

Shorter workweeks may lead to less smoking, thinner waistlines

By Theo Wayt

Last modified January 13, 2021. Published January 13, 2021.

Shortening the length of the workweek has a positive impact on measures of workers' health, including body-mass index and smoking, according to a new paper that utilizes a unique French data set.

For blue-collar workers, shortening the workweek by four hours leads to a 19% to 24% decrease in smoking, according to the [paper](#), which was published in the December 2020 issue of *Economics & Human Biology*. For white-collar workers, meanwhile, cutting the same amount of hours was associated with a 1.7% to 2.1% drop in BMI.

“The key implication of these results is that policies that reduce working time, such as shortening the statutory workweek, could lead to important health benefits,” said co-author Inés Berniell, an economist at the Universidad Nacional de La Plata in Argentina.

Berniell wrote the paper alongside economist Jan Bietenbeck of Lund University in Sweden. The two originally met in the Ph.D. program at the Center for Monetary and Financial Studies in Madrid, Spain.

Berniell and Bietenbeck used data from a labor reform introduced in 1998 by France's socialist government that cut the legal length of the workweek from 39 to 35 hours without changing workers' pay. The rule, which was later rolled back by a subsequent conservative government, gave researchers the rare opportunity to study the impact of working hours on a nationwide scale.

“Exogenous changes in working time together with no changes in income make the French context uniquely suited to study the impact of working hours on health,” said Berniell, adding that other estimates of working time are typically confounded by the influence of working hours on income, which can have a large independent effect on health.

The health data came from a survey of workers in 1998, when the reform was announced, and 2002, when the reform was fully implemented. The survey was longitudinal, meaning that the same workers were interviewed four years apart.

“This is very useful because we can compare the same people before and after the treatment,” Berniell said.

In addition to tracking smoking and BMI, the survey also tracked self-reported health. The four-hour reduction in working hours increased the likelihood of being in good self-reported health by an imprecise estimate of 2 to 3%, the researchers found.

Interestingly, the reduction in working hours was associated with virtually no change in white-collar workers' smoking habits, and may have even increased BMI among blue-collar workers.

The researchers said the difference in BMI change between white-collar workers and blue-collar workers could be attributed to differences in on- and off-the-job physical activity.

“A potential explanation for this pattern of results is that treated white-collar workers use part of the additional free time to exercise, thus lowering their BMI. Instead, blue-collar workers likely burn more calories on the job, and they fail to make up for the decrease in work-related physical activity due to the shorter workweek, thus increasing their BMI,” Berniell and Bietenbeck wrote.

Crucially, the group's main sample did not include women. Berniell said she made the decision to exclude women because they were more likely to work part-time, meaning that the workweek reform had a much less meaningful effect on their sample.

“I usually get angry when I see a paper in economics, usually labor economics, that only focuses on men, as it excludes half of the population,” said Berniell. “But this case is special: We focus on men in our sample because men are the ones that reduced their working time after the reform.”

“The differential reduction of hours for treated women is quite small and does not allow us to study the effects of changes in hours on worker’s health, which is why we exclude them from the main sample — but we do include them in a robustness check,” she added.

The main sample also excluded all managers and part-time workers.

Berniell came up with the idea to study the health effects of the French reform in 2010 as her master’s thesis. She then shelved the idea for several years before working with Bietenbeck to write a new version in 2016. She said the pair plan to work together more in the future.

Asked if she found anything particularly surprising during the course of her research, Berniell said, “I was surprised by the time it could take to publish a paper!”

The paper, titled “The effect of working hours on health,” was published in the December 2020 issue of Economics & Human Biology. Inés Berniell of the Universidad Nacional de La Plata and Jan Bietenbeck of Lund University were co-authors. Berniell was lead author.