World Health Organization

REGIONAL OFFICE FOR Europe

Spotlight on adolescent health and well-being

FINDINGS FROM THE 2017/2018

HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN

(HBSC) SURVEY IN EUROPE AND CANADA

INTERNATIONAL REPORT

VOLUME 1. KEY FINDINGS

hbsc

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Spotlight on adolescent health and well-being

Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada

International report

VOLUME 1. KEY FINDINGS

Edited by: Jo Inchley, Dorothy Currie, Sanja Budisavljevic, Torbjørn Torsheim, Atle Jåstad, Alina Cosma, Colette Kelly & Ársæll Már Arnarsson

Abstract
Health Behaviour in School-aged Children (HBSC), a WHO collaborative cross-national study, has provided information about the health, well-being, social environment and health behaviour of 11-, 13- and 15-year-old boys and girls for over 30 years. The 2017/2018 survey report presents data from over 220 000 young people in 45 countries and regions in Europe and Canada. The data focus on social context (relations with family, peers, school and online communication), health outcomes (subjective health, mental health, overweight and obesity, and injuries), health behaviours (patterns of eating, physical activity and toothbrushing) and risk behaviours (use of tobacco, alcohol and cannabis, sexual behaviour, fighting and bullying) relevant to young people's health and well-being. New items on electronic media communication and cyberbullying and a revised measure on family meals were introduced to the HBSC survey in 2017/2018 and measures of individual health complaints and underweight are also included for the first time in the international report. Volume 1 of the international report presents key findings from the 2017/2018 survey, and Volume 2 provides key data disaggregated by country/region, age, gender and family affluence.

Keywords
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HEALTH STATUS DISPARITIES
SOCIOECONOMIC FACTORS
GENDER
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CHILD HEALTH
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Cover illustration by **Ketlin**, aged 15 (Estonia).

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HBSC, a WHO collaborative cross-national study, involves a wide network of researchers from all participating countries and regions. The data collection in each country or region was funded at national/regional level. The editors are grateful for the financial support and guidance offered by government ministries, research foundations and other funding bodies in the participating countries and regions. Particular thanks go to the Norwegian Directorate of Health, which contributed funding to the HBSC Data Management Centre. The report's production was supported by a generous contribution from the WHO Regional Office for Europe.

The editors would like to thank: our valued partners, particularly the WHO Regional Office for Europe, for their continuing support; the young people who were willing to share their experiences and those who kindly allowed inclusion of some of their fantastic artwork and insightful comments in this report; schools and education authorities in each participating country and region for making the survey possible; and all members of national/regional HBSC teams involved in the research.

The editors are also grateful to Yekaterina Chzhen, Trinity College Dublin, Ireland, and Bjorn Holstein, University of Southern Denmark, for providing very helpful feedback on an earlier draft.

The WHO Regional Office for Europe would like to express gratitude to the Government of Germany and the Government of the Russian Federation for financial support in preparing the international report of the HBSC survey.

FOREWORD

Life has changed enormously in Europe over the last two decades. Digitization, globalization, migration, urbanization and climate change mean we now live in a more complex Europe. Young people are often the first to be exposed to and affected by these changes and have become outspoken advocates on issues such as climate change.

It is important, at European level and in each country/region, to understand what young people think, know and understand in terms of their health, and how they behave. The Health Behaviour in School-aged Children (HBSC) study, now presenting its seventh international report, helps us with all of this.

HBSC is truly international, now involving over 50 countries and regions across Europe and North America. It investigates the behavioural and social factors that drive the disease burden in adolescence and adulthood. It understands how policy and practice in sectors such as education, social care, justice and welfare affect young people's health and well-being. It promotes multiprofessional and intersectoral solutions to the issues young people face today, and young adults face tomorrow. And its primary purpose is to advocate for policy changes to safeguard the health and well-being of one of society's most vulnerable groups – children and adolescents.

HBSC data are indispensable for WHO and the European Region. Countries and regions use them to develop policies and strategies that focus on improving the health and well-being of this and future generations, and to ensure that the current generation of adolescents grow into adulthood free from the risk factors that jeopardize their physical, mental and social well-being, and affect their educational and employment prospects. And we at the Regional Office use the data first for developing, then monitoring, the new child and adolescent health strategy and how it works in countries/regions across the Region.

The health sector faces increasing demands from citizens through demographic change and rising expectations. The costs of providing health care are rising due to innovative medicines and technologies. The health-care workforce is facing challenges through shortages and lack of training. And the system's ability to respond is being hampered by disinformation, populist policies and an erosion of trust in authorities.

Based on these developments, I am giving the WHO Regional Office for Europe a new vision that meets the challenges of today and the threats and opportunities of tomorrow. This vision is based on support to countries/regions and international solidarity. It focuses on key areas of action, including tackling the main drivers of the disease burden, recognizing that threats to public health often arise from decisions in other sectors, working to achieve people-centred health systems that bring together public health, primary care, specialist services and social care, and safeguarding all groups within our populations.

This seventh international report and the vital data it presents shows that HBSC is, and will continue to be, a central support of the new vision for the WHO Regional Office for Europe.

Hans Henri P. Kluge
WHO Regional Director for Europe

PREFACE

The Health Behaviour in School-aged Children (HBSC) study has been seeking to understand and monitor young people's health across Europe and North America for more than 30 years. As the study has grown to include 50 member countries and regions, the utility of the data it provides for the well-being of 11-, 13- and 15-year-olds has also grown.

This seventh international report in the series presents findings on adolescent health and well-being from 45 participating countries and regions in 2017/2018. It is divided into two volumes. ***Volume 1*** *provides an overview of the key findings highlighting important gender and socioeconomic differences, as well as changes since the last survey in 2013/2014. The key data are presented in* ***Volume 2*** *in a series of charts showing country/region-level and overall prevalence by age, gender and family affluence.*

A broad range of measures of physical and mental well-being are included, as well as young people's experiences of school, family life and peer relationships. A new special focus area on online communication was included in the 2017/2018 HBSC survey to better understand the role of digital technology in young people's lives. For the first time, the report also includes data from the last survey in 2013/2014 to show where key changes have occurred in young people's health and health behaviours, as well as the wider circumstances in which they live and grow.

High-quality, internationally comparable data are essential to support international policy development and monitor progress towards global targets such as the United Nations Sustainable Development Goals and the WHO global strategy for women's, children's and adolescents' health (2016–2030). Disaggregated data such as those provided by HBSC allow us to identify key challenges at different life stages and highlight priority areas for action. In the WHO European Region, HBSC data have been used to underpin the WHO European strategy for child and adolescent health, which provides a road map for countries and regions to engage across sectors to promote the health and well-being of children and adolescents. The data can be used by countries and regions to monitor progress on their health priorities and compare with other similar countries/regions.

The report provides further scientific evidence to support health improvement efforts at national/regional level. It reveals stark socioeconomic divides that are deeply embedded across many areas of young people's lives. Gender differences in health status also persist in countries and regions, but these are not inevitable. Data from those with greater gender equalization show that gender parity can be achieved for many aspects of adolescent health. Some aspects of young people's health, such as substance use and eating behaviours, have improved across many countries and regions, supported by national/regional policies and international guidelines. In other areas, the report shows a lack of progress or worsening trends despite long-standing policies.

These findings throw light on the key issues affecting young people's health today across Europe and Canada. With its continuing growth, the study now spans some of the world's richest nations and some lower-middle-income countries. As such, HBSC provides a rich source of data that can be used to compare the health of adolescents, prioritize health spending and monitor progress towards improving the health of young people and building societies in which they can thrive.

Jo Inchley
HBSC International Coordinator

Dorothy Currie
HBSC Deputy International Coordinator

EXECUTIVE SUMMARY

OVERVIEW

This report presents key findings from 227 441 young people aged 11, 13 and 15 years in 45 countries/regions who participated in the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey. The findings highlight some positive trends in relation to adolescents' health and well-being. Most adolescents experience positive and supportive social relationships, relatively few health problems, and good overall health and well-being. Substance use continues to decline and eating habits are improving. Challenges nevertheless remain.

There is some evidence of increasing pressure at school, especially among older adolescents, at a time when perceived support from family and teachers decreases. The proliferation of digital media has led to problematic use among some adolescents whose social media behaviours affect their relationships with family and friends and disrupt other activities. Physical activity levels remain extremely low and increasing numbers of young people are reporting issues that affect their mental health, such as feeling low and sleep difficulties. Persistent social and gender inequalities remain, and many aspects of health and well-being worsen with age.

By helping to make young people's lives more visible, HBSC continues to underpin effective actions to promote the health of adolescents across the WHO European Region, Canada and beyond.

KEY FINDINGS

EATING BEHAVIOURS AND ORAL HEALTH

Most adolescents are failing to meet current nutritional recommendations, undermining their capacity for healthy development. The proportion of adolescents eating breakfast has declined since 2014 in around half the countries/regions. More than four out of 10 adolescents do not eat breakfast every school day. Girls across all ages tend to skip breakfast and eat fewer meals with their family than boys. Almost two in three adolescents do not eat enough nutrient-rich foods such as fruits and vegetables, and consumption of highly processed foods is high: one in four adolescents eat sweets and one in six consume sugary drinks at least once a day. This is despite declines in sweets and soft-drinks consumption and an increase in fruit and vegetable intake since 2014. As adolescents grow older and gain more autonomy over their eating behaviour, they are more likely to make unhealthy food choices and skip meals. Levels of good oral hygiene, as indicated by regular toothbrushing, remain low in some countries/regions, especially among boys. Social inequalities in eating behaviours and oral health persist in most countries/regions, with adolescents from richer families having healthier eating habits and better oral hygiene.

PHYSICAL ACTIVITY

Fewer than one in five adolescents meet the WHO global physical activity recommendations of 60 minutes or more of moderate-to-vigorous physical activity (MVPA) each day. Levels have declined in around a third of countries/regions since 2014, mostly among boys, and participation remains particularly low among girls and older adolescents. More adolescents (half of boys and a third of girls) participate in vigorous physical activity (VPA) four or more times a week. Social inequalities in physical activity persist, with adolescents from poorer families reporting lower levels of MVPA and VPA in most countries/regions.

OVERWEIGHT, UNDERWEIGHT AND BODY IMAGE

Overweight and obesity affect one in five adolescents, with higher levels among boys and younger adolescents. Compared with 2014, levels have largely remained stable, but increases were observed in up to a third of countries/regions, particularly among older adolescents. Only a few countries/regions have shown decreases in overweight and obesity. On the other hand, one in 20 adolescents are underweight, and this number has been stable since 2014. Older adolescents are more likely to have a healthy body weight, but less likely to have a positive body image. One in four adolescents, and even more girls, consider themselves as too fat. This is despite some encouraging declines in negative body perceptions since 2014, notably among girls. Overweight and body image are highly patterned by family affluence, with young people from poorer families more likely to be overweight or obese or have poorer body image.

ONLINE COMMUNICATION

While use of digital technology is now ubiquitous among young people, girls are more likely than boys to communicate frequently with friends and others online and are more at risk of problematic social media use. Around a third of adolescents communicate online with friends and others almost all the time throughout the day, and intensive use increases with age. Overall, one in seven adolescents prefer to use online communication to discuss personal issues with their friends, and this is more common among boys. Problematic social media use affects 7% of adolescents overall but is highest among older girls.

MENTAL WELL-BEING

Boys and adolescents from richer families report higher life satisfaction and better mental well-being. A decline in mental well-being is observed with increasing age, such that older adolescents have lower levels of life satisfaction, are less likely to report excellent health and experience more frequent health complaints. At age 15, girls report poorer mental well-being than boys across almost all countries/regions. Prevalence of multiple health complaints have increased since 2014. The most common health complaints are nervousness, irritability and sleep difficulties.

SEXUAL HEALTH

Risky sexual behaviour remains worrying, with a quarter of sexually active 15-year-olds using neither condom nor pill at last sexual intercourse. At age 15, one in four boys and one in seven girls report having had sexual intercourse. While most countries/regions showed no change, prevalence of sexual intercourse among 15-year-olds declined in almost a quarter. Since 2014, there has been a small decline in condom use. Pill use is less common but has remained relatively stable.

ALCOHOL, TOBACCO AND CANNABIS USE

Drinking and smoking have continued to decline, but the number of current users remains high among 15-year-olds. Alcohol is the most commonly used substance by 15-year-olds: 59% have ever drunk alcohol compared with 28% for cigarette-smoking and 13% for cannabis use. In relation to current use, 37% of 15-year-olds had drunk alcohol in the last 30 days, 15% had smoked cigarettes and 7% had used cannabis. The sharpest increases in both alcohol use and smoking are seen between ages 13 and 15. Substance use is more common in boys, with the gender gap narrowing at age 15. Social inequalities in substance use are only evident for alcohol use, mainly among boys.

BULLYING AND VIOLENCE

Boys are more likely to be perpetrators of both physical and online violence, while girls are more likely to be victims of cyberbullying. Boys report higher involvement in physical fights, bullying and cyberbullying perpetration. Unlike face-to-face bullying, where the rates are similar among genders, girls are more likely to be cyberbullied, especially at age 13. Despite declines in bullying perpetration since 2014, the proportion of adolescents being bullied has remained the same. Younger adolescents are particularly vulnerable and more likely to be the victims of bullying. There is no clear link between social inequalities and violent behaviours.

INJURIES

Boys and younger adolescents are more likely to report medically attended injuries. Social inequalities are observed, with higher frequency of medically attended injuries among adolescents from richer families.

SOCIAL WELL-BEING

Most adolescents report high family and peer support, but social inequalities exist in more than half of countries/regions. Over two in three adolescents perceive their parents as being highly supportive and easy to talk to, but both these positive aspects of family life decline with increasing age. Boys report higher levels of parental support and communication, while girls perceive higher levels of support from their friends. While ease of communication with parents has improved since 2014, levels of peer support have declined. Social well-being is socially patterned, with adolescents from richer families reporting better communication with their parents and higher levels of family and peer support.

SCHOOL EXPERIENCE

Compared with 2014, adolescents in around a third of countries/regions are more likely to feel pressured by schoolwork and less likely to like school. More than half of adolescents report high levels of support from their fellow

students and their teachers, but only around a quarter like school a lot. In most countries/regions, school experience worsens with age: school satisfaction and support from teachers and classmates decline, and schoolwork pressure increases. Gender differences in schoolwork pressure increase with age, with 15-year-old girls reporting higher levels than boys in most countries/regions. Adolescents from richer families report more schoolwork pressure but also higher student support in some.

FAMILY CONTEXT

The life circumstances in which adolescents grow up vary greatly and large differences are observed at both individual and country/region levels. Most adolescents live with both their mother and father, while one in six live in a single-parent family, mostly headed by a mother. Parental unemployment and immigrant status each affect one in 20 adolescents, although large cross-national variation is observed. Both are known risk factors for poorer adolescent health and well-being outcomes.

THE HBSC STUDY

An HBSC survey is undertaken every four years to provide an overview of adolescent health and well-being in Europe and North America. HBSC data are used at national/regional and international levels to gain new insights into adolescent health and well-being, understand the social determinants of health and inform policy and practice to improve young people's lives.

The 2017/2018 HBSC international report is published in three parts:

- Volume 1: key findings
- Volume 2: key data
- methods annex and online resources.

Further information about the HBSC study is available online (HBSC, 2020). HBSC data can be accessed at the WHO Regional Office for Europe's health information gateway (WHO Regional Office for Europe, 2020) and via the HBSC data portal at the University of Bergen (University of Bergen, 2020).

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WHO Regional Office for Europe (2020). Health information gateway. In: WHO Regional Office for Europe [website]. Copenhagen: WHO Regional Office for Europe (https://gateway.euro.who.int/en/, accessed 25 February 2020).

Ane, aged 12 (Estonia)

Gabrysia, aged 14 (Poland)

Barbora, aged 13 (Slovakia)

INTRODUCTION

Alisa, aged 10 (Estonia)

Janika, aged 12 (Estonia)

HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN (HBSC) STUDY

HBSC is a WHO collaborative cross-national study of adolescent health and well-being (HBSC, 2020). The survey is undertaken every four years using a self-report questionnaire. HBSC uses findings at national/regional and international levels to:

- gain new insight into young people's health and well-being;
- understand the social determinants of health; and
- inform policy and practice to improve young people's lives.

The first HBSC survey was conducted in 1983/1984 in five countries. The study has now grown to include 50 countries and regions across Europe and North America (Fig. 1), with over 400 members in the HBSC international research network. The study is funded at national level in each of its member countries and regions.

Contributors to the survey process and the development of this report are shown in the Annex.

RESEARCH APPROACH

HBSC focuses on understanding young people's health in their social context – at home, school, and with family and friends. It aims to improve understanding of how these factors, individually and collectively, influence young people's health throughout early adolescence.

Data are collected in all participating countries and regions through school-based surveys using a standard methodology detailed in the HBSC 2017/2018 international study protocol (Inchley et al., 2018a). Each country or region uses cluster sampling to select a proportion of young people aged 11, 13 and 15 years, ensuring that the sample is representative of all in the age range. Around 1500 students in each HBSC country or region are selected from each age group. A total of 227 441 young people took part in the 2017/2018 survey (see Volume 2 for further details).

> "Our views, thoughts and opinions should count and matter in the world.

Of the 50 countries and regions that are HBSC network members, 45 completed the 2017/2018 survey and met the requirements for publication of data in this report. Those not included were unable to conduct the survey within the required timeframe (Israel and Turkey) or joined the network after fieldwork was completed (Cyprus, Kyrgyzstan and Uzbekistan). Fieldwork took place mainly between September 2017 and July 2018, except in six countries, where an extended fieldwork period was necessary to reach the required sample size.

