



# **Daily Activity Behaviours Questionnaire (DABQ)**

User manual

**The questionnaire is freely available for use.**

**Title:** Daily Activity Behaviours Questionnaire (DABQ): User manual

**Authors:** Kaja Kastelic<sup>1,2</sup> and Nejc Šarabon<sup>2,3</sup>

<sup>1</sup> University of Primorska, Andrej Marušič Institute, Slovenia

<sup>2</sup> University of Primorska, Faculty of Health Sciences, Slovenia

<sup>3</sup> InnoRenew CoE, Slovenia

**Institution:** University of Primorska, Faculty of Health Sciences

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**Contact:** [DABQ@fvz.upr.si](mailto:DABQ@fvz.upr.si)

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### **Download the analysis tool**

[DABQanalyser 3.0](#)

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## About the DABQ questionnaire

Daily Activity Behaviours Questionnaire (DABQ) is a self-reported questionnaire that asks about sleep, sedentary behaviour, and physical activity in the past seven days. It was developed due to the need for an accessible tool that enables evaluation of activity behaviours that constitutes the day (24 hours). It consists of 14 basic questions, some of which are accompanied by additional sub-questions. It was primarily designed for the general adult population; however, it can also be used in adolescents and older adults. The questionnaire provides a rich insight into the 24-hour time-use domain specific activity behaviours. This questionnaire is special for providing the daily activity behaviours estimates that sum to exactly 24-hours.

DABQ was designed for epidemiological research, population surveillance, and for a healthy lifestyle promotion among adults. It has been developed and tested as self-administered questionnaire. No additional guidelines for respondent are needed. DABQ is available in paper-back and online format. The paper-back format is freely available [here](#). For uses of the online format in your projects, please contact us at [DABQ@fvz.upr.si](mailto:DABQ@fvz.upr.si). The DABQ completion time is 5-20 minutes.

## Overview of the DABQ activity domains and dimensions

### Sleep domain

DABQ covers the following information regarding sleep domain: sleep timing, sleep duration, sleep latency, wake after sleep onset, napping time, and time in bed.

### Occupational domain

DABQ covers the following information regarding occupational domain: employment status, type of work schedule, ratio between workdays and non-workdays, timing and duration of occupational time, duration of occupational sedentary behaviour, duration of occupational light physical activity, and duration of occupational moderate-vigorous physical activity.

### Commuting domain

DABQ covers the following information regarding commuting domain: mode of transportation to and from the workplace, duration of commuting time, duration of commuting sedentary behaviour, duration of commuting light physical activity, and duration of commuting moderate-vigorous physical activity.

### Non-occupational domain

DABQ covers the following information regarding non-occupational domain (excluding commuting): duration of non-occupational time, timing and duration of non-occupational sedentary behaviour, duration of non-occupational light physical activity, duration of non-occupational moderate-vigorous physical activity, including recreational screen time, walking time,

duration of sport participation, number of days performing muscle-strengthening exercise, and duration of engaging in other physically more demanding non-sports activities.

## **The concept and features of DABQ**

DABQ consists of employment-related introductory questions followed by four sections of questions that relates to the individual's 1) sleep time, 2) occupational time, 3) commuting time (time spent traveling to and from the workplace), and 4) other non-occupational time. The questions for wake time are asking about domain-specific sedentary behaviour and moderate-vigorous physical activity. Domain-specific light physical activity is calculated as the remaining time to the total time spent in the specific domain. The DABQ takes into the account that daily activity behaviours (ie, sleep, sedentary behaviour, physical activity) are mutually exclusive and exhaustive components of the 24-hour day.

Some questions in the DABQ are tailored to the individual's employment status (ie, employed or unemployed) and type of their work schedule (ie, standard or nonstandard work schedule). Employed individuals with a nonstandard work schedule (ie, shift work, split shifts, or night work) are not asked about the timing of sleep and work (since their timings often vary substantially), they are asked about the sleep and work duration directly. Unemployed individuals skip the sections on the occupational time and commuting time and are asked only about their sleep time and wake time activity behaviours. Additionally, some questions that refer to the workdays and non-workdays for employed individuals, refers to the weekdays (Mon-Fri) and weekend days (Sat-Sun) for unemployed individuals. These tailored questions are automatically displayed in the online format of the DABQ, while in the paper-back format there are marks along each question that are guiding the responder on which question they should respond.

## **DABQanalyser for data cleaning and analysis**

DABQ data should be cleaned and analysed in a standardised way using the proprietary Microsoft Excel Spreadsheet tool DABQanalyser. This tool consists of 1) a field where DABQ data are entered, 2) a validation field where invalid entries are alerted, and 3) a field that displays the primarily and secondary results. The DABQanalyser is freely available [here](#).

