conditionExerciseHr_CLEAN < 0 & conditionExerciseMin_CLEAN < 0 & ///
249 floorExercise_CLEAN < 1 & floorExerciseHr_CLEAN < 0 & floorExerciseMin_CLEAN < 0 & ///
250 dancing_CLEAN < 1 & dancingHr_CLEAN < 0 & dancingMin_CLEAN < 0 & ///
251 compRun_CLEAN < 1 & compRunHr_CLEAN < 0 & compRunMin_CLEAN < 0 & ///
252 jog_CLEAN < 1 & jogHr_CLEAN < 0 & jogMin_CLEAN < 0 & ///
253 bowling_CLEAN < 1 & bowlingHr_CLEAN < 0 & bowlingMin_CLEAN < 0 & ///
254 tennisBadminton_CLEAN < 1 & tennisBadmintonHr_CLEAN < 0 & tennisBadmintonMin_CLEAN < 0 & ///
255 squash_CLEAN < 1 & squashHr_CLEAN < 0 & squashMin_CLEAN < 0 & ///
256 tableTennis_CLEAN < 1 & tableTennisHr_CLEAN < 0 & tableTennisMin_CLEAN < 0 & ///
257 golf_CLEAN < 1 & golfHr_CLEAN < 0 & golfMin_CLEAN < 0 & ///
258 footballRugbyHockey_CLEAN < 1 & footballRugbyHockeyHr_CLEAN < 0 & footballRugbyHockeyMin_CLEAN < 0 & ///
259 cricket_CLEAN < 1 & cricketHr_CLEAN < 0 & cricketMin_CLEAN < 0 & ///
260 rowing_CLEAN < 1 & rowingHr_CLEAN < 0 & rowingMin_CLEAN < 0 & ///
261 netVolleyBasketBall_CLEAN < 1 & netVolleyBasketBallHr_CLEAN < 0 & netVolleyBasketBallMin_CLEAN < 0 & ///
262 huntingShootingFish_CLEAN < 1 & huntingShootingFishHr_CLEAN < 0 & huntingShootingFishMin_CLEAN < 0 & ///
263 horseBased_CLEAN < 1 & horseBasedHr_CLEAN < 0 & horseBasedMin_CLEAN < 0 & ///
264 snookerBillardsDarts_CLEAN < 1 & snookerBillardsDartsHr_CLEAN < 0 & snookerBillardsDartsMin_CLEAN < 0 & ///
265 musicalInstrumentSing_CLEAN < 1 & musicalInstrumentSingHr_CLEAN < 0 & musicalInstrumentSingMin_CLEAN < 0 & ///
266 iceSkating_CLEAN < 1 & iceSkatingHr_CLEAN < 0 & iceSkatingMin_CLEAN < 0 & ///
267 Skiing_CLEAN < 1 & SkiingHr_CLEAN < 0 & SkiingMin_CLEAN < 0 & ///
268 sailingWindsurfBoat_CLEAN < 1 & sailingWindsurfBoatHr_CLEAN < 0 & sailingWindsurfBoatMin_CLEAN < 0 & ///
269 combatsSports_CLEAN < 1 & combatsSportsHr_CLEAN < 0 & combatsSportsMin_CLEAN < 0 & ///
270 ActiveComputerGames_CLEAN < 1 & ActiveComputerGamesHr_CLEAN < 0 & ActiveComputerGamesMin_CLEAN < 0
271 */
272

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273 // Added in to change any that have done no rec activities but completed online Q (which includes Do none of the above)
274 // volunteer selects none of the above to skip all activities within a certain section.
275 //replace MISSINGC = 2 if Donone1_CLEAN == 1 & Donone2_CLEAN == 1 & Donone3_CLEAN == 1 & Donone4_CLEAN == 1 & ///
276 //Donone5_CLEAN == 1 & Donone6_CLEAN == 1 & Donone7_CLEAN == 1 & MISSINGC == 1 & QVersion_CLEAN >= 11 & QVersion_CLEAN !=.
277
278 /* MISSING */
279 gen MISSING = 2
280 replace MISSING = 1 if MISSINGJOB == 1 & MISSINGCOMMUT == 1 & MISSINGC == 1
281
282 /* CALCULATION OF DAILY DURATIONS */
283 gen GETABOUT = Gettingabout_CLEAN
284 replace GETABOUT = 0 if Gettingabout_CLEAN < 1 & MISSINGA == 2
285 replace GETABOUT = . if Gettingabout_CLEAN < 1 & MISSINGA == 1
286
287 if VersionNumber_CLEAN >= 11 & VersionNumber_CLEAN !=. {
288     gen SCREENDUR1 = . if Screenweekdaypre6pm_CLEAN < 1 & MISSINGA == 1 /* 'Not completed'*/
289     replace SCREENDUR1 = 0 if Screenweekdaypre6pm_CLEAN < 1 & MISSINGA == 2 /* 'Not completed'*/
290     replace SCREENDUR1 = 0 if Screenweekdaypre6pm_CLEAN == 1
291     replace SCREENDUR1 = 2.5 if Screenweekdaypre6pm_CLEAN == 2
292     replace SCREENDUR1 = 7.5 if Screenweekdaypre6pm_CLEAN == 3
293     replace SCREENDUR1 = 12.5 if Screenweekdaypre6pm_CLEAN == 4
294     replace SCREENDUR1 = 17.5 if Screenweekdaypre6pm_CLEAN == 5
295     replace SCREENDUR1 = 22.5 if Screenweekdaypre6pm_CLEAN == 6
296     replace SCREENDUR1 = 27.5 if Screenweekdaypre6pm_CLEAN == 7
297     replace SCREENDUR1 = 32.5 if Screenweekdaypre6pm_CLEAN == 8
298     replace SCREENDUR1 = 37.5 if Screenweekdaypre6pm_CLEAN == 9
299     replace SCREENDUR1 = 42.5 if Screenweekdaypre6pm_CLEAN == 10
300     gen SCREENDUR2 = . if Screenweekdaypost6pm_CLEAN < 1 & MISSINGA == 1 /* 'Not completed'*/
301     replace SCREENDUR2 = 7.5 if Screenweekdaypost6pm_CLEAN < 1 & MISSINGA == 2 /* 'Not completed'*/
302     replace SCREENDUR2 = 0 if Screenweekdaypost6pm_CLEAN == 1
303     replace SCREENDUR2 = 2.5 if Screenweekdaypost6pm_CLEAN == 2
304     replace SCREENDUR2 = 7.5 if Screenweekdaypost6pm_CLEAN == 3
305     replace SCREENDUR2 = 12.5 if Screenweekdaypost6pm_CLEAN == 4
306     replace SCREENDUR2 = 17.5 if Screenweekdaypost6pm_CLEAN == 5
307     replace SCREENDUR2 = 22.5 if Screenweekdaypost6pm_CLEAN == 6
308     replace SCREENDUR2 = 27.5 if Screenweekdaypost6pm_CLEAN == 7
309     replace SCREENDUR2 = 32.5 if Screenweekdaypost6pm_CLEAN == 8
310     replace SCREENDUR2 = 37.5 if Screenweekdaypost6pm_CLEAN == 9
311     replace SCREENDUR2 = 42.5 if Screenweekdaypost6pm_CLEAN == 10
312     gen SCREENDUR3 = . if Screenweekendpre6pm_CLEAN < 1 & MISSINGA == 1 /* 'Not completed'*/
313     replace SCREENDUR3 = 1 if Screenweekendpre6pm_CLEAN < 1 & MISSINGA == 2 /* 'Not completed'*/
314     replace SCREENDUR3 = 0 if Screenweekendpre6pm_CLEAN == 1
315     replace SCREENDUR3 = 1 if Screenweekendpre6pm_CLEAN == 2
316     replace SCREENDUR3 = 3 if Screenweekendpre6pm_CLEAN == 3
317     replace SCREENDUR3 = 5 if Screenweekendpre6pm_CLEAN == 4
318     replace SCREENDUR3 = 7 if Screenweekendpre6pm_CLEAN == 5
319     replace SCREENDUR3 = 9 if Screenweekendpre6pm_CLEAN == 6
320     replace SCREENDUR3 = 11 if Screenweekendpre6pm_CLEAN == 7
321     replace SCREENDUR3 = 13 if Screenweekendpre6pm_CLEAN == 8
322     replace SCREENDUR3 = 15 if Screenweekendpre6pm_CLEAN == 9
323     replace SCREENDUR3 = 17 if Screenweekendpre6pm_CLEAN == 10
324     gen SCREENDUR4 = . if Screenweekendpost6pm_CLEAN < 1 & MISSINGA == 1 /* 'Not completed'*/
325     replace SCREENDUR4 = 5 if Screenweekendpost6pm_CLEAN < 1 & MISSINGA == 2 /* 'Not completed'*/
326     replace SCREENDUR4 = 0 if Screenweekendpost6pm_CLEAN == 1
327     replace SCREENDUR4 = 1 if Screenweekendpost6pm_CLEAN == 2
328     replace SCREENDUR4 = 3 if Screenweekendpost6pm_CLEAN == 3
329     replace SCREENDUR4 = 5 if Screenweekendpost6pm_CLEAN == 4
330     replace SCREENDUR4 = 7 if Screenweekendpost6pm_CLEAN == 5
331     replace SCREENDUR4 = 9 if Screenweekendpost6pm_CLEAN == 6
332     replace SCREENDUR4 = 11 if Screenweekendpost6pm_CLEAN == 7
333     replace SCREENDUR4 = 13 if Screenweekendpost6pm_CLEAN == 8
334     replace SCREENDUR4 = 15 if Screenweekendpost6pm_CLEAN == 9
335     replace SCREENDUR4 = 17 if Screenweekendpost6pm_CLEAN == 10
336     gen DURSCREEN = (SCREENDUR1+SCREENDUR2+SCREENDUR3+SCREENDUR4)/7
337     gen DURTV = .
338     gen DURCOMP = .
339
340 }

```

