Navigating uncharted territory: school closures and adolescent experiences during the COVID-19 pandemic in the WHO European Region

Impact of the COVID-19 pandemic on young people’s health and well-being from the findings of the HBSC survey round 2021/2022

Frank J. Elgar, Henri Lahti, Joana Lopes Ferreira, Marina Melkumova and Ludwig Bilz
The COVID-19 pandemic led to drastic changes in schooling. Students, especially older adolescents and girls, felt it had a negative impact on their school performance. Adolescents experiencing a higher number of school closure days during the pandemic were more likely to report school pressure, with lack of personal interaction with teachers and, peers possibly being among the factors behind the link between school closure and school pressure. Remote learning processes may have contributed to feelings of added school pressure through lower learning concentration and engagement, inability to learn from online sources, difficulties in organizing study time and worries about the future. Only one in five adolescents liked school a lot during the pandemic. Adolescents from less well-off families reported more negative impacts on their school performance due to the pandemic. Those from better-off families reported more school pressure and less liking of school. Targeted efforts are needed to address the avoidable differences between the groups of adolescents affected by the COVID-19 pandemic. Adolescent experiences of the impact of the pandemic on their school experience should be heard and taken into consideration in the post-pandemic recovery.
KEY FINDINGS

- On average, 138 school closure days occurred between January 2020 and December 2022 in the 22 countries and regions of the WHO European Region that were studied.
- The range of number of days of school closures across the countries and regions was from 341 to zero.
- Almost half of the adolescents reported experiencing some or a lot of school pressure, with those having more school closure days being more likely to report this.
- Girls and older adolescents were more likely to report feelings of pressure from their schoolwork.
- Adolescents who experienced more social support from classmates and teachers felt less school pressure and reported fewer negative impacts on school performance.
- More than a quarter (especially older adolescents and girls) reported that the COVID-19 pandemic had had a negative or very negative impact on their school performance.
- The number of school closure days was not linked to the pandemic’s impact on school performance.
- Only around 20% reported liking school a lot during the pandemic. Adolescents experiencing higher social support from their classmates and teachers reported liking school more.
- Boys were less prone to liking school than girls. The number of school closure days was not linked to liking school during the pandemic.
- Adolescents from better-off families reported more negative school experiences (more school pressure and less liking of school) but also less pandemic impact on school performance.
- Targeted efforts are needed to address the avoidable differences between the groups of adolescents affected by the pandemic.
- Adolescent experiences should be heard and taken into consideration in the post-pandemic recovery.

SUMMARY

The COVID-19 pandemic led to drastic changes in schooling. Students, especially older adolescents and girls, felt it had a negative impact on their school performance.

Adolescents experiencing a higher number of school closure days during the pandemic were more likely to report school pressure, with lack of personal interaction with teachers and peers possibly being among the factors behind the link between school closure and school pressure.

Remote learning processes may have contributed to feelings of added school pressure through lower learning concentration and engagement, inability to learn from online sources, difficulties in organizing study time and worries about the future. Only one in five adolescents liked school a lot during the pandemic.

Adolescents from less well-off families reported more negative impacts on their school performance due to the pandemic. Those from better-off families reported more school pressure and less liking of school.

Targeted efforts are needed to address the avoidable differences between the groups of adolescents affected by the COVID-19 pandemic. Adolescent experiences of the impact of the pandemic on their school experience should be heard and taken into consideration in the post-pandemic recovery.
FINDINGS

COVID-19 pandemic impacts on school closures

The average of school closure days between January 2020 and when data were collected across the 22 European countries/regions was 138 days, ranging from 341 days in Italy to zero in Finland (Fig. 1). These figures represent only national bans on all in-person teaching at all levels. Finland, for instance, is shown to have zero days of school closures because early childhood education and pre-primary settings remained open, as did basic education for some groups, while primary, secondary and tertiary institutions were closed.

COVID-19 pandemic impacts on school performance

Twenty-seven per cent of adolescents reported that the COVID-19 pandemic had had a negative or very negative impact on their school performance. The share varied between countries/regions, from 40% in Kazakhstan to 16% in Serbia. The number of school closure days was not linked to impacts on school performance.

Girls reported more negative impacts due to the pandemic than boys, and 13- and 15-year-olds reported more than 11-year-olds. Adolescents from families that were not well-off were more likely to report a negative impact on school performance than those whose families were fairly well-off and well-off.