### **Primarily results**

Average daily activity behaviours:

- sleep (min/day)
- sedentary behaviour (min/day)
- light physical activity (min/day)
- moderate-vigorous physical activity (min/day)

## Secondary results

Sleep indicators:

- time in bed (min/day)
- sleep latency (min/day)
- wake after sleep onset (min/day)
- napping time (min/day)

Occupational time:

- occupational time (min/workday)
- occupational sedentary behaviour (min/workday)
- occupational light physical activity (min/workday)
- occupational moderate-vigorous physical activity (min/workday)

Commuting time:

- commuting time (min/workday)
- commuting sedentary behaviour (min/workday)
- commuting light physical activity (min/workday)
- commuting moderate-vigorous physical activity (min/workday)

Other non-occupational time on workday:

- other non-occupational time (min/workday)
- other non-occupational sedentary behaviour (min/workday)
- other non-occupational physical activity (min/workday)

Average daily activity behaviours on workday:

- sleep on workday (min/workday)
- sedentary behaviour on workday (min/workday)
- physical activity on workday (min/workday)

Average daily activity behaviours on non-workday:

- sleep on non-workday (min/non-workday)
- sedentary behaviour on non-workday (min/non-workday)
- physical activity on non-workday (min/non-workday)

Non-occupational activities:


- walking – light intensity (min/day)
- walking – moderate-vigorous intensity (min/day)
- sport participation – light intensity (min/day)
- sport participation – moderate-vigorous intensity (min/day)
- other physically more demanding activities – light intensity (min/day)
- other physically more demanding activities – moderate-vigorous intensity (min/day)
- recreational screen time (min/day)
- muscle-strengthening exercise (no. days/week)

## Instructions on entering the data

DABQ data from specific responder should be entered into the DABQanalyser spreadsheet that corresponds to the respondent's employment status and work schedule. The user gets this information from the introductory questions (coded as U1 and U3). There are three spreadsheet options that are designed 1) for employed individuals with a standard work schedule, 2) for employed individuals with a nonstandard work schedule, and 3) for unemployed individuals.

Each question/answer in the DABQ has a unique code consisting of a letter (that corresponds to the specific section that the question belongs to) and a consecutive number (Figure 1). The user should enter the data in the DABQanalyser in a way that column names match the question/answer code. Each row presents data on one responder. Each cell has a pre-defined valid data entry format/range that could be found in the Supplementary material 1. The cells are formatted as "General", with the few exceptions: cells in a column "Date" are formatted as "Short date (dd/mm/yyyy)" and cells in the columns "S1.1\_wd", "S1.1\_nw", "S1.2\_wd", "S1.2\_nw", "D1.1", "D1.2", "S1.1\_mf", "S1.1\_ss", "S1.2\_mf", "S1.2\_ss" are formatted as "Custom (hh:mm)". The user needs to ensure this formation is kept when data are entered. All other cells in the DABQanalyser are protected for any changes. When data are entered into all cells of one row of data entry filed, the validation alert displays (note that if the answer on the basic question was "no", all its sub-question answers should be entered as 0).

**Figure 1:** Data entry field.

 NOTE: Enter the answers from the questionnaire (for employed individuals with a standard work schedule). The column names should match the question/answer code. Line 4 serves as an example of the required data entry format. Results would display when you enter all answers within a line.

Code	ID	Date	U2	S1.1_wd	S1.1_nw	S1.2_wd	S1.2_nw	S2	S3	S3.1	S3.2	S4	S4.1	S4.2
0	S_01	30/11/2019	3	22:00	23:00	06:00	07:15	15	yes	2	20	yes	2	45
1	S_01	29/11/2019	4	21:10	22:00	06:00	07:15	15	yes	2	20	yes	2	45
2	S_02	29/11/2019	3	21:30	22:10	06:20	07:35	10	yes	2	20	no	0	0
3	S_03	30/11/2019	5	22:00	22:00	06:10	05:15	10	yes	1	20	no	0	0
4	S_04	30/11/2019	3	21:20	22:30	07:00	07:15	5	no	0	0	yes	1	45
5	S_05	30/11/2019	5	21:00	22:00	06:00	07:15	5	no	0	0	yes	2	45
6	S_06	30/11/2019	5	21:00	22:00	07:00	07:00	15	no	0	0	yes	2	45

## Instructions on verifying the validation filed and data cleaning

The validation field include information whether the DABQ data are valid or invalid. In case of invalid data, the validation alert displays (Figure 2). The user should follow the validation alerts and correct data entry according to the instructions provided. If not applicable, the individual completed DABQ is not valid and should be removed.