```

341
342 /* FLIGHTS OF STAIRS */
343 gen STAIRFLIGHT1 = . if Stairweekday_CLEAN < 1 & MISSINGA == 1 /* 'Not completed'*/
344 replace STAIRFLIGHT1 = 40 if Stairweekday_CLEAN < 1 & MISSINGA == 2 /* 'Not completed'*/
345 replace STAIRFLIGHT1 = 0 if Stairweekday_CLEAN == 1
346 replace STAIRFLIGHT1 = 15 if Stairweekday_CLEAN == 2
347 replace STAIRFLIGHT1 = 40 if Stairweekday_CLEAN == 3
348 replace STAIRFLIGHT1 = 65 if Stairweekday_CLEAN == 4
349 replace STAIRFLIGHT1 = 90 if Stairweekday_CLEAN == 5
350 replace STAIRFLIGHT1 = 115 if Stairweekday_CLEAN == 6
351 gen STAIRFLIGHT2 = . if Stairweekend_CLEAN < 1 & MISSINGA == 1 /* 'Not completed'*/
352 replace STAIRFLIGHT2 = 16 if Stairweekend_CLEAN == . & MISSINGA == 2 /* 'Not completed'*/
353 replace STAIRFLIGHT2 = 0 if Stairweekend_CLEAN == 1
354 replace STAIRFLIGHT2 = 6 if Stairweekend_CLEAN == 2
355 replace STAIRFLIGHT2 = 16 if Stairweekend_CLEAN == 3
356 replace STAIRFLIGHT2 = 26 if Stairweekend_CLEAN == 4
357 replace STAIRFLIGHT2 = 36 if Stairweekend_CLEAN == 5
358 replace STAIRFLIGHT2 = 46 if Stairweekend_CLEAN == 6
359 *assign 10 seconds per flights of stairs
360 gen DURSTAIRFLIGHT = ((STAIRFLIGHT1+STAIRFLIGHT2)/7)/360
361
362
363 /* JOB ACTIVITY */
364 foreach var in Work4wkago_CLEAN Work3wkago_CLEAN ///
365 Work2wkago_CLEAN Work1wkago_CLEAN {
366     replace `var' = . if `var' < 0
367 }
368
369 forvalues i = 1/4 {
370     gen DURATIONJOB`i' = Work`i'wkago_CLEAN
371     replace DURATIONJOB`i' = . if Work`i'wkago_CLEAN < 0
372 }
373
374
375 egen DURATIONJOB = rowtotal(DURATIONJOB1 DURATIONJOB2 DURATIONJOB3 DURATIONJOB4)
376 replace DURATIONJOB = . if DURATIONJOB1 ==. & DURATIONJOB2 == . & DURATIONJOB3 == . & DURATIONJOB4 == .
377 su DURATIONJOB if MISSINGJOB == 2, detail
378 *version 8 had no work duration question. assigning median to those who answered the worktype question.
379 replace DURATIONJOB = r(p50) if QVersion_CLEAN == 8 & MISSINGJOB == 2
380 *if median not computable, assign 37hrs/wk where worktype is reported but no duration
381 replace DURATIONJOB = 4*37 if Worktype_CLEAN > 0 & Worktype_CLEAN < 5 & (DURATIONJOB <0 | DURATIONJOB ==.)
382 *also assign median where worktype is reported but no duration
383 replace DURATIONJOB = r(p50) if Worktype_CLEAN > 0 & Worktype_CLEAN < 5 & (DURATIONJOB <0 | DURATIONJOB ==.)
384
385 *generate average weekly hours over last 4 weeks
386 replace DURATIONJOB = DURATIONJOB/4
387 *generate average daily hours of work
388 gen DURJOB = DURATIONJOB/7 if DURATIONJOB > 0 & DURATIONJOB <= 84
389 replace DURJOB = 0 if DURATIONJOB == 0
390 *truncate to max 12hrs per day
391 replace DURJOB = 12 if DURATIONJOB > 84 & DURATIONJOB !=.
392
393
394 /* TRANSPORTATION ACTIVITY */
395 gen FREQCARINI = 0 if (Wrkbycar_CLEAN < 1 | Wrkbycar_CLEAN > 4) & MISSINGCOMM == 2 /* 'NOT COMPLETED'*/
396 replace FREQCARINI = 0 if Wrkbycar_CLEAN == 4 /* 'Never or rarely'*/
397 replace FREQCARINI = .25 if Wrkbycar_CLEAN == 3 /* 'Occasionally'*/
398 replace FREQCARINI = .75 if Wrkbycar_CLEAN == 2 /* 'Usually'*/
399 replace FREQCARINI = 1 if Wrkbycar_CLEAN == 1 /* 'Always'*/
400 gen FREQPUBLICINI = 0 if (Wrkbypubtran_CLEAN < 1 | Wrkbypubtran_CLEAN > 4) & MISSINGCOMM == 2 /* 'NOT COMPLETED'*/
401 replace FREQPUBLICINI = 0 if Wrkbypubtran_CLEAN == 4 /* 'Never or rarely'*/
402 replace FREQPUBLICINI = .25 if Wrkbypubtran_CLEAN == 3 /* 'Occasionally'*/
403 replace FREQPUBLICINI = .75 if Wrkbypubtran_CLEAN == 2 /* 'Usually'*/
404 replace FREQPUBLICINI = 1 if Wrkbypubtran_CLEAN == 1 /* 'Always'*/
405 gen FREQCYLEINI = 0 if (Wrkbybicycle_CLEAN < 1 | Wrkbybicycle_CLEAN > 4) & MISSINGCOMM == 2 /* 'NOT COMPLETED'*/
406 replace FREQCYLEINI = 0 if Wrkbybicycle_CLEAN == 4 /* 'Never or rarely'*/
407 replace FREQCYLEINI = .25 if Wrkbybicycle_CLEAN == 3 /* 'Occasionally'*/
408 replace FREQCYLEINI = .75 if Wrkbybicycle_CLEAN == 2 /* 'Usually'*/

```