Experiencing higher levels of classmate and teacher support were each linked to fewer negative impacts on school performance.
**COVID-19 pandemic impacts on school pressure**

Reporting some or a lot of school pressure ranged from 65% in Serbia to 18% in Kazakhstan, with an average across the countries/regions of 46%. Adolescents who experienced more school closure days were likelier to report some or a lot of school pressure. For every 100 days that schools were closed, the likelihood of experiencing some or a lot of school pressure increased by 74%, indicating strong links between the length of school closures and school pressure experienced by adolescents.

Individual and social factors were linked to school pressure. Girls were 69% more likely to report some or a lot of school pressure. Increases were also seen with age, with 13- and 15-year-olds reporting more than those aged 11.

Family-level factors played a role. Adolescents from fairly well-off and well-off families were more likely to report school pressure than those whose families were not well-off.

Social support from classmates and teachers seemed to work as a buffer against feelings of higher school pressure. Adolescents who had higher classmate and teacher support were less likely to report school pressure.
COVID-19 pandemic impacts on liking school

Nineteen per cent reported liking school a lot during the pandemic, with the share in countries/regions varying from 32% in Kazakhstan to 9% in Croatia. School closure days were not linked to liking school.

Girls were more prone to liking school a lot. Adolescents who experienced higher classmate and teacher support reported liking school more than those with lower support.

Adolescents from fairly well-off families were less prone to liking school a lot than those whose families were not well-off, and 13-year-olds were less likely to do so than 11-year-olds.

POLICY ACTIONS

Measures will need to be put in place to make up for the pandemic’s impacts on adolescents’ school performance. Such measures should include the following:

• expanding adolescent support networks by taking students’ perspectives into account and targeting the groups most affected (in the case of school performance and school pressure, for instance, targeted efforts should be aimed at older adolescents and girls);

• using school closures in future health emergencies more cautiously and considering alternative measures first to offset the increased experiences of school pressure with extended school closures; and

• promoting school and classroom climates as a health promotion measure, reflecting the understanding that schools are not only about knowledge transfer and that social experiences at school are closely linked to academic achievement and good health and well-being.
The COVID-19 pandemic created unprecedented challenges for the education system and student health and well-being (1). Schools brought in measures such as requiring the use of face masks, physical distancing, phased arrivals and departures, and symptom screening to reduce virus transmission (2). The pandemic and government containment measures led to students facing online or interrupted education, delays in seeking health care, absence (or reductions) of face-to-face contacts with school peers, friends and relatives, strained family relationships, prolonged screen time, irregular sleep patterns, reduced physical activity and less balanced diets (3,4). Evidence also shows that adolescents have experienced more mental health concerns since the start of the pandemic (5–8), particularly anxiety and depression (9).

School closures were among the measures used to help prevent the spread of the virus. Worldwide, almost 1.6 billion adolescents in more than 190 countries, from pre-primary to higher education settings, were affected by school closures (10). The move to home-schooling caused psychological and emotional distress for families and adolescents, changes in adolescents’ learning patterns (11,12), reductions in learning and slower academic progress (13). Several studies found school closures negatively affected student achievement in reading, science and mathematics. Younger children and those from less well-off families were more affected (14,15), and children with physical or mental health conditions experienced the most severe impacts of the pandemic (16).

To date, most research has focused on the impact of school closures on learning outcomes. Little is known about how school closures affected adolescents’ school satisfaction and perceptions of school pressure.
The Health Behaviour in School-aged Children (HBSC) study is a large school-based survey carried out every four years in collaboration with the WHO Regional Office for Europe. It tracks, monitors and reports on the self-reported health behaviours, health outcomes and social environments of boys and girls aged 11, 13 and 15 years. The most recent survey (2021/2022) was conducted across 44 countries and regions of the WHO European Region and Canada and included an optional set of questions that measured perceived impacts of the COVID-19 pandemic.

This report presents main findings from the HBSC survey round 2021/2022 on the COVID-19 pandemic’s effects on key areas of the lives of adolescents (such as mental health, relationships with family and school performance) from 22 countries and regions of the WHO European Region. It is part of a series of five reports on understanding the impact of the COVID-19 pandemic on young people’s health and well-being.

Fig. 2 shows the dates on which the 22 countries conducted the survey.
REFERENCES


All references accessed 24 May 2023.
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