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**hbsc**  
HEALTH BEHAVIOUR IN  
SCHOOL-AGED CHILDREN

## **Age, gender and class: how the COVID-19 pandemic affected school-aged children 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

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# ABSTRACT

This report shows that adolescents across 22 countries and regions of the WHO European Region who took part in the Health Behaviour in School-aged Children survey round 2021/2022 reported that the COVID-19 pandemic had had big impacts across multiple areas of their lives. The impacts were both negative and positive, with some adolescents reporting positive impacts in some areas and negative impacts in others. A large number reported that the COVID-19 pandemic had had neither positive nor negative impacts. Of adolescents reporting negative impacts, most related to their mental health. For positive, most related to relationships with their family. No consistent geographical patterns were seen. Gender and age differences were clearer and more consistent for positive rather than negative impacts. Boys reported positive impacts more often than girls in almost all countries and regions and younger adolescents were more likely to have experienced positive impacts than those who were older. Differences by how well-off adolescents' families were could be found in most countries and regions, affecting both positive and negative impacts. Adolescents whose families were not well-off were most likely to have experienced negative impacts, and those from well-off families were most likely to have reported positive impacts. Differences between genders, ages and families' economic status were not clear for negative impacts, but clear differences by gender (boys doing better), age group (younger adolescents doing better) and family economic status (adolescents from well-off families doing better) were seen for positive impacts.

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# KEY FINDINGS

- Overall, 15–30% of adolescents reported that the COVID-19 pandemic had had negative impacts on different areas of their lives, 32–49% reported neutral and 28–48% positive impacts.
- Negative impacts most commonly were related to mental health, physical activity and school performance, and positive impacts to relationships with family and friends.
- Thirteen per cent reported negative and 31% positive impacts of the COVID-19 pandemic in 6–10 (most) areas of their lives.
- Adolescents experiencing negative or positive impacts in 6–10 (most) areas of their lives across countries and regions ranged from 6–28% for negative and 9–53% for positive.
- Girls more often reported negative impacts in most areas of their lives and boys more often reported positive impacts.
- Younger adolescents reported positive impacts in most areas of their lives more often than those who were older, but there was no clear pattern across age groups for negative impacts.
- Adolescents from well-off families were more likely to report positive impacts in most areas of their lives.
- Adolescents from families that were not well-off were more likely to report negative impacts in two thirds of the countries and regions.
- The negative impacts of the pandemic on the mental health of adolescents clearly need to be addressed fully. This may require extra funding and the development of services to target adolescents of main concern.
- Policy-makers should consider allocating resources specifically to develop responses for girls and older adolescents and reflect their needs in response plans for any future pandemics.

## SUMMARY

This report shows that adolescents across 22 countries and regions of the WHO European Region who took part in the Health Behaviour in School-aged Children survey round 2021/2022 reported that the COVID-19 pandemic had had big impacts across multiple areas of their lives. The impacts were both negative and positive, with some adolescents reporting positive impacts in some areas and negative impacts in others. A large number reported that the COVID-19 pandemic had had neither positive nor negative impacts.

Of adolescents reporting negative impacts, most related to their mental health. For positive, most related to relationships with their family.

No consistent geographical patterns were seen. Gender and age differences were clearer and more consistent for positive rather than negative impacts. Boys reported positive impacts more often than girls in almost all countries and regions and younger adolescents were more likely to have experienced positive impacts than those who were older.

Differences by how well-off adolescents' families were could be found in most countries and regions, affecting both positive and negative impacts. Adolescents whose families were not well-off were most likely to have experienced negative impacts, and those from well-off families were most likely to have reported positive impacts.

Differences between genders, ages and families' economic status were not clear for negative impacts, but clear differences by gender (boys doing better), age group (younger adolescents doing better) and family economic status (adolescents from well-off families doing better) were seen for positive impacts.

