

New Study: Schools Play a Subordinate Role in the Spread of Coronavirus

The school holidays in summer and autumn had no significant impact on the spread of the SARS CoV-2 virus in Germany. Moreover, the return to full schooling after the summer holidays did not lead to an increase in the number of infection cases - neither among children nor among adults. These are the findings of a new study by economists from University College London (UCL) and the Centre for Research and Analysis of Migration (CReAM) Uta Schönberg, Kirill Borusyak and Clara von Bismarck-Osten. In contrast to most epidemiological studies that observe the occurrence of infections at individual school locations, the study is based on Germany-wide data from the Robert Koch Institute. Quasi-experimental statistical methods were used for the analysis, which exploit the delayed start and end points of holidays in the different federal states.

The most important facts in brief:

- School closures during the summer holidays have not led to a significant reduction of the SARS-CoV-2 infection rate among school children. Data analysis showed an effect of almost zero and, according to the lower bound of confidence interval, at most 0.33 daily infections per 100,000 school children aged 5-14 years have been prevented by school closures. The analysis of the autumn holidays confirms the findings of the summer holidays: the closures in the fall did not significantly reduce the number SARS-CoV-2 cases even in the environment of much higher infection rates in the fall, compared to the summer.
- The authors find no evidence that school closures have a spill-over effect on infection rates among adults. In the elderly population, the summer holidays resulted in a maximum decrease in infection rates of 0.03 infections per day per 100,000 persons aged 60 years and older. The analysis of the autumn holiday also confirms this finding.
- At the same time, the return to school at full capacity after the summer holiday did not lead to an increase in infection rates among either children or adults. Rather, infection rates increased in the last weeks of the summer holidays when families were returning from vacations.
- The study takes advantage of the fact that school holidays in the Länder are set at different times and several years in advance and were not affected by the course of the pandemic in the state. In contrast to the school closures during the first "lockdown" in March, the start of the summer and autumn holidays was not accompanied by the introduction of other containment measures. This allows the effects of school closures to be analysed in isolation, for which the authors use the latest econometric methods.

"The results suggest that schools played a subordinate role in the spread of the SARS-CoV-2 virus," says Uta Schönberg, Professor at University College London and Deputy Director of the Centre for Research and Analysis of Migration. "The school closures during the summer and autumn holidays have not led to a significant reduction in the risk of infection. The assumption that the return to full-time schooling after the summer holidays largely contributed to the second wave of infections in the

fall also seems unfounded – possibly due to the rules introduced in schools to prevent infection. In sum, given their barely demonstrable containment effect and the large costs they entail, the study raises doubts as to whether school closures can be considered an adequate measure.”

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This press release refers to the CReAM Discussion Paper 22/20 “[The Role of Schools in Transmission of the SARS-CoV-2 Virus: Quasi-Experimental Evidence from Germany](#)” by Clara von Bismarck-Osten, Kirill Borusyak and Uta Schönberg.