**Figure 2:** Validation field.

Validity	Reason
Invalid	Invalid entry: L5.1, L5.2.
Valid	
Valid	
Invalid	Overlap of sleep and work timing.
Valid	
Valid	

There are four types of validation alerts:

- Invalid entry
- Invalid entry in the section
- Overlap of sleep and work timing
- Work+commute+sleep > 24h

“Invalid entry” validation alert is accompanied with the information about the question/answer code where individual invalid entry occurred. The user should check valid data entry format/range for a specific cell (see Supplementary material 1) and correct data entry, if applicable. The user should also note, that if the answer on the basic question is "no", all its sub-question answers should be entered as 0.

“Invalid entry in the section” validation alert is accompanied with the information about the section where invalid entry occurred.

- If this validation alert displays “S”, the user should check entered fields S1.1 and S1.2 (calculated time in bed should be in range 0 – 1000 minutes). If obvious mistake in reported/entered “hh:mm” was made (for example, reporting “hh:mm” as am / pm), the user should correct the data entry accordingly.
- If this validation alert displays “D”, the user should check entered fields U2 and D3.1 (the condition  $U2 \leq D3.1$  was violated), or the calculated sum of occupational sedentary behaviour and physical activity exceeded the daily occupational time by at least 2-folds. The user should correct data entry, if applicable.
- If this validation alert displays “P”, the user should check entered fields P1.1 and P1.2 (the condition  $P1.2 \leq P1.1$  was violated). The user should correct data entry, if applicable.
- If this validation alert displays “L”, calculated sum of non-occupational sedentary behaviour and physical activity exceeded the daily non-occupational time by at least 2-folds. The user should correct data entry, if applicable.

“Overlap of sleep and work timing” validation alert appears if sleep and work timing overlap. The user should check entered fields S1.1 and S1.2, and D1.1 and D1.2 (sleep and work timing should not overlap). If obvious mistake in reported/entered “hh:mm” was made (for example, reporting “hh:mm” as am / pm), the user should correct the data entry accordingly.

“Work+commute+sleep > 24h” validation alert appears if calculated sum of work time, commuting time and sleep time exceeded 24-hours. The user should correct data entry, if applicable.

If all entries are valid, the primary and secondary results display (Figure 3).

**Figure 3:** A field with the results.

		PRIMARY RESULTS				SECONDARY RESULTS						
		Average daily activity behaviours (min/day)				Sleep indicators (min/day)				Occupational time (min/workday)		
ID	Date	Sleep	Sedentary behaviour	Light physical activity	Moderate-vigorous physical activity	Time in bed	Sleep latency	Wake after sleep onset	Napping time	Occupational time	Occupational sedentary behaviour	Occupational light physical activity
S_01	29/11/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S_02	29/11/2019	534	363	469	73	550	10	6	0	750	90	564
S_03	30/11/2019	461	270	649	60	474	10	3	0	750	90	602
S_04	30/11/2019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S_05	30/11/2019	552	242	586	60	557	5	0	13	570	68	444
S_06	30/11/2019	581	239	560	60	596	15	0	13	630	76	497

### Instructions on exporting the results

We recommend copying the DABQanalyser results field and paste it (as Values (V)) into the new Excel Workbook (\*.xlsx) for further data handling. Data rounding is up to the user's further data analysis decisions.

### Behind the DABQanalyser calculations

**Average daily activity behaviours.** Sleep time is calculated based on the information about the time in bed (S1.1 and S1.2), sleep latency (S2), wake after sleep onset (S3.1 and S3.2) and napping time (S4.1 and S4.2) (for employed individuals with a nonstandard work schedule, it is assessed directly by the single question (S1)). Time spent in sedentary behaviour is a sum of occupational, commuting, and other non-occupational sedentary behaviour (see description codes below). Time spent in moderate-vigorous physical activity is a sum of occupational, commuting, and other non-occupational moderate-vigorous physical activity (see description codes below). Time spent in light physical activity is a sum of occupational, commuting, and other non-occupational light physical activity (see description codes below). Calculations on average daily activity behaviours are taking into the account the number of reported workdays and non-workdays (or weekdays and weekend days for unemployed individuals) in the past seven days.

**Sleep indicators.** Time in bed includes sleep time, sleep latency and wake after sleep onset. Sleep latency is assessed by the single question (S2), wake after sleep onset is calculated based on the S3 sub-questions. Napping time is calculated based on the S4 sub-questions.