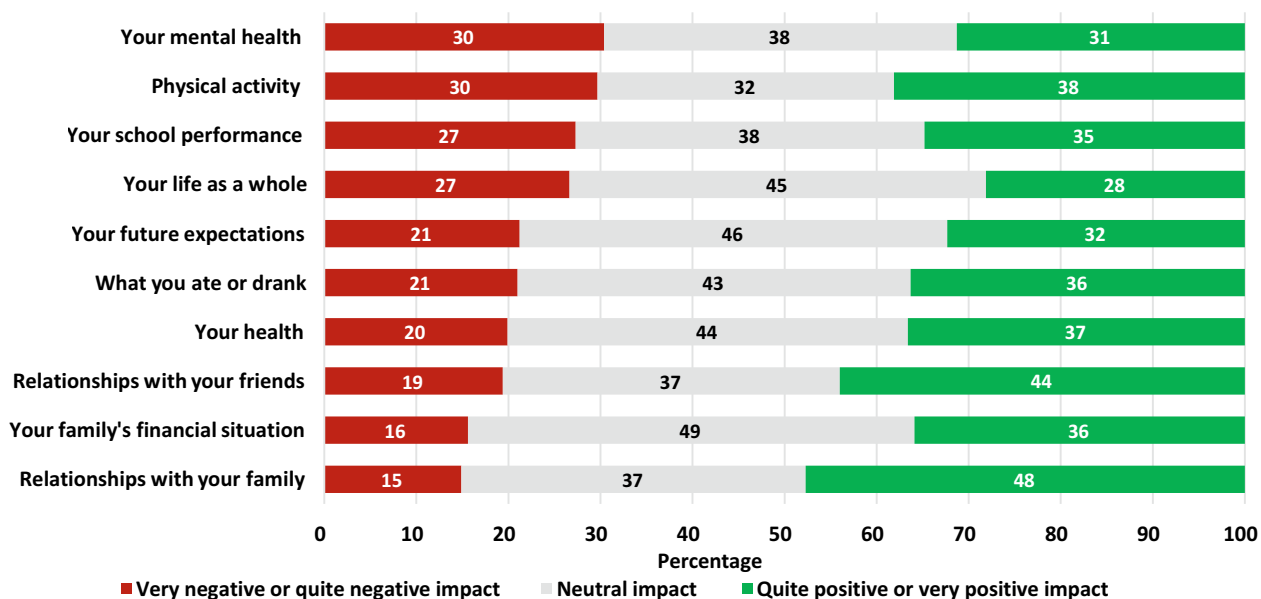
The negative impacts of the pandemic on the mental health of adolescents clearly need to be addressed fully. This may require extra funding and the development of services to target adolescents of main concern.

# FINDINGS

## COVID-19 pandemic impact on different areas of life

The HBSC survey asked adolescents across 22 countries and regions of the WHO European Region to report negative, neutral and positive impacts of the COVID-19 pandemic in 10 areas of their lives. Fig. 1 shows the overall patterns of reported positive, neutral and negative impacts of the pandemic in these areas. Most adolescents experienced neutral or positive impacts, but a large share reported negative impacts in each area.

Fig. 1. Overall patterns of reported positive, neutral and negative impacts of the pandemic

