

National Health and Nutrition Examination Survey

August 2021-August 2023 Data Documentation, Codebook, and Frequencies

Sleep Disorders (SLQ_L)

Data File: SLQ_L.xpt

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Last Revised: NA

Component Description

The sleep disorders questionnaire (variable name prefix SLQ) has questions on the sleep time and awake time adapted from the Munich ChronoType Questionnaire (Roenneberg et. al., 2003).

Eligible Sample

All participants aged 16 and older were eligible.

Interview Setting and Mode of Administration

This questionnaire was asked by trained interviewers using the Computer-Assisted Personal Interview (CAPI) system in the participant's home or by telephone.

Quality Assurance & Quality Control

The CAPI system is programmed with built-in consistency checks to reduce data entry errors. Additional edits were conducted post-data collection as described in "Data Processing and Editing."

Data Processing and Editing

Edits were made to ensure completeness, consistency, and analytic usefulness of the data. Approximately 3% of audio-recorded interviews were reviewed to confirm correct data entry or validate unusual sleep and wake times (SLQ300, SLQ310, SLQ320, SLQ330). Summary variables for usual number of hours of sleep on weekdays (SLD012) and weekends (SLD013) were derived from reported times for complete records only and rounded to the nearest half hour. Very low and high sleep hours were recoded as 'less than 3 hours' and '14 hours or more.' For these participants, reported times in SLQ300, SLQ310, SLQ320, SLQ330 were set to "missing" to minimize disclosure risks.

Analytic Notes

In 2021- 2023, participants were only asked to report usual sleep and wake times; questions on sleep disorders included in previous cycles were not asked. Derived variables for sleep hours were calculated from reported usual bed times (SLQ300 and SLQ320) and wake time s(SLQ310 and SLQ330). Respondents reporting that they usually slept for very short periods of times were asked to report the times for their main sleeping period. Therefore, summary

variables may not represent the total hours of sleep during a 24 hour period which could include regular napping or other periods of light sleep. If both sleep and wake times were not reported, then summary sleep hours could not be calculated.

Please refer to the [NHANES Analytic Guidelines](#) and the online [NHANES Tutorial](#) for further details on the use of sample weights and other analytic issues.

References

- Roenneberg T, Wirz-Justice A, and Merrow M (2003) Life between clocks: daily temporal patterns of human chronotypes. *J Biol Rhythms* 18:80-90

Codebook and Frequencies

SEQN - Respondent sequence number

Variable Name: SEQN
SAS Label: Respondent sequence number
English Text: Respondent sequence number.
Target: Both males and females 16 YEARS - 150 YEARS

SLQ300 - Usual sleep time on weekdays or workdays

Variable Name:

SLQ300

SAS Label:

Usual sleep time on weekdays or workdays

English Text:

What time {do you/does SP} usually fall asleep on weekdays or workdays?

English Instructions:

Character variable 'HH:MM' ('00:00' to '23:45')

Target:

Both males and females 16 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
Usual sleep time on weekdays or workdays	Value was recorded	8346	8346	
77777	Refused	6	8352	
99999	Don't know	82	8434	
< blank >	Missing	67	8501	

SLQ310 - Usual wake time on weekdays or workdays

Variable Name:

SLQ310

SAS Label:

Usual wake time on weekdays or workdays

English Text:

What time {do you/does SP} usually wake up on weekdays or workdays?

English Instructions:

Character variable 'HH:MM' ('00:00' to '23:30')

Target:

Both males and females 16 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
Usual wake time on weekdays or workdays	Value was recorded	8383	8383	
77777	Refused	6	8389	
99999	Don't know	45	8434	
< blank >	Missing	67	8501	

SLD012 - Sleep hours - weekdays or workdays

Variable Name: SLD012
SAS Label: Sleep hours - weekdays or workdays
English Text: Number of hours usually sleep on weekdays or workdays.
English Instructions: Derived from SLQ300 and SLQ310
Target: Both males and females 16 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
3 to 13.5	Range of Values	8318	8318	
2	Less then 3 hours	33	8351	
14	14 hours or more	37	8388	
.	Missing	113	8501	

SLQ320 - Usual sleep time on weekends

Variable Name: SLQ320

SAS Label: Usual sleep time on weekends

English Text: What time {do you/does SP} usually fall asleep on weekends or non-workdays?

English Instructions: Character variable 'HH:MM' ('00:00' to '23:45')

Target: Both males and females 16 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
Usual sleep time on weekends	Value was recorded	8344	8344	
77777	Refused	10	8354	
99999	Don't know	78	8432	
< blank >	Missing	69	8501	

SLQ330 - Usual wake time on weekends

Variable Name: SLQ330

SAS Label: Usual wake time on weekends

English Text: What time {do you/does SP} usually wake up on weekends or non-workdays?

English Instructions: Character variable 'HH:MM' ('00:00' to '23:30')

Target: Both males and females 16 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
Usual wake time on weekends	Value was recorded	8374	8374	
77777	Refused	8	8382	
99999	Don't know	49	8431	
< blank >	Missing	70	8501	

SLD013 - Sleep hours - weekends

Variable Name: SLD013

SAS Label: Sleep hours - weekends

English Text: Number of hours usually sleep on weekends or non-workdays.

English Instructions: Derived from SLQ320 and SLQ330

Target: Both males and females 16 YEARS - 150 YEARS

Code or Value	Value Description	Count	Cumulative	Skip to Item
3 to 13.5	Range of Values	8302	8302	
2	Less then 3 hours	33	8335	
14	14 hours or more	52	8387	
.	Missing	114	8501	

