

PANDEMIC Research News

World Sleep Day: Sleep behaviour before and during the COVID-19 Pandemic in 6 European countries.

The World Sleep Society celebrates World Sleep Day® on Friday, March 19th 2021. The slogan for the 14th annual World Sleep Day is 'Regular Sleep, Healthy Future.' World Sleep Day is a reminder to everyone about the importance of sleep for achieving an optimal quality of life and improving global health.

This summary comes from COME-HERE (COVID-19, MEntal HEalth, REsilience and Self-regulation) data, designed to examine life in six European Union countries, France, Germany, Italy, Luxembourg, Spain and Sweden during the COVID-19 pandemic.

Research Institutions: University of Luxembourg (UL), Paris School of Economics (PSE)

Principal Investigators: Conchita D'Ambrosio (UL), Samuel Greiff (UL), Luca Ratti (UL), Claus Vögele (UL), Bénédicte Apouey (PSE), Andrew Clark (PSE).

Researchers: Liyousew Borga (UL), Annika Lutz (UL), Remi Yin (UL), Alan Piper (PSE)

Sponsors: Agence Nationale de la Recherche (ANR), Fonds National de la Recherche Luxembourg (FNR), Losch Foundation, ArtzCure, CARGOLUX

Contact: liyousew.borga@uni.lu

Web: <https://pandemic.uni.lu>

Questions

During an average week before social distancing measures...

During the last week...

- ... when did you go to bed in the evening on an average weekday?
- ...when did you get up in the morning on an average weekday?

We here show results from the COME-HERE data, that follows the same pool of individuals over time. The four rounds of survey in France, Germany, Italy, Spain and Sweden were conducted in April/May (8,063 respondents), June (4,788 participants), August (5,565 respondents), and November/December 2020 (5,594 respondents). In Luxembourg and the Greater Region the survey was conducted in three rounds in the months of April/May (n=1007), July/August (n=782), and October/November (n=541). Importantly, for this report, the COME-HERE survey gauged sleep behaviour both before and at these four points during the pandemic. It also collects information on self-assessed sleep quality.

COVID-19 has changed our behaviours in most aspects of our life, and sleep is no exception.

Our results suggest that **those individuals who managed to maintain their pre-pandemic sleeping behaviours are happier** than those who changed them. This may have been quite challenging to do. As shown in Table 1 the average time spent in bed in minutes fluctuated over the course of the pandemic. These averages are also different from those that our survey respondents reported before social-distancing measures were enforced.

Table 1: Average length of time in minutes spent in bed at night on a typical weekday (24 hour cycle).

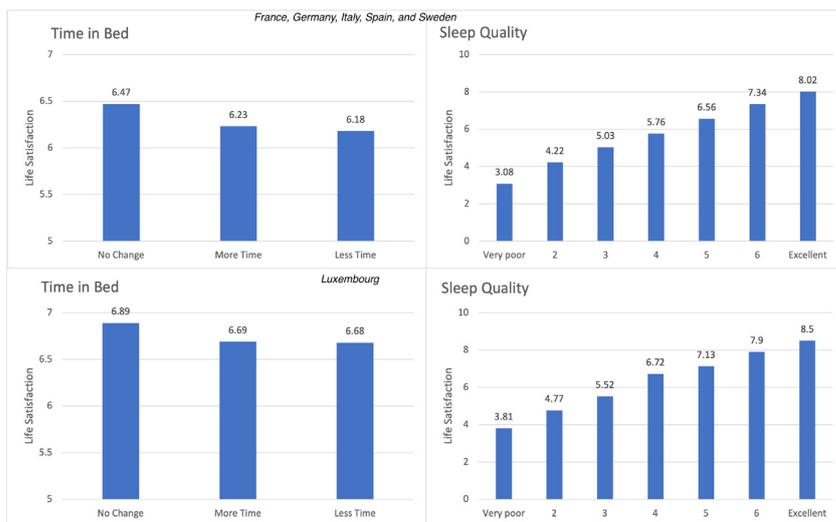
	Pre-pandemic	April/May	June	August	Nov/Dec
France	498 (76.6)	515 (82.4)	493 (75.7)	498 (78.9)	494 (75.4)
Germany	494 (82.6)	502 (83.3)	488 (77.0)	490 (82.4)	491 (81.2)
Italy	477 (72.6)	490 (84.0)	477 (78.9)	471 (79.1)	480 (78.9)
Spain	473 (69.7)	480 (87.0)	463 (77.5)	463 (76.7)	467 (78.8)
Sweden	498 (83.5)	505 (87.7)	496 (84.9)	506 (90.6)	499 (87.0)
	Pre-pandemic	April/May		July/Aug	Oct/Nov
Luxembourg	488.4 (69.2)	501.5 (75.2)		490 (70.1)	499 (69.8)

Note: Standard deviations in parentheses.

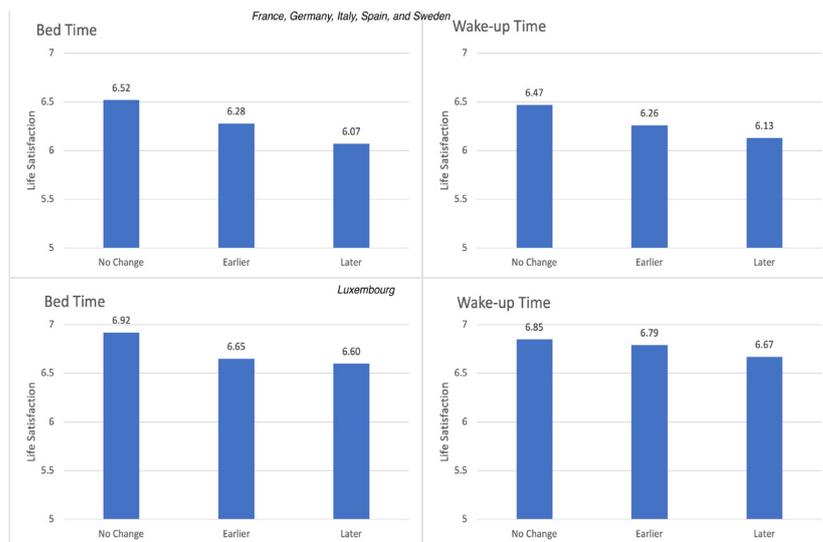
Further analysis shows that respondents are happier if they did not change their average duration of time spent in bed. We also observe that in all six countries sleep quality is highly correlated with life satisfaction. **People who believe that they are not getting quality sleep also report being less happy.**

Questions

- Overall, in the past week, how satisfied have you been with your life on a scale from 0 (not at all) to 10 (completely)?
- How would you rate your sleep quality during the last week on average on a scale from 1 (very poor) to 7 (excellent)?



We can see that individuals who reduced their time spent in bed are less happy than those who increased it. We can also find out separately about changes in the time people go to bed and the time they wake up. The broad averages indicate that **people who maintained their bedtimes were more satisfied than those who changed them.** Similarly, those who changed their wake-up times since the onset of the pandemic are less satisfied with life than those who kept them the same. The averages are presented in Figure 2, and indicate that those moving their times earlier are happier than those having later times, though not as happy as those who maintained their pre-pandemic schedule.



Research sponsors



The ongoing pandemic has changed much in our lives. Our initial results indicate that **we are better off if our sleep behaviour did not change.** This finding likely extends to other aspects of our lives over which we have some control. If we can keep the behaviours that worked for us before the pandemic going during the pandemic, then we may be more content than if we were to make changes.