**Occupational time.** Occupational time is calculated based on the information about the time spent at the workplace (D1.1 and D1.2 for employed individuals with a standard work schedule, and D1 for employed individuals with a nonstandard work schedule). Occupational sedentary behaviour is calculated based on the occupational time and the answer on the proportion of time

spent sitting at the workplace (D2). Occupational moderate-vigorous physical activity is calculated based on the D3 sub-questions (only the time when reported breathing rate was elevated is considered as moderate-vigorous). Occupational light physical activity is calculated as the remaining time to the occupational time. If reported occupational sedentary behaviour and physical activity exceeds the occupational time, the activity behaviours are proportionally rescaled to fit the occupational time (the same is applied also for the non-occupational time).

**Commuting time.** Commuting time is assessed by the single question (P1.1). If the answer on the question P1 is “car” or “public transport”, the commuting sedentary behaviour is calculated as a difference between commuting time and commuting walking time (P1.1 – P.12). If the answer on the question P1 is “walking”, “bicycle/scooter etc.” or “motorcycle/el. scooter etc.”, the commuting sedentary behaviour is 0. If the answer on the question P1 is “car”, “public transport” or “walking”, the commuting moderate-vigorous physical activity is calculated based on the P1 sub-questions (only the time when reported breathing rate was elevated is considered as moderate-vigorous). If the answer on the question P1 is “bicycle/scooter etc.”, the commuting moderate-vigorous physical activity equals to reported commuting time. If the answer on the question P1 is “motorcycle/el. scooter etc.”, the commuting moderate-vigorous physical activity equals to 0. Commuting light physical activity is calculated as the remaining time to the commuting time.

**Other non-occupational time on workday.** Other non-occupational time on workday is calculated as the remaining time to the 24-hours (ie, 24-hours – occupational time – commuting time – sleep time on workday). Other non-occupational sedentary behaviour on workday is calculated based on the other non-occupational time on workday and the answer on the proportion of other non-occupational wake time spend sitting or lying on workday (L1\_wd). Other non-occupational physical activity on workday is calculated as the remaining time to the other non-occupational time on workday.

**Average daily activity behaviours on workday.** Sleep time on workday is calculated based on the information about the time in bed on workday (S1.1\_wd and S1.2\_wd), sleep latency (S2), wake after sleep onset (S3.1 and S3.2) and napping time (S4.1 and S4.2) (for employed individuals with a nonstandard work schedule, it is assessed directly by the single question (S1\_wd)). Time spent in sedentary behaviour on workday is a sum of occupational, commuting, and other non-occupational sedentary behaviour on workday. Time spent in physical activity on workday is a sum of occupational, commuting, and other non-occupational physical activity on workday.

**Average daily activity behaviours on non-workday.** Sleep time on workday is calculated based on the information about the time in bed on non-workday (S1.1\_nw and S1.2\_nw), sleep latency (S2), wake after sleep onset (S3.1 and S3.2) and napping time (S4.1 and S4.2) (for employed individuals with a nonstandard work schedule, it is assessed directly by the single question (S1\_nw)). Time spent in sedentary behaviour on non-workday is calculated based on the wake time on non-workday (ie, 24-hours – sleep time on non-workday) and the answer on the proportion of wake time spend sitting or lying on non-workday (L1\_nw). Time spent in physical activity on non-workday is calculated as the remaining time to the non-workday.

**Non-occupational activities.** Light intensity and moderate-vigorous intensity walking time is calculated based on the information about walking time (L3) and the answer on the proportion of walking time spent walking quickly (L3.1) (walking quickly is considered as moderate-vigorous intensity, and the remaining walking time is considered as light intensity). Calculations on walking time are taking into the account the number of reported workdays and non-workdays (or weekdays and weekend days for unemployed individuals) in the past seven days. Time spent engaging in light and moderate-vigorous intensity sports is calculated based on the L4 sub-questions (the time when reported breathing rate was elevated is considered as moderate-vigorous, and the remaining time is considered as light). Time spent in other physically more demanding activities of light and moderate-vigorous intensity is calculated based on the L5 sub-questions (the time when reported breathing rate was elevated is considered as moderate-vigorous, and the remaining time is considered as light). Recreational screen time is assessed by the single question (L2). Number of days engaging in muscle-strengthening exercise is assessed by the single question (L4.3).

## **Suggestions on further DABQ data analysis**

Time-use data (assessed with any tool, not just with DABQ questionnaire) are preferred to be analysed using “Compositional data analysis”, that is a special branch of statistics designed for compositional data (ie, data that are parts of the whole and thus convey only relative information). Time-use data on DABQ daily activity behaviours are parts of the 24-hour day. The users are suggested to learn more about Compositional data analysis by visiting the web page of [CoDa Association](#) and [International Network of Time-use Epidemiologists \(INTUE\)](#) where a list of selected publications relevant to time-use epidemiology could also be found.