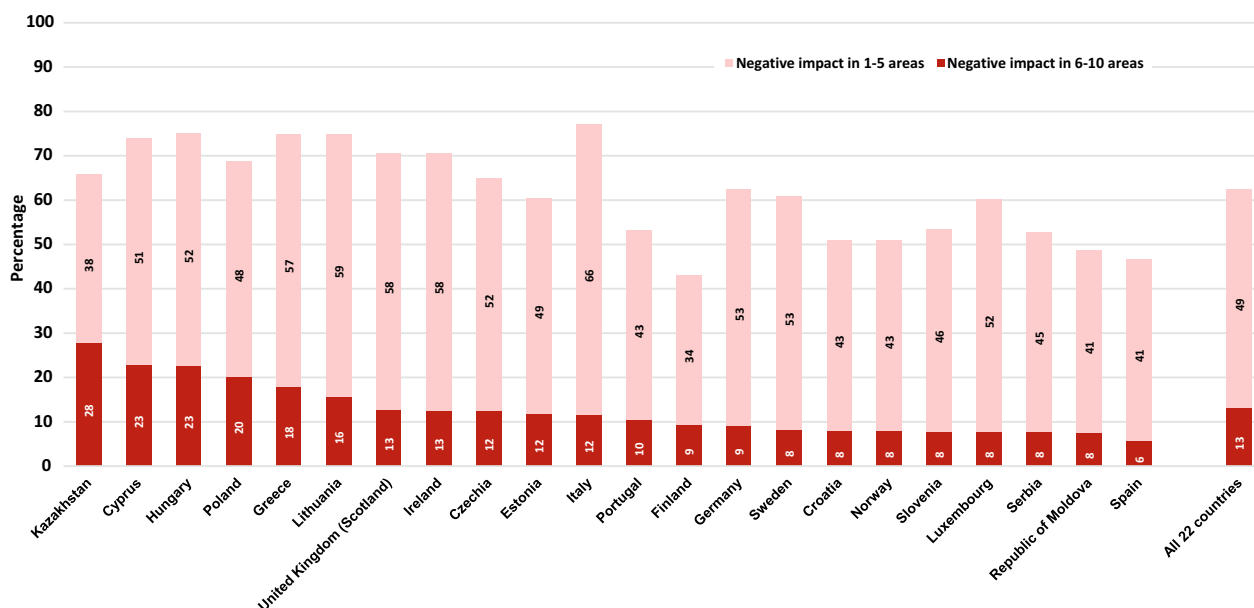


## COVID-19 pandemic impact across countries and regions

### Negative impacts

Forty-nine per cent of adolescents reported negative impacts in 1–5 (up to half) of the areas of their lives and 13% negative impacts in 6–10 (most) areas (Fig. 2). The share of those experiencing negative impacts in up to half of the areas ranged from 34% in Finland to 66% in Italy. For those reporting negative impacts in most areas, the range was 6% in Spain to 28% in Kazakhstan. No clear geographical pattern was seen.

Fig. 2. Negative impacts across countries



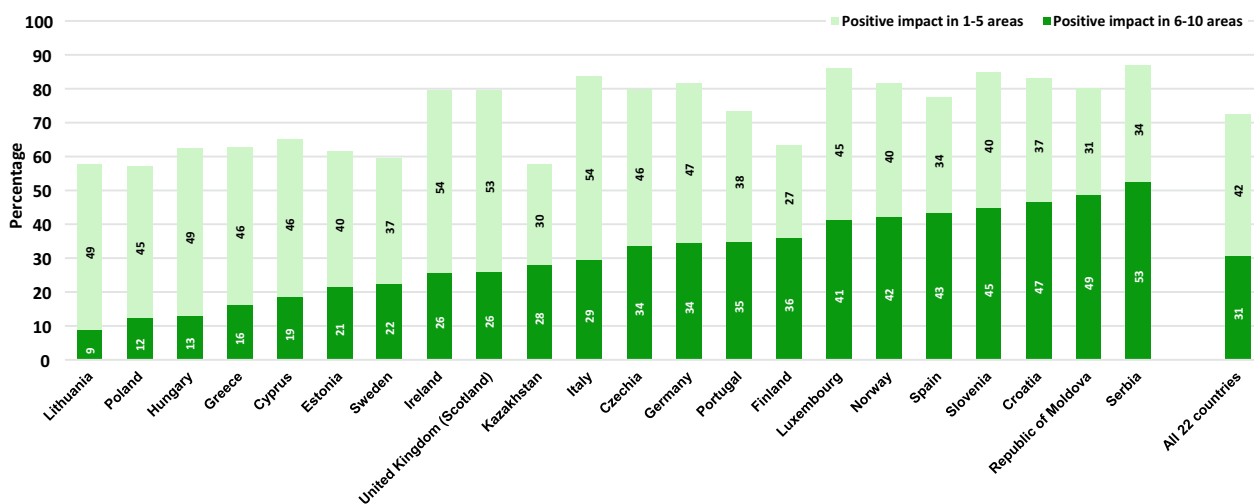
Note: only 13- and 15-year-olds are included from Czechia and Norway.

