CHAPTER 2: VARIABLES FROM OLDER VERSIONS NO LONGER IN USE

The MTUS has evolved with time. In addition to adding a number of variables, we also have dropped some variables available in earlier versions. We detail the changes and the variables no longer in use here for those users who have read research using older versions of the MTUS of who themselves have used previous versions of the files.

The Szalai surveys which gave inspiration for the original MTUS covered the working-age population (people aged 18-60). The older versions of the MTUS restricted the diaries included to this age range. From the World 5.1 version, we now include all diaries.

From the early versions through the World 5.52 version, diaries missing 61 or more minutes of main activity time were deleted. We now include all diaries, low-quality and good quality, though we 0-weight the low-quality diaries. We continue to exclude row cases of non-participants where these are included in the original data.

Some variables have evolved or been dropped. We now detail the older names and the dropped variables.

- PERIOD: Time survey period
- ID: Case Identifier
- AGE1/2: Age
- AGEGR5Y: Five-year age groups
- AGEKID: Age of the youngest child in household
- EMPSTAT2/3
- TOTTIME
- OPOPWT
- ODAYWT
- POPWT2
- DAYWT2
- 22-category activity typology

PERIOD: Survey time period

This variable records the period during which the survey was carried out. The values range from 1961-69 (value '1') to 2000-04 (value '7'). Precise information on when the survey was carried out is recorded in the variable 'Survey'.

Note that the length of each period is not equal. Cut-off points were chosen to maximise the number of countries in each period and to ensure that there was only 1 survey per period for any specific country. In cases for which multiple surveys were available for a country during a specific period, only one of these surveys has been included in the MTUS dataset.

Value	Label
1	1961 – 1969
2	1970 – 1975
3	1976 – 1984
4	1985 – 1989
5	1990 – 1994
6	1995 – 1999
7	2000 – 2004
8	2005 – 2009
9	2010 – 2014

ID: Diary identifier

In the oldest version of the MTUS, this variable served as a case id within each survey. No regard was given to multiple diaries per person or multiple diaries per household. Rather, this variable ranged in value from 1 to the highest number of diaries in the survey. This decision was recognised as a mistake, and in most versions of the MTUS, this variable distinguishes diaries, and taken alongside persid, hldid, msamp, swave, survey, and country, uniquely identifies cases.

AGE1/2: Age

This variable records the age of respondents (up to 3 digits). For surveys in which age was recorded in categories, we recoded age into a continuous variable by assigning the mid-point of each age group (e.g. 17 for age group 15-19). When surveys only included the year of birth of respondents, we computed AGE by subtracting the year of birth from the year of the survey. This variable was renamed as AGE for clarity from the release of Version 5.53.

AGEGR5Y: Five-year age groups

This variable, derived from AGE2, recorded respondent's age in 5-year bands.

Value	Label
1	0-4
2	5-9
3	10-14
4	15-19
5	20-24
6	25-29
7	30-34
8	35-39
9	40-44
10	45-49
11	50-54
12	55-59
13	60-64
14	65-69
15	70-74
16	75-79
17	80+

AGEKID: Age of youngest child in household

This variable records information on the age of the youngest child in the household. If there are no children under 18 in the household, this variable takes the value -7 (even if the original survey gives a valid value for such cases).

Value	Label
1	Youngest child between 0-4
2	Youngest child between 5-12
3	Youngest child between 13-17

This variable is highly comparable across surveys. However, the cut-off point for the age of the child varies across surveys. Also, in some surveys the data correspond to the diarist's children rather than children residing in the diarist's household. This variable has been upgraded to AGEKIDX which now includes a category for a child aged 18 or older in the household.

EMPSTAT2/3: Employment status

This variable has been updated and modified slightly over various incarnations of the of MTUS. The first version, called simply EMPSTAT, had three categories, 1=Full-time employed, 2=Part-time employed, and 3=no employed. Diarists who said that they were in the military but for whom no hours of work were reported were coded as '3' (other, not employed).

We recognised this as a mistake, and from version 5.51, changed category 3 to "employed, hours unknown" and coded people not employed as 4. With this change, diarists who reported serving in armed forces or otherwise being employed but whose weekly hours of work were unknown were coded as the new category 3. This recoding affected few surveys and very few cases, but to note the change, the variable was renamed EMPSTAT2.

With the release of Version 5.52, we further amended the coding of this variable. In previous incarnations of the MTUS, people reporting working 30 or more hours per week were coded as working full-time. From the release of version 5.52, preference was given to self-declared full-time or part-time status. The variable was renamed to EMPSTAT3. No further changes were added when the variable was renamed to EMPSTAT from the release of version 5.53 – but we felt that the variable name EMPSTAT was more clear than EMPSTAT3 – which creates the expectation that two other variables also are available in the same file. Also, few people used the MTUS in the old SPSS versions when the original variable also had this name, and we felt that the length of time which has passed justified the return to the original name with minimal chance that users might be inconvenienced.

TOTTIME: Total diary minutes per day

This variable was a constant value of 1440 – and was generated during tests that all diaries had been correctly coded. As this variable merely is an interim check and of no research value, we no longer include it.