```

409 replace FREQCYCLEINI = 1 if Wrkbybicycle_CLEAN == 1 /* 'Always'*/
410 gen FREQWALKINI = 0 if (Wrkbyfoot_CLEAN < 1 | Wrkbyfoot_CLEAN > 4) & MISSINGCOMM == 2 /* 'NOT COMPLETED'*/
411 replace FREQWALKINI = 0 if Wrkbyfoot_CLEAN == 4 /* 'Never or rarely'*/
412 replace FREQWALKINI = .25 if Wrkbyfoot_CLEAN == 3 /* 'Occasionally'*/
413 replace FREQWALKINI = .75 if Wrkbyfoot_CLEAN == 2 /* 'Usually'*/
414 replace FREQWALKINI = 1 if Wrkbyfoot_CLEAN == 1 /* 'Always'*/
415 gen FREQTOTAL = FREQCARINI + FREQPUBLICINI + FREQCYCLEINI + FREQWALKINI
416
417
418 gen DISTWORKMILES = .
419 replace DISTWORKMILES = 0 if Wrkmiles_CLEAN <=0 & Wrkkms_CLEAN <=0
420 replace DISTWORKMILES = (Wrkkms_CLEAN*0.62) if (Wrkkms_CLEAN >0 & Wrkmiles_CLEAN <=0)
421 replace DISTWORKMILES = (Wrkmiles_CLEAN) if (Wrkmiles_CLEAN >0 & Wrkkms_CLEAN <=0)
422 replace DISTWORKMILES = ((Wrkmiles_CLEAN +0.62*Wrkkms_CLEAN)/2) if (Wrkkms_CLEAN > 0 & Wrkmiles_CLEAN > 0)
423
424 *Truncation of total distance ****set maximum miles to 100miles for anyone claiming more than that as a distance
425 replace DISTWORKMILES = 100 if (DISTWORKMILES > 100 & DISTWORKMILES != .)
426 */
427
428 gen CARMILES = 0
429 replace CARMILES = DISTWORKMILES * FREQCARINI if FREQCARINI >= 0.25
430 gen PUBLICMILES = 0
431 replace PUBLICMILES = DISTWORKMILES * FREQPUBLICINI if FREQPUBLICINI >= 0.25
432 gen CYCLEMILES = 0
433 replace CYCLEMILES = DISTWORKMILES * FREQCYCLEINI if FREQCYCLEINI >= 0.25
434 gen WALKMILES = 0
435 replace WALKMILES = DISTWORKMILES * FREQWALKINI if FREQWALKINI >= 0.25
436
437 gen TOTALTRAVMILES_DER = CARMILES + PUBLICMILES + CYCLEMILES + WALKMILES
438
439 gen DISTFACTOR = DISTWORKMILES/TOTALTRAVMILES_DER
440
441 *Assigning distance to multi-mode commuters.
442 * We have made many assumptions here. We have only made amendments when the total frequency of travel is > 1.25. Eg when someone reports always travelling by car
443 * and walking, we make the assumption that they drive most (90%) of the way. This may get further truncated in the next section.
444
445 replace CARMILES = (0.5*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
446 replace PUBLICMILES = (0.5*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQWALKINI < 0.25& FREQTOTAL >= 1.25
447
448 replace CARMILES = (0.95*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQPUBLICINI < 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
449 replace CYCLEMILES = (0.05*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQPUBLICINI < 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
450
451 replace CARMILES = (0.99*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQPUBLICINI < 0.25 & FREQTOTAL >= 1.25
452 replace WALKMILES = (0.01*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQPUBLICINI < 0.25 & FREQTOTAL >= 1.25
453
454 replace PUBLICMILES = (0.9*DISTWORKMILES) if FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQCARINI < 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
455 replace CYCLEMILES = (0.1*DISTWORKMILES) if FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQCARINI < 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
456
457 replace PUBLICMILES = (0.99*DISTWORKMILES) if FREQPUBLICINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQCARINI < 0.25 & FREQTOTAL >= 1.25
458 replace WALKMILES = (0.01*DISTWORKMILES) if FREQPUBLICINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQCARINI < 0.25 & FREQTOTAL >= 1.25
459
460 replace CYCLEMILES = (0.95*DISTWORKMILES) if FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCARINI < 0.25 & FREQPUBLICINI < 0.25 & FREQTOTAL >= 1.25
461 replace WALKMILES = (0.05*DISTWORKMILES) if FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCARINI < 0.25 & FREQPUBLICINI < 0.25 & FREQTOTAL >= 1.25
462
463 replace CARMILES = (0.475*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
464 replace PUBLICMILES = (0.475*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
465 replace CYCLEMILES = (0.05*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI < 0.25 & FREQTOTAL >= 1.25
466
467 replace CARMILES = (0.495*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQTOTAL >= 1.25
468 replace PUBLICMILES = (0.495*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQTOTAL >= 1.25
469 replace WALKMILES = (0.01*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCYCLEINI < 0.25 & FREQTOTAL >= 1.25
470
471 replace CARMILES = (0.9*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQPUBLICINI < 0.25 & FREQTOTAL >= 1.25
472 replace CYCLEMILES = (0.09*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQPUBLICINI < 0.25 & FREQTOTAL >= 1.25
473 replace WALKMILES = (0.01*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQPUBLICINI < 0.25 & FREQTOTAL >= 1.25
474
475 replace PUBLICMILES = (0.9*DISTWORKMILES) if FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCARINI < 0.25 & FREQTOTAL >= 1.25
476 replace CYCLEMILES = (0.09*DISTWORKMILES) if FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCARINI < 0.25 & FREQTOTAL >= 1.25

```