IMPORTANCE OF RESEARCH ON ADOLESCENT HEALTH

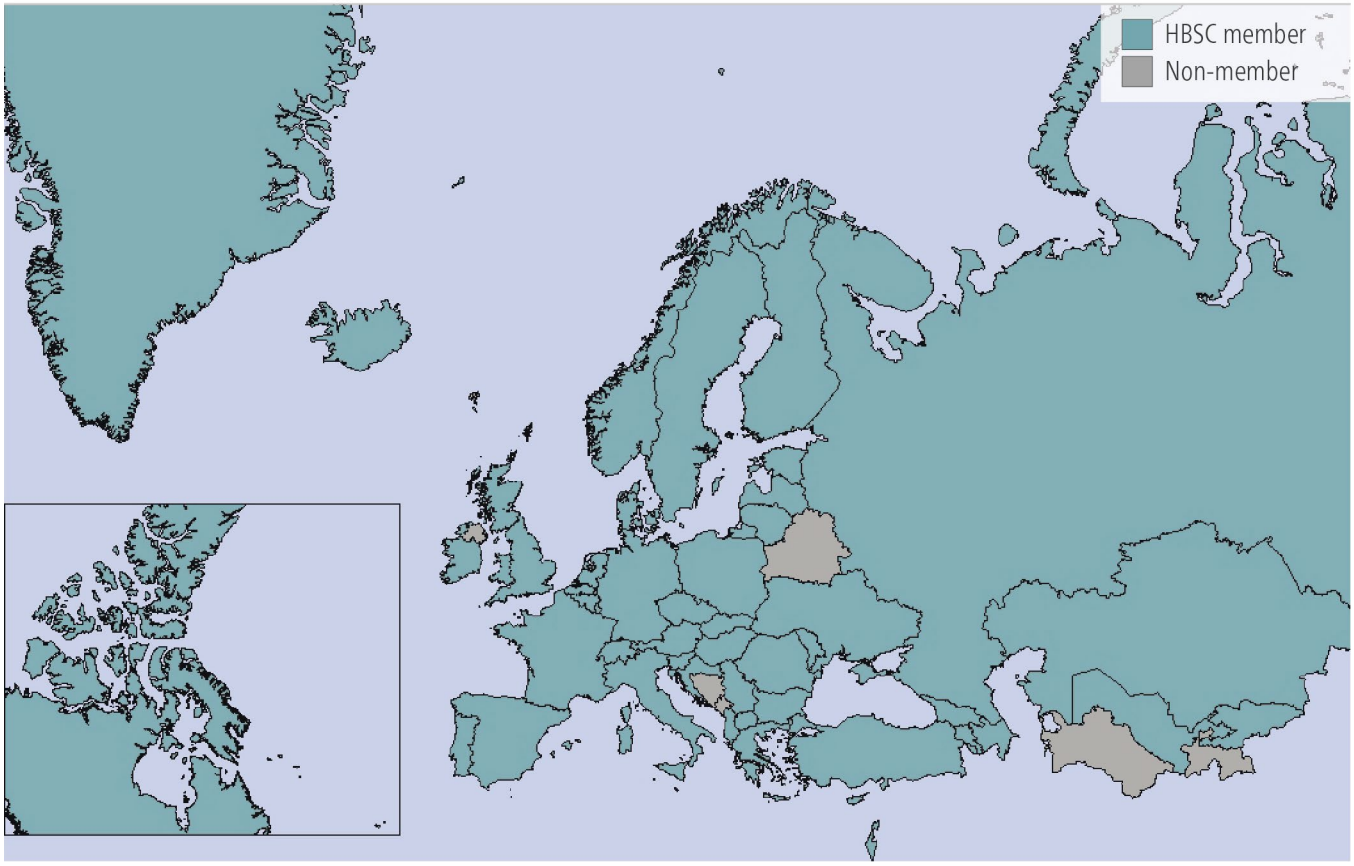
The importance of the second decade of life has been highlighted in international publications (United Nations Children's Fund, 2011; WHO, 2014). Young people aged between 11 and 15 years face many pressures and challenges, including increasing academic demands and expectations, changing social relationships with family and peers, and increasing exposure to online interactions. Adolescence is a period of rapid physical growth and brain development, bringing its own physical and emotional challenges. These years mark a period of increased autonomy during which health-related behaviours develop and independent decision-making may influence their current and future health.

Behaviours established during this transition period can continue into adulthood, affecting issues such as mental health, substance use, physical activity levels and diet, as well as longer-term health outcomes. Exposure to alcohol or tobacco use, physical inactivity, unprotected sex and violence, for example, presents risks not only to adolescents' current health and well-being, but also their future health. HBSC findings show the changes in young people's health as they move from childhood through adolescence and towards adulthood. They can be used to monitor young people's health, guide the development of policies and programmes and determine the effectiveness of health improvement interventions.

ENGAGING WITH YOUNG PEOPLE

Youth engagement is integral to the work of the HBSC network. Article 12 of the United Nations Convention on the Rights of the Child, which enshrines the rights of children to

Fig. 1. HBSC member countries and regions



have their views and opinions heard, respected and taken into account, is fundamental to the work of HBSC. Young people have a right to participate in issues that concern their lives and in making decisions that are relevant to them. HBSC takes the view that young people are critical stakeholders in the production of science and policy relevant to their lives.

The HBSC network uses a range of methodologies to enable young people to play an active role in the research process. Participatory research approaches with young people are employed in data generation, devising new research areas and related questions, data analysis and interpretation, and dissemination of findings. These approaches consider the role of power in the relationship between researchers and young people to ensure that engaging in research is empowering and health-promoting for young people. The aim is to capture data that are meaningful to young people and which reflect their current lifestyles and experiences, while also being of significant value to programme and policy design. The meaningful involvement of young people in the HBSC study has expanded in scope over many years and provides an example of an increasing number of studies that embed engagement with young people within their core methodology.

ENGAGING WITH POLICY-MAKERS

HBSC data provide an essential, but not sufficient, basis for policy action to improve young people's well-being by allowing prevalence to be compared across countries/regions and over time. To further enhance the impact and reach of its findings, the HBSC network works closely with external partners to provide more in-depth analysis and highlight targeted priority areas through additional publications on key topics.

Through its long-standing partnership with WHO, the HBSC study has become a core part of efforts to invest in young people's health, such as the European child and adolescent health strategy 2015–2020, major publications on adolescent health, global health indicator coordination and the development of WHO collaborating centres with a primary focus on adolescent health. This collaboration has also resulted in a series of thematic reports highlighting

various important findings of the HBSC study. Examples include recent reports on adolescent obesity (Inchley et al., 2017) and alcohol use (Inchley et al., 2018b), presenting the latest trends and exploring gender and socioeconomic inequalities across the WHO European Region.

The HBSC network aims to create and maintain active collaboration with health and education ministries and other government bodies responsible for the well-being of young people. The study has been at the forefront of making research relevant to policy and practice, while also engaging with policy-makers in identifying themes that should be included in the study. HBSC has also built strong relationships with other national and international stakeholders, such as international development agencies, advocacy organizations, and professional groups and networks, including the United Nations Children's Fund, United Nations Educational, Scientific and Cultural Organization, the Organisation for Economic Co-operation and Development, Eurochild, the Excellence in Pediatrics Institute and the Schools for Health in Europe Network. HBSC data are used to support and inform the work of these organizations in advancing the rights and well-being of young people.

SOCIAL DETERMINANTS OF ADOLESCENT HEALTH AND WELL-BEING

Adolescents are often neglected as a population group in health statistics, being either aggregated with younger children or with young adults. Even less attention has been paid to inequalities related to socioeconomic status, age and gender among this group. Evidence gathered over the last few decades shows that young people growing up in disadvantaged social circumstances are exposed to higher health risks. As a result, health inequalities are now embedded in contemporary international policy development, yet they continue to be experienced by young people across Europe and North America.

Attempts to address health inequalities must be based on an understanding of differences in health status and their causes. The HBSC study has collected data on the health and health behaviours of young people since 1983, enabling it to describe the social patterning of health across countries and regions. HBSC recognizes the importance of the settings and relationships that comprise the immediate social context of young people's lives and shows how family, peers and school can provide supportive environments

Anna, aged 10 (Estonia)

for healthy development. Importantly, the study has highlighted strong social gradients that affect not only the health of adolescents, but also the social circumstances in which young people grow up.

This report contributes to developing a better understanding of determinants of, and inequalities in, young people's health by presenting data from the HBSC 2017/2018 survey analysed by age, gender, family affluence and country/region of residence. HBSC seeks to understand adolescent health within a developmental perspective that takes account of the ways in which young people's health and health behaviours change as they grow older. Findings in the report are presented for boys and girls separately, providing clear evidence of gender disparities in health, many of which have persisted over time. The magnitude of gender differences varies considerably cross-nationally. Targeting young people's health from a gender perspective has considerable potential to reduce health differentials based on gender in adulthood.

The HBSC study previously has found family affluence to be an important predictor of young people's health. A better understanding of health inequalities in adolescence may enable the identification of the origins of socioeconomic differences in adult health and offer opportunities to define

possible pathways through which adult health inequalities are produced and reproduced. Health inequalities may emerge or worsen during the adolescent years and this has important implications for the timing of health interventions.

Finally, variations between countries and regions in patterns of health and its social determinants are seen. Over the 30 years of the HBSC study, it has been possible to monitor how young people's health and lifestyle patterns have developed in the context of political and economic change. The findings underline the importance of the wider societal context and the effect, both positive and negative, it can have on young people's health. While geographic patterns are not specifically analysed in this report, differences between countries and regions are highlighted and more detailed information is provided in Volume 2.

NEW TOPICS INCLUDED IN THIS REPORT

The HBSC study has a continuous process of item review and development to address current issues affecting young people's health and well-being, and several new topics were introduced in the 2017/2018 survey. As well as two new items on cyberbullying, a new special focus area on electronic media communication is included in this report, with questions on frequency of online communication, preference for online social interaction and problematic social media use. A revised measure of family meals asks about frequency of eating any meal with the family (instead of evening meals as in previous surveys) and new multi-item measures of classmate and teacher support are included. Some items are presented differently – for example, life satisfaction is reported as a mean score, whereas previous reports reported the prevalence of high life satisfaction. In addition, several variables are included in the report for the first time, including individual health complaints, underweight and parental unemployment.

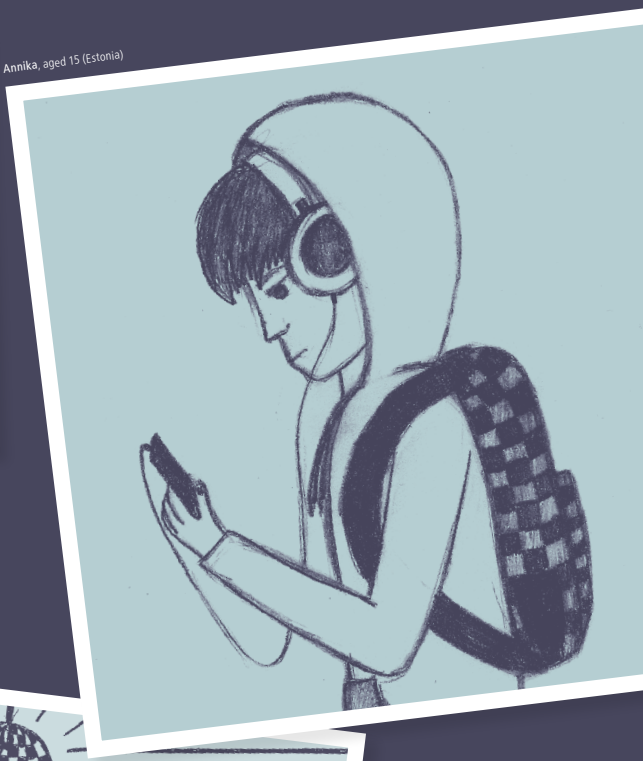
> "The future of young people is uncertain today, and students are aware of it.

DATA ACCESS

Data presented in this report can be accessed at the WHO Regional Office for Europe's health information gateway (WHO Regional Office for Europe, 2020). HBSC data can also be accessed via the HBSC data portal at the University of Bergen (University of Bergen, 2020).

Caoimhe, aged 13 (Ireland)

Annika, aged 15 (Estonia)



Valeria, aged 10 (Estonia)

KEY FINDINGS

Jelizaveta, aged 12 (Estonia)

Most adolescents are failing to meet current nutritional recommendations, undermining their capacity for healthy development.

KEY POINTS

- **Breakfast consumption on school days has declined since 2014.**
- **Breakfast and family meals are less frequent among older adolescents, especially girls.**
- **Fruit and vegetable consumption has increased since 2014, but almost half of adolescents (48%) eat neither fruit nor vegetables daily.**
- **Despite encouraging declines in soft-drinks consumption since 2014, 16% of adolescents still consume these every day.**
- **Only two thirds of adolescents brush their teeth twice a day, with prevalence higher among girls than boys.**
- **Adolescents from more affluent families have healthier eating habits; they are more likely to eat breakfast daily, have family meals, eat fruit and vegetables every day, and brush their teeth twice a day.**

BREAKFAST CONSUMPTION ON SCHOOL DAYS

Eating breakfast every school day was more prevalent among boys than girls (61% and 55%, respectively). Gender differences were observed in most countries/regions and increased with age; significant gender differences were observed in less than a third at age 11 but in two thirds at ages 13 and 15. Bulgaria was the only country where breakfast consumption was higher among girls (at age 13). The largest gender difference was found in United Kingdom (Wales) at ages 13 and 15 (18 percentage points).

Breakfast consumption varied widely among countries/regions. The proportion of adolescents who ate breakfast daily ranged from 31% among 15-year-old girls in Romania to 91% among 11-year-old boys in the Netherlands. Central European countries were notable for having the lowest overall levels of daily breakfast consumption (Austria, Hungary, Romania, Slovakia and Slovenia), while the Netherlands had the highest across all ages.

Older adolescents, especially girls, were less likely to eat breakfast on school days in most countries/regions. Between ages 11 and 15, prevalence declined from 67% to 56% for boys and from 64% to 48% for girls. The biggest decrease with age was found in United Kingdom (Scotland) for boys (22 percentage points) and Greenland for girls (31 percentage points).

Social inequalities were found in two thirds of countries/regions, with more affluent boys and girls more likely to eat breakfast every school day. The strongest inequalities were found in Greenland for boys (23 percentage-point difference) and United Kingdom (England) for girls (29 percentage-point difference).

Since 2014, there has been a significant decline in daily breakfast consumption in almost half of countries/regions. The decrease across all the HBSC countries/regions combined was around 5%, similar in each age and gender group. Bulgaria had the largest declines among boys across all ages, followed by Spain (11-year-olds). For girls, the largest declines were found in Bulgaria (aged 11), Portugal (aged 13) and Greenland (aged 15). North Macedonia was alone in showing the opposite trend, with significant increases found for girls and boys at ages 11 and 13.

FAMILY MEALS

Boys were more likely than girls to eat a meal with their family every day. Gender differences increased with age, from being present in less than a fifth of countries/regions at age 11 to one third at ages 13 and 15. The largest gender difference was found in Finland at age 11 (19 percentage points), with higher prevalence among boys.

Wide cross-national variation was observed in the proportion of adolescents having daily meals with their family. Prevalence ranged from 15% among 15-year-old girls in Czechia to 86% among 13-year-old boys in Azerbaijan. The lowest overall rates were recorded in Visegrad countries (Czechia, Hungary, Poland and Slovakia), Finland and United Kingdom (Scotland), where only one in three adolescents ate a meal with their family every day. The highest overall levels (for all ages and genders combined) were recorded in Azerbaijan (82%) and Kazakhstan (76%).

Older adolescents, especially girls, were less likely to eat meals with their family in over two thirds of countries/regions. Between ages 11 and 15, the proportion eating a meal with their family every day declined from 57% to 46% in boys and from 54% to 42% in girls. The biggest decrease with age was found in Hungary for boys (29 percentage points) and Romania for girls (30 percentage points).

A social gradient was evident in almost a third of countries/regions, with more affluent adolescents more likely to have daily family meals. The strongest inequalities were observed in Estonia for both boys (17 percentage-point difference) and girls (18 percentage-point difference). The reverse pattern was seen in a small number of countries/regions, with lower prevalence of family meals among high-affluence boys in two countries (Kazakhstan and Slovenia) and among high-affluence girls in three (Albania, the Netherlands and Romania).

FRUIT CONSUMPTION

Only two fifths of adolescents (40%) ate fruit every day. Prevalence was higher among girls than boys (43% and 37%, respectively). A significant gender difference was observed in more than half of countries/regions, with the largest difference among 15-year-olds in Finland (13 percentage points).

Daily fruit consumption varied considerably among countries/regions. The proportion of adolescents who ate fruit daily ranged from 12% among 15-year-old boys in Finland to 73% among 13- and 15-year-old girls in Albania. Countries in the Baltic region (Finland, Latvia and Sweden) were notable for having the lowest overall rates. Highest levels across all ages and genders were observed in Albania, Armenia and Canada.

Older adolescents were less likely to eat fruit every day in the large majority of countries/regions. The greatest decreases between 11 and 15 years were observed in Austria for boys (23 percentage points) and Slovenia for girls (24 percentage points).

More affluent boys and girls were more likely to eat fruit daily in the vast majority of countries/regions. The biggest inequalities were observed in Albania for boys (37 percentage points) and Azerbaijan for girls (33 percentage points). No country/region had the opposite pattern. Sweden and Norway were the only countries where no social inequalities in fruit consumption were observed.

Between 2014 and 2018, daily fruit consumption increased among boys and girls in one quarter of countries/regions. Notable increases across ages and genders were found in Albania and Greenland, and decreases in Croatia, Denmark and Norway. Greenland had the highest increases across all ages and genders, except for boys aged 15. A minority of countries/regions showed a decrease in fruit consumption, especially among younger adolescents.

VEGETABLE CONSUMPTION

Less than two fifths of adolescents (38%) ate vegetables every day. In two thirds of countries/regions, girls were more likely than boys to eat vegetables daily (42% versus 35%). The largest gender difference was found among 13-year-olds in Finland (17 percentage points).

There was considerable variation in daily vegetable consumption among countries/regions. The proportion of adolescents who ate vegetables every day ranged from 19% among 15-year-old boys in Germany to 69% among 13-year-old girls in Belgium (Flemish). Daily vegetable intake was lowest in south European countries (25% in Malta, 27% in Italy and 28% in Croatia) and highest in Belgium (61% for French and 58% for Flemish), followed by Canada (53%) and Ukraine (52%).

Older adolescents were less likely to eat vegetables every day in almost half of countries/regions. The greatest age-related decline of 15 percentage points was observed in Czechia for boys and Slovenia for girls. Three countries showed a different pattern, with highest levels at age 13 in Ireland (boys) and Kazakhstan (girls) and the lowest level at age 13 in Denmark (girls).

More affluent boys and girls were more likely to eat vegetables daily in a large majority of countries/regions, with larger inequalities among girls. The biggest social inequalities were seen in boys in Belgium (Flemish) and United Kingdom (Scotland) (18 percentage points) and girls in United Kingdom (Scotland) (31 percentage points). There was no country/region with the opposite pattern.

Between 2014 and 2018, an increase in daily vegetable consumption was observed in almost half of the countries/regions, especially among

the youngest adolescents. The highest increases (10 percentage points or more) were found in Armenia, Czechia and Slovenia. Prevalence decreased in a minority of countries/regions. The largest decrease (14 percentage points) was seen among 15-year-old boys in Malta.

FRUIT AND VEGETABLE CONSUMPTION

Overall, almost half (48%) of adolescents ate neither fruit nor vegetables daily (Fig. 2). Eating fruit and vegetables less than daily was more common among boys than girls (52% and 44%, respectively) and among older adolescents (53% at age 15 compared with 43% at age 11). The largest gender difference was found in Finland at age 13 (22 percentage points). The largest age differences were observed in Czechia for boys (21 percentage points) and Slovenia for girls (22 percentage points). Cross-national variation was considerable, with the proportion of adolescents who ate neither fruit nor vegetables ranging from 19% for 13-year-old girls in Albania to 76% for 13-year-old boys in Finland. Overall, adolescents in Finland, Hungary and Latvia were least likely to eat fruit or vegetables every day. Conversely, adolescents in Albania, Armenia and Belgium (Flemish and French) were most likely to eat fruit and/or vegetables every day.