### Positive impacts

Forty-two per cent of adolescents reported positive impacts in up to half of the areas and 31% in most areas (Fig. 3). The share of those experiencing positive impacts in up to half of the areas ranged from 27% in Finland to 54% in Italy and Ireland. For those reporting positive impacts in most areas, the range was 9% in Lithuania to 53% in Serbia.

Countries where low numbers of adolescents reported positive impacts were from central (Hungary and Poland), eastern (Estonia and Lithuania) and the Mediterranean area of southern Europe (Cyprus and Greece). All countries with high numbers reporting positive impacts were from southern Europe (Slovenia and Balkans countries, including Croatia, the Republic of Moldova and Serbia).

Fig. 3. Positive impacts across countries



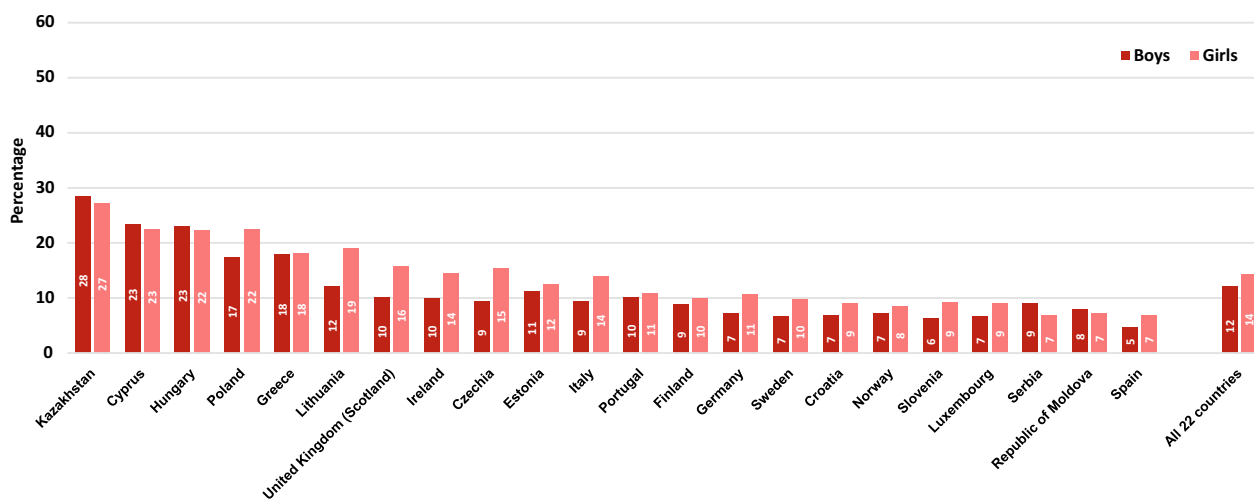
Note: only 13- and 15-year-olds are included from Czechia and Norway.

# COVID-19 pandemic impact: differences between boys and girls

## Negative impacts

Twelve per cent of boys and 14% of girls reported negative impacts in most areas of their lives (Fig. 4). Higher shares of girls reported negative impacts in most areas in 17 countries/regions, with the gender differences being substantial in 12. No clear geographical pattern was seen.