```

477 replace WALKMILES = (0.01*DISTWORKMILES) if FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQCARINI <0.25 & FREQTOTAL >= 1.25
478
479 replace CARMILES = (0.45*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQWALKINI >= 0.25 & FREQTOTAL >= 1.25
480 replace PUBLICMILES = (0.45*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQTOTAL >= 1.25
481 replace CYCLEMILES = (0.09*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQTOTAL >= 1.25
482 replace WALKMILES = (0.01*DISTWORKMILES) if FREQCARINI >= 0.25 & FREQPUBLICINI >= 0.25 & FREQCYCLEINI >= 0.25 & FREQWALKINI >= 0.25 & FREQTOTAL >= 1.25
483
484 *Truncate Walking and Cycling
485 replace CYCLEMILES = 20 if CYCLEMILES > 20 & CYCLEMILES !=.
486 replace WALKMILES = 3 if WALKMILES > 3 & WALKMILES !=.
487
488
489 gen DURWALK = WALKMILES*2*(5/7)/3
490 gen DURCYCLE = CYCLEMILES*2*(5/7)/10
491 gen DURCAR = CARMILES*2*(5/7)/45
492 gen DURPUBLIC = PUBLICMILES*2*(5/7)/30
493
494 *assume 2 journeys over 5 days at 3mph (walk), cycle at 10mph, car at 45mph and public at 30mph - rescaled to daily basis in 7 day week
495
496 ****
497 /* RECREATIONAL ACTIVITY */
498 /* JP- Takes frequencies reported in categories to frequencies per week */
499 ****
500 foreach var in swimComp_CLEAN swimLeis_CLEAN backPackMountainClimb_CLEAN walkPleasure_CLEAN cyclingRacingRough_CLEAN ///
501 cyclePleasure_CLEAN mowing_CLEAN waterLawn_CLEAN heavyGardening_CLEAN weedPrune_CLEAN dIY_CLEAN Household_CLEAN ///
502 aerobicsHigh_CLEAN aerobicsOther_CLEAN exerciseWeights_CLEAN conditionExercise_CLEAN floorExercise_CLEAN dancing_CLEAN ///
503 compRun_CLEAN jog_CLEAN bowling_CLEAN tennisBadminton_CLEAN squash_CLEAN tableTennis_CLEAN golf_CLEAN ///
504 footballRugbyHockey_CLEAN cricket_CLEAN rowing_CLEAN netVolleyBasketBall_CLEAN huntingShootingFish_CLEAN horseBased_CLEAN ///
505 snookerBillardsDarts_CLEAN musicalInstrumentSing_CLEAN iceSkating_CLEAN sailingWindsurfBoat_CLEAN ///
506 combatsSports_CLEAN ActiveComputerGames_CLEAN {
507
508     gen `var'_orig = `var' // this keeps a copy of the untranslated frequency variables so we can save them
509
510     replace `var' = 0      if `var' <= 1 & (QVersion_CLEAN == 8 | QVersion_CLEAN == 9 | QVersion_CLEAN == 10 | QVersion_CLEAN == 11) & template==1 & MISSINGC == 2
511     replace `var' = 1/4    if `var' == 2 & (QVersion_CLEAN == 8 | QVersion_CLEAN == 9 | QVersion_CLEAN == 10 | QVersion_CLEAN == 11) & template==1
512     replace `var' = 2.5/4  if `var' == 3 & (QVersion_CLEAN == 8 | QVersion_CLEAN == 9 | QVersion_CLEAN == 10 | QVersion_CLEAN == 11) & template==1
513     replace `var' = 1     if `var' == 4 & (QVersion_CLEAN == 8 | QVersion_CLEAN == 9 | QVersion_CLEAN == 10 | QVersion_CLEAN == 11) & template==1
514     replace `var' = 2.5   if `var' == 5 & (QVersion_CLEAN == 8 | QVersion_CLEAN == 9 | QVersion_CLEAN == 10 | QVersion_CLEAN == 11) & template==1
515     replace `var' = 4.5   if `var' == 6 & (QVersion_CLEAN == 8 | QVersion_CLEAN == 9 | QVersion_CLEAN == 10 | QVersion_CLEAN == 11) & template==1
516     replace `var' = 7     if `var' == 7 & (QVersion_CLEAN == 8 | QVersion_CLEAN == 9 | QVersion_CLEAN == 10 | QVersion_CLEAN == 11) & template==1
517
518     //this section handles for when the data entry has been done using the alternative data entry template(#2) where was coded 1-8 but missing 2:
519     replace `var' = 0      if `var' <= 2 & QVersion_CLEAN == 9 & template==2 & MISSINGC == 2
520     replace `var' = 1/4    if `var' == 3 & QVersion_CLEAN == 9 & template==2
521     replace `var' = 2.5/4  if `var' == 4 & QVersion_CLEAN == 9 & template==2
522     replace `var' = 1     if `var' == 5 & QVersion_CLEAN == 9 & template==2
523     replace `var' = 2.5   if `var' == 6 & QVersion_CLEAN == 9 & template==2
524     replace `var' = 4.5   if `var' == 7 & QVersion_CLEAN == 9 & template==2
525     replace `var' = 7     if `var' == 8 & QVersion_CLEAN == 9 & template==2
526
527 }
528
529 ****
530 /* JP- assigns maximum duration of activities to allow for over reporting of the duration of an episode */
531 ****
532
533 *truncated high durations
534 //Household & ActiveComputerGames need a category!
535 foreach x in swimComp swimLeis compRun jog bowling tennisBadminton tableTennis horseBased snookerBillardsDarts musicalInstrumentSing iceSkating ActiveComputerGames {
536
537     replace `x'Hr_CLEAN = 4 if `x'Hr_CLEAN >4 & `x'Hr_CLEAN !=.
538     replace `x'Min_CLEAN = 0 if `x'Hr_CLEAN >=4 & `x'Hr_CLEAN !=.
539 }
540
541 foreach x in exerciseWeights squash {
542
543     replace `x'Hr_CLEAN = 2 if `x'Hr_CLEAN >2 & `x'Hr_CLEAN !=.
544     replace `x'Min_CLEAN = 0 if `x'Hr_CLEAN >=2 & `x'Hr_CLEAN !=.

```