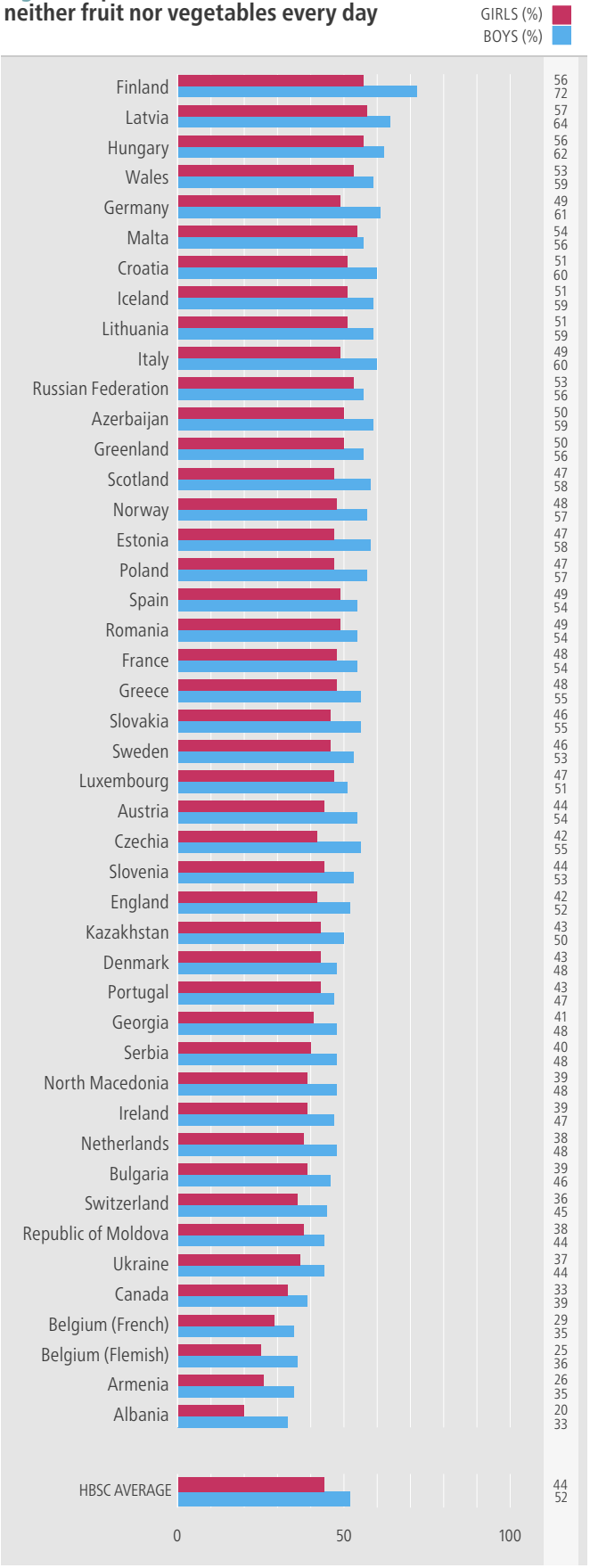
SWEETS (INCLUDING CHOCOLATE) CONSUMPTION

Overall, one in four adolescents (25%) ate sweets every day. Generally, girls reported eating sweets more often than boys (27% and 23%, respectively) and significant gender differences were observed in five countries/regions at age 11, almost half at age 13 and a third at age 15. No country/region showed the opposite pattern. The largest gender difference was found among 15-year-olds living in Albania (16 percentage points).

The prevalence of daily sweets consumption varied greatly across countries/regions, ranging from 3% in Finland (all ages) to 70% in Armenia (13-year-old girls). Adolescents living in the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) were least likely to eat sweets every day. On the other hand, countries such as Armenia, Albania and Georgia were among those with the highest prevalence.

Daily sweets consumption was higher among older adolescents in almost half of countries/regions for girls and in seven for boys. The greatest increase between ages 11 and 15 was observed in North Macedonia for both boys (13

Fig. 2. Proportion of adolescents who ate neither fruit nor vegetables every day



Note: country/region name in **bold** indicates significant gender difference in 2018 (at $p < 0.05$); significant change between 2014 and 2018 (at $p < 0.05$) is denoted by an arrow indicating direction of change (averages for 2014 and 2018 are not directly comparable and no significances are shown). For reasons of space, the names of the three regions of the United Kingdom that took part in the survey have been shortened to England, Scotland and Wales in this and other figures.

percentage points) and girls (16 percentage points). Three countries/regions showed a different pattern, having the highest levels at age 13 (girls in Luxembourg and United Kingdom (Wales) and boys in Austria), with 11-year-olds in Austria having the same level as 13-year-olds.

Social inequalities in sweets consumption were more evident among girls than boys. Significant associations between family affluence and daily sweets consumption were found in just over a third of countries/regions for girls and in six for boys. The patterns were mixed, but overall, prevalence was higher among more affluent adolescents. The largest inequalities were mainly found in eastern European and central Asian countries for boys (Armenia, Estonia, Georgia and Ukraine) and girls (Armenia, Azerbaijan, Kazakhstan, the Republic of Moldova, the Russian Federation and Ukraine), where high-affluence adolescents were more likely to consume sweets. High inequalities (19 percentage points) were also observed among girls in Greenland, but prevalence was higher among low-affluence girls.

Sweets consumption decreased among older adolescents in around a quarter of countries/regions between 2014 and 2018. Consistent declines in both girls and boys were seen in Belgium (French), Hungary, Ireland and United Kingdom (Scotland). The largest decline (14 percentage points) was seen among 13-year-old girls in Belgium (French). Only a few countries/regions had significant increases in sweets consumption, but Armenia and Malta showed consistent patterns of increase across gender and age groups. The biggest increase was found among 15-year-olds in Malta (27 percentage points for boys and 17 for girls).

SUGARED SOFT-DRINKS CONSUMPTION

Overall, one in six (16%) adolescents consumed sugary soft drinks every day. Boys were more likely to report daily soft-drink consumption than girls (18% and 14%, respectively) across all ages in most countries/regions. No country/region showed the opposite pattern. The largest gender difference (12 percentage points) was found among 15-year-olds in Luxembourg.

Soft-drinks consumption varied greatly across countries/regions. Prevalence ranged from 2% in Finland (11- and 13-year-old girls) to 37% in North Macedonia (15-year-old boys). Nordic countries had the lowest rates overall, while Belgium (French) (29%), North Macedonia (29%) and Albania (28%) had the highest.

Older adolescents were more likely to consume soft drinks every day in over a third of countries/regions. This age effect was observed for both boys and girls. While there was a steady increase between ages 11 and 15 in boys, the main increase was seen between ages 11 and 13 in girls. The greatest age-related increase was observed in Luxembourg for boys (14 percentage-points) and Serbia for girls (13 percentage-points). Only two countries showed the opposite pattern of decreasing consumption with age (Azerbaijan for boys and girls, Bulgaria for boys).

Soft-drinks consumption was more strongly associated with family affluence among girls than boys. Significant associations were observed in less than half of countries/regions for boys and almost two thirds for girls. In most countries/regions where social inequalities were present, more affluent adolescents were less likely to consume soft drinks. The biggest inequalities were found in Belgium (French) for both boys (16 percentage-point difference) and girls (24 percentage-point difference). Former countries of the USSR showed the opposite pattern for both boys (Armenia, Azerbaijan, Georgia, the Republic of Moldova and Ukraine) and girls (Armenia, the Republic of Moldova and the Russian Federation), where high-affluence adolescents were more likely to consume soft drinks. Among these countries, Armenian boys and girls showed the biggest difference between high- and low-affluence groups (16 and 10 percentage points, respectively).

A decline in consumption of sugary soft drinks was seen in 23 countries/regions between 2014 and 2018, but the pattern within each country/region was not consistent across all age and gender groups. The largest decreases were observed among 13-year-old boys in Malta (16 percentage points) and the smallest among 15-year-old girls in Iceland (1 percentage point). Relatively small increases in soft-drink consumption were observed in four countries/regions; in Armenia, this was consistent across boys at all ages, but there was no change among girls.

ORAL HEALTH

Overall, two thirds of adolescents (65%) brushed their teeth the recommended amount of at least twice a day. Prevalence was higher among girls overall (73% compared with 57% of boys) and gender differences were

observed in all countries/regions except Denmark, Malta, the Netherlands, the Russian Federation and Ukraine at age 11, and Greenland at age 15. The largest gender difference was found among 15-year-olds in Greece (29 percentage points).

Wide cross-national variation was observed, with prevalence ranging from 24% in Malta (15-year-old boys) to 91% in Switzerland (11-year-old girls). In addition to Malta, the lowest prevalence of toothbrushing was observed in Armenia, Azerbaijan, Kazakhstan, Lithuania and the Republic of Moldova.

Older boys were less likely to brush their teeth in half of countries/regions, while girls showed the opposite pattern. Older girls were more likely to have good oral hygiene in a third of countries/regions, although prevalence decreased with age among girls in Azerbaijan. Overall, prevalence between ages 11 and 15 declined from 61% to 55% for boys and increased from 71% to 74% for girls. The biggest age-related decline was noted in Azerbaijan for both boys (21 percentage points) and girls (22 percentage points).

Social inequalities in oral health were strong, with more affluent adolescents more likely to brush their teeth in almost all countries/regions. The biggest social gradient was found in Greenland for both boys (44 percentage-point difference) and girls (37 percentage-point difference).

Since 2014, the proportion of adolescents who brush their teeth at least twice a day has remained stable. A few countries/regions showed changes, but these were not in a uniform direction. Fig. 3 summarizes differences in eating behaviours and oral health by family affluence.

SUMMARY

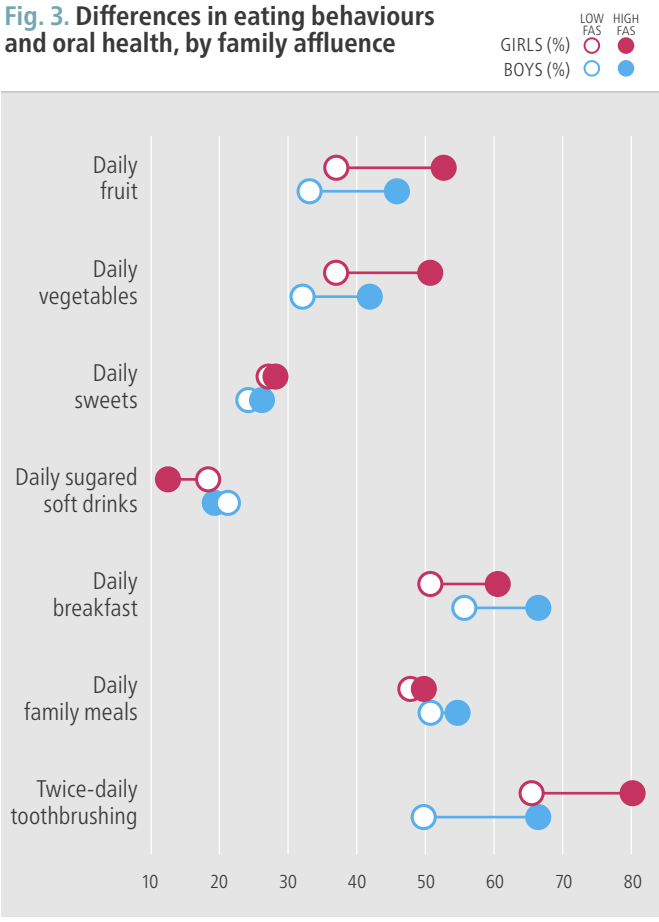
Healthy eating behaviours are important for adolescent health and their capacity to participate, learn, grow and develop fully. The latest findings highlight poor eating habits among adolescents in Europe and Canada, including inadequate intake of healthy foods, frequent consumption of high-sugar foods and irregular meal habits. The proportion of boys and girls eating breakfast on school days has declined since 2014, with just over one in two adolescents eating breakfast daily on school days. Girls tend to skip breakfast and family meals more often than boys across all ages.

Most adolescents are not eating enough nutrient-rich foods such as fruit and vegetables, and too many consume highly processed foods such as sweets and soft drinks. This is despite recent declines in sweets and soft-drinks consumption and an increase in fruit and vegetable intake since 2014. Not eating enough fruits and vegetables can lead to so-called hidden hunger or deficiency in micronutrients and can influence the risk of noncommunicable diseases such as cardiovascular disease, cancer, diabetes and obesity.

As adolescents grow older and gain more autonomy over their eating behaviour, they are more likely to make unhealthy food choices and skip meals. Unhealthy food choices also affect their oral health by increasing the risk of dental caries. This is worrying, since levels of good oral hygiene remain low in some countries/regions, especially among boys.

Social inequalities in eating behaviours and oral health are observed in many countries/regions, with adolescents from more affluent families generally having healthier eating habits and better oral hygiene. Poverty can negatively affect adolescent eating behaviours in a number of ways and leaves adolescents from lower socioeconomic backgrounds particularly vulnerable to poor nutrition and associated adverse health outcomes.

Fig. 3. Differences in eating behaviours and oral health, by family affluence



FAS: Family Affluence Scale. *Note*: all ages combined.

Fewer than one in five adolescents meet the physical activity guidelines and participation is particularly low among girls from poorer families.

KEY POINTS

- **Only 19% of adolescents achieve the recommended 60 minutes of moderate-to-vigorous physical activity (MVPA) daily.**
- **Levels of MVPA have declined in around a third of countries/regions since 2014.**
- **Half of boys (49%) and a third of girls (35%) participate in vigorous physical activity (VPA) four or more times a week.**
- **At all ages and in almost all countries/regions, boys are more likely than girls to be physically active.**
- **The gender gap increases with age for both MVPA and VPA.**
- **Physical activity participation is lower among older adolescents and those from low-affluence families.**

MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY

Fewer than one in five adolescents (19%) met the current recommendation of 60 minutes of MVPA every day. Prevalence was higher among boys than girls (23% and 16%, respectively). The gender gap increased with age and was significant in 29 countries/regions at age 11, 37 at age 13 and 39 at age 15. The largest gender difference was found among 15-year-olds in Serbia (20 percentage points).

MVPA generally declined with age in both boys and girls. Age-related declines were more common among girls, with a significant decrease between ages 11 and 15 observed in 29 countries/regions for boys and 42 for girls. The largest declines were among Finnish boys (30 percentage points) and girls (25 percentage points). Only three countries (Denmark, Georgia and the Netherlands) had no significant age differences in both boys and girls.

Cross-national variation was wide, with the highest prevalence among 11-year-old boys in Finland (52%) and the lowest among 15-year-old girls in Italy (4%). In general, the lowest levels of MVPA were observed in central/southern European countries such as France, Italy and Portugal.

A significant association between MVPA and family affluence was found in 31 countries/regions for boys and 26 for girls. In all these countries/regions, **higher affluence was associated with higher levels of MVPA**, except among girls in Kazakhstan, where MVPA was higher among girls from low-affluence families. The largest inequalities were observed in Iceland (boys) and Finland (girls). There was no association between MVPA and family affluence for both boys and girls in five countries/regions (Denmark, Germany, Greenland, Romania and United Kingdom (Scotland)).

Levels of MVPA have declined in around a third of countries/regions across all ages since 2014, mostly among boys. The largest declines were found among 11-year-old boys in Romania (18 percentage points) and 13-year-old girls in the Republic of Moldova (15 percentage points). Romania was the only country to show significant declines in both boys and girls at all ages. Small increases were also observed in some countries/regions, especially among girls and at ages 11 and 15. Slovenia was notable for having an increase in MVPA among girls in all three age groups.

> "Sport is important because it affects how we think and feel.

VIGOROUS PHYSICAL ACTIVITY

Around half of boys (49%) and a third of girls (35%) participated in VPA in their free time four or more times a week. Similar to MVPA, levels of VPA were generally higher among boys than girls in most countries/regions and the gender gap increased with age. Significant gender differences were found in most countries/regions at all three ages. Wide cross-national variation was observed. For boys, prevalence ranged from 31% among 15-year-olds in Azerbaijan to 69% among 11-year-olds in Ireland. For girls, prevalence ranged from 14% among 15-year-olds in France to 68% among 11-year-olds in Finland. The largest gender difference was observed among 15-year-olds in Serbia (32 percentage points). Gender differences were lowest in

northern European countries/regions (Denmark, Finland, Iceland, Norway and United Kingdom (Scotland)).

In general, **VPA participation decreased with age among both boys and girls**, with significant age-related declines in 28 countries/regions for boys and 42 for girls. Larger declines were observed among girls; between ages 11 and 15, overall prevalence fell from 43% to 28% among girls and from 54% to 45% among boys. The largest age difference was seen in Hungary for boys (22 percentage points) and in Finland for girls (29 percentage points). Only Armenia and Denmark showed a significant increase in VPA with age for boys.

Boys and girls from higher-affluence families were more likely to participate in VPA. Levels of VPA were lowest among low-affluence girls (30%) compared with high-affluence girls (43%) and both low- and high-affluence boys (44% and 57%, respectively). Significant inequalities were observed in more than two thirds of countries/regions for both boys and girls. Among boys, the largest inequalities (20+ percentage points between the highest- and lowest-affluence groups) were found in Estonia, Iceland, Malta and United Kingdom (England and Wales). Among girls, the largest inequalities (20+ percentage points) were observed in Belgium (Flemish), Iceland, Luxembourg, Slovakia, Sweden and United Kingdom (England and Scotland).

Compared with 2014, most countries/regions showed no change in VPA over time. Where changes were observed, there was no consistent pattern. VPA increased in a few countries/regions, with the largest improvements among 11-year-old girls in Greece (13 percentage points). In contrast, decreases were also observed in a minority, with the steepest declines among 13-year-old boys in Denmark and 13-year-old girls in Luxembourg (both 15 percentage points). Overall changes between 2014 and 2018 by age and gender are shown in Fig. 4.

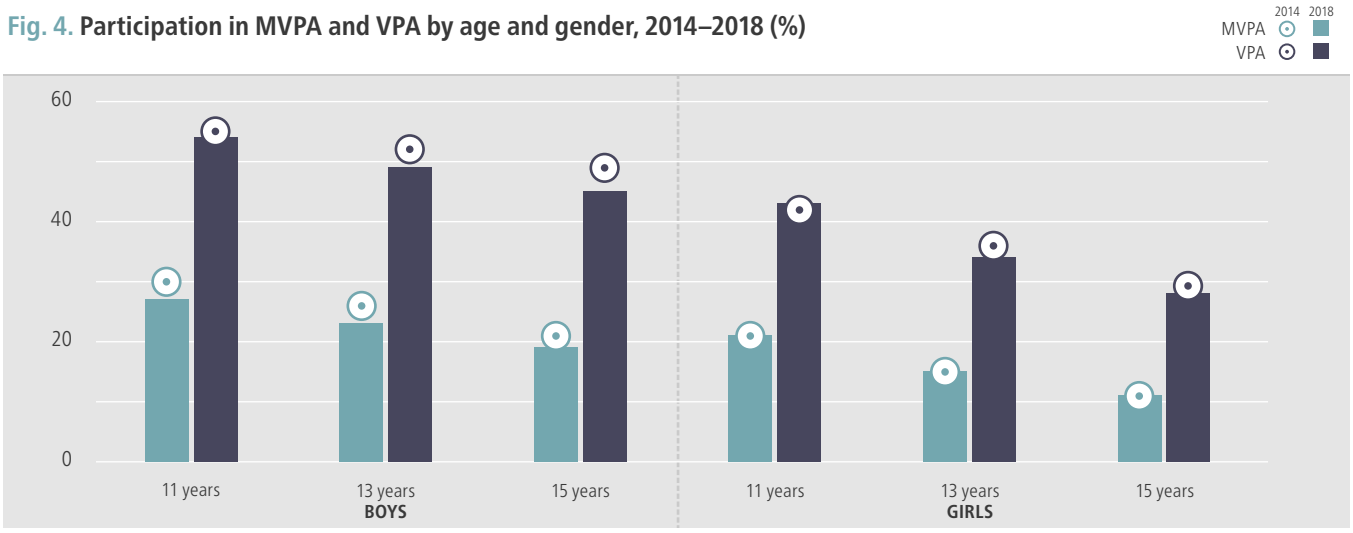
SUMMARY

The proportion of young people meeting the global physical activity recommendation of 60 minutes of MVPA every day remains low. There is little evidence of an increase in physical activity since 2014, and MVPA has declined in a third of countries/regions, particularly among boys. Compared with daily MVPA, more adolescents reported taking part in VPA regularly in their free time. Several countries/regions (including France, Italy and Portugal) showed low levels of both VPA and MVPA, and this was particularly evident for girls.