# Glossary

**Compositional data analysis.** A special branch of statistics developed for data that are compositional in nature.

**Daily activity behaviours.** An umbrella term for sleep, sedentary behaviour, and physical activity (synonyms: 24-hour movement behaviours, 24-hour physical behaviours).

**Light physical activity.** Physical activity that is characterized by an energy expenditure  $<3$  metabolic equivalents (METs).

**Moderate-vigorous physical activity.** Physical activity that is characterized by an energy expenditure  $\geq 3$  metabolic equivalents (METs).

**Nap.** A short sleep period, usually taken during the day, apart from a person's primary sleep period (National Sleep Foundation, 2021).

**Physical activity.** Any waking behaviour that is not sedentary (Tremblay et al., IJBNPA 14(1):75, 2017).

**Responder.** A person who completed the DABQ.

**Sedentary behaviour.** Any waking behaviour characterized by an energy expenditure  $\leq 1.5$  metabolic equivalents (METs), while in a sitting, reclining, or lying posture (Tremblay et al., IJBNPA 14:75, 2017).

**Sleep.** A naturally recurring (behavioural) state of relatively suspended sensory and motor activity, characterized by total or partial unconsciousness from which an individual can be aroused (Ezenwanne, Ann Med Health Sci Res 1(2):173-9, 2011).

**Time-use epidemiology.** The study of determinants, incidence, distributions, and effects of health-related time-use patterns in populations and of methods for preventing unhealthy time-use patterns and achieving the optimal distribution of time for population health (Pedišić et al., Kinesiology 49(2):252-269, 2017).

**User.** A person who is using DABQanalyser.

# Supplementary material

## Supplementary material 1. DABQanalyser valid data entry format/range.

Code	Valid data entry format/range	Excel formatting style required	Code	Valid data entry format/range	Excel formatting style required
<b>ID</b>	Not specified	General	<b>L1_wd</b>	0 - 100	General
<b>Date</b>	dd/mm/yyyy	Short date	<b>L1_nw</b>	0 - 100	General
<b>U2</b>	0 - 7	General	<b>L1_mf</b>	0 - 100	General
<b>S1.1_wd</b>	hh:mm	Custom	<b>L1_ss</b>	0 - 100	General
<b>S1.1_nw</b>	hh:mm	Custom	<b>L2_h</b>	0 - 20	General
<b>S1.2_wd</b>	hh:mm	Custom	<b>L2_min</b>	0 - 60	General
<b>S1.2_nw</b>	hh:mm	Custom	<b>L3_wd</b>	0 - 1200	General
<b>S1.1_mf</b>	hh:mm	Custom	<b>L3_nw</b>	0 - 1200	General
<b>S1.1_ss</b>	hh:mm	Custom	<b>L3.1_wd</b>	0 - 100	General
<b>S1.2_mf</b>	hh:mm	Custom	<b>L3.1_nw</b>	0 - 100	General
<b>S1.2_ss</b>	hh:mm	Custom	<b>L3_mf</b>	0 - 1200	General
<b>S2</b>	0 - 1000	General	<b>L3_ss</b>	0 - 1200	General
<b>S3</b>	no / yes	General	<b>L3.1_mf</b>	0 - 100	General
<b>S3.1</b>	0 - 7	General	<b>L3.1_ss</b>	0 - 100	General
<b>S3.2</b>	0 - 1000	General	<b>L4</b>	no / yes	General
<b>S4</b>	no / yes	General	<b>L4.1_moD</b>	0 - 1200	General
<b>S4.1</b>	0 - 7	General	<b>L4.1_moB</b>	0 - 100	General
<b>S4.2</b>	0 - 1000	General	<b>L4.1_tuD</b>	0 - 1200	General
<b>S1_h_wd</b>	0 - 20	General	<b>L4.1_tuB</b>	0 - 100	General
<b>S1_min_wd</b>	0 - 60	General	<b>L4.1_weD</b>	0 - 1200	General
<b>S1_h_nw</b>	0 - 20	General	<b>L4.1_weB</b>	0 - 100	General
<b>S1_min_nw</b>	0 - 60	General	<b>L4.1_thD</b>	0 - 1200	General
<b>D1.1</b>	hh:mm	Custom	<b>L4.1_thB</b>	0 - 100	General
<b>D1.2</b>	hh:mm	Custom	<b>L4.1_frD</b>	0 - 1200	General
<b>D1_h</b>	0 - 20	General	<b>L4.1_frB</b>	0 - 100	General
<b>D1_min</b>	0 - 60	General	<b>L4.1_saD</b>	0 - 1200	General
<b>D2</b>	0 - 100	General	<b>L4.1_saB</b>	0 - 100	General
<b>D3</b>	no / yes	General	<b>L4.1_suD</b>	0 - 1200	General
<b>D3.1</b>	0 - 7	General	<b>L4.1_suB</b>	0 - 100	General
<b>D3.2</b>	0 - 1200	General	<b>L4.2</b>	no / yes	General
<b>D3.3</b>	0 - 100	General	<b>L4.3</b>	0 - 7	General
<b>P1</b>	0 - 6	General	<b>L5</b>	no / yes	General
<b>P1.1</b>	0 - 1200	General	<b>L5.1</b>	0 - 7	General
<b>P1.2</b>	0 - 1200	General	<b>L5.2</b>	0 - 1200	General
<b>P1.3</b>	0 - 100	General	<b>L5.3</b>	0 - 100	General