```

545 }
546
547 foreach x in mowing waterLawn aerobicsHigh aerobicsOther conditionExercise floorExercise footballRugbyHockey netVolleyBasketBall rowing combatsSports {
548     replace `x'Hr_CLEAN = 3 if `x'Hr_CLEAN >3 & `x'Hr_CLEAN !=.
549     replace `x'Min_CLEAN = 0 if `x'Hr_CLEAN >=3 & `x'Hr_CLEAN !=.
550 }
551
552 foreach x in backPackMountainClimb walkPleasure cyclingRacingRough cyclePleasure heavyGardening weedPrune dancing cricket {
553     replace `x'Hr_CLEAN = 8 if `x'Hr_CLEAN >8 & `x'Hr_CLEAN !=.
554     replace `x'Min_CLEAN = 0 if `x'Hr_CLEAN >=8 & `x'Hr_CLEAN !=.
555 }
556
557 foreach x in dIY golf huntingShootingFish Skiing sailingWindsurfBoat Household {
558     replace `x'Hr_CLEAN = 10 if `x'Hr_CLEAN >10 & `x'Hr_CLEAN !=.
559     replace `x'Min_CLEAN = 0 if `x'Hr_CLEAN >=10 & `x'Hr_CLEAN !=.
560 }
561
562 *where no frequency is reported (but duration is) assign median frequency from those participating in the activity
563 *major assumption
564 foreach x in swimComp swimLeis backPackMountainClimb walkPleasure cyclingRacingRough cyclePleasure mowing waterLawn heavyGardening ///
565 weedPrune dIY Household aerobicsHigh aerobicsOther exerciseWeights conditionExercise floorExercise dancing compRun jog bowling ///
566 tennisBadminton squash tableTennis golf footballRugbyHockey cricket rowing netVolleyBasketBall huntingShootingFish horseBased ///
567 snookerBillardsDarts musicalInstrumentSing iceSkating Skiing sailingWindsurfBoat combatsSports ActiveComputerGames {
568
569     su `x'_CLEAN if `x'_CLEAN > 0 & `x'_CLEAN !=., detail
570     replace `x'_CLEAN = r(p50) if (`x'_CLEAN <=0 | `x'_CLEAN == .) & ((`x'Hr_CLEAN > 0 & `x'Hr_CLEAN < 20) | (`x'Min_CLEAN > 0 & `x'Min_CLEAN <= 60))
571     replace `x'_CLEAN = 0 if (`x'_CLEAN == . | `x'_CLEAN < 0) & MISSINGC == 2
572 }
573
574
575 *where no duration is reported (but frequency is) assign median duration from those participating in the activity
576 foreach x in swimComp swimLeis backPackMountainClimb walkPleasure cyclingRacingRough cyclePleasure mowing waterLawn heavyGardening ///
577 weedPrune dIY Household aerobicsHigh aerobicsOther exerciseWeights conditionExercise floorExercise dancing compRun jog bowling ///
578 tennisBadminton squash tableTennis golf footballRugbyHockey cricket rowing netVolleyBasketBall huntingShootingFish horseBased ///
579 snookerBillardsDarts musicalInstrumentSing iceSkating Skiing sailingWindsurfBoat combatsSports ActiveComputerGames {
580
581     replace `x'Hr_CLEAN = 0 if `x'Hr_CLEAN < 0
582     replace `x'Min_CLEAN = 0 if `x'Min_CLEAN < 0
583     *generate total hrs of each activity
584     gen TOT_`x'Hr = .
585     replace TOT_`x'Hr = (`x'Hr_CLEAN + (`x'Min_CLEAN/60)) if ((`x'Hr_CLEAN > 0 & `x'Hr_CLEAN <20) | (`x'Min_CLEAN > 0 & `x'Min_CLEAN <=60))
586     su TOT_`x'Hr if TOT_`x'Hr > 0 & TOT_`x'Hr < 20, detail
587     replace TOT_`x'Hr = r(p50) if (TOT_`x'Hr == .) & (`x'_CLEAN > 0 & `x'_CLEAN < 8)
588     replace TOT_`x'Hr = 0 if (TOT_`x'Hr == . & MISSINGC == 2)
589 }
590
591
592 * once clean generate the total duration (hours per day)
593 foreach x in swimComp swimLeis backPackMountainClimb walkPleasure cyclingRacingRough cyclePleasure mowing waterLawn heavyGardening ///
594 weedPrune dIY Household aerobicsHigh aerobicsOther exerciseWeights conditionExercise floorExercise dancing compRun jog bowling ///
595 tennisBadminton squash tableTennis golf footballRugbyHockey cricket rowing netVolleyBasketBall huntingShootingFish horseBased ///
596 snookerBillardsDarts musicalInstrumentSing iceSkating Skiing sailingWindsurfBoat combatsSports ActiveComputerGames {
597
598     *generate total hrs of each activity per day
599     gen TOTDUR_`x' = (TOT_`x'Hr * `x'_CLEAN)/7
600 }
601
602
603 * DNAC data harmonisation: Household, skiing and active computer games not asked at Yr9-11
604 * For comparison these are set to 0 in TOTDUR so no value is taken forward for processing, but raw values left in
605 foreach x in Household Skiing ActiveComputerGames {
606     replace TOTDUR_`x' = 0 if TOTDUR_`x' !=.
607 }
608
609 ****
610 /* calculates total reported leisure time activities per day */
611 ****
612 egen DURATIONLEIS = rowtotal (TOTDUR_swimComp TOTDUR_swimLeis TOTDUR_backPackMountainClimb TOTDUR_walkPleasure ///
```

```

613     TOTDUR_cyclingRacingRough TOTDUR_cyclePleasure TOTDUR_mowing TOTDUR_waterLawn TOTDUR_heavyGardening ///
614     TOTDUR_weedPrune TOTDUR_dIY TOTDUR_Household TOTDUR_aerobicsHigh TOTDUR_aerobicsOther TOTDUR_exerciseWeights ///
615     TOTDUR_conditionExercise TOTDUR_floorExercise TOTDUR_dancing TOTDUR_compRun TOTDUR_jog TOTDUR_bowling ///
616     TOTDUR_tennisBadminton TOTDUR_squash TOTDUR_tableTennis TOTDUR_golf TOTDUR_footballRugbyHockey TOTDUR_cricket ///
617     TOTDUR_rowing TOTDUR_netVolleyBasketBall TOTDUR_huntingShootingFish TOTDUR_horseBased TOTDUR_snookerBillardsDarts ///
618     TOTDUR_musicalInstrumentSing TOTDUR_iceSkating TOTDUR_Skiing TOTDUR_sailingWindsurfBoat TOTDUR_combatsSports TOTDUR_ActiveComputerGames ) if MISSINGC == 2
619
620 ****
621 /* re-weights total reported activities per day if total is greater than 18hrs per day */
622 ****
623 gen SCRadj = DURSCREEN
624 gen TVadj = DURTV
625 gen COMPadj = DURCOMP
626 gen JOBadj = DURJOB
627 gen CARadj = DURCAR
628 gen PUBLICadj = DURPUBLIC
629 gen CYCLEadj = DURCYCLE
630 gen WALKadj = DURWALK
631 gen LEISadj = DURATIONLEIS
632 gen STAIRadj = DURSTAIRFLIGHT
633 egen DURATIONINI = rowtotal(SCRadj TVadj COMPadj JOBadj CARadj STAIRadj PUBLICadj CYCLEadj WALKadj LEISadj) if (MISSINGA == 2 | MISSINGCOMMUT == 2 | MISSINGJOB == 2 | MISSINGC == 2)
634
635 replace SCRadj = DURSCREEN*18/DURATIONINI if DURATIONINI > 18
636 replace TVadj = DURTV*18/DURATIONINI if DURATIONINI > 18
637 replace COMPadj = DURCOMP*18/DURATIONINI if DURATIONINI > 18
638 replace STAIRadj = DURSTAIRFLIGHT*18/DURATIONINI if DURATIONINI > 18
639 replace JOBadj= DURJOB*18/DURATIONINI if DURATIONINI > 18
640 replace CARadj = DURCAR*18/DURATIONINI if DURATIONINI > 18
641 replace PUBLICadj = DURPUBLIC*18/DURATIONINI if DURATIONINI > 18
642 replace CYCLEadj = DURCYCLE*18/DURATIONINI if DURATIONINI > 18
643 replace WALKadj = DURWALK*18/DURATIONINI if DURATIONINI > 18
644
645 foreach x in TOTDUR_swimComp TOTDUR_swimLeis TOTDUR_backPackMountainClimb TOTDUR_walkPleasure ///
646     TOTDUR_cyclingRacingRough TOTDUR_cyclePleasure TOTDUR_mowing TOTDUR_waterLawn TOTDUR_heavyGardening ///
647     TOTDUR_weedPrune TOTDUR_dIY TOTDUR_Household TOTDUR_aerobicsHigh TOTDUR_aerobicsOther TOTDUR_exerciseWeights ///
648     TOTDUR_conditionExercise TOTDUR_floorExercise TOTDUR_dancing TOTDUR_compRun TOTDUR_jog TOTDUR_bowling ///
649     TOTDUR_tennisBadminton TOTDUR_squash TOTDUR_tableTennis TOTDUR_golf TOTDUR_footballRugbyHockey TOTDUR_cricket ///
650     TOTDUR_rowing TOTDUR_netVolleyBasketBall TOTDUR_huntingShootingFish TOTDUR_horseBased TOTDUR_snookerBillardsDarts ///
651     TOTDUR_musicalInstrumentSing TOTDUR_iceSkating TOTDUR_Skiing TOTDUR_sailingWindsurfBoat TOTDUR_combatsSports TOTDUR_ActiveComputerGames {
652     gen `x'a = `x' /*variables postfixed with "a" stands for adjusted variable*/
653     replace `x'a = `x'*18/DURATIONINI if DURATIONINI > 18
654 }
655
656 ****
657 /* Calculating sleep time based on max reported hours of activities */
658 /* AH= Remaining time - Time not accounted for by RPAQ */
659 ****
660
661 gen UNACCOUNTED = .
662 gen SLEEP = .
663 replace SLEEP = 6 if DURATIONINI > 18
664 replace SLEEP = 24-DURATIONINI if DURATIONINI <= 18 & DURATIONINI > 16
665 replace SLEEP = 8 if DURATIONINI <= 16
666
667 replace UNACCOUNTED = 24 -(DURATIONINI+8) if DURATIONINI <= 16
668 replace UNACCOUNTED = 24-DURATIONINI - SLEEP if DURATIONINI <= 18 & DURATIONINI > 16
669 replace UNACCOUNTED = 0 if DURATIONINI > 18
670
671
672 *generate adjusted durations for each domain considering maximum value of 18 for total activities
673
674 *HOME
675 egen HOMEtime = rowtotal(SCRadj TVadj COMPadj STAIRadj TOTDUR_Householda TOTDUR_mowinga TOTDUR_waterLawna TOTDUR_heavyGardeninga ///
676     TOTDUR_weedPrunea TOTDUR_dIYa) if MISSINGA == 2
677
678 *WORK
679 gen WORKtime = JOBadj if MISSINGJOB == 2
680

```

