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TIME USE SURVEY RESULTS

Tables 1-3 of this First Release provide an overview of time use when considering the entire population (regardless of whether individuals indicated at least once in their time-use diaries that they spent time on a particular activity), which allowed us to construct a 24-hour "statistical day".

It is interesting to note that **more than 16 hours a day were spent in the activity categories "Personal care"** (including sleep) **and "Free time".** A statistically significant difference between sexes can be observed in the activity categories "Household and family care (unpaid work)" and "Employment" (excluding travel to/from work).

Table 4 shows the proportion of individuals in the sample who reported at least once in their time-use diaries that they spent time on a specific activity category, which had an impact on Tables 5-7. In other words, **individuals who did not engage in a specific activity category at any time are excluded from the calculations in Tables 5-7 for those categories**, so in this case it is not possible to construct a 24-hour "statistical day".

Considering the time spent in the activity category "Household and family care (unpaid work)", the difference between the sexes is significant, but also stable when considering the entire population (Table 1).

As for the population aged 65 and over, they spent more than five and a half hours in the activity category "Employment".

1 AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER, BY SEX, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)

	Men	Women	Total
Personal care	11:10	11:08	11:09
Employment	03:47	02:46	03:16
Study	00:19	00:25	00:22
Household and family care (unpaid work)	02:26	04:04	03:17
Free time	05:09	04:44	04:56
Travel	01:08	00:52	00:59
Other	00:02	00:01	00:01

2 AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER, BY WHETHER IT IS WEEKDAYS, WEEKEND DAYS OR ALL DAYS, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)

	Weekdays	Weekend days	Total (all days)
Personal care	11:02	12:12	11:09
Employment	03:31	00:59	03:16
Study	00:24	00:06	00:22
Household and family care (unpaid work)	03:15	03:29	03:17
Free time	04:47	06:16	04:56
Travel	01:00	00:56	00:59
Other	00:01	00:02	00:01

3 AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER, BY AGE GROUPS, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)

	15 – 29	30 - 64	65+
Personal care	11:16	10:41	12:02
Employment	03:05	04:41	00:24
Study	01:55	00:00	00:00
Household and family care (unpaid work)	02:00	03:17	04:11
Free time	04:30	04:13	06:45
Travel	01:13	01:06	00:36
Other	00:01	00:01	00:02

4 PARTICIPATION RATE IN VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER, BY SEX, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023

	Men	Women	Total
Personal care	100,0	100,0	100,0
Employment	48,1	37,6	42,7
Study	7,0	6,6	6,8
Household and family care (unpaid work)	89,4	94,2	91,9
Free time	98,4	96,7	97,5
Travel	85,5	80,5	82,9
Other	7,0	6,7	6,9

%

5 AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER WHO SPENT TIME ON EACH ACTIVITY CATEGORY, BY SEX, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)

	Men	Women	Total
Personal care	11:10	11:08	11:09
Employment	07:52	07:22	07:38
Study	04:26	06:16	05:21
Household and family care (unpaid work)	02:43	04:19	03:34
Free time	05:14	04:54	05:04
Travel	01:19	01:04	01:12
Other	00:24	00:16	00:20

6 AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER WHO SPENT TIME ON EACH ACTIVITY CATEGORY, BY WHETHER IT IS WEEKDAYS, WEEKEND DAYS OR ALL DAYS, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)

	Weekdays	Weekend days	Total (all days)
Personal care	11:02	12:12	11:09
Employment	07:41	06:17	07:38
Study	05:38	01:55	05:21
Household and family care (unpaid work)	03:32	03:49	03:34
Free time	04:55	06:22	05:04
Travel	01:12	01:12	01:12
Other	00:19	00:27	00:20

7 AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER WHO SPENT TIME ON EACH ACTIVITY CATEGORY, BY AGE GROUPS, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)

	15 – 29	30 - 64	65+
Personal care	11:16	10:41	12:02
Employment	07:38	07:45	05:34
Study	05:38	01:07	01:40
Household and family care (unpaid work)	02:23	03:31	04:27
Free time	04:32	04:23	06:50
Travel	01:21	01:14	00:56
Other	00:15	00:18	00:32

NOTES ON METHODOLOGY

The Time Use Survey is conducted based on a methodology that is standardized at the European Union level (*Harmonised European Time Use Survey*).

The aim of the Survey is to collect statistical data on how people spend their time during working days and on their days off, what activities they engage in and how much time they devote to them as well as on the socio-economic characteristics of household members.