Abbreviations: wd, workday; nw, non-workday; mf, Monday-Friday; ss, Saturday-Sunday; mo / tu / we / th / fr / sa / su, Monday / Tuesday / Wednesday / Thursday / Friday / Saturday / Sunday; D, activity duration; B, % of time the breathing rate was elevated.

Note: For P1: 1, car; 2, public transport; 3, walking; 4 bicycle/scooter etc.; 5, motorcycle/el. scooter etc.; 6, I work from home.

**Supplementary material 2.** Daily Activity Behaviours Questionnaire (DABQ).






# Daily Activity Behaviours Questionnaire (DABQ)

For employed and unemployed individuals

This questionnaire is about sleep, sedentary behaviour and physical activity in the past seven days.


Some questions will be tailored to your employment status, so please fill out the introductory questions.

U1	Are you <b>employed</b> ?	<input type="checkbox"/> <b>No</b> → Follow the sign  <input type="checkbox"/> <b>Yes</b>
U2	How many <b>days have you worked</b> in the past seven days?	_____ <b>days</b>
U3	In the past seven days, have you done any <b>shift work, split shifts or night work</b> ? <i>Note: Night work is work carried out between 23:00 and 6:00 the next day.</i>	<input type="checkbox"/> <b>No</b> → Follow the sign  <input type="checkbox"/> <b>Yes</b> → Follow the sign 

 Please follow and **answer only the questions** that are marked with a **circle**.

 Please follow and **answer only the questions** that are marked with a **square**.

 Please follow and **answer only the questions** that are marked with a **rhombus**.

  **The following sections refer to:**

- your sleep time,
- your time spent at the workplace,
- your commuting time (time spent travelling to and from the workplace), and
- your time spent outside the workplace (excluding commuting time).

 **The following sections refer to:**

- your sleep time, and
- your wake time.



The following section refers to your sleep time (●■◆).

S1.1 ●	In the past seven days, at what time did you <b>on average go to bed</b> (the time when you decided to fall asleep)? <i>Note: Enter hours between 00:00 and 23:59.</i>	Time: _____	<b>WORKDAY</b>
		Time: _____	<b>NON-WORKDAY</b>
S1.2 ●	In the past seven days, at what time did you <b>on average wake up</b> ?	Time: _____	<b>WORKDAY</b>
		Time: _____	<b>NON-WORKDAY</b>

S1.1 ◆	In the past seven days, at what time did you <b>on average go to bed</b> (the time when you decided to fall asleep)? <i>Note: Enter hours between 00:00 and 23:59.</i>	Time: _____	<b>MON-FRI</b>
		Time: _____	<b>SAT-SUN</b>
S1.2 ◆	In the past seven days, at what time did you <b>on average wake up</b> ?	Time: _____	<b>MON-FRI</b>
		Time: _____	<b>SAT-SUN</b>

S2 ●■◆	In the past seven days, how long did it take you <b>on average to fall asleep</b> ?	_____ minutes
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S3 ●■◆	In the past seven days, have you <b>woken up during your sleeping hours</b> and could not immediately fall back asleep?	<input type="checkbox"/> <b>No</b> → Skip to question S4 <input type="checkbox"/> <b>Yes</b>
S3.1 ●■◆	<b>How many days</b> did this occur in the past seven days?	_____ days
S3.2 ●■◆	On average, how long (on such day) were you <b>awake during your sleeping hours</b> ?	_____ minutes

S4 ●■◆	In the past seven days, have you <b>taken a nap during the day</b> ? <i>Note: A nap is a short period of sleep.</i>	<input type="checkbox"/> <b>No</b> → Skip to next section <input type="checkbox"/> <b>Yes</b>
S4.1 ●■◆	<b>How many days</b> did this occur in the past seven days?	_____ days
S4.2 ●■◆	On average, how long (on such day) did your <b>naps last</b> ?	_____ minutes

S1 ■	In the past seven days, how much time (on average) per day did you <b>sleep</b> (including naps during the day)?	<b>WORKDAY</b> _____ hours _____ minutes
		<b>NON-WORKDAY</b> _____ hours _____ minutes



The following section refers to your time spent at the workplace (●■).