Fig. 4. Negative impacts: differences between boys and girls

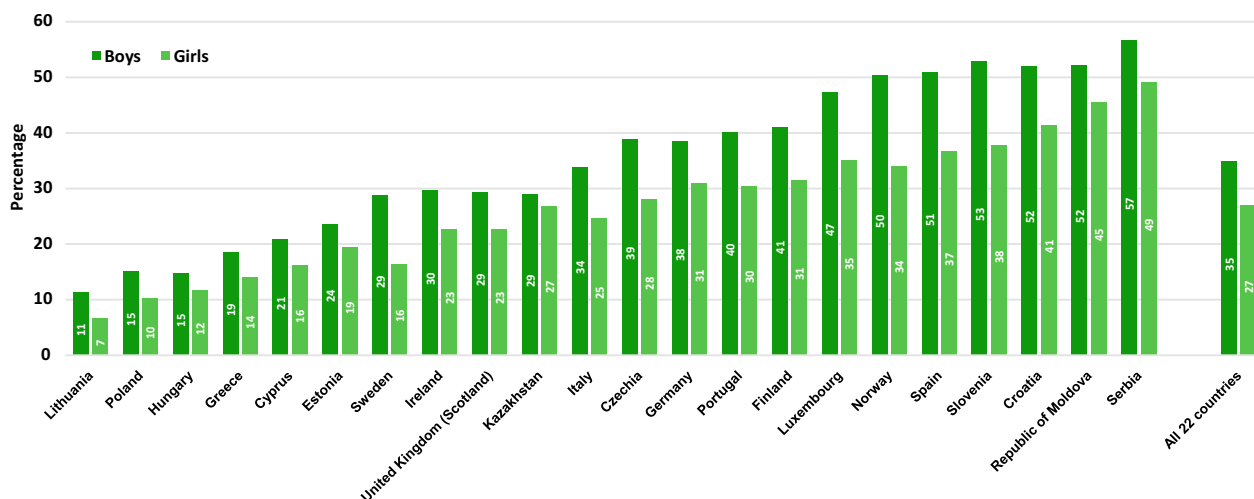


Note: only 13- and 15-year-olds are included from Czechia and Norway.

## Positive impacts

Thirty-five per cent of boys and 27% of girls reported positive impacts from the COVID-19 pandemic in most areas of their lives, which signals a substantial difference (Fig. 5). Many more boys than girls experienced positive impacts in most areas in all countries/regions, with the differences being pronounced in 21 (this was not seen only in Kazakhstan).

Fig. 5. Positive impacts: differences between boys and girls



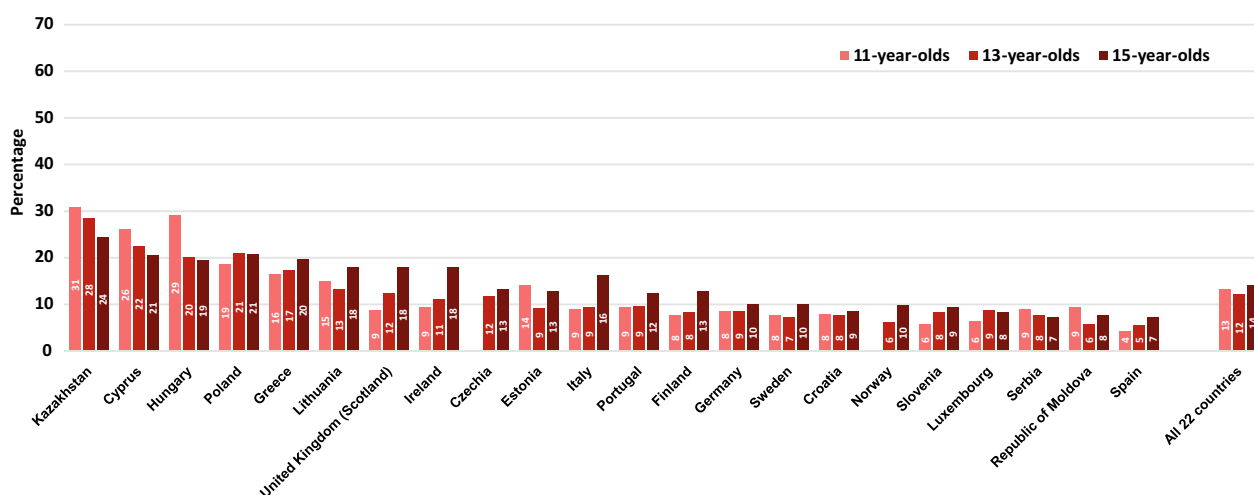
Note: only 13- and 15-year-olds are included from Czechia and Norway.