```

681 *COMMUTING
682 egen COMMUTETIME = rowtotal(CARadj PUBLICadj CYCLEadj WALKadj) if MISSINGCOMMUT == 2
683
684 *LEISURE
685 egen LEISTIME = rowtotal(TOTDUR_swimCompa TOTDUR_swimLeisa TOTDUR_backPackMountainClimba TOTDUR_walkPleasurea ///
686 TOTDUR_cyclingRacingRougha TOTDUR_cyclePleasurea TOTDUR_aerobicsHigha TOTDUR_aerobicsOthera TOTDUR_exerciseWeightsa ///
687 TOTDUR_conditionExercisea TOTDUR_floorExercisea TOTDUR_dancinga TOTDUR_compRuna TOTDUR_joga TOTDUR_bowlinga ///
688 TOTDUR_tennisBadmintona TOTDUR_squasha TOTDUR_tableTennisa TOTDUR_golfa TOTDUR_footballRugbyHockeya TOTDUR_cricketa ///
689 TOTDUR_rowinga TOTDUR_netVolleyBasketBalla TOTDUR_huntingShootingFisha TOTDUR_horseBaseda TOTDUR_snookerBillardsDartsa ///
690 TOTDUR_musicalInstrumentSinga TOTDUR_iceSkatinga TOTDUR_Skiinga TOTDUR_sailingWindsurfBoata TOTDUR_combatsSportsa TOTDUR_ActiveComputerGamesa ) if MISSINGC == 2
691
692 egen TOTALtime = rowtotal(HOMEtime WORKtime COMMUTETIME LEISTIME SLEEP)
693 *TOTALtime always = 24 (minus AH)
694
695 ****
696 /* Calculation of MET scores as per Ainsworth's PA Compendium */
697 ****
698 /* Home section */
699 gen SCORESCREEN = SCRadj //LG - need to know a MET score if we are giving a score above 1 (we do not do that with TV/COMP anymore
700 gen SCORETV = TVadj
701 gen SCORECOMP = COMPadj //redefined to be a MET score of 1 (as active computer use has been removed).
702 *stairs is halfway between 8 for going up and 3 for going down
703 gen SCORESTAIRS = STAIRadj*5.5
704 /*Home Activities from Recreation Section*/
705 gen SCOREHOUSEHOLD = TOTDUR_Householda * 2.3 // new for v10: Light Cleaning
706 gen SCORELAWN = TOTDUR_mowinga *5.5
707 gen SCOREWATER = TOTDUR_waterLawna *1.5
708 gen SCOREDIG = TOTDUR_heavyGardeninga *6
709 gen SCOREWEED = TOTDUR_weedPrunea *4.5
710 gen SCOREDIY = TOTDUR_dIYa *4.5
711
712 egen SCOREHOME = rowtotal(SCORESCREEN SCORETV SCORECOMP SCORESTAIRS SCOREHOUSEHOLD SCORELAWN SCOREWATER SCOREDIG SCOREWEED SCOREDIY)
713
714 replace SCOREHOME = . if MISSINGA == 1
715
716 /* Work section */
717
718 *worktype assigned as 1 (median in Fenland dataset) where worktype is missing but time in work reported
719 *original:
720 /*
721 local sed_met = 1.5
722 local stand_met = 2.3
723 local man_met = 3.5
724 local heavyman_met = 5.5
725 */
726
727
728 *Based on Fenland analysis 2015 (see relevant references in header)
729
730 local sed_met = 1.54
731 local stand_met = 1.74
732 local man_met = 1.93
733 local heavyman_met = 2.20
734
735 gen SCOREJOB = . if MISSINGJOB == 1
736 replace SCOREJOB = 0 if JOBadj == 0
737 replace SCOREJOB = `sed_met'*JOBadj if JOBadj > 0 & (Worktype_CLEAN == . | Worktype_CLEAN <0)
738 replace SCOREJOB = `sed_met'*JOBadj if Worktype_CLEAN == 1
739 replace SCOREJOB = `stand_met'*JOBadj if Worktype_CLEAN == 2
740 replace SCOREJOB = `man_met'*JOBadj if Worktype_CLEAN == 3
741 replace SCOREJOB = `heavyman_met'*JOBadj if Worktype_CLEAN == 4
742
743 /* Commuting section */
744 gen SCORECAR = 1.5*CARadj /*Compendium says driving 2METs, riding 1MET*/
745 gen SCOREPUBLIC = PUBLICadj
746 gen SCORECYCLE = 6*CYCLEadj
747 gen SCOREWALK = 3.3*WALKadj
748

```