Physical activity, and VPA in particular, was highly patterned by family affluence, with young people from low-affluence families less likely to be regularly active. There may be specific barriers to leisure-time physical activity that disproportionately affect adolescents from low-affluence families. These should be identified to reduce inequalities.

The findings also stress the importance of efforts to promote habitual daily physical activity by, for example, increasing opportunities for school-based activity, and active transportation and active leisure among adolescents. They highlight persistent gender inequalities in physical activity, with girls reporting lower levels of MVPA and VPA in most countries/regions. The lowest gender differences were typically observed in the Nordic countries.

Fig. 4. Participation in MVPA and VPA by age and gender, 2014–2018 (%)



Since 2014, overweight and obesity has increased in up to a third of countries/regions, affecting one in five adolescents.

KEY POINTS

- **One in four adolescents perceive themselves as too fat, especially girls.**
- **Adolescents from poorer families are more likely to be overweight or obese and to report negative body image.**
- **One in 20 adolescents are underweight.**
- **Negative body perceptions have declined since 2014 in over half of countries/regions.**

OVERWEIGHT AND OBESITY

Overall, one in five adolescents (21%) were found to be overweight or obese. Overweight and obesity, based on self-reported height and weight, was more prevalent in boys than girls (25% versus 16%) across all ages. Gender differences were significant in a large majority of countries/regions. Greenland was the only consistent exception, showing no gender difference across ages. The biggest gender difference was found in Bulgaria at age 13 (19 percentage points) and the smallest in France at age 11 (4 percentage points).

The prevalence of overweight and obesity varied substantially across countries/regions. The proportion of boys who were overweight or obese ranged from 9% among 15-year-olds in Kazakhstan to 44 % among 11-year-olds in Malta, and the proportion of girls ranged from 5% among 15-year-olds in Azerbaijan to 35% among 13-year-olds in Malta. Greenland, Malta and North Macedonia consistently had the highest rates of overweight and obesity across all ages. Kazakhstan had the lowest levels across all ages and genders, with the Netherlands and the Republic of Moldova following closely.

Older adolescents were less likely to be overweight or obese. This decline with age was evident in almost half of countries/regions in both genders. The largest age-related declines were seen among boys in Georgia, Italy and Slovakia (all 11+ percentage points) and among girls in Azerbaijan (21 percentage points). Three Nordic countries showed a different pattern, with levels being either highest (girls in Finland and Norway) or lowest (boys in Denmark) at age 13.

Strong social inequalities were observed, with more affluent boys and girls less likely to be overweight or obese. The inequalities were present in almost two thirds of countries/regions for girls and in over a half for boys. The greatest inequalities were observed in United Kingdom (England) for both boys (24 percentage points) and girls (27 percentage points). No country/region showed the opposite pattern.

Prevalence of overweight and obesity increased in up to a third of countries/regions between 2014 and 2018. The largest increase was found in Albania for boys (11 percentage points) and Albania and Hungary for girls (7 percentage points). A small number of countries/regions showed declining levels of overweight and obesity, but these were not consistent across all age and gender groups.

UNDERWEIGHT

Overall, one in 20 adolescents (5%) were found to be underweight. Gender differences in underweight changed with age. At age 11, there were gender differences in around a quarter of countries/regions, and in all cases girls had slightly higher rates than boys. The largest difference was in United Kingdom (Wales) (5 percentage points). At age 15, there were gender differences in nine countries/regions, with boys generally having slightly higher rates than girls. The largest difference was in United Kingdom (England) (7 percentage points). At age 13, only three countries/regions had a significant gender difference.

The prevalence of underweight varied across countries/regions. The proportion of girls who were underweight ranged from 1% among 15-year-olds in Finland to 16% among 11-year-olds in United Kingdom (Wales), and from < 0.5% among 15-year-old boys in Greenland to 14% among 11-year-old boys in Ireland. Only a small minority of countries/regions showed social inequalities in underweight, with inconsistent patterns.

Older adolescents were less likely to be underweight. Overall, underweight was 7% among 11-year-olds and only 4% among 15-year-olds. The largest differences across age groups were seen in United Kingdom (Wales), where the rate

of underweight in girls changed by 13 percentage points, from 16% to 3%, and among boys in Ireland, where the rate changed by 9 percentage points, from 14% at age 11 to 5% at age 15.

There is little evidence of a consistent change in underweight since 2014. The largest declines were seen among 13-year-old girls in Albania (8 percentage points) and 11-year-old girls in Ireland and United Kingdom (Scotland) (6+ percentage points). The largest increase in underweight was among 13-year-old boys in Ireland (10 percentage points).

BODY IMAGE

More than one in four adolescents (27%) perceived themselves as being too fat. Girls were more likely than boys to report they were too fat (31% and 22%, respectively) in three quarters of countries/regions, with the gender gap increasing with age. Gender inequalities were most pronounced among 15-year-olds in Greenland (30 percentage-point difference) (Fig. 5).

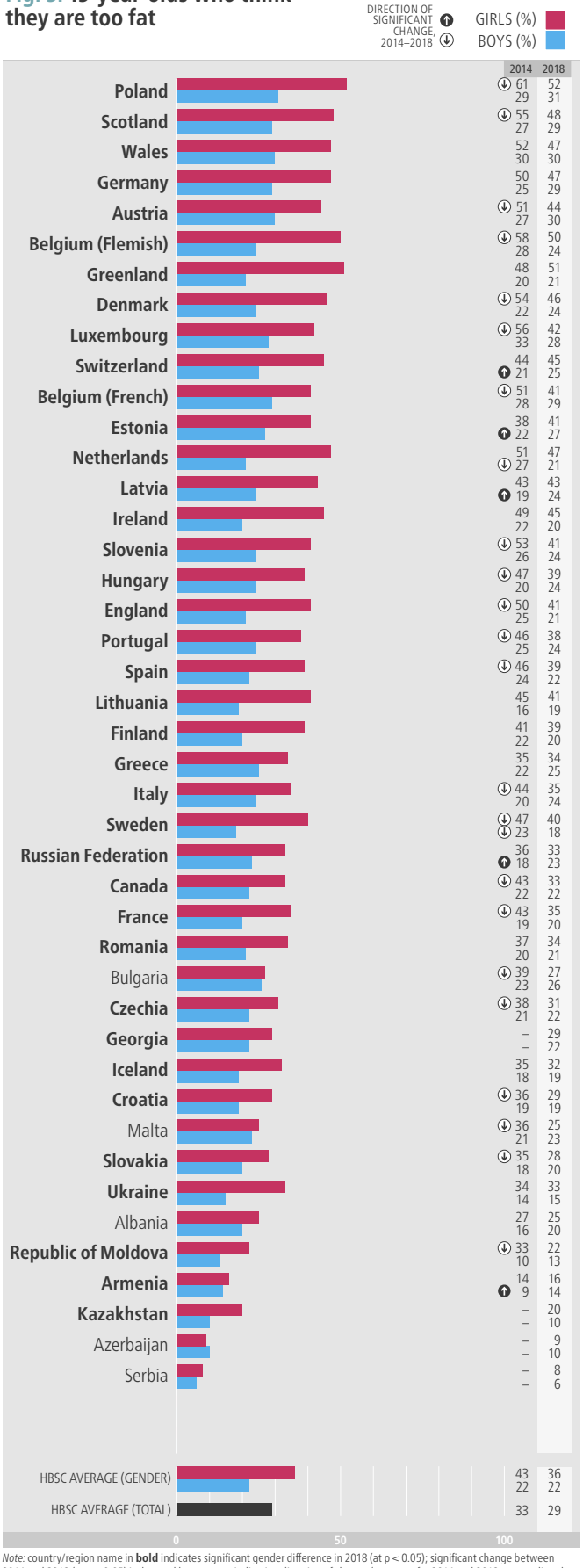
Wide cross-national variation was observed. The proportion of adolescents perceiving themselves as too fat ranged from 2% among 11-year-old boys in Serbia to 52% among 15-year-old girls in Poland. Poland and Serbia were notable for having the highest and lowest levels respectively, across all ages.

Older adolescents were more likely to perceive themselves as too fat. This increase with age was evident in almost all countries/regions for girls and fewer than half for boys. The largest age-related increase was found in United Kingdom (Wales) for both girls (26 percentage points) and boys (11 percentage points). Prevalence significantly declined with age among boys in Albania, Lithuania and Ukraine.

Social inequalities were observed in almost half of countries/regions, with less affluent adolescents more likely to report being too fat. The largest social inequalities in body image were found in Germany and United Kingdom (Scotland) for girls, and Italy and Spain for boys.

There was a significant decline since 2014 in perceptions of being too fat in over half of countries/regions (23). The decline was particularly notable among girls and 15-year-olds and was largest in Luxembourg

Fig. 5. 15-year-olds who think they are too fat



Note: country/region name in **bold** indicates significant gender difference in 2018 (at $p < 0.05$); significant change between 2014 and 2018 (at $p < 0.05$) is denoted by an arrow indicating direction of change (averages for 2014 and 2018 are not directly comparable and no significances are shown).

(14 percentage points), and Bulgaria and Slovenia (both 12 percentage points). On the other hand, a significant increase over time was observed among 15-year-old boys in Armenia, Estonia, Latvia and the Russian Federation (5 percentage points). Poland remained the country with the highest prevalence of negative body image.

Fig. 6 summarizes the prevalence of overweight and obesity and perceived overweight by age and gender.

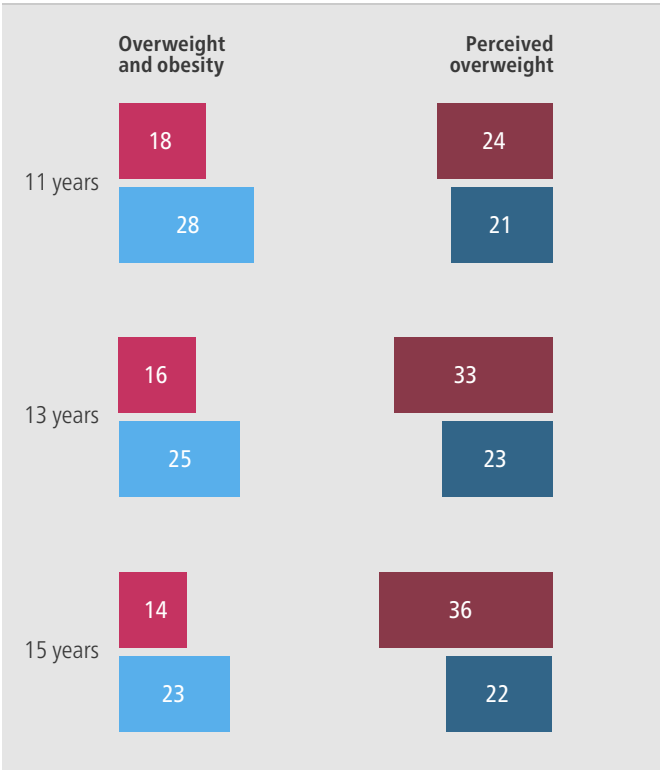
SUMMARY

Levels of overweight and obesity have risen since 2014. One in five adolescents are overweight or obese, with boys of all age groups more likely to be affected. On the other hand, prevalence of underweight has remained stable since 2014, with younger girls and boys more likely to report low body weight. Overweight, obesity and underweight decline with age, meaning older adolescents are more likely to have a healthy body weight. These patterns may to some extent reflect maturational processes, but may also indicate increasing sociocultural pressures to conform to certain body stereotypes as adolescents grow older and become more body-conscious.

Over one in four adolescents consider themselves too fat, with this negative body perception being especially pronounced in girls. This persists despite a significant decline in negative body image, notably among girls, since 2014. As they grow older, adolescents' perceptions of their body become increasingly negative.

Both underweight and overweight undermine adolescents' capacity for healthy development and can lead to serious health, educational and economic consequences. Adolescents from lower socioeconomic backgrounds are especially vulnerable, since they are more likely to be overweight or obese and perceive themselves as too

Fig. 6. Prevalence of overweight and obesity and perceived overweight by age and gender



fat. Poverty, food insecurity, unhealthy food and urban environments are potential drivers of overweight and obesity, while negative body image may be influenced by a wide range of factors, including social media.

Variation between countries/regions in the prevalence of missing body mass index data was wide. The United Kingdom and Ireland had the highest levels (over 80%) of data missing, followed by Greenland, Malta and Canada. The percentage of missing data declined with age and was higher in girls than boys in all age groups (see Volume 2). Prevalence of missing data should be taken into account when interpreting the findings.

Girls are more likely than boys to communicate with friends online and have higher levels of problematic social media use.

KEY POINTS

- **Thirty-five per cent of adolescents use electronic media to communicate with others almost all the time throughout the day (intensive use).**
- **One in 10 adolescents report intensive online communication with people they got to know through the Internet and did not know before.**
- **Seven per cent of adolescents report problematic social media use.**
- **Boys are more likely than girls to report a preference for online communication.**

INTENSIVE USE

Overall, 35% of adolescents were classified as intensive users of electronic media communication, meaning they communicated online with friends or others almost all the time throughout the day. Prevalence ranged from 12% of 11-year-old boys in Azerbaijan to 63% of 15-year-old girls in Italy. Countries with a particularly high prevalence of intensive online contact were Albania, Italy, North Macedonia, Romania and Serbia. Overall, the prevalence of intensive use was higher among girls than boys across all age groups, and gender differences were more marked among older adolescents. Frequency of online communication increased with age for both boys and girls. The largest difference between 11- and 15-year-olds was observed in Iceland (21 percentage points for boys and 37 percentage points for girls).

Over a quarter (29%) of adolescents reported online contact with their close friends almost all the time throughout the day. Prevalence was higher for girls than boys (32% versus 26%), especially at age 15 (40% versus 31%). Intensive online contact with close friends increased with age among boys and girls across all countries/regions, from 21% at age 11 to 36% at age 15 (except in Bulgaria, where the peak was at age 13).

Overall, one in 10 adolescents (10%) reported intensive online communication with people they got to know through the Internet and did not know before. Prevalence was higher among boys across all three age groups. Prevalence increased with age in around a quarter of countries/regions for girls but remained stable across age groups for boys.

Fig. 7 shows intense online contact with friends and other groups by gender.

Adolescents from higher-affluence families were more likely to report intensive online communication in almost half of countries/regions. The largest inequalities were observed in Albania, Armenia, the Republic of Moldova and Ukraine (ranging from 18–22 percentage points for girls and 13–20 percentage points for boys). Belgium (Flemish) was notable for showing the opposite pattern, in boys only.

PREFERENCE FOR ONLINE COMMUNICATION

When talking about their feelings, concerns and secrets, most adolescents preferred face-to-face communication with friends over online communication. However, **14% of adolescents (14% of boys and 13% of girls) said they strongly preferred online communication compared to face-to-face communication.** Substantial cross-national variation was observed; the proportion reporting a preference for online communication ranged from 2% of 11-year-old boys in the Netherlands to 34% of 15-year-old girls in Kazakhstan. Overall, preference for online communication increased with age for both boys and girls; this age effect was significant in 23 countries/regions for boys and 28 for girls. The strongest age effect was observed in United Kingdom (Scotland) for boys (18 percentage points) and in Canada for girls (18 percentage points).

Boys reported higher preference for online communication than girls, but this difference declined with age. Gender differences were observed in almost half of countries/regions at age 11 but in only six at age 15. The largest gender difference (10 percentage points) was seen among 11-year-olds in Albania and 15-year-olds in Denmark.

An association with family affluence was observed in a minority of countries/regions. Patterns were mixed for boys but consistent for girls; in all five countries/regions with social inequalities among girls, those from low-affluence families had higher preference for online communication.

> You are able to express your feelings at a safe distance.

PROBLEMATIC SOCIAL MEDIA USE

Overall, 7% of adolescents were classified as problematic social media users, based on the Social Media Disorder Scale (Van den Eijnden et al., 2016). Prevalence ranged from 1% among 11-year-old girls in Iceland to 24% of 11-year-old boys in Azerbaijan. At age 15, the countries with the highest levels of problematic use were Albania, Ireland, Malta and Spain.

Gender differences in problematic social media use were small but increased with age. Gender differences among 11-year-olds were significant in 12 countries/regions, with boys more likely to report problematic use than girls. Problematic use among 13- and 15-year-olds was more common among girls, with gender differences being significant in around half of countries/regions.

Fifteen-year-old girls reported the highest levels of problematic social media use. Prevalence increased from 5% at age 11 to 10% at age 15 among girls, while it remained relatively stable among boys (6% and 7%, respectively). The strongest age effect was observed in Azerbaijan for boys (17 percentage points) and in Albania for girls (15 percentage points). Problematic social media use was associated with family affluence in only a few countries/regions, and patterns varied. The largest difference between high- and low-affluence groups was observed in Spain for boys (6 percentage points) and in Norway for girls (7 percentage points).

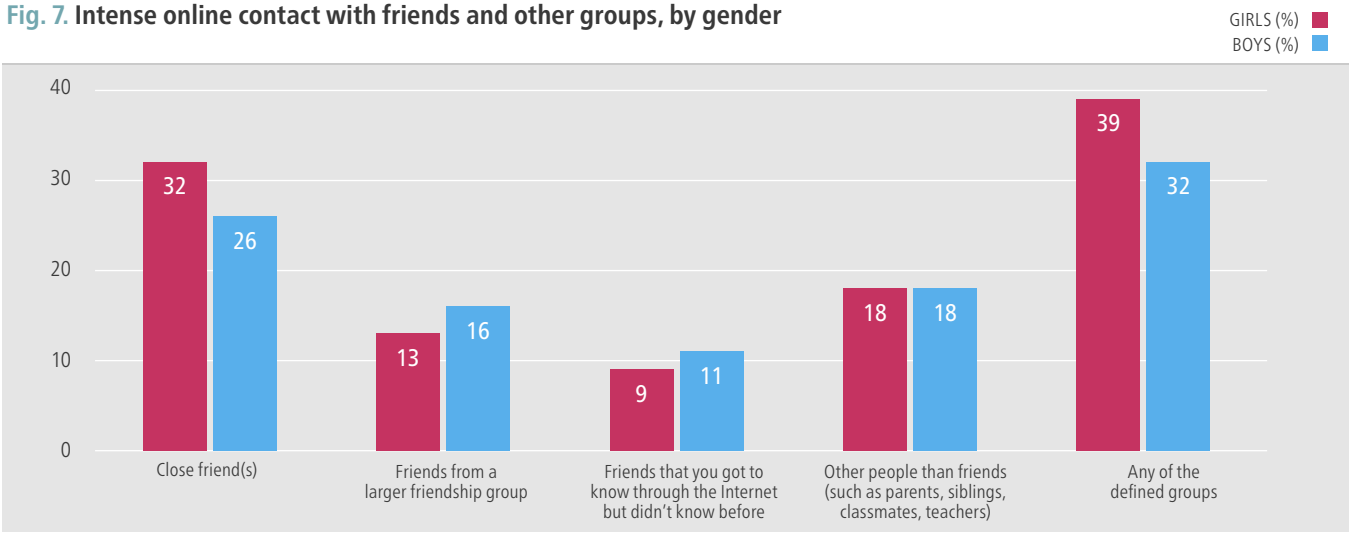
SUMMARY

Online communication has become an integral part of adolescents' lives. A preference for online social interaction, which is more anonymous and controlled, over face-to-face communication has been well documented as a factor associated with social vulnerability (such as social anxiety, shyness and low social competence) and psychosocial problems (Caplan, 2003).