Data collection

The Time Use Survey was conducted in the Republic of Croatia from 21 November 2022 to 26 November 2023 on a sample of 4 680 private households.

The survey data are collected over a 12-month period. The field survey is conducted at 52 weekly intervals throughout the year. This means that a portion of the households in the sample are interviewed each week.

Data from the Time Use Survey are collected using electronic questionnaires (CAPI method) and a timeuse diary.

A part of the survey data is collected by conducting interviews, that is, by filling out two questionnaires. The household surveys are conducted in the field by specially trained interviewers. Before the interviewers arrived at the households, an announcement letter was sent to the households informing them about this Survey, the legal basis for its implementation, the characteristics of the Survey and the structure and content of the questionnaires and the diary.

The household questionnaire collects data on household characteristics and basic socio-demographic and other data on household members. The household questionnaire is completed by the head of the household, i.e. a person over 18 years of age who has sufficient information about the household and is familiar with the household structure, finances and living conditions.

The individual questionnaire is completed by household members aged 15 and older and it collects data on the characteristics of these members.

Each household member aged 15 and over kept two identical time-use diaries in paper format, one for a weekday and the other for a weekend day. The days to which the diaries refer were predetermined by using a statistical method and were identical for the entire household. After the two days had passed, the interviewers would collect the completed diaries.

The time-use diary consists of a cover page with information about the household, the person completing the diary, and the date the diary was completed, followed by three sample pages on how to fill out the 24-hour diary that the respondent was asked to complete, several questions at the end of the diary, and a checklist/instructions for verifying entries.

Diary days were divided into 10-minute intervals (the diary starts at 4 a.m. on the reference day and ends at 4 a.m. the following day), for which the person had to enter the main activity, a parallel activity (if any), the usage of IT devices, a place or means of transportation, whether the person was alone or with someone they knew (if the respondent was only with strangers, according to the methodology they would mark in the diary that they were alone).

Since the respondents were asked to write down the activities they performed in their own words in the diaries, the activities had to subsequently be coded according to the activity classification, for the purposes of data entry and their further processing.

Additional questions included the time of filling out the diary, the assessment of the reference day (estimated satisfaction scale), whether it was a usual day or not, and the like.

In order to try to optimally implement the methodological guideline according to which all household members aged 15 and over should keep time-use diaries, and at the same time avoid unsustainable non-response rates, the following conditions were set for the Time Use Survey to be considered successfully completed:

- For a household with one person aged 15 and over, both diaries for one person had to be filled out.
- For a household with two or three people aged 15 and over, both diaries for two people had to be filled out.
- For a household with four or more people aged 15 and over, both diaries for three people had to be filled out.

For successful participation in the Survey, a household would receive the amount of 150 kuna (for survey intervals implemented in 2022) or 19.91 euro (for survey intervals implemented in 2023).

According to the Official Statistics Act (NN, Nos 25/20 and 155/23), the confidentiality of all personal data given by respondents is guaranteed. The collected data are used solely for statistical purposes and are published in aggregate form.

Basic definitions

Household is every family or other community of individuals who live together and spend their income together for meeting basic existential needs (accommodation, food and so on). Every person who lives alone is also considered a household (one-person household).

The activity coding system is based on three levels. The first level has 10 activity categories, from 0 to 9 (0 – personal care, 1 – employment-related activities, 2 – study, 3 – household and family care, 4 – volunteering, 5 – social life and entertainment, 6 – sports and outdoor activities, 7 – hobbies, 8 – mass media, 9 – travel and unspecified time use). Within each of these first-level categories, there are one to nine second-level activity categories (coded at two digits). Furthermore, within each second-level category, there are one to ten third-level activity categories possible. Codes containing the word "other" include all activities that cannot be classified into any of the listed activities within the given categories.

The stub entries in the tables reflect the first level of activity categories. The exception is the stub entry "Free time", which includes several first-level categories, as follows: 4 – volunteering, 5 – social life and entertainment, 6 – sports and outdoor activities, 7 – hobbies and 8 – mass media.

Sampling design and sample selection

The basic set for the statistical survey on time use was based on data from the 2021 Census of Population, Households and Dwellings.

The 2022 Time Use Survey was conducted on a random sample of private households.

The sample for the 2022 Time Use Survey is a stratified two-stage random sample.