```

749 egen SCORECOMMUTE = rowtotal(SCORECAR SCOREPUBLIC SCORECYCLE SCOREWALK)
750 replace SCORECOMMUTE = . if MISSINGCOMMUT == 1
751
752 *Generate MET scores for LTPA variables
753 /* Recreation section */
754 gen SCORELAPSWI = TOTDUR_swimCompa *10
755 gen SCORELESSWI = TOTDUR_swimLeisa *6
756 gen SCOREBAKPAK = TOTDUR_backPackMountainClimba *7
757 gen SCOREWALKPLEASURE = TOTDUR_walkPleasurea *3.5
758 gen SCORECYCRAC = TOTDUR_cyclingRacingRougha *10
759 gen SCORECYCPLE = TOTDUR_cyclePleasurea *4
760 gen SCORESTEP = TOTDUR_aerobicsHigha *7
761 gen SCOREAERO = TOTDUR_aerobicsOthera *5
762 gen SCOREWHT = TOTDUR_exerciseWeightsa *3
763 gen SCOREEXER = TOTDUR_conditionExercisea *5.5
764 gen SCOREFLOOR = TOTDUR_floorExercisea *4
765 gen SCOREDANCE = TOTDUR_dancinga *4.5
766 gen SCORECOMRUN = TOTDUR_compRuna *12.5
767 gen SCOREJOG = TOTDUR_joga *7
768 gen SCOREBOWL = TOTDUR_bowlinga *3
769 gen SCORETENBAD = TOTDUR_tennisBadmintona *6
770 gen SCORESQUASH = TOTDUR_squasha *12
771 gen SCORETABTEN = TOTDUR_tableTennisa *4
772 gen SCOREGOLF = TOTDUR_golfa *4.5
773 gen SCOREFOOT = TOTDUR_footballRugbyHockeya *8
774 gen SCORECRICK = TOTDUR_cricketa *5
775 gen SCOREROW = TOTDUR_rowinga *7
776 gen SCORENET = TOTDUR_netVolleyBasketBalla *5.5
777 gen SCOREFISH = TOTDUR_huntingShootingFisha *3
778 gen SCOREHORSE = TOTDUR_horseBaseda *4
779 gen SCORESNOK = TOTDUR_snookerBillardsDartsa *2.5
780 gen SCOREMUSIC = TOTDUR_musicalInstrumentSinga *2.7
781 gen SCORESKATE = TOTDUR_iceSkatinga *7
782 gen SCORESKI = TOTDUR_Skiinga * 6 // new for v10
783 gen SCORESAIL = TOTDUR_sailingWindsurfBoata *3
784 gen SCOREBOX = TOTDUR_combatsSportsa*10
785 gen SCOREACTCOMP = TOTDUR_ActiveComputerGamesa*2.3 // new for v10: Activity promoting video games light effort
786
787 egen SCORELEIS = rowtotal(SCORELAPSWI SCORELESSWI SCOREBAKPAK SCOREWALKPLEASURE SCORECYCRAC SCORECYCPLE ///
788 SCORESTEP SCOREAERO SCOREWHT SCOREEXER SCOREFLOOR SCOREDANCE SCORECOMRUN SCOREJOG ///
789 SCOREBOWL SCORETENBAD SCORESQUASH SCORETABTEN SCOREGOLF SCOREFOOT SCORECRICK SCOREROW SCORENET SCOREFISH ///
790 SCOREHORSE SCORESNOK SCOREMUSIC SCORESKATE SCORESKI SCORESAIL SCOREBOX SCOREACTCOMP)
791
792 replace SCORELEIS = . if MISSINGC == 1
793
794 *Score Unaccounted time according to getting about mode (assumption being that this is a marker for energy cost of activities not captured)
795 gen SCORE_UNACCOUNTED = UNACCOUNTED * 1
796 replace SCORE_UNACCOUNTED = UNACCOUNTED * 1.3 if Gettingabout_CLEAN ==2 | Gettingabout_CLEAN ==4
797
798 /* Total score */
799
800 egen TOTMETHRS = rowtotal(SCOREHOME SCOREJOB SCORECOMMUTE SCORELEIS) if MISSING == 2 /*awake-time only*/
801 egen TOTMETHRS_w_UNACCtime = rowtotal(SCOREHOME SCOREJOB SCORECOMMUTE SCORELEIS SCORE_UNACCOUNTED) if MISSING == 2 /*awake-time only*/
802
803 egen TOTtime = rowtotal(HOMETime WORKtime COMMUTEtime LEIStime)
804
805 gen ACTMETS = TOTMETHRS - TOTtime*1
806 gen ACTMETS_w_UNACCtime = TOTMETHRS_w_UNACCtime - (24-SLEEP)*1
807 *difference between the two scores is the assignment of energy to unaccounted for time; the first score assigns 1MET to all unaccounted for time and the second assigns 1.3MET to unaccounted for time if
the person reports getting about actively
808
809 gen HOME_METS = SCOREHOME
810 gen WORK_METS = SCOREJOB
811 gen LEIS_METS = SCORELEIS
812 gen COMMUTE_METS = SCORECOMMUTE
813
814 gen HOME_ACTMETS = SCOREHOME - HOMETime
815 gen WORK_ACTMETS = SCOREJOB - WORKtime

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```

816 gen LEIS_ACTMETS = SCORELEIS - LEIStime
817 gen COMMUTE_ACTMETS = SCORECOMMUTE - COMMUTETIME
818
819 *Convert MET HRS per day to kJ/kg/day. Multiply by 60 to get to MET minutes (which cancels out minutes), multiply by 3.5 * 20.35 to convert to J.
820 gen PAEE = ACTMETS * 3.5 * 20.35 * 60 / 1000
821 gen HOME_PAEE = HOME_ACTMETS * 3.5 * 20.35 * 60 / 1000
822 gen WORK_PAEE = WORK_ACTMETS * 3.5 * 20.35 * 60 / 1000
823 gen LEIS_PAEE = LEIS_ACTMETS * 3.5 * 20.35 * 60 / 1000
824 gen COMMUTE_PAEE = COMMUTE_ACTMETS * 3.5 * 20.35 * 60 / 1000
825
826 *ENERGY SPENT AT DIFFERENT INTENSITIES
827 *SPA: <=1.5 METs, not including sleep
828 egen SED_INTENSITY = rowtotal(SCORESCREEN SCORETV SCORECOMP SCORECAR SCOREPUBLIC)
829 egen SED_INTENSITY2 = rowtotal(SCORESCREEN SCORETV SCORECOMP SCORECAR SCOREPUBLIC SCOREJOB)
830 replace SED_INTENSITY = SED_INTENSITY2 if Worktype_CLEAN == 1
831 drop SED_INTENSITY2
832
833 *LPA: 1.5001-2.99 METs
834 egen LIGHT_INTENSITY = rowtotal(SCOREWATER SCORESNOK SCOREMUSIC SCOREHOUSEHOLD SCOREACTCOMP)
835 egen LIGHT_INTENSITY2 = rowtotal(SCOREWATER SCORESNOK SCOREMUSIC SCOREHOUSEHOLD SCOREACTCOMP SCOREJOB)
836 replace LIGHT_INTENSITY = LIGHT_INTENSITY2 if Worktype_CLEAN == 2
837 drop LIGHT_INTENSITY2
838
839 *MPA: 3-5.99 METs
840 *includes digging and commute cycling
841 egen MODERATE_INTENSITY = rowtotal(SCORESTAIRS SCOREWALK SCORECYCLE SCORELESSWI SCOREWALKPLEASURE SCORECYCPL ///
842 SCORELAWN SCOREDIG SCOREWEED SCOREDIY SCOREAERO SCOREWGHT SCOREEXER SCOREFLOOR SCOREDANCE SCOREBOWL ///
843 SCORETENBAD SCORETABTN SCOREGOLF SCORECRICK SCORERET SCOREFISH SCOREHORSE SCORESAIL)
844 egen MODERATE_INTENSITY2 = rowtotal(SCORESTAIRS SCOREWALK SCORECYCLE SCORELESSWI SCOREWALKPLEASURE SCORECYCPL ///
845 SCORELAWN SCOREDIG SCOREWEED SCOREDIY SCOREAERO SCOREWGHT SCOREEXER SCOREFLOOR SCOREDANCE SCOREBOWL ///
846 SCORETENBAD SCORETABTN SCOREGOLF SCORECRICK SCORERET SCOREFISH SCOREHORSE SCORESAIL SCOREJOB)
847 replace MODERATE_INTENSITY = MODERATE_INTENSITY2 if Worktype_CLEAN == 3
848 drop MODERATE_INTENSITY2
849
850 *VPA: >=6 METs
851 egen VIGOROUS_INTENSITY = rowtotal(SCORELAPSWI SCOREBAKPAK SCORECYCRAC SCORESTEP SCORECOMRUN SCOREJOG SCORESQUASH SCOREFOOT SCOREROW SCORESKATE SCOREBOX SCORESKI)
852 egen VIGOROUS_INTENSITY2 = rowtotal(SCORELAPSWI SCOREBAKPAK SCORECYCRAC SCORESTEP SCORECOMRUN SCOREJOG SCORESQUASH SCOREFOOT SCOREROW SCORESKATE SCOREBOX SCORESKI SCOREJOB)
853 replace VIGOROUS_INTENSITY = VIGOROUS_INTENSITY2 if Worktype_CLEAN == 4
854 drop VIGOROUS_INTENSITY2
855
856 * TIME SPENT AT DIFFERENT INTENSITIES
857 *Time spent in SPA (<=1.5 METs, not including sleep)
858 egen SEDtime = rowtotal(SCRadj TVadj COMPadj CARadj PUBLICadj)
859 egen SEDtime2 = rowtotal(SCRadj TVadj COMPadj CARadj PUBLICadj JOBadj)
860 replace SEDtime = SEDtime2 if Worktype_CLEAN == 1
861 drop SEDtime2
862
863
864 *Time spent in LPA: 1.5001-2.99 METs
865 egen LIGHTtime = rowtotal(TOTDUR_waterLawn TOTDUR_snookerBillardsDarts TOTDUR_musicalInstrumentSinga TOTDUR_ActiveComputerGamesa TOTDUR_Householda)
866 egen LIGHTtime2 = rowtotal(TOTDUR_waterLawn TOTDUR_snookerBillardsDarts TOTDUR_musicalInstrumentSinga TOTDUR_ActiveComputerGamesa TOTDUR_Householda JOBadj)
867 replace LIGHTtime = LIGHTtime2 if Worktype_CLEAN == 2
868 drop LIGHTtime2
869
870 *Time spent in MPA: 3-5.99 METs
871 egen MODERATEtime = rowtotal(STAIRadj WALKadj CYCLEadj TOTDUR_swimLeisa TOTDUR_walkPleasurea TOTDUR_cyclePleasurea TOTDUR_mowinga ///
872 TOTDUR_heavyGardeninga TOTDUR_weedPrunea TOTDUR_dIYa TOTDUR_aerobicsOthera TOTDUR_exerciseWeightsa ///
873 TOTDUR_conditionExercisea TOTDUR_floorExercisea TOTDUR_dancinga TOTDUR_bowlinga TOTDUR_tennisBadmintona TOTDUR_tableTennisa TOTDUR_golfa ///
874 TOTDUR_cricketa TOTDUR_netVolleyBasketBall TOTDUR_huntingShootingFisha TOTDUR_horseBaseda TOTDUR_sailingWindsurfBoata)
875 egen MODERATEtime2 = rowtotal(STAIRadj WALKadj CYCLEadj TOTDUR_swimLeisa TOTDUR_walkPleasurea TOTDUR_cyclePleasurea TOTDUR_mowinga ///
876 TOTDUR_heavyGardeninga TOTDUR_weedPrunea TOTDUR_dIYa TOTDUR_aerobicsOthera TOTDUR_exerciseWeightsa ///
877 TOTDUR_conditionExercisea TOTDUR_floorExercisea TOTDUR_dancinga TOTDUR_bowlinga TOTDUR_tennisBadmintona TOTDUR_tableTennisa TOTDUR_golfa ///
878 TOTDUR_cricketa TOTDUR_netVolleyBasketBall TOTDUR_huntingShootingFisha TOTDUR_horseBaseda TOTDUR_sailingWindsurfBoata JOBadj)
879 replace MODERATEtime = MODERATEtime2 if Worktype_CLEAN == 3
880 drop MODERATEtime2
881
882
883 *Time spent in VPA: >=6 METs

```