Problematic social media use is characterized by addiction-like symptoms such as loss of control over one's use of social media at the expense of other important life domains, including relationships with peers and parents, and hobbies (Van den Eijnden et al., 2016). One in three adolescents communicate online with friends and others almost all the time throughout the day, while around one in eight prefer to use online communication to discuss personal issues with their friends.

Frequency of online communication increases with age and different gender patterns are observed. Girls are more likely to be intensive users of online communication, but boys are more likely to prefer discussing personal issues online. Girls are also more at risk of problematic social media use as they get older. Substantial cross-national variation in online behaviour was observed, suggesting that cultural, policy and economic factors play a role in shaping these aspects of young people's lives.

Fig. 7. Intense online contact with friends and other groups, by gender



Boys and adolescents from more affluent families are more satisfied with their lives and report better mental well-being.

KEY POINTS

- **Boys and younger adolescents report higher levels of life satisfaction and excellent health, and lower levels of multiple health complaints.**
- **Adolescents from high-affluence families report higher levels of life satisfaction and excellent health, and lower levels of multiple health complaints.**
- **One in four adolescents report feeling nervous, feeling irritable or having difficulties getting to sleep every week.**
- **There was a small increase in multiple health complaints across all age and gender groups between 2014 and 2018.**

SELF-RATED HEALTH

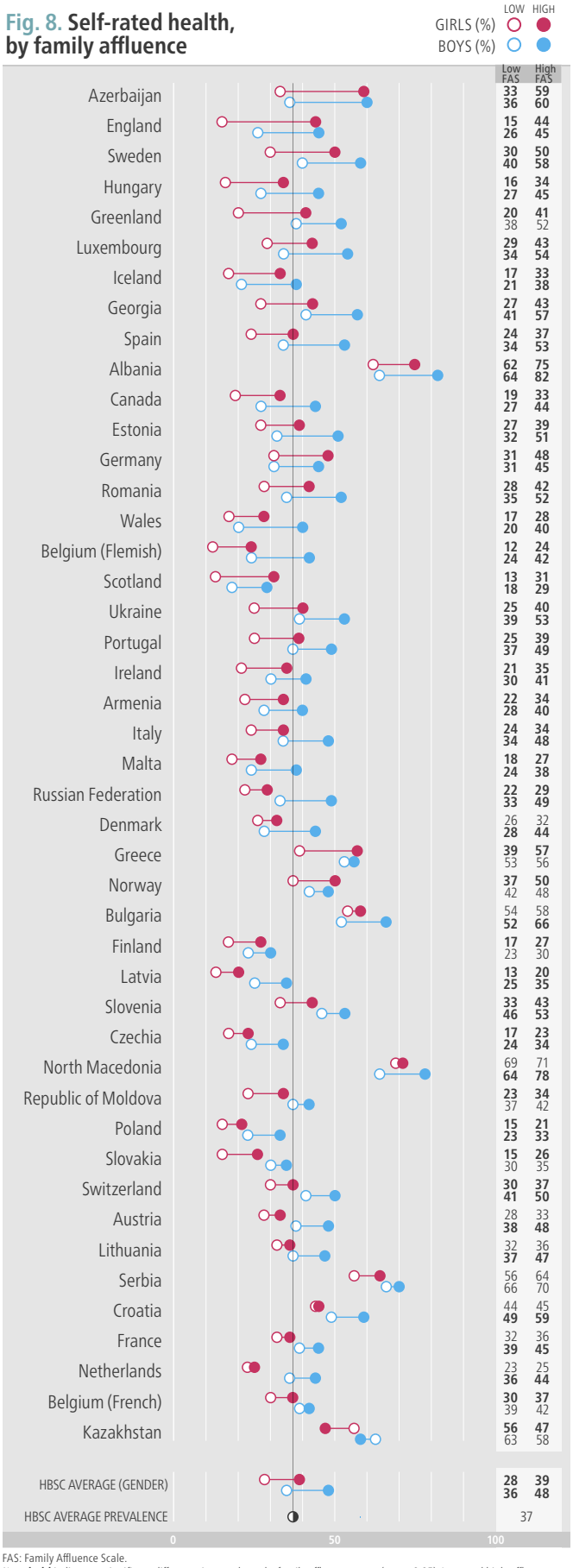
Overall, over **one in three (37%) adolescents reported excellent health,** with the highest prevalence observed in Albania, North Macedonia and Serbia. For girls, prevalence ranged from 15% in Latvia to 71% in North Macedonia, and for boys from 22% in United Kingdom (Scotland) to 77% in Albania.

Almost all countries/regions followed a similar pattern, with **boys more likely than girls to report excellent health (41% versus 33%).** This gender gap increased with age; the gender difference was significant in 17 countries/regions for 11-year-olds, in 35 for 13-year-olds and in all (except Azerbaijan) for 15-year-olds.

Fifteen-year-olds reported lower rates of excellent health than younger adolescents and **declines in excellent health were more marked among girls.** At age 11, almost half (45%) of boys and 41% of girls said they had excellent health, but at age 15, slightly fewer boys (39%) and substantially fewer girls (25%) reported excellent health.

Boys and girls from high-affluence families were more likely to report excellent health in two thirds of countries/regions (Fig. 8). On average, the prevalence difference between the highest- and lowest-affluence groups was 11%

Fig. 8. Self-rated health, by family affluence



FAS: Family Affluence Scale.
Note: **bold** indicates a significant difference in prevalence by family affluence group (at $p < 0.05$). Low- and high-affluence groups represent the lowest 20% and highest 20% in each country/region.

for girls and 12% for boys. The largest differences (above 20 percentage points for boys and girls combined) were observed in Azerbaijan and United Kingdom (England). The opposite pattern was seen in Kazakhstan, with adolescents from low-affluence families more likely to report excellent health.

Overall, there was little change in prevalence of excellent health between 2014 and 2018, with some countries/regions showing a small increase, some a small decrease and around half showing no real change. Exceptions were Albania, with an increase of around 20 percentage points across all age groups, and Belgium (Flemish), where there was a decrease of 20 percentage points in both genders at age 11.

LIFE SATISFACTION

Most adolescents felt satisfied with their lives, with an overall score of 7.8 out of 10. The country/region-level average ranged from 7.2 in Malta to 8.6 in Kazakhstan. Life satisfaction was higher among boys than girls in most countries/regions. The largest gender differences were observed in Austria, Canada and Sweden. Countries/regions with the highest overall estimates of life satisfaction also had the smallest gender differences. Gender differences increased with age, with a peak at age 15 in over two thirds of countries/regions.

Mean life satisfaction across all countries/regions decreased with age, from 8.3 at age 11 to 7.4 at age 15. This decline by age was stronger in girls. The largest decrease was observed between ages 11 and 13. Ireland and Malta showed the largest age differences among boys (1.1 mean difference) and Greece had the largest difference in girls (1.7 mean difference).

Adolescents from more affluent families reported higher levels of life satisfaction across all countries/regions (except Kazakhstan and girls in Greenland). The largest differences between adolescents from high- and low-affluence families were seen in Estonia, Latvia and United Kingdom (England).

Overall, life satisfaction has increased slightly since 2014, from 7.7 to 7.8. Changes over time were fairly consistent across gender and age groups. An increase was observed in 14 countries/regions, with Belgium (Flemish), Czechia and North Macedonia reporting the highest increases. A decline in life satisfaction emerged in only two countries (Austria and Malta).

INDIVIDUAL HEALTH COMPLAINTS

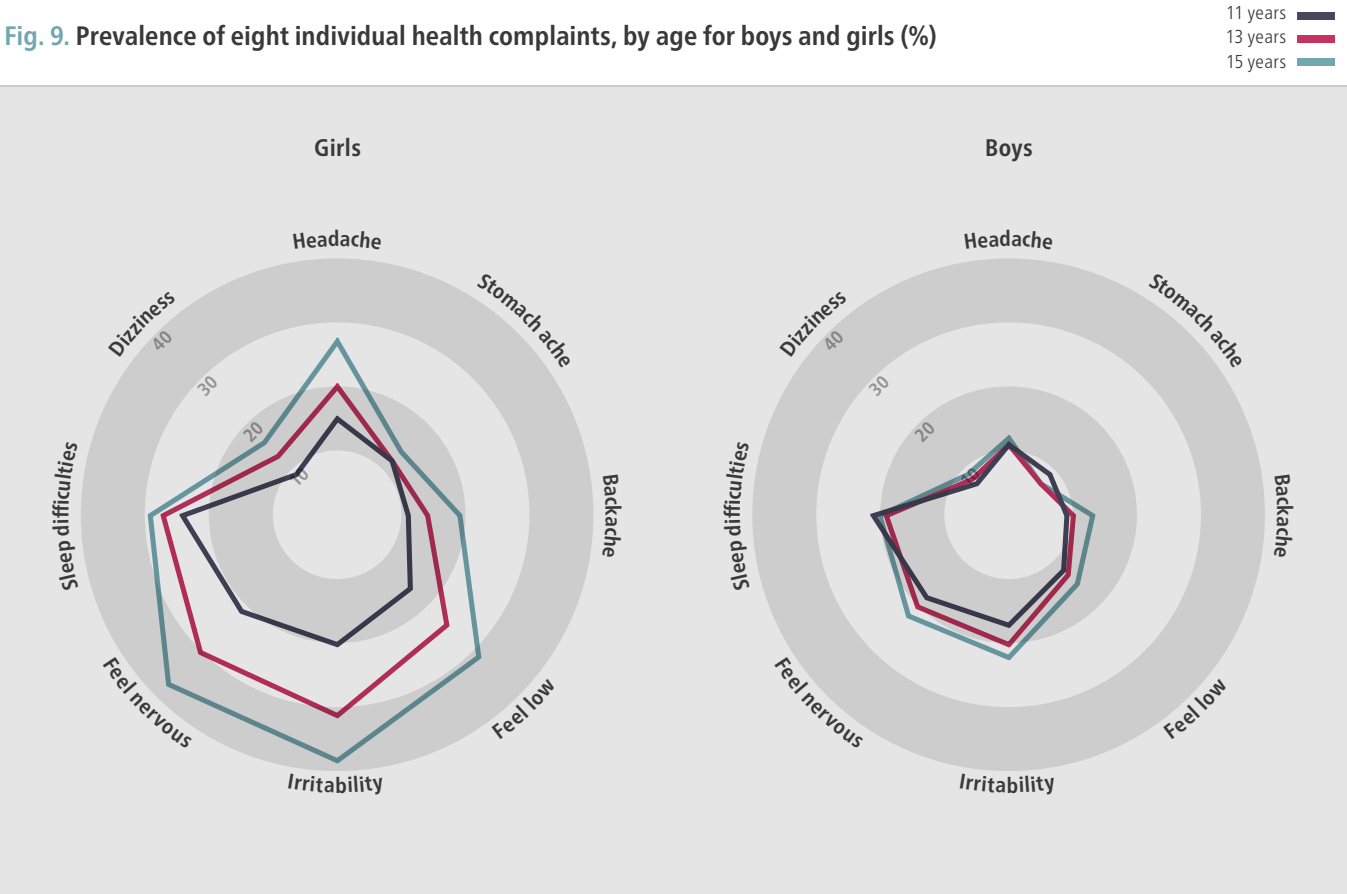
The HBSC symptom checklist presents a non-clinical measure of subjective health complaints (headache, stomach ache, backache, feeling low, feeling irritable or bad tempered, feeling nervous, difficulties in getting to sleep, and feeling dizzy) experienced over the last six months that may have both somatic and psychological origins. Overall, the most common health complaints were those associated with psychological health: nervousness (25%), irritability (25%) and difficulties in getting to sleep (24%), followed by feeling low (18%). Lower prevalence rates were observed for somatic complaints: headache (15%), backache (13%), stomach ache (10%) and dizziness (10%).

> “A lot of the time mental health in young people is overlooked and seen as ‘just part of growing up’.

Older adolescents reported higher levels of individual health complaints, but age effects varied by gender (Fig. 9). Prevalence of irritability, nervousness, feeling low, headache and backache increased with age for girls in almost all countries/regions. Among boys, the age effects were observed in fewer than half of countries/regions. The largest differences between 11- and 15-year-olds were observed for irritability (13 percentage points among boys in Bulgaria and 31 percentage points among girls in Greece) and feeling low (19 percentage points among boys in Azerbaijan and 27 percentage points among girls in United Kingdom (England)).

Girls experienced individual health complaints more often than boys. The largest gender differences were observed for irritability, nervousness and feeling low (an average difference of 10 percentage points between girls and boys). **Gender differences increased with age across all health complaints, with highest prevalence among 15-year-old girls.** At age 15, girls reported more

Fig. 9. Prevalence of eight individual health complaints, by age for boys and girls (%)



frequent headaches and irritability in all countries/regions. The gender difference was largest at age 15 for irritability (27 percentage points difference in Greece) and feeling low (25 percentage points difference in Greenland and Italy).

An association with family affluence for each individual health complaint was observed only in a minority of countries/regions. In most countries/regions with social inequalities, higher rates were reported by adolescents from lower-affluence families. The largest social inequalities were observed for feeling low. An association between feeling low and family affluence emerged in more than a third of countries/regions (18 for boys and 16 for girls), in which adolescents from low-affluence families reported higher levels of feeling low. The largest difference between high- and low-affluence groups was seen in Greenland for boys (15 percentage points) and Malta for girls (13 percentage points).

MULTIPLE HEALTH COMPLAINTS

Responses to the eight individual health-complaints items were combined to give a measure of multiple health complaints, which is defined as two or more symptoms more than once a week in the last six months.

Overall, one in three adolescents (35%) reported multiple health complaints. There was wide cross-national variation. Among boys, prevalence ranged from 16% of 11-year-olds in Spain to 51% of 15-year-olds in Bulgaria. Lowest prevalence among girls was found among 11-year-olds in Slovenia (19%) and highest among 15-year-olds in Italy (75%).

Girls were more likely than boys to report multiple health complaints (43% versus 28%), and this gender difference increased with age. Girls reported higher rates of multiple health complaints in 26 countries/regions at age 11, 40 at age 13 and all at age 15. The largest gender difference among 15-year-olds was observed in Italy (44% of boys and 75% of girls) and the smallest in Azerbaijan (24% of boys and 35% of girls).

Fig. 10 shows HBSC country average multiple health complaints by age and gender.

The prevalence of multiple health complaints increased with age in almost all countries/regions for girls and in one third for boys. The largest increases

between ages 11 and 15 were found in Slovenia for girls (34%) and in United Kingdom (Scotland) for boys (15%).

Only two countries reported a significant decline in multiple health complaints with age, among boys only: a small decline was seen in the Republic of Moldova (a 5 percentage-point decrease between ages 11 and 15) and a larger decline was evident in Azerbaijan (16 percentage points). On average, the increase in prevalence with age was stronger in girls (from 33% of 11-year-olds to 52% of 15-year-olds) than in boys (27% of 11-year-olds to 30% of 15-year-olds).

Adolescents from low-affluence families were more likely to report multiple health complaints in over a third of countries/regions. The average difference between highest- and lowest-affluence groups was 5% for both boys and girls. The largest inequalities were observed in United Kingdom (Scotland) for boys (42% in the lowest-affluence group compared to 21% in the highest) and United Kingdom (England) for girls (55% low versus 37% high).

There was a small overall increase in multiple health complaints among adolescents between 2014 and 2018 (33% in 2014 and 35% in 2018). Among boys, prevalence increased from 25% to 28% and, among girls, from 40% to 43%. At national/regional level, **multiple health complaints increased in 26 countries/regions, while a decrease was observed in three countries** (Croatia, the Netherlands and Spain). The biggest increases (10 or more percentage points) were seen in Ukraine and United Kingdom (England). The number of countries/regions where

> "Young people should be taught the tools to be able to deal with stress.

an increasing trend was observed for boys was almost double that for girls (26 versus 14). Spain was the only country where multiple health complaints decreased in both boys and girls across all age groups.

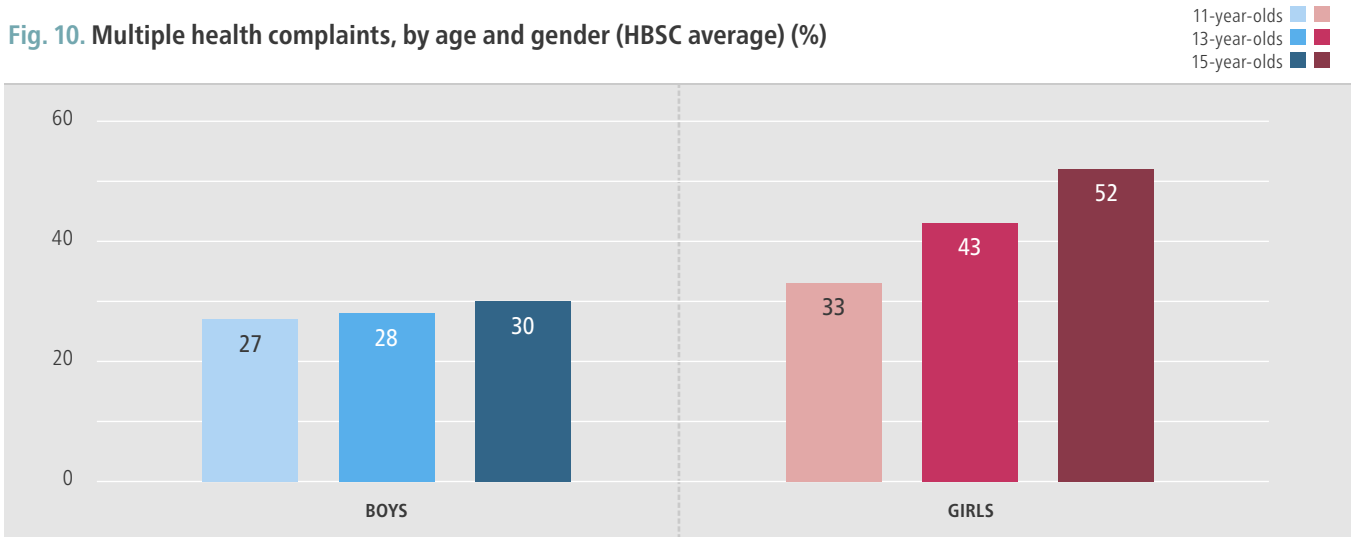
SUMMARY

Good mental well-being is critical to ensuring healthy transitions to adulthood, with implications for overall well-being, growth and development, and social and educational outcomes. Significant age, gender and social inequalities emerged across Europe and Canada for all adolescent mental well-being outcomes.

