



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

COVID-19, school closures, and child poverty: a social crisis in the making



While coronavirus disease 2019 (COVID-19) continues to spread across the globe, many countries have decided to close schools as part of a physical distancing policy to slow transmission and ease the burden on health systems. The UN Educational, Scientific and Cultural Organization estimates that 138 countries have closed schools nationwide, and several other countries have implemented regional or local closures. These school closures are affecting the education of 80% of children worldwide. Although scientific debate is ongoing with regard to the effectiveness of school closures on virus transmission,¹ the fact that schools are closed for a long period of time could have detrimental social and health consequences for children living in poverty, and are likely to exacerbate existing inequalities. We discuss two mechanisms through which school closures will affect poor children in the USA and Europe.

First, school closures will exacerbate food insecurity. For many students living in poverty, schools are not only a place for learning but also for eating healthily. Research shows that school lunch is associated with improvements in academic performance, whereas food insecurity (including irregular or unhealthy diets) is associated with low educational attainment and substantial risks to the physical health and mental wellbeing of children.^{2,3} The number of children facing food insecurity is substantial. According to Eurostat, 6.6% of households with children in the European Union—5.5% in the UK—cannot afford a meal with meat, fish, or a vegetarian equivalent every second day. Comparable estimates in the USA suggest that 14% of households with children had food insecurity in 2018.⁴

Second, research suggests that non-school factors are a primary source of inequalities in educational outcomes. The gap in mathematical and literacy skills between children from lower and higher socioeconomic backgrounds often widens during school holiday periods.⁵ The summer holiday in most American schools is estimated to contribute to a loss in academic achievement equivalent to one month of education for children with low socioeconomic status; however, this effect is not observed for children with higher socioeconomic status.⁶

Summer holidays are also associated with a setback in mental health and wellbeing for children and adolescents.⁷

Although the current school closures differ from summer holidays in that learning is expected to continue digitally, the closures are likely to widen the learning gap between children from lower-income and higher-income families. Children from low-income households live in conditions that make home schooling difficult. Online learning environments usually require computers and a reliable internet connection. In Europe, a substantial number of children live in homes in which they have no suitable place to do homework (5%) or have no access to the internet (6.9%). Furthermore, 10.2% of children live in homes that cannot be heated adequately, 7.2% have no access to outdoor leisure facilities, and 5% do not have access to books at the appropriate reading level.⁸ In the USA, an estimated 2.5% of students in public schools do not live in a stable residence. In New York city, where a large proportion of COVID-19 cases in the USA have been observed, one in ten students were homeless or experienced severe housing instability during the previous school year.⁹

While learning might continue unimpeded for children from higher income households, children from lower income households are likely to struggle to complete homework and online courses because of their precarious housing situations. Beyond the educational challenges, however, low-income families face an additional threat: the ongoing pandemic is expected to lead to a severe economic recession. Previous recessions have exacerbated levels of child poverty with long-lasting consequences for children's health, wellbeing, and learning outcomes.¹⁰

Policy makers, school administrators, and other local officials thus face two challenges. First, the immediate nutrition and learning needs of poor students must continue to be addressed. The continuation of school-provided meals is essential in preventing widespread food insecurity. Teachers should also consider how to adapt their learning materials for students without access to wireless internet, a computer, or a place to study. Second, local and national legislators must prepare for the considerable challenges that await when

Lancet Public Health 2020

Published Online
April 7, 2020
[https://doi.org/10.1016/S2468-2667\(20\)30084-0](https://doi.org/10.1016/S2468-2667(20)30084-0)

For more on UN Educational, Scientific and Cultural Organization school closure estimates see <https://en.unesco.org/covid19/educationresponse>

the pandemic subsidies. At the local level, an adequate response must include targeted education and material support for children from low-income households to begin to close the learning gap that is likely to have occurred. From a policy perspective, legislators should consider providing regular income support for households with children during the impending economic crisis to prevent a deepening and broadening of child poverty. Without such action, the current health crisis could become a social crisis that will have long-lasting consequences for children in low-income families.

We declare no competing interests.

Copyright © 2020 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY 4.0 license.

**Wim Van Lancker, Zachary Parolin*
wim.vanlancker@kuleuven.be

Centre for Sociological Research, University of Leuven, B-3000 Leuven, Belgium (WVL); and Center on Poverty and Social Policy, Columbia University, New York, NY, USA (ZP)

- 1 Cohen J, Kupferschmidt K. Countries test tactics in 'war' against COVID-19. *Science* 2020; **367**: 1287–88.
- 2 Schwartz AE, Rothbart MW. Let them eat lunch: the impact of universal free meals on student performance. *J Policy Anal Manage* 2019; published online Oct 10. DOI:10.1002/pam.22175.
- 3 Bitler MP, Seifoddini A. Health impacts of food assistance: evidence from the United States. *Annu Rev Resour Economics* 2019; **11**: 261–87.
- 4 United States Department of Agriculture. Food security in the United States. <https://www.ers.usda.gov/data-products/food-security-in-the-united-states/> (accessed March 25, 2020).
- 5 Alexander KL, Entwisle DR, Olson LS. Lasting consequences of the summer learning gap. *Am Sociol Rev* 2007; **72**: 167–80.
- 6 Cooper H, Nye B, Charlton K, Lindsay J, Greathouse S. The effects of summer vacation on achievement test scores: a narrative and meta-analytic review. *Rev Educ Res* 1996; **66**: 227–68.
- 7 Morgan K, Melendez-Torres GJ, Bond A, et al. Socio-economic inequalities in adolescent summer holiday experiences, and mental wellbeing on return to school: analysis of the school health research network/health behaviour in school-aged children survey in Wales. *Int J Environ Res Public Health* 2019; **16**: 1107.
- 8 Guio AC, Gordon D, Marlier E, Najera H, Pomati M. Towards an EU measure of child deprivation. *Child Indic Res* 2018; **11**: 835–60.
- 9 National Center for Homeless Education. Federal Data Summary. School Year 2015–16 through 2017–18. 2020. <https://nche.ed.gov/wp-content/uploads/2020/01/Federal-Data-Summary-SY-15.16-to-17.18-Published-1.30.2020.pdf> (accessed April 3, 2020).
- 10 Cantillon B, Chzhen Y, Handa S, Nolan B. Children of austerity. Impact of the great recession on child poverty in rich countries. New York: UNICEF, Oxford University Press, 2017. https://www.unicef-irc.org/publications/pdf/Children_of_austerity.pdf (accessed April 3, 2020).