```

884 egen VIGOROUStime = rowtotal(TOTDUR_swimCompa TOTDUR_backPackMountainClimba TOTDUR_cyclingRacingRougha ///
885 TOTDUR_aerobicsHigha TOTDUR_compRuna TOTDUR_joga TOTDUR_squasha TOTDUR_footballRugbyHockeya ///
886 TOTDUR_rowinga TOTDUR_iceSkatinga TOTDUR_combatsSportsa TOTDUR_Skiinga)
887 egen VIGOROUStime2 = rowtotal(TOTDUR_swimCompa TOTDUR_backPackMountainClimba TOTDUR_cyclingRacingRougha ///
888 TOTDUR_aerobicsHigha TOTDUR_compRuna TOTDUR_joga TOTDUR_squasha TOTDUR_footballRugbyHockeya ///
889 TOTDUR_rowinga TOTDUR_iceSkatinga TOTDUR_combatsSportsa TOTDUR_Skiinga JOBadj)
890 replace VIGOROUStime = VIGOROUStime2 if Worktype_CLEAN == 4
891 drop VIGOROUStime2
892
893 ****
894 *** LABELLING OF KEY VARIABLES ***
895 ****
896 label var TOTMETHRS "Total reported duration (hours) of activity times intensity (MET) [METhrs/d]"
897 label var TOTMETHRS_w_UNACCTime "Total reported plus unaccounted duration hours) times intensity (MET) [METhrs/d]"
898 label var TOTtime "Total reported duration (hours) of activity [hrs/d]"
899 label var TOTALtime "Total reported duration (hours) of activity + assumed sleep [hrs/d]"
900 label var ACTMETS "Total activity energy expenditure discounting resting [net METhrs/d]"
901 label var ACTMETS_w_UNACCTime "Activity EE incl AEE for unaccounted time for active getting about [net METhrs/d]"
902 label var PAEE "Physical activity energy expenditure [kJ/kg/d]"
903
904 label var HOME_METS "Home domain energy expenditure [METhrs/d]"
905 label var WORK_METS "Work domain energy expenditure [METhrs/d]"
906 label var LEIS_METS "Leisure domain energy expenditure [METhrs/d]"
907 label var COMMUTE_METS "Commute domain energy expenditure [METhrs/d]"
908 label var HOME_ACTMETS "Home domain activity energy expenditure [net METhrs/d]"
909 label var WORK_ACTMETS "Work domain activity energy expenditure [net METhrs/d]"
910 label var LEIS_ACTMETS "Leisure domain activity energy expenditure [net METhrs/d]"
911 label var COMMUTE_ACTMETS "Commute domain activity energy expenditure [net METhrs/d]"
912 label var HOME_PAEE "Home domain activity energy expenditure [kJ/kg/d]"
913 label var WORK_PAEE "Work domain activity energy expenditure [kJ/kg/d]"
914 label var LEIS_PAEE "Leisure domain activity energy expenditure [kJ/kg/d]"
915 label var COMMUTE_PAEE "Commute domain activity energy expenditure [kJ/kg/d]"
916
917 label var SED_INTENSITY "Sedentary behavior energy expenditure [METhrs/d]"
918 label var LIGHT_INTENSITY "Light intensity energy expenditure [METhrs/d]"
919 label var MODERATE_INTENSITY "Moderate intensity energy expenditure [METhrs/d]"
920 label var VIGOROUS_INTENSITY "Vigorous intensity energy expenditure [METhrs/d]"
921 label var SEDtime "Time spent sedentary, excluding sleep [hrs/d]"
922 label var LIGHTtime "Time spent at light intensity activity [hrs/d]"
923 label var MODERATEtime "Time spent at moderate intensity activity [hrs/d]"
924 label var VIGOROUStime "Time spent at vigorous intensity activity [hrs/d]"
925
926 order ISerial template
927
928 nois di in red "$OUTPUT_FOLDER/`YEAR'_$OUTPUT_SUFFIX"
929 save "$OUTPUT_FOLDER/`YEAR'_$OUTPUT_SUFFIX.dta", replace
930 outsheet using "$OUTPUT_FOLDER/`YEAR'_$OUTPUT_SUFFIX.csv", comma replace
931
932 *This is now the most up to date version of RPAQ data with METs generated that is to be used for analyses.
933
934 set more off
935 di "Listing extreme PAEE values"
936 list ISerial PAEE WORK_PAEE Worktype_CLEAN WORKtime LEIStime LIGHTtime MODERATEtime VIGOROUStime if WORK_PAEE> 120 & WORK_PAEE!=.
937 list ISerial PAEE LEIS_PAEE LEIStime LIGHTtime MODERATEtime VIGOROUStime if LEIS_PAEE> 120 & LEIS_PAEE!=.
938
939 restore
940 }
941
942 timer off 1
943 timer list 1
944

```