Boys consistently were more likely to report better mental well-being, and these gender differences increased with age. In line with previous studies, older adolescent girls were particularly at risk of poor mental well-being. There is evidence that mental well-being has worsened in many countries/regions since 2014.

Social inequalities emerged, with adolescents from high-affluence families reporting higher levels of excellent health and life satisfaction and lower levels of health complaints. Substantial variation in the prevalence of mental well-being outcomes was observed across countries/regions. This indicates that cultural, policy and economic factors may play a role in fostering good mental well-being.

Fig. 10. Multiple health complaints, by age and gender (HBSC average) (%)



Note: no data were received from North Macedonia.

One in four 15-year-olds who have had sex used neither a condom nor the contraceptive pill at last sexual intercourse.

KEY POINTS

- **At age 15, one in four boys and one in seven girls report having had sexual intercourse.**
- **Less than two thirds (61%) of sexually active adolescents used a condom at last intercourse, a small decline since 2014.**
- **One in four (26%) adolescents used the contraceptive pill at last intercourse.**
- **Since 2014, the proportion of adolescents who report having had sex has declined in fewer than a quarter of countries/regions; most showed no significant change.**

SEXUAL INTERCOURSE

Boys were more likely than girls to report having had sexual intercourse at age 15 (24% versus 14%). These gender differences were significant in 29 countries/regions, with the largest difference observed in Georgia (43 percentage points) and Albania (40 percentage points). Greenland was the only country with a significantly higher prevalence among girls.

Wide cross-national variation was observed, with different patterns for girls and boys. For girls, the prevalence ranged from 1% in Kazakhstan and Armenia to 46% in Greenland, whereas for boys these ranged from 14% in Kazakhstan and the Russian Federation to 45% in Albania and Georgia. High prevalence was observed for girls in many of the Nordic countries, while highest prevalence for boys was found mainly in eastern Europe.

Social patterning in sexual intercourse was only evident in a minority of countries/regions. Boys from high-affluence families were more likely to report having had sexual intercourse in 10 countries/regions. For girls, sexual intercourse was associated with family affluence in only four, with higher prevalence among girls from lower-affluence families in three of these. The largest inequalities were observed for boys in Georgia (35 percentage-point difference) and for girls in Belgium (French) (19 percentage-point difference).

Prevalence of sexual intercourse decreased in five countries/regions for boys and six for girls between 2014 and 2018. The largest declines were observed in the Russian Federation among boys (12 percentage points) and in Poland and United Kingdom (Scotland) among girls (8 percentage points). Small increases were observed in Iceland for boys and Albania for girls (3 percentage points).

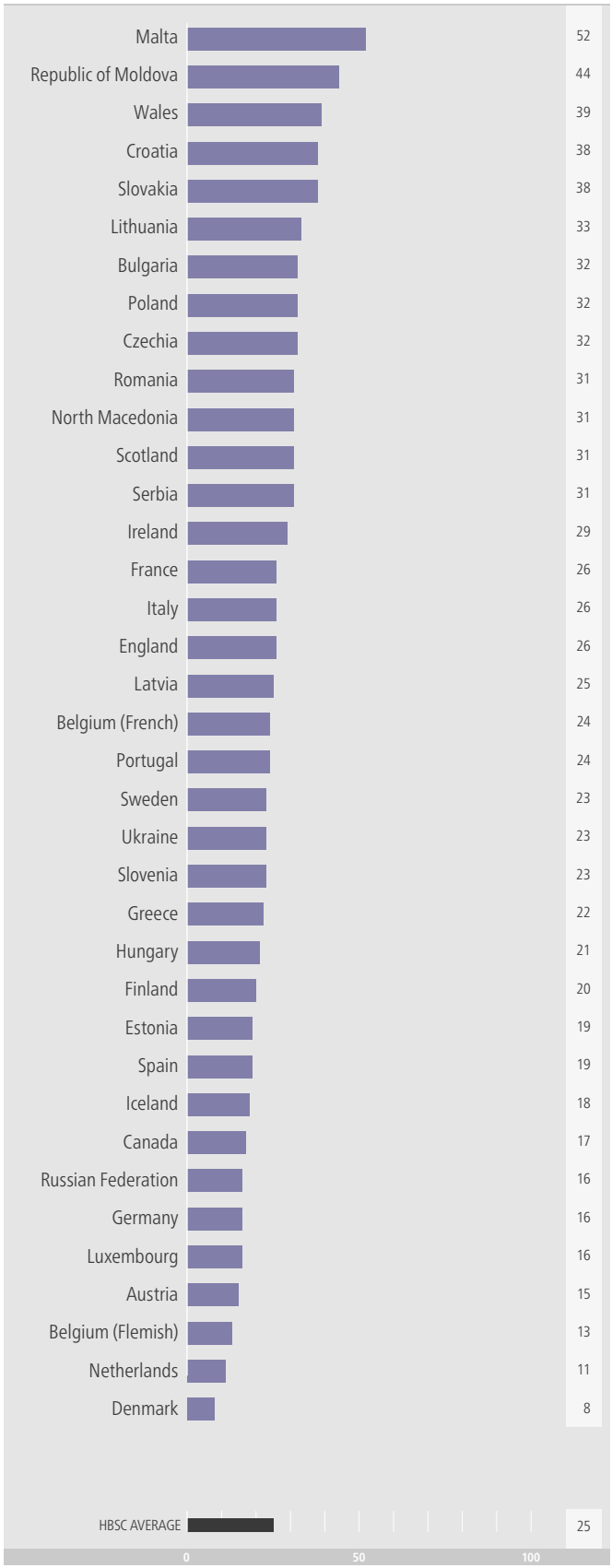
CONDOM AND CONTRACEPTIVE PILL USE AT LAST SEXUAL INTERCOURSE

Around one in four 15-year-olds (25%) across the HBSC countries/regions who have had sex did not use either of the most effective contraceptive methods (condom or pill) at last intercourse (Fig. 11). Wide cross-national variation was seen, ranging from 8% of sexually active adolescents in Denmark to over half (52%) in Malta. More than one in four adolescents did not use a condom or contraceptive pill at last intercourse in around half of countries/regions.

Both condom use and pill use varied widely among countries/regions. The lowest prevalence of condom use was 39% in Malta. Low levels of condom use were also seen in Albania, the Republic of Moldova, Sweden and United Kingdom (Wales), where fewer than 50% of young people reported using a condom at last intercourse. Pill use at last intercourse was extremely low in some countries/regions, being reported by only 6% of adolescents in Greece. Contraceptive use was highest in Spain, where over 75% of both boys and girls reported using a condom at last intercourse. The highest levels of pill use were among girls in the Netherlands (70%) and boys and girls in Belgium (Flemish) (over 60%).

Use of the contraceptive pill at last intercourse was similar among boys (27%) and girls (25%); only seven countries/regions had a significant gender difference, with no consistency of direction. Overall, more boys than girls (64% versus 58%) reported using a condom at last sexual intercourse. Significant gender differences were observed in only seven countries/regions, however, with boys reporting higher rates of condom use in six of these. The largest gender difference was observed in Albania (39 percentage points). The only country with the opposite gender pattern was Poland, where 50% of boys and 66% of girls reported

Fig. 11. Prevalence of not using either condom or pill at last sexual intercourse, boys and girls combined (%)



condom use at last intercourse. There was little evidence of an association between family affluence and either condom or contraceptive pill use.

Among 15-year-olds who had had sex, there was a small decline in condom use (around 2 percentage points) between 2014 and 2018, but no significant change in contraceptive pill use. Changes in contraceptive use had occurred in a minority of countries/regions, but there was no consistent patterning for either condom or pill use. The most consistent and largest decreases in condom use since 2014 were seen in Czechia and United Kingdom (Wales), with declines of over 20 percentage points among boys and over 14 percentage points among girls. Significant increases in condom use were observed in very few countries/regions, with the largest increase among girls in Poland (from 24% to 66%). Pill use changed by over 10% among either boys or girls in just seven countries/regions.

SUMMARY

The emergence of romantic relationships is an important developmental marker of adolescence, and first intercourse often occurs at this time. Previous research indicates that early sex has implications for self-perception, well-being, social status and future health behaviours, including sexual behaviours. Early sexual initiation and unprotected sex can be seen as part of broader risk-behaviour clusters that also include substance use, with genetic and environmental factors possibly being important mediators. For boys and girls, there was large cross-country variation in the proportion of 15-year-olds reporting sexual initiation and contraceptive use (condom and pill) at last sexual intercourse. Boys were more likely to report having had sexual intercourse and using a condom at last sexual intercourse. Sexual behaviour was not strongly associated with family affluence.

> “Sex education is still a big problem in schools.

Despite continued declines in alcohol use and smoking, more than one in three 15-year-olds had drunk alcohol and almost one in seven had smoked cigarettes in the last 30 days.

KEY POINTS

- **Alcohol is the most commonly used substance by 15-year-olds: almost three in five have drunk alcohol in their lifetime, compared with almost one in four for smoking and around one in seven for cannabis use.**
- **The prevalence of lifetime alcohol use and cigarette-smoking has declined since 2014.**
- **Substance use generally is more common among boys.**
- **The largest increases in substance use are between ages 13 and 15.**
- **Higher family affluence is associated with higher alcohol consumption, but smoking and cannabis use are less socially patterned.**

ALCOHOL CONSUMPTION: LIFETIME AND LAST 30 DAYS (CURRENT) USE

Overall, boys were more likely than girls to have drunk alcohol in their lifetime (38% and 33%, respectively). Gender differences were more common among younger adolescents. A significant gender difference at age 11 was observed in 36 countries/regions, with prevalence being higher among boys in all. Only 10 countries/regions showed a significant gender difference at age 15 and, in four of these, prevalence was higher among girls (Canada, Latvia, Lithuania and Poland).

The prevalence of current (last 30 days) alcohol use was also higher for boys than girls (20% and 18%, respectively). At age 15, gender differences exceeded 10 percentage points for both lifetime and current alcohol use in Albania, Armenia, Georgia, the Republic of Moldova and Romania. Armenia showed the largest gender difference both in lifetime (20 percentage points) and current (21 percentage-point difference) alcohol use, with boys having higher levels at age 15.

The prevalence of alcohol use varied greatly across countries/regions. The proportion of adolescents who had ever consumed alcohol ranged from 2% of 11-year-olds in Kazakhstan (boys and girls) to 85% of 15-year-old boys and girls in Greece. Current alcohol use ranged from 0.5% of 11-year-olds in Greenland (boys) and Ireland (girls) to 67% of 15-year-old girls in Denmark. Denmark and Greece had the highest levels of both lifetime and current alcohol use at age 15, while Azerbaijan and Kazakhstan had the lowest.

The prevalence of lifetime and recent alcohol use increased sharply with age in both genders in almost all countries/regions, except Azerbaijan and Kazakhstan. Lifetime consumption increased between ages 11 and 15 from 19% to 60% among boys and from 10% to 59% among girls. Similarly, current alcohol use increased from 7% to 38% among boys and from 3% to 36% among girls. The largest age-related increases for lifetime alcohol use were found in Germany (60 percentage points) for boys and Denmark (76 percentage points) for girls. Denmark also had the largest increase with age for current use among both boys (55 percentage points) and girls (65 percentage points).

Adolescents from higher-affluence families were more likely to report having consumed alcohol in their lifetime in almost half of countries/regions for boys and a fifth for girls. Similarly, **high-affluence adolescents reported higher levels of current alcohol consumption** in almost half of countries/regions. No country/region showed the opposite pattern. France had the largest difference between adolescents from high- and low-affluence families for both lifetime (22 percentage points for boys and 25 percentage points for girls) and current (20 percentage points for boys and 17 percentage points for girls) alcohol use.

There has been a small decline in lifetime alcohol use among adolescents since 2014 (from 38% to 35%), but overall levels of current alcohol use remained stable. The Republic of Moldova showed the largest decline in prevalence of lifetime alcohol use (16 percentage points), followed by Armenia, Czechia and Estonia, with decreases of approximately 10 percentage points. The largest decline in current alcohol use was found in Greenland (10 percentage points) and the largest increase in Portugal (5 percentage points).

DRUNKENNESS: LIFETIME AND LAST 30 DAYS

One in five 15-year-olds (20%) had been drunk twice or more in their lifetime (Fig. 12)**, and almost one in seven (15%) had been drunk in the last 30 days.** Drunkenness was higher among boys than girls in all age groups. The gender difference was significant in around a third of countries/regions at ages 11 and 15, but fewer at age 13. The only exception was United Kingdom (Wales), where girls had a higher prevalence of drunkenness both in their lifetime and the last 30 days. The largest gender difference was found in Armenia for both lifetime and recent drunkenness at age 15 (18 percentage points).

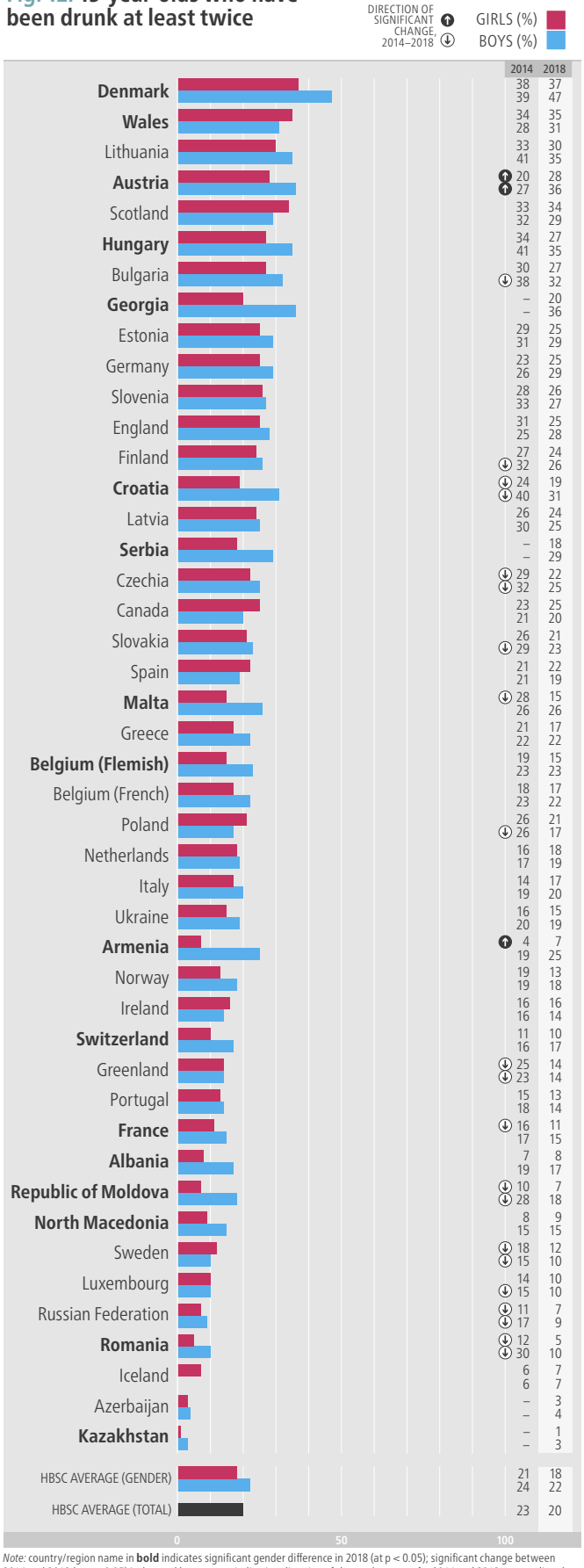
The prevalence of drunkenness varied greatly across countries/regions. Prevalence at ages 11 and 13 generally was low, with highest levels in Bulgaria and Georgia. Among 15-year-olds, the proportion of adolescents who had been drunk two or more times in their lifetime ranged from 1% of girls in Kazakhstan to 47% of boys in Denmark. For drunkenness in the last 30 days, prevalence ranged from 1% of girls in Kazakhstan to 36% of boys in Denmark.

The prevalence of recent and lifetime drunkenness increased steeply with age in both genders in almost all countries/regions. The main exceptions were Azerbaijan and Kazakhstan, where prevalence of both lifetime and recent drunkenness was less than 5% at all ages. Denmark showed the biggest increase with age for both lifetime (46 percentage points for boys and 37 percentage points for girls) and recent (36 percentage points for boys and 32 percentage points for girls) drunkenness.

Adolescents from higher-affluence families were more likely to report having been drunk twice or more times in their lifetime in a third of countries/regions for boys and fewer than a quarter for girls. Similarly, high-affluence adolescents reported higher levels of recent drunkenness in a minority of countries/regions. Iceland was the only country with the opposite pattern in lifetime drunkenness, with higher levels among low-affluence boys.

The overall prevalence of lifetime drunkenness has remained relatively stable since 2014. At age 15, however, rates of lifetime drunkenness declined in around a third of countries/regions, with decreases of over 10% in Romania and Greenland. Only Austria saw a substantial

Fig. 12. 15-year-olds who have been drunk at least twice



Note: country/region name in **bold** indicates significant gender difference in 2018 (at $p < 0.05$); significant change between 2014 and 2018 (at $p < 0.05$) is denoted by an arrow indicating direction of change (averages for 2014 and 2018 are not directly comparable and no significances are shown).

(9 percentage-point) increase in lifetime drunkenness. Even fewer countries/regions showed a change in recent drunkenness at age 15 since 2014, with the largest declines (over 10 percentage points) seen in Greenland and Malta and small increases in other countries/regions.

CIGARETTE-SMOKING: LIFETIME AND LAST 30 DAYS (CURRENT) USE

Overall, prevalence of cigarette-smoking was similar in boys and girls: across all ages, 15% of boys and 13% of girls reported ever having smoked cigarettes and 7% of boys and girls had smoked in the last 30 days. In countries/regions with a significant gender difference, prevalence of smoking was slightly higher among boys than girls at ages 11 and 13. Current and lifetime smoking among 15-year-olds were more common among boys in around a quarter of countries/regions, but prevalence was higher among girls in Bulgaria, Italy and United Kingdom (Wales). The largest gender difference among 15-year-olds was found in the Republic of Moldova for lifetime (19 percentage points) and Armenia for current (14 percentage points) smoking.

The prevalence of cigarette-smoking varied greatly across countries/regions, ranging from 0.5% in Ireland (11-year-old girls) to 59% in Lithuania (15-year-old boys) for lifetime smoking, and from 0.2% in the Netherlands and Sweden (11-year-old girls) to 38% in Bulgaria (15-year-old girls) for current smoking. Azerbaijan and Kazakhstan were notable for having low levels of both lifetime (less than 10%) and current (less than 7%) smoking at age 15. Conversely, high levels were observed in the Baltic states (Estonia, Latvia and Lithuania) and Italy for lifetime smoking, and in Bulgaria, Lithuania and Italy for current smoking. Across all three age groups, Lithuania had the highest levels of adolescent lifetime smoking and Bulgaria of smoking in the last 30 days.