# COVID-19 pandemic impact: differences across age groups

## Negative impacts

Thirteen per cent of 11-year-olds, 12% of 13-year-olds and 14% of 15-year-olds reported negative impacts in most areas of their lives (Fig. 6). The youngest age group had the highest share reporting negative impacts in most areas in six of the 22 countries/regions, and the oldest group in 14. No clear geographical pattern was seen.

Fig. 6. Negative impacts: differences across age groups

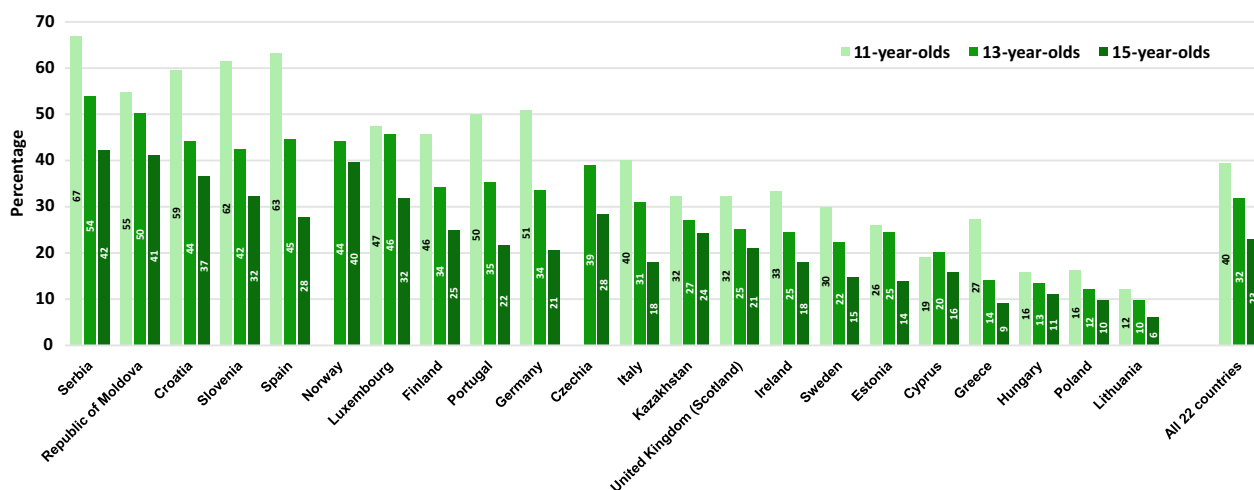


Note: only 13- and 15-year-olds are included from Czechia and Norway.

## Positive impacts

Forty per cent of 11-year-olds, 32% of 13-year-olds and 23% of 15-year-olds reported positive impacts in most areas of their lives, reflecting substantial differences (Fig. 7). The same age patterns were found in all countries and regions: 11-year-olds were most likely to report positive impacts in most areas of life and 15-year-olds least likely. The age difference was substantial in 21 of the countries/regions, but not in Norway.

Fig. 7. Positive impacts: differences across age groups



Note: only 13- and 15-year-olds are included from Czechia and Norway.