D1.1 ● In the past seven days, what time did you on average **arrive at your workplace**? Time: \_\_\_\_\_

D1.2 ● In the past seven days, what time did you on average **leave your workplace**? Time: \_\_\_\_\_

D1 ■ In the past seven days, how much time (on average) per workday did you **spend at the workplace**? \_\_\_\_\_ hours \_\_\_\_\_ minutes

D2 ●■ In the past seven days, what proportion of your time **at the workplace** did you spend **sitting**?  
*Note: Mark with a cross on the line.*

None of the time | 0% 20% 40% 60% 80% 100% | All of the time

D3 ●■ In the past seven days, did your **work duties** include any **physically more demanding tasks**?  
*For example: Lifting, carrying, or pushing loads, etc.*

No → Skip to next section  
 Yes

D3.1 ●■ **How many days** did you engage in the above mentioned physically more demanding tasks in the past seven days? \_\_\_\_\_ days

D3.2 ●■ On average, how much time (on such day) did you spend **performing the above mentioned tasks**? \_\_\_\_\_ minutes

D3.3 ●■ What proportion of time performing the above mentioned tasks was **your breathing rate elevated**?  
*Note: Mark with a cross on the line.*

None of the time | 0% 20% 40% 60% 80% 100% | All of the time



The following section refers to your commuting time – time spent travelling to and from the workplace (●■).

P1 ●■ In the past seven days, what was your **most frequently used mode of transport** to and from the workplace?

Car  
 Public transport  
 Walking  
 Bicycle/scooter etc.  
 Motorcycle/el. scooter etc.  
 I work from home → Skip to next section

P1.1 ●■ In the past seven days, how much time (on average per workday) did you **spend commuting**? \_\_\_\_\_ minutes

P1.2 ●■ How many minutes of your commute were spent **walking**?  
*Note: If your answer was »walking«, skip to question P1.3.* \_\_\_\_\_ minutes

P1.3 ●■ What proportion of your time walking was spent **walking quickly**?  
*Note: Mark with a cross on the line.*

None of the time | 0% 20% 40% 60% 80% 100% | All of the time

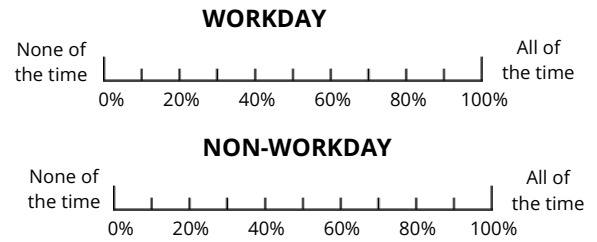


The following section refers to your time spent outside the workplace, excluding commuting time (●■).

The following section refers to your wake time (◆).

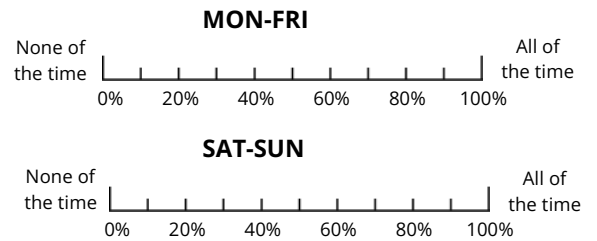
L1 ●■ In the past seven days, what proportion of your time spent **outside the workplace** (without commuting time) did you spend **sitting or lying while awake?**

*For example: While watching TV, reading, in the car, during meals etc.*



L1 ◆ In the past seven days, what proportion of your wake time did you spend **sitting or lying?**

*For example: While watching TV, reading, in the car, during meals etc.*



L2 ●■◆ In the past seven days, how much time (on average per day) did you spend **watching TV/movies, playing video/computer games, or surfing the internet** for recreational purposes?