The prevalence of lifetime and current smoking increased steeply with age in both genders and in most countries/regions. For example, at age 11, 5% of boys and 2% of girls had ever smoked, but this rose to 29% of boys and 27% of girls at age 15. Levels of current smoking increased from 2% of boys and 1% of girls at age 11 to 15% of both boys and girls at age 15. The biggest age difference was between 13- and 15-year-olds. Lithuania had the largest increase with age in lifetime smoking for boys (43 percentage points) and girls (48 percentage points), and in current smoking for boys (25 percentage points). The largest increase with age in current smoking among girls was found in Italy (32 percentage points).

Only a minority of countries/regions showed an association between lifetime and current smoking and family affluence, with inconsistent patterns.

The overall prevalence of lifetime smoking has declined by four percentage points for 13-year-olds and seven percentage points for 15-year-olds since 2014. The prevalence of lifetime smoking among 11-year-olds remained stable. Current smoking has declined slightly among 15-year-olds since 2014 in around a third of countries/regions. There was little change in prevalence at ages 11 and 13, with the exception of 11-year-olds in Bulgaria, with an increase in current smoking of more than 5% in boys and girls since 2014.

CANNABIS USE: LIFETIME AND LAST 30 DAYS (CURRENT) USE

Overall, almost one in seven adolescents (13%) aged 15 had used cannabis in their lifetime, with higher prevalence among boys (15%) than girls (11%). Gender differences were greatest (more than 10 percentage points) in Albania, Armenia, Denmark and Georgia. **Use of cannabis in the last 30 days was reported by 7% of 15-year-olds,** with higher prevalence among boys than girls (8% and 5%, respectively). The gender difference was significant in over half of countries/regions, with the largest difference in Armenia (9 percentage points) for current use.

The prevalence of cannabis use varied substantially across countries/regions, with lifetime use ranging from 0.6% in Azerbaijan to 24% in Bulgaria for girls and 3% in Azerbaijan to 27% in Switzerland for boys. The proportion of 15-year-olds who had used cannabis in the last 30 days ranged from 0.3% in Azerbaijan to 16% in Bulgaria for girls and 1% in Azerbaijan to 19% in Bulgaria for boys. Azerbaijan and Kazakhstan were notable for having the lowest overall levels of both lifetime (< 4%) and current (< 2%) cannabis use among boys and girls. Bulgaria had the highest overall levels of both lifetime (24%) and current (18%) cannabis use. Social inequalities were observed in only a minority of countries/regions, with inconsistent patterns.

The overall prevalence of lifetime and current cannabis use has remained stable since 2014. Some countries/regions nevertheless showed differences over

time. A decrease in lifetime cannabis use was seen in 10 countries/regions for girls and five for boys. Fewer countries/regions showed a decrease in current cannabis use. The largest declines in both lifetime and current cannabis use were seen in France and Poland. Increases were observed in a few countries/regions, mainly among boys. The largest increases were among boys in Armenia (lifetime and current use) and among girls and boys in Bulgaria (current use only).

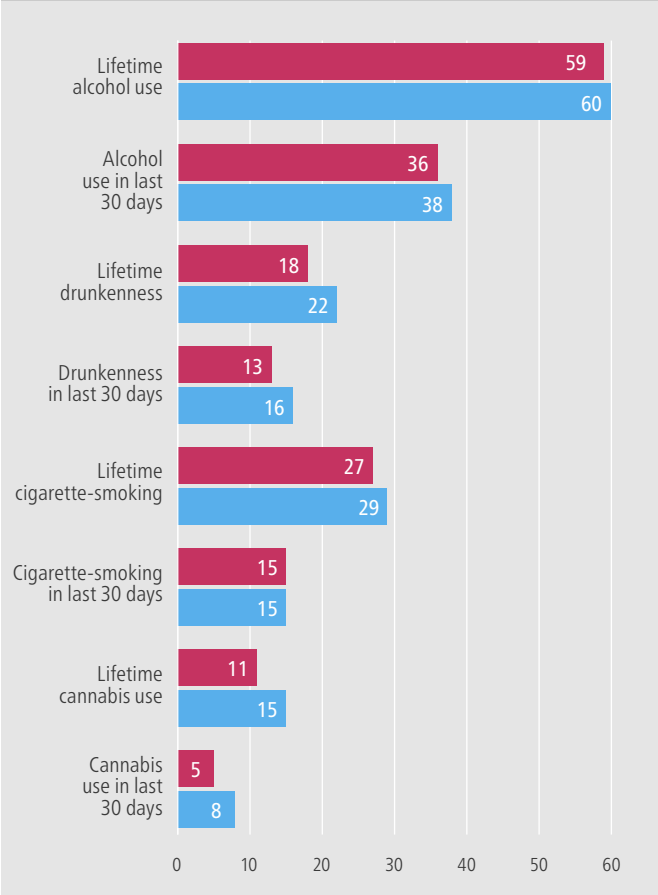
The prevalence of alcohol use, drunkenness, cigarette-smoking and cannabis use among 15-year-olds is summarized in Fig. 13.

SUMMARY

Adolescence is a critical period in human development, when the risks associated with substance use are particularly high. Alcohol consumption, smoking behaviour and cannabis use are typically established during the adolescent years. Despite encouraging reductions in tobacco and alcohol use since 2014, levels of current cigarette-smoking and drinking are high, particularly among 15-year-olds.

Overall, alcohol and tobacco use increase dramatically between ages 13 and 15 in both genders, with use more common in boys and the gender gap narrowing at age 15. Strong gender patterning is evident for drunkenness and cannabis use, with boys generally having higher levels. Social inequalities in substance use were restricted to alcohol use, and especially among boys. More affluent adolescents reported higher levels of alcohol consumption, which is likely explained by greater accessibility and affordability.

Fig. 13. Prevalence of alcohol use, drunkenness, cigarette-smoking and cannabis use among 15-year-olds



Boys are more likely to be perpetrators of both physical and online violence, while girls are more likely to be victims of cyberbullying.

KEY POINTS

- **Boys are more likely than girls to bully and cyberbully others.**
- **While the proportion of boys and girls who are victims of traditional bullying is similar, girls are more likely to be cyberbullied.**
- **Boys tend to engage in physical fighting more than girls, but levels decline with age.**
- **There has been a decline in bullying perpetration since 2014, but the proportion of adolescents being bullied has remained the same.**

BULLYING

Across all ages, boys tended to bully others more than girls, and this gender difference was significant in over half of countries/regions at each age. Around one in 12 boys (8%) said they had bullied others at least 2–3 times in the last couple of months, compared with one in 20 girls (5%). No country/region had the opposite pattern. The biggest gender difference was found in Lithuania at age 15 (15 percentage points).

Unlike bullying perpetration, **the proportion of adolescents who reported having been bullied at least 2–3 times in the last couple of months was the same among boys and girls (both 10%).** A significant gender difference was observed at age 11 in 13 countries/regions; prevalence was higher among boys in 12 of these. Only Canada showed the opposite pattern. At age 15, however, a gender effect was only evident in four countries/regions; boys were more likely to have been bullied in three of these. Only Switzerland showed the opposite pattern, with higher bully victimization among girls. Gender differences were generally small, with the largest being in Serbia at age 11 (9 percentage points).

The prevalence of bullying varied greatly across countries/regions, with the highest levels in Latvia, Lithuania and the Republic of Moldova. The proportion of adolescents who reported bullying others ranged from 0.3% among 11-year-old girls in Portugal to 30% among 15-year-old boys in Lithuania. Prevalence of being bullied ranged from 0.5% among 13-year-old girls in Iceland to 32% among 13-year-old boys in Lithuania. Lithuania was notable for having the highest overall levels of both bullying perpetration and victimization.

Age had a different effect on bullying perpetration and victimization. In countries and regions with a significant age effect, **bullying victimization tended to decrease with age while bullying perpetration tended to increase,** but overall differences were small. Among boys, prevalence of bullying others was highest at age 15, but among girls, it was highest at age 13. In contrast, prevalence of being bullied was highest among younger adolescents. The greatest age effect for bullying perpetration was found in Latvia for boys (14 percentage points) and Lithuania for girls (8 percentage points). Only four countries/regions showed an age-related decline in bullying perpetration among boys. On the other hand, the prevalence of being bullied declined as boys and girls grew older in half of countries/regions. The biggest decline was found in Azerbaijan for boys (16 percentage points) and Estonia for girls (13 percentage points).

Only a small minority of countries/regions showed social inequalities in bullying perpetration, but the patterns were inconsistent. The largest inequalities were found in Greenland, where low-affluence boys were more likely to bully others (13 percentage points), and Ukraine, where high-affluence girls were more likely to bully others (5 percentage points).

Low-affluence boys and girls were more likely to be victims of bullying in a fifth of countries/regions. The biggest inequalities were found in Greenland for boys (15 percentage points) and Estonia for girls (9 percentage points). The opposite pattern was found in Kazakhstan for boys (4 percentage points) and North Macedonia for girls (5 percentage points), where high-affluence adolescents were more likely to be bullied.

Since 2014, there has been a decline in bullying perpetration in half of the countries/regions for boys and a third for girls, **but the prevalence of being bullied has remained the same.** Austria was notable for having the biggest overall decline in bullying perpetration for both boys (13 percentage points) and girls (6 percentage

points). A significant increase in bullying perpetration was seen in a minority of countries/regions, with the highest increases among boys in Armenia (7 percentage points) and girls in Bulgaria (5 percentage points). Regarding bullying victimization, the Republic of Moldova was notable for having the greatest increase for both boys (6 percentage points) and girls (4 percentage points), and Belgium (French) the biggest decline in boys (15 percentage points) and girls (6 percentage points).

CYBERBULLYING

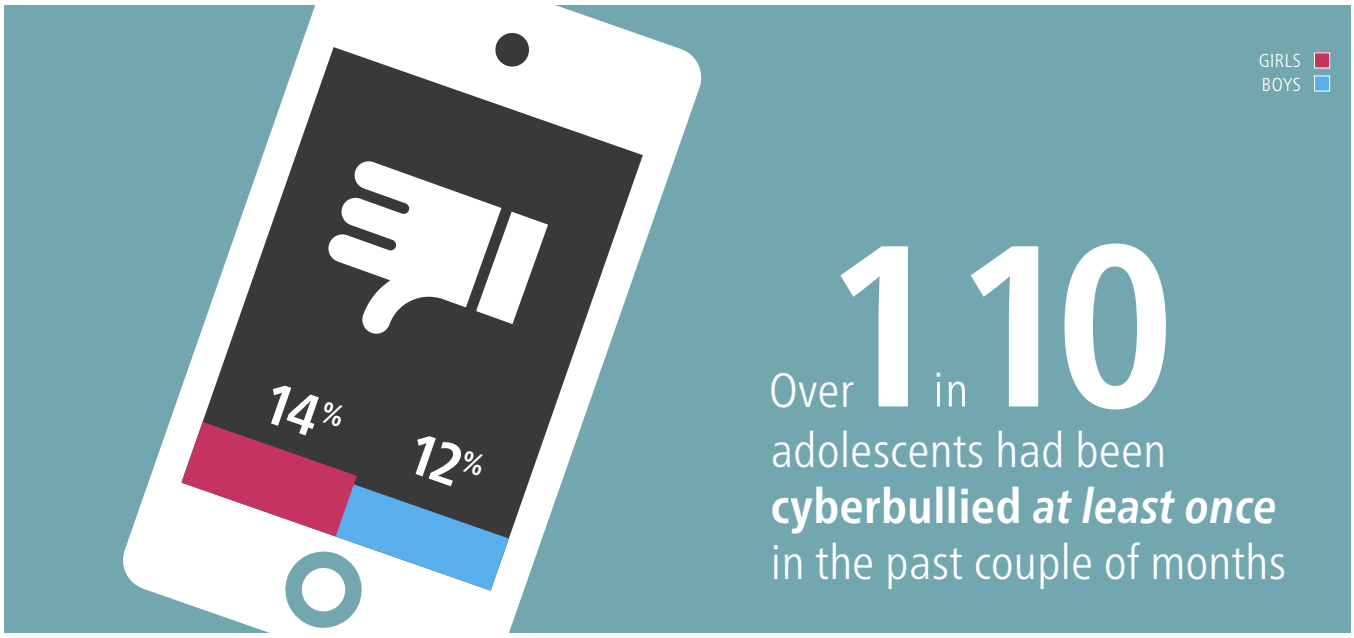
Cyberbullying is experienced differently by boys and girls. Based on reports of cyberbullying at least once in the past couple of months, the percentage of boys who were perpetrators and victims of cyberbullying was the same (12%), but girls showed a different pattern. They were less likely than boys to cyberbully others but more likely to be the victims of cyberbullying, especially at age 13, when gender differences were found in over half of countries/regions. Compared to the prevalence of cyberbullying perpetration among girls (8%), almost twice as many girls were victims of cyberbullying (14%).

The prevalence of cyberbullying varied greatly across countries/regions. The proportion of adolescents who had cyberbullied others ranged from 0.6% among 11-year-old girls in Greece to 31% among 15-year-old boys in Latvia. The proportion of adolescents who had been cyberbullied ranged from 3% among 15-year-old boys in Spain to 29% among 15-year-old boys in Lithuania.

> “Everyone has a right to be safe and feel safe.

Age had a different effect on cyberbullying perpetration and victimization for boys compared to girls. Like traditional bullying, older boys in half of countries/regions tended to cyberbully more, while girls showed a peak increase at age 13. The greatest age-related increase in cyberbullying perpetration was found in Latvia for boys (14 percentage points) and Croatia for girls (7 percentage points). On the other hand, girls at age 13 were most likely to be cyberbullied in a third of countries/regions, while inconsistent age-related changes were observed for boys. The biggest increase in being cyberbullied between ages 11 and 13 was seen in Latvian girls (10 percentage points). The biggest decline in boys was found in the Republic of Moldova (8 percentage points) and Ukraine (6 percentage points), and the biggest increase in Lithuania (9 percentage points).

Social inequalities in cyberbullying were observed only in a minority of countries/regions, with inconsistent patterns. The association was stronger in boys and, in most countries/regions with a social gradient, prevalence of cyberbullying others was higher among more affluent adolescents. This pattern was especially pronounced in Greenland (boys), and Azerbaijan and Georgia (boys and



girls). For cyberbullying victimization, even fewer countries/regions showed an association with family affluence. Kazakhstan was the only country showing social inequalities in both boys and girls, with more affluent adolescents more likely to be cyberbullied. Austria, Denmark, Iceland and United Kingdom (Wales) for boys, and Belgium (Flemish) and Ireland for girls, showed the opposite pattern.

FIGHTING

Boys were more likely than girls (15% versus 5%) to have been involved in a physical fight three or more times in the past 12 months and this gender difference was seen in almost all countries/regions. The largest gender difference was found in Armenia at ages 13 and 15 (29 percentage points). Iceland was the only country with no gender gap across all ages. There was substantial variation between countries/regions, with the rates of fighting ranging from 2% among 11-year-old girls in Armenia to 34% among 11-year-old boys in Belgium (French).

Older adolescents were less likely to be involved in physical fights. The decline with age was particularly evident among boys. The largest age-related decline was seen in Belgium (French) for boys (16 percentage points) and Hungary for girls (6 percentage points).

A small minority of countries/regions showed social inequalities in fighting behaviour. This tended to reflect an increase in fighting with higher affluence, but the patterns were not consistent. Lower affluence was associated with higher prevalence of fighting in only one country/region for boys (Belgium (French)) and two for girls (Austria and United Kingdom (England)). The largest inequalities were observed in Armenia for boys (17 percentage points) and Albania for girls (6 percentage points), where adolescents from more affluent families were more likely to be involved in physical fighting.

Rates of physical fighting in most countries/regions remained stable between 2014 and 2018. An increase was noted in nine countries/regions for both genders, and a decrease in nine for boys and four for girls. The greatest increase in physical fighting was seen in Iceland for both boys (9 percentage points) and girls (15 percentage points), with similar changes in all age groups. Particularly large changes were also seen in Armenia, where rates of fighting decreased by 16 percentage points among 11-year-old boys, and Albania, with a decline of 12% among 15-year-old boys. With the exception of Iceland, changes since 2014 among girls were generally less than 5%.

SUMMARY

School bullying is one of the most prevalent forms of youth violence, but technological advances have given rise to new forms of bullying, with the Internet and mobile phones used to send mean messages, e-mails, texts and wall postings. Online bullying can cause profound harm due to its unique nature in reaching a wide audience quickly and remaining accessible indefinitely.

Bullying and cyberbullying can sometimes lead to fighting behaviour, which is assessed as a measure of aggression and violence and a component of risk behaviours. The threats posed by school bullying, cyberbullying and interpersonal violence to adolescents' health and social well-being have been well documented, and affect both victims and perpetrators.

Across different violent behaviours, from physical to online violence, boys report significantly higher levels than girls. Boys are more likely to be involved in physical fights, bullying and cyberbullying perpetration. Unlike face-to-face bullying, where the prevalence is similar among genders, girls are more likely to be cyberbullied, especially at age 13.

Despite an encouraging decline in bullying perpetration since 2014, the proportion of adolescents being bullied remains the same. Younger adolescents are particularly vulnerable and more likely to be the victims of bullying. There was no clear link between social inequalities and violent behaviours, suggesting that violence in adolescents is not associated with socioeconomic background.

> "[Cyberbullying is a] lot more scary because people are more likely to say stuff over social media than they would to your face; 'keyboard warriors'.

Boys and younger adolescents are more likely to report medically attended injuries.

KEY POINTS

- **Boys are more likely than girls to have received medical attention for injuries.**
- **Older adolescents have lower rates of medically attended injuries.**
- **More affluent boys and girls are more likely to report medically attended injuries.**

MEDICALLY ATTENDED INJURIES

The prevalence of medically attended injuries in the last 12 months was higher for boys than girls (48% versus 39%), and the gender difference was significant across all age groups and in most countries/regions. The largest gender difference was found in Iceland (27 percentage points) at age 13. There was wide cross-national variation, ranging from 9% among 15-year-old girls in Iceland to 69% among 11-year-old boys in Spain.

Younger adolescents were more likely to have received medical treatment for injuries in the last 12 months. Prevalence declined with age in a third of countries/regions for boys and a quarter for girls. The one exception was Switzerland, which had the opposite pattern. The greatest age-related decrease was found in Iceland for boys (29 percentage points) and Romania for girls (15 percentage points).

More affluent boys and girls had higher rates of medically attended injuries across all age groups (Fig. 14). These differences were significant in over two thirds of countries/regions. The biggest difference was found in Hungary for boys (19 percentage points) and Greece for girls (14 percentage points). Iceland was the only country with the opposite pattern, in girls only (7 percentage points).

Overall prevalence of medically attended injuries remained relatively stable between 2014 and 2018. No consistent pattern was seen at country/region level, with increases observed in around a third of countries/regions and decreases in around a fifth. The biggest increase was seen in Austria for both boys (15 percentage points) and girls (16 percentage points), while Iceland had the largest decline (17 percentage points for boys and 35 percentage points for girls).