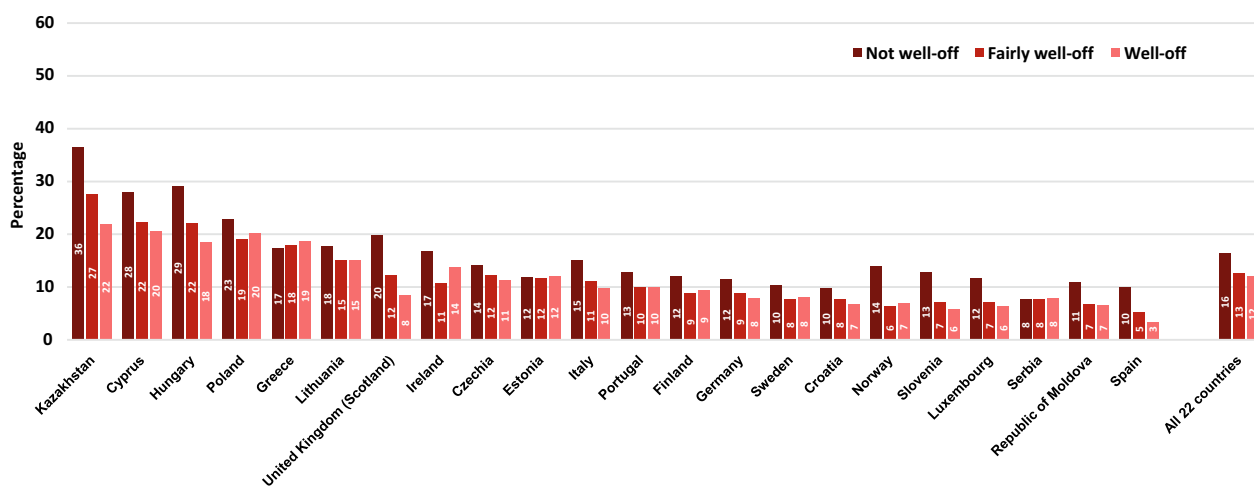
## COVID-19 pandemic impact: differences across family income groups

### Negative impacts

Sixteen per cent of adolescents whose parents were not well-off, 13% whose parents were fairly well-off and 12% whose parents were well-off reported negative impacts in most areas of their lives (Fig. 8). The difference between the not well-off group and the other two was substantial. Adolescents from the not well-off group were most likely to report negative impacts in 19 of the 22 countries and regions, with a substantial difference with the other two groups in 15.

In half of the countries and regions, adolescents from families that were not well-off were most likely to report negative impacts in most areas of their lives and those from families that were well-off least likely. Three countries (Greece, Estonia and Serbia) had no meaningful differences between the three family income groups.

Fig. 8. Negative impacts across family income groups



Note: only 13- and 15-year-olds are included from Czechia and Norway.

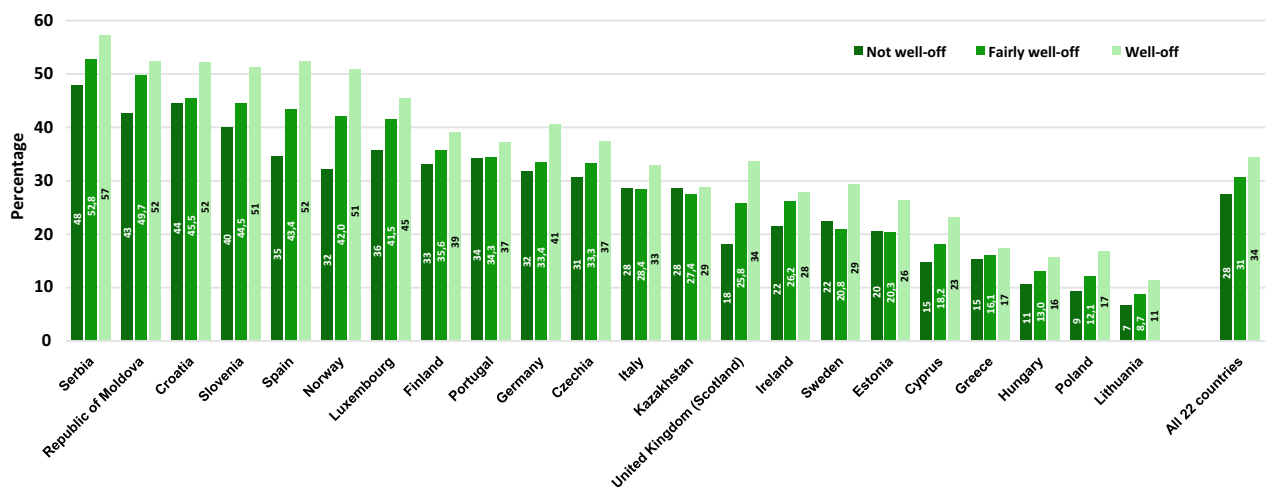


## Positive impacts

Twenty-eight per cent of adolescents coming from families that were not well-off, 31% from fairly well-off families and 34% from well-off families reported positive impacts in most areas of their lives, with the overall difference being substantial (Fig. 9). Those from well-off families were much more likely to report positive impacts than the other two groups.