OPOPWT: Original population weight

Where original surveys included a weight that correct for over- and/or under-sampling and non-response but did not correct for the distribution of the days of the week, we included this weight under this column heading. This weight appeared in versions World 5.0 through World 5.52.

ODAYWT: Original day weight

Some original surveys offered separate weights, one which corrected for the variation between the observed population and the respondents, and another for balancing the distribution of the days of the week (but not the sample variation from the observed population). If the original survey included separate weights, we used this name for the day of week distribution weight.

POPWT2: Post-hoc sex-age weight

Where original surveys did not include a weight that corrected for the distribution of age and sex groups in the population, we calculated such a weight on the basis of the age/sex group distribution in that country reported in an international organisation text, such as the International Labour Organization (ILO) Year Book. This weight appeared in versions World 5.0 through World 5.52.

DAYWT2: post-hoc day weight

Where original surveys did not include a weight that corrected for the distribution of the days of the week, we constructed this weight. This weight appeared in versions World 5.0 through World 5.52.

General note on older weights

All the weights in earlier versions of the Multinational Time Use Study were post-hoc types, that is, weights that were computed by the MTUS team as opposed to 'original' weights computed by the statistical agencies in charge of administering each survey. These post-hoc weights were age-sex-employment specific. They were computed based on official data published in the ILO's *Year Book of Labour Statistics.* From Version 5.0 through 5.52, the original survey weights were included wherever possible, and ad hoc weights only constructed when original weights were not calculated.

SEXEMPWT: Sex, age, employment weight (not account for day)

This weight balanced the demographic distributions in accordance with ILO data. This older weight made use of employment data as well as sex and age, though has been superseded. Partly, in older and younger age categories in some datasets, too few people were employed to allow for meaningful weights to be based (in the earliest versions of the MTUS were employment status also was used, the MTUS sample also was restricted to people aged 20-60 – the working age population). Also, in the majority of more recent surveys, weights provided

with the original data account for an even wider range of demographic characteristics.

SURVWT: Weight to get 2000 per survey (not account for day of week)

This weight generally reduced the apparent size of the survey, though in a limited number of cases inflated the size of the survey to place all surveys on a comparable sample size. More recent surveys tend to have significantly larger samples, and better options are available in statistical software than were available in the mid-1980s, and we no longer make this restriction.

COUNWT: Weight to get 2000 cases per country (not account for day)

This weight created an artificial balance between the countries. When the MTUS covered a smaller scope and time period, this weight served some limited research purposes of the original creators. As more countries, some of which have many surveys over decades and some of which have only one survey, this weight no longer makes the same sense, so no longer is created.

DAYWT: Weight to balance the distribution of the days of the week

This weight balances the distribution of the days of the week for the survey.

SEDWT: Sex, and age weight from ILO data (not account for day of week)

This weight balanced the demographic distributions of sex and age only in accordance with ILO data.

SEDWT2: Sex, age, employment, and day weight

SEXEMPWT * DAYWT generates this weight. This weight is the weight most often used in the analysis of the earlier versions of the MTUS.

SEDWT3: Sex, age, employment, day and survey balance weight

SEXEMPWT * DAYWT * SURVWT generates this weight.

SEDWT4: Sex, age, employment, day, survey, and country balance weight

SEXEMPWT * DAYWT * SURVWT * COUNWT generates this weight.

22-category activity typology

Table 3.1 shows how the 41 activity category code list collapses into 22 categories. Half the categories directly map to one category on the AV41 code list. The SPSS syntax which makes this collapse is available on the user contributions page of the CTUR website:

http://www.timeuse.org/mtus/contributions/

Table 3.1: Map of the 22-category to 41-category MTUS activity codes

22 codes	MAIN	Notes on changes and similarities
paidetc	AV1 AV2 AV3 AV5	Paid work and education combined
hwork	AV7	Routine housework
cooking	AV6	Food preparation and cooking
eating	AV15	Meals and snacks
kidcare	AV11	Child care
shopping	AV10	Shopping (all sorts)
dtravel	AV12	Domestic related travel
otravel	AV17 AV18	All other non-work travel
perscare	AV13 AV16	Personal care activities
eatout	AV28	Eating out
pubsclubs	AV26 AV27	At pubs or clubs
spectat	AV20 AV22 AV23 AV24 AV25	Spectator
asports	AV19	Active sporting
walking	AV21	Walking
visits	AV29 AV38	Visiting or entertaining friends **Note that we return to this collapsed category in the 69-category typology**
tvrad	AV30 AV31 AV32	Televisions, radio etc.
reading	AV33 AV34	Reading books, papers or magazines **Note that we return to this collapsed**

	AV35	**category in the 69-category typology**
chatsets	AV36 AV37	Talking, relaxing
oddjobs	AV8 AV9	Non-routine domestic work
hobbies	AV39 AV40	Other at-home leisure
medical	AV14	Medically related personal care
educ	AV4	Education (included in paidetc in the earliest versions of the MTUS)