Strata are defined by division into statistical regions according to the HR_NUTS 2021 classification – HR NUTS 2 (Pannonian Croatia, Adriatic Croatia, the City of Zagreb and Northern Croatia) and type of settlement (city or municipality). A special stratum within Adriatic Croatia comprises cities of Rijeka and Split together.

The sample allocation with respect to statistical regions is proportional to the square root of the number of private households.

In the first stage, spatial units – enumeration areas – were selected with a probability proportional to the number of private households in the enumeration area from the 2021 Census. A total of 936 enumeration areas were selected.

In the second stage, five dwellings (households) were selected in each enumeration area.

A total of 4 680 dwellings (households) were selected for the sample.

The sample was distributed over 52 intervals (weeks) so that an equal number of households (and enumeration areas) were selected in each interval in each region (NUTS 2). Finally, each household was randomly assigned a weekday and a Saturday or Sunday on which household members aged 15 or over kept a diary of their activities.

The response rate was 21.6%.

Weighting

The weighting procedure is carried out in order to calculate an estimation for the entire population of private households and persons in private households. This procedure compensates for the impact of sample design and size, as well as the impact of household non-response to the 2022 Time Use Survey.

In the first phase of weighting, the weights for selecting units in the sample from both sampling stages (enumeration areas and dwellings) were calculated, and in the second phase, the weights for adjusting for non-response of the sample units were calculated.

In the last phase of weighting, the final weights from the first two phases were calibrated to the estimated population distribution by age groups, sex and level 2 statistical regions.

Calibration is a technique used to adjust the weights of a probability sample so that the estimates based on survey data correspond to the estimated population of the Republic of Croatia, which is based on the 2021 Census of Population, Households and Dwellings in the Republic of Croatia.

Given that each person filled out a diary for one weekday and one weekend day, the weight of the weekday diary is 5/7 of the final weight, and the weight of the weekend diary is 2/7 of the final weight.

8 ESTIMATES AND MEASURES OF PRECISION FOR THE INDICATOR "AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)"

	Estimate	Standard estimation error, %	Confidence interval, 95%	Variation coefficent, %
Personal care	11:09	6,4	10:56; 11:21	1,0
Employment	03:16	10,8	02:54; 03:37	5,5
Study	00:22	3,9	00:14; 00:30	17,9
Household and family care (unpaid work)	03:17	6,4	03:04; 03:29	3,3
Free time	04:56	8,2	04:40; 05:12	2,8
Travel	00:59	2,3	00:55; 01:04	3,9
Other	00:01	0,2	00:01; 00:02	18,4

9 ESTIMATES AND MEASURES OF PRECISION FOR THE INDICATOR "PARTICIPATION RATE IN EACH ACTIVITY CATEGORY, POPULATION AGED 15 AND OVER, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023"

	Estimate	Standard estimation error	Confidence interval (95%)	Variation coefficent
Personal care	100,0	0,0	100,0; 100,0	0,0
Employment	42,7	2,2	38,3; 47,1	5,3
Study	6,8	1,2	4,5; 9,1	17,4
Household and family care (unpaid work)	91,9	1,0	89,9; 93,9	1,1
Free time	97,5	0,7	96,2; 98,9	0,7
Travel	82,9	1,5	79,9; 86,0	1,9
Other	6,9	1,2	4,4; 9,3	17,9

%

10 ESTIMATES AND MEASURES OF PRECISION FOR THE INDICATOR "AVERAGE TIME SPENT ON VARIOUS ACTIVITY CATEGORIES, POPULATION AGED 15 AND OVER WHO SPENT TIME ON EACH ACTIVITY CATEGORY, REPUBLIC OF CROATIA, NOVEMBER 2022 – NOVEMBER 2023 (HOURS AND MINUTES)"

	Estimate	Standard estimation error, %	Confidence interval, 95%	Variation coefficent, %
Personal care	11:09	6,4	10:56; 11:21	0,0
Employment	07:38	9,0	07:21; 07:56	0,0
Study	05:21	35,8	04:09; 06:33	0,1
Household and family care (unpaid work)	03:34	6,7	03:21; 03:47	0,0
Free time	05:04	7,9	04:48; 05:19	0,0
Travel	01:12	2,4	01:07; 01:16	0,0
Other	00:20	2,7	00:15; 00:25	0,1

Abbreviations

CAPI	computer-assisted personal interview
HR NUTS 2021 – HR NUTS 2	National Classification of Statistical Regions – level 2 statistical regions, 2021
	version
NN	Narodne novine, official gazette of the Republic of Croatia

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