The same pattern was found in all countries and region: adolescents from families that were not well-off or were fairly well-off reported positive impacts in most areas least often, while those from well-off families reported positive impacts most often. The differences were substantial in 18 of the 22 countries and regions.

Fig. 9. Positive impacts across family income groups



Note: only 13- and 15-year-olds are included from Czechia and Norway.

# POLICY ACTIONS

Countries and regions should consider the following as they prepare to shield adolescents from the medium and long-term effects of the COVID-19 pandemic and any unintended consequences of future health emergencies.

- Given the substantial share of adolescents reporting negative impacts of the COVID-19 pandemic on their lives, their age-specific needs should be considered by policy-makers in response plans for any future pandemics to avoid the unintended negative impacts of protective measures.
- Policy-makers should consider conducting more detailed country/regional-specific assessments and analyses of data from national/regional HBSC surveys to better understand the impacts of the COVID-19 pandemic on adolescents. These analyses could be used to tailor interventions to the specific needs of adolescents in each country/region.
- The negative impacts of the pandemic on the mental health of adolescents clearly need to be addressed fully. This may require extra funding and the development of services to target adolescents. Services to address long-COVID-19 symptoms and provide mental health counselling, as well as associated support services, should be included in the measures.
- School and school performance were among the areas of life in which adolescents reported negative impacts of the pandemic. Policy-makers should prioritize in-person education as an essential service, as disruptions to schooling can have multiple and severe long-term negative impacts.
- Girls and older adolescents reported negative impacts of the pandemic more often and experienced positive impacts less often. Policy-makers should consider allocating resources specifically to develop responses for girls and older adolescents and reflect their needs in response plans for any future pandemics. Other groups of adolescents, however, should not be deprived of resources.
- Families that were better-off were more resilient during the pandemic. Policy-makers should implement policies to address the issues that create income inequality and its consequences. This could include measures such as increasing access to affordable housing, allocating extra social resources to schools and social services in disadvantaged areas, providing better financial support to low-income families and increasing funding for social safety-net programmes.

# CONTEXT

The COVID-19 pandemic affected lives in ways that are only now beginning to fully be understood. For children and adolescents, it had impacts in many parts of their daily lives, including their education, health, relationships and feelings. Impacts were experienced due to three factors: contracting the virus; concerns about the virus; and changes imposed on their lives by the public health measures designed to control spread (1).

Evidence shows differences in the COVID-19 pandemic's impact by gender, age groups and social class. The pandemic seems to have deepened pre-existing disparities between social groups (2). Much attention has been given to the negative impacts of the pandemic on children's and adolescents' mental health (3), but broader positive and negative impacts that affect different groups of adolescents in different contexts are also important (4).

Countries and regions have reported differences in the pandemic's impact on children and adolescents across a wide range of factors (5). Girls and those living in poorer families were more likely to report negative impacts than boys and those whose families were better-off (6,7), as were older adolescents (8).

Information on the positive and negative impacts of the pandemic on broader areas of adolescents' lives nevertheless is scarce. It is not clear if impacts are consistent across countries and regions. The Health Behaviour in School-aged Children (HBSC) survey provides a unique opportunity to consider these issues and draw relevant recommendations for policy development.

# HBSC SURVEY ROUND 2021/2022

The 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. 10 shows the dates on which 22 countries conducted the survey.

**Fig. 10. Dates on which the 22 countries conducted the survey**



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