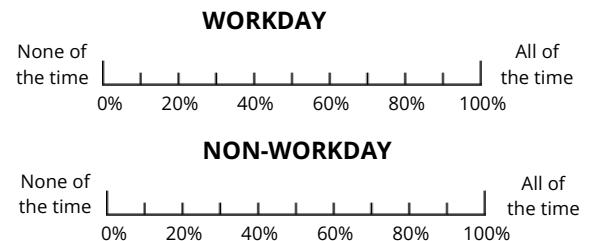
\_\_\_\_\_ hours \_\_\_\_\_ minutes

L3 ●■ In the past seven days, how much time (on average per day) did you spend **walking to and from places or for recreational purposes?**

*Note: The question for the workday refers to time spent outside the workplace (without commuting time).*

\_\_\_\_\_ minutes **WORKDAY**  
\_\_\_\_\_ minutes **NON-WORKDAY**

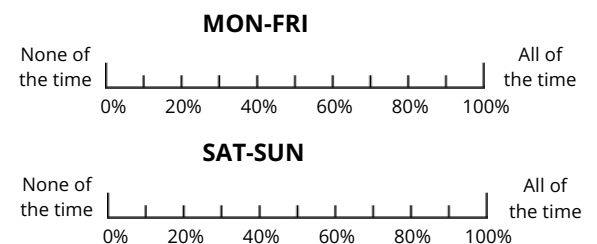
L3.1 ●■ What proportion of your time walking was spent **walking quickly?**



L3 ◆ In the past seven days, how much time (on average per day) did you spend **walking to and from places or for recreational purposes?**

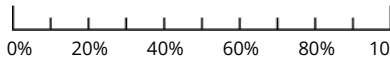
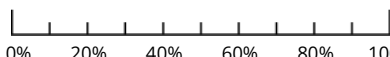
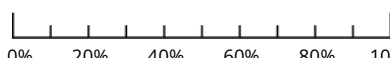

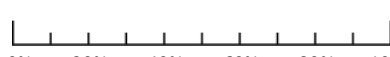
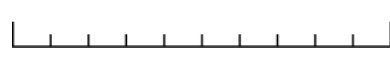

\_\_\_\_\_ minutes **MON-FRI**  
\_\_\_\_\_ minutes **SAT-SUN**

L3.1 ◆ What proportion of your time walking was spent **walking quickly?**



L4    In the past seven days, have you engaged in **(recreational) sports activities** (running, cycling, muscle strengthening exercise, football etc.)?  **No** → Skip to question L5  
 **Yes**  
*Note: Do not include time spent walking.*

L4.1    Complete the questions below **only for those days** you engaged in **(recreational) sports activities**.

Activity duration	What proportion of time was your <b>breathing rate elevated</b> ?
<b>MON</b> _____ minutes	None of the time  All of the time 0% 20% 40% 60% 80% 100%
<b>TUE</b> _____ minutes	None of the time  All of the time 0% 20% 40% 60% 80% 100%
<b>WED</b> _____ minutes	None of the time  All of the time 0% 20% 40% 60% 80% 100%
<b>THU</b> _____ minutes	None of the time  All of the time 0% 20% 40% 60% 80% 100%
<b>FRI</b> _____ minutes	None of the time  All of the time 0% 20% 40% 60% 80% 100%
<b>SAT</b> _____ minutes	None of the time  All of the time 0% 20% 40% 60% 80% 100%
<b>SUN</b> _____ minutes	None of the time  All of the time 0% 20% 40% 60% 80% 100%

L4.2    Including activities already mentioned, have you performed **muscle strengthening exercises** in the past seven days?  **No** → Skip to question L5  
 **Yes**

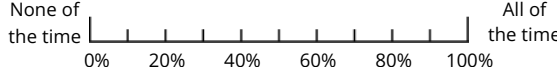
L4.3    In the past seven days, **how many days** did you engage in muscle strengthening exercises? \_\_\_\_\_ days

L5   In the past seven days, have you engaged in any **physically more demanding** non-sports **activities** during your time spent **outside the workplace**?  **No** → DABQ completed!  
 **Yes**  
*For example: Intensive cleaning, lifting loads, active play with children, physically more demanding gardening etc.*

L5   In the past seven days, have you engaged in any **physically more demanding** non-sports **activities**?  **No** → DABQ completed!  
 **Yes**  
*For example: Intensive cleaning, lifting loads, active play with children, physically more demanding gardening etc.*

L5.1    **How many days** did you engage in the above mentioned physically more demanding activities in the past seven days? \_\_\_\_\_ days

L5.2    On average, how much time (on such day) did you spend **engaging in the above mentioned activities**? \_\_\_\_\_ minutes

L5.3    What proportion of time engaging in the above mentioned activities was your **breathing rate elevated**? 

**Thank you for your participation!**