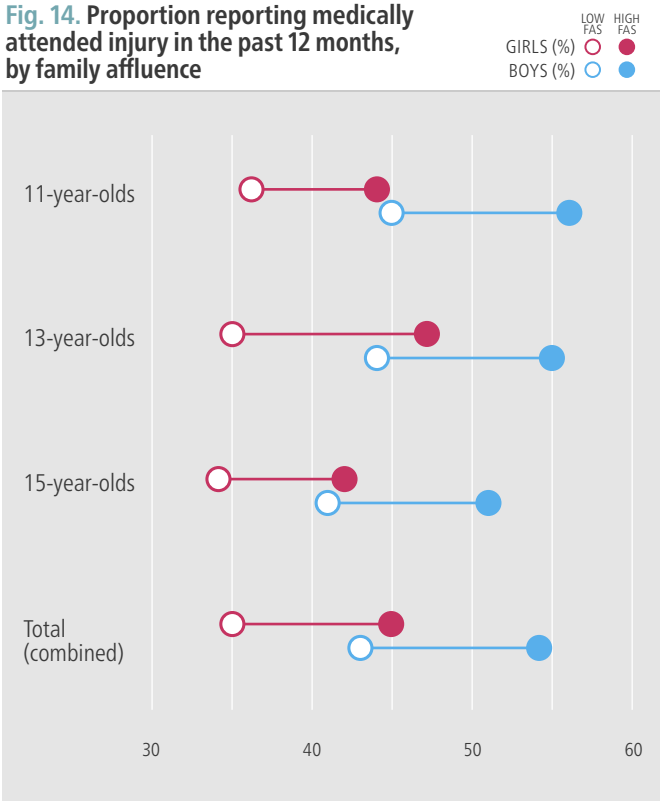
SUMMARY

Unintentional injuries are the leading cause of death and disability among children beyond 1 year of age (WHO Regional Office for Europe, 2006). The risk of injury increases dramatically during adolescence and may be considered a marker of high-risk adolescent lifestyles.

The findings show that medically attended injuries are more common in boys than girls. This is consistent with adolescent boys being more physically active than girls and more likely to be involved in physical fights, both of which increase the risk of injuries. As they grow older, adolescents are less likely to receive medical treatment for injuries.

Strong social inequalities were observed, with adolescents from more affluent families more likely to receive medical treatment for injuries. This may reflect increased access to health services, as well as greater opportunities for physical activity and sports.

Fig. 14. Proportion reporting medically attended injury in the past 12 months, by family affluence



FAS: Family Affluence Scale.

Most adolescents report high family and peer support, but levels are generally lower among adolescents from poorer families.

KEY POINTS

- **Over two thirds of adolescents report high levels of family support and easy communication with their parents.**
- **Generally, adolescents find it easier to communicate with their mother than their father.**
- **Only 57% of 15-year-old girls find it easy to talk to their father about things that bother them.**
- **Perceived family support and ease of communication with parents decline with age.**
- **Over half of boys and around two thirds of girls report high peer support.**
- **The proportion of adolescents reporting high peer support has declined since 2014.**
- **Social well-being generally is higher among boys and girls from high-affluence families.**

FAMILY COMMUNICATION

Most adolescents reported easy communication with their mothers (87% of boys and 84% of girls) **but fewer with their fathers** (79% of boys and 66% of girls). At age 15, the highest prevalence for ease of communication with both parents was observed in Albania, Georgia and the Netherlands. **Boys were more likely than girls to report easy communication with their father across all ages,** with significant gender differences in most countries/regions. The number of countries/regions showing a significant gender difference in maternal communication increased from seven at age 11 to 20 at age 15; boys were more likely to report easy communication with their mother in most of these.

Ease of family communication declined with age, so that younger adolescents were more likely to report that they found it easy to talk to their mother (from 91% at age 11 to 80% at age 15) and father (from 80% at age 11 to 65% at age 15).

Adolescents from higher-affluence families were more likely to find it easy to talk to their parents about things that bother them in about a third of countries/regions. The social gradient was stronger among girls. The largest social inequalities were found in Canada, Greenland and United Kingdom (England) (communication with mother), and Estonia and Latvia (communication with father).

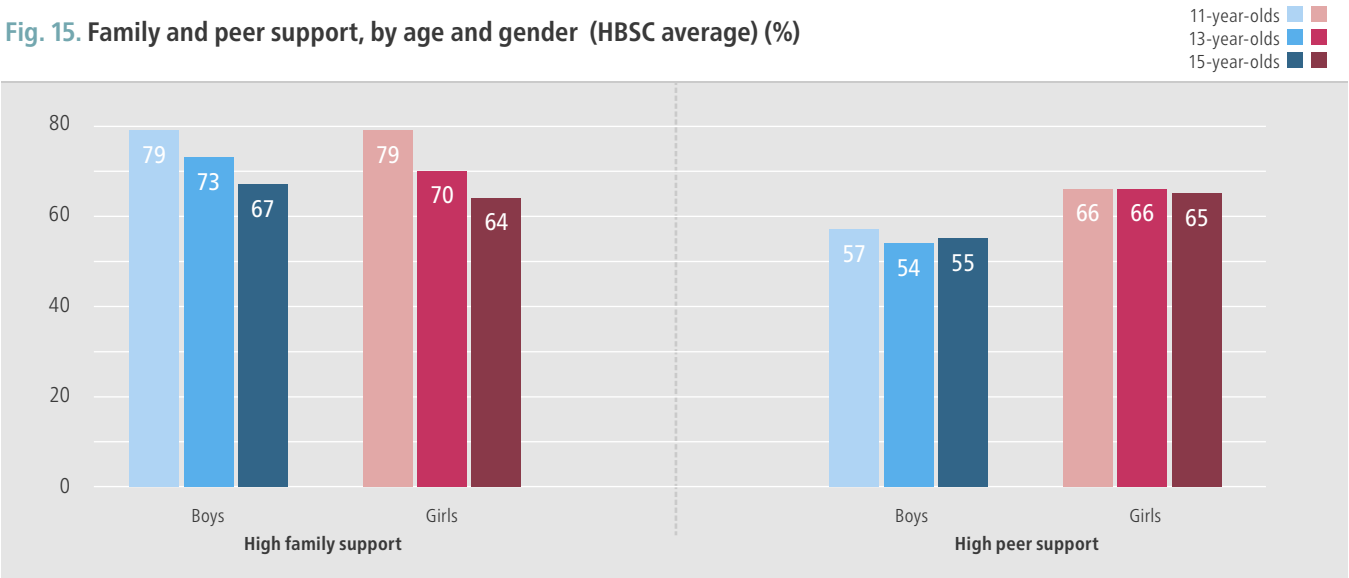
Between 2014 and 2018, there was a small overall increase in ease of communication with mothers for boys of all ages, and ease of communication with fathers for girls of all ages. The increase in the ease of paternal communication was present at country/region level, particularly for younger ages, in up to a third of countries/regions for girls and a fifth for boys. Among boys, the biggest increase was found among 15-year-olds in Denmark (10 percentage points). Among girls, the biggest increases were among 15-year-olds in Albania (15 percentage points) and 13-year-olds in Armenia and Bulgaria (both 14 percentage points). A small number of countries/regions showed increases in the ease of maternal communication, with a few also exhibiting declines across genders. The largest increases were found in France (10 percentage points) among 15-year-old boys and the Russian Federation and Belgium (French) among 11- and 15-year-old girls respectively (6 percentage points). France was notable for showing increases in both maternal and paternal communication across both genders and ages.

FAMILY SUPPORT

Over two thirds of adolescents reported high levels of support from their family (73% of boys and 71% of girls). Wide cross-national variation was observed, with prevalence ranging from 32% among 15-year-old boys in Bulgaria to 94% of 11-year-old girls in Albania. Across most countries, **younger girls and boys were more likely to report high family support** (79% at age 11 versus 66% at age 15). The largest age difference between 11 and 15 years was observed in Poland (29 percentage points for both boys and girls).

Fig. 15 shows social support by age and gender.

Fig. 15. **Family and peer support, by age and gender (HBSC average) (%)**



Significant gender differences were observed in less than half of countries/regions. Boys were more likely to report higher levels of family support in most of these. The gender gap increased with age and was significant in eight countries/regions at age 11, in 15 at age 13 and 19 at age 15. The largest gender difference was found among 15-year-olds in Bulgaria (14 percentage points).

In more than half of countries/regions, adolescent boys and girls from high-affluence families reported higher levels of family support. The largest difference between low and high family affluence was observed in United Kingdom (Scotland) for boys (19 percentage points) and in Greenland for girls (30 percentage points).

Levels of family support have changed since 2014 in around half of the HBSC countries/regions. There was an increase in family support in most of these, but a decrease was observed in some. Consistently large increases were observed among adolescents in Belgium (Flemish) (16 percentage points in both girls and boys) and Luxembourg (17 percentage points in boys and 16 in girls). Bulgaria had an overall decline in family support of 21 percentage points and Czechia had a decline of 17 percentage points.

PEER SUPPORT

More than half of adolescents reported high support from their peers (65% girls and 55% boys). Significant age differences were found in almost half of countries/regions, with most of these showing higher prevalence among 11-year-olds. The biggest differences were found in United Kingdom (Scotland) (17 percentage points among boys and 12 percentage points among girls). Peer support was higher among 15-year-olds in four countries/regions for boys and five for girls. Both boys and girls in Azerbaijan and Switzerland reported higher levels of peer support at age 15.

Overall, girls were more likely to report high levels of peer support. Gender differences remained stable with increasing age. The largest gender differences across all three age groups were found in Finland and Germany, while no gender differences at any age were observed in Albania, Armenia, Kazakhstan and North Macedonia.

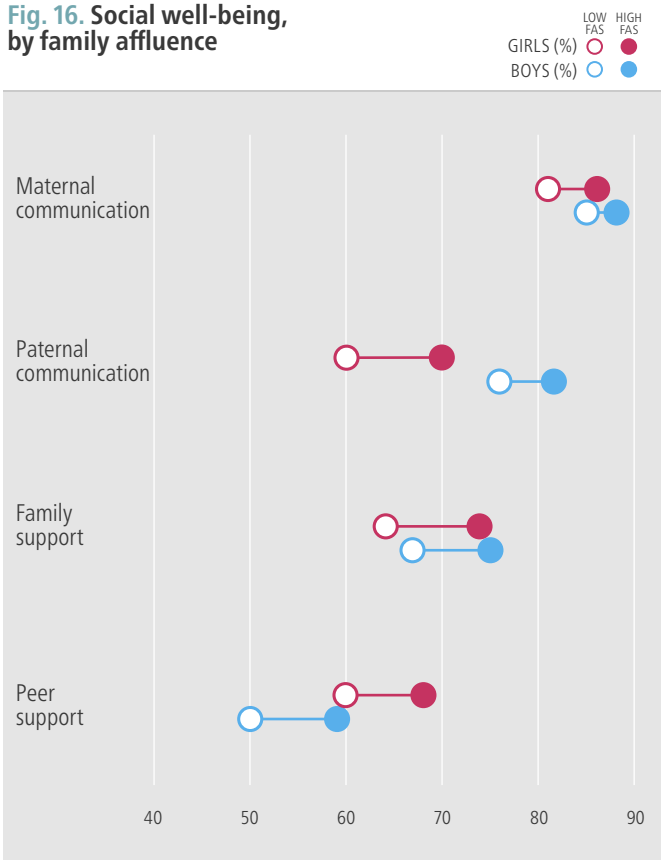
> “It is essential to have a good group of friends we can count on at the most difficult times.

Social inequalities in peer support were found in more than half of countries/regions for both genders. Compared to those from low-affluence families, **adolescents from high-affluence families were more likely to report high levels of peer support** (64% versus 56%). Social inequalities in some countries/regions were particularly high

in only one gender – girls in Greenland, for example, and boys in Malta.

Fig. 16 shows social inequalties in social well-being by family affluence.

Fig. 16. Social well-being, by family affluence



FAS: Family Affluence Scale. *Note*: all ages combined.

Overall levels of peer support have decreased since 2014, from 63% to 60%. Up to a third of countries/regions showed a decline in peer support across all ages and genders, with a minority showing the opposite trend. Bulgaria, Czechia, Poland, the Republic of Moldova and United Kingdom (England) were notable for showing decreases in both genders and across all ages, while Belgium (Flemish) and Spain showed increases in peer support in boys and girls of all ages. The strongest decline in peer support was found in Poland among 15-year-old boys (19 percentage points) and 13-year-old girls (27 percentage points). The highest increases were found among 15-year-old boys in Belgium (Flemish) (21 percentage points) and 15-year-old girls in Spain (13 percentage points).

SUMMARY

Supportive family and peer relationships play a fundamental role in adolescent development, socialization, health and well-being. A high level of perceived family support is related to better mental health and lower levels of risk behaviours. Adolescents who perceive their friends as supportive experience higher levels of psychological well-being and have better social competences and fewer emotional and behavioural problems.

Some improvements in ease of communication with parents have been observed. More than two thirds of adolescents perceived their parents as being highly supportive and easy to talk to, but both these positive aspects of family life decline with increasing age. Boys reported higher levels of parental support and communication, while girls reported higher levels of support from their friends.

Unlike some positive changes in family relationships, the proportion of adolescents who perceive their friends as supportive has declined since 2014. Family and peer relationships were socially patterned, with adolescents from high-affluence families generally reporting better communication with their parents and higher levels of family and peer support.

Compared with 2014, adolescents are more likely to feel pressured by schoolwork and less satisfied with school in around a third of countries/regions.

KEY POINTS

- **School experience worsens with age in most countries/regions; school satisfaction and perceived teacher support decline, while schoolwork pressure increases.**
- **More than half of adolescents report high levels of support from their fellow students and their teachers, but only around a quarter like school a lot.**
- **Gender differences in schoolwork pressure increase with age, with 15-year-old girls reporting higher levels than boys in most countries/regions.**
- **Adolescents from higher-affluence families report more schoolwork pressure but also higher student support in some countries/regions.**

SCHOOL SATISFACTION (LIKING SCHOOL)

Just over a quarter of adolescents (28%) reported liking school a lot. The largest gender differences were found among 11-year-olds, where 43% of girls and 35% of boys reported liking school a lot, with girls having a higher prevalence than boys in 29 countries/regions. Gender differences in most countries/regions were small by age 15; overall, one in five 15-year-olds (22% of girls and 21% of boys) reported that they liked school a lot. Greenland notably was the only country where school satisfaction was higher among boys in all three age groups. The largest gender differences were seen in the Republic of Moldova among 11-year-olds (22 percentage points) and Armenia among all age groups (17 percentage points or more).

School satisfaction declined with age among both boys and girls in almost all countries/regions. Spain and United Kingdom (Wales) had particularly large declines (around 30 percentage points). Hungary and Slovenia were notable for having the opposite pattern, with high school satisfaction being more prevalent at age 15 in both genders.

Wide cross-national variation in school satisfaction was evident within each age group. Prevalence ranged from 5% among 13-year-old boys and girls in Croatia to 87% of 11-year-old girls in Azerbaijan. Consistently high prevalence across all ages was found in Armenia, Azerbaijan, Georgia and North Macedonia. In contrast, Czechia and Estonia had low prevalence across all age groups.

Only a few countries/regions showed significant social inequalities in liking school, and the direction of association varied. The highest levels of inequality were seen in Kazakhstan, where boys from low-affluence families were more likely to say they liked school a lot (27 percentage-point difference).

A significant decline in school satisfaction was observed in around one third of countries/regions between 2014 and 2018. In Albania, Armenia, Iceland, Romania, Sweden and United Kingdom (England), school satisfaction declined significantly among boys and girls in all or almost all age groups. The largest declines, of over 20% in some age/gender groups, were seen in Albania and Romania. By contrast, school satisfaction increased significantly in Belgium (French) among adolescents across all age groups, and in Switzerland among 11- and 13-year-old boys and girls.

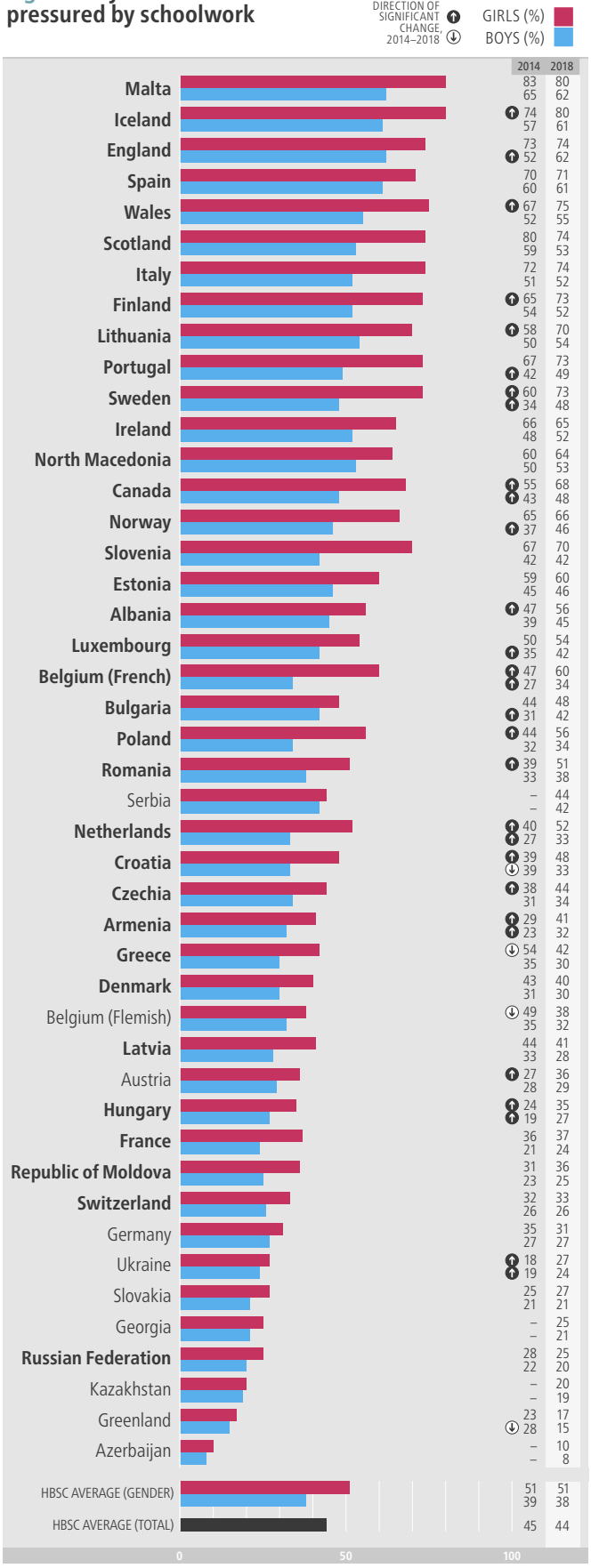
SCHOOLWORK PRESSURE

Overall, over a third (36%) of adolescents reported feeling some or a lot of pressure from schoolwork. Azerbaijan had the lowest prevalence (around 10%) across all age and gender groups. The highest prevalence (80%) was reported by 15-year-old girls in Malta. Iceland, Lithuania and Spain also had particularly high prevalence across all age groups (Fig. 17).

Schoolwork pressure increased with age, from 26% of 11-year-olds to 44% of 15-year-olds. This increase was seen in 41 countries/regions for girls and 34 for boys. The largest age-related changes in schoolwork pressure for boys and girls were found in Sweden (33 and

We're not all good at formal exams.

Fig. 17. 15-year-olds who feel pressured by schoolwork



Note: country/region name in **bold** indicates significant gender difference in 2018 (at $p < 0.05$); significant change between 2014 and 2018 (at $p < 0.05$) is denoted by an arrow indicating direction of change (averages for 2014 and 2018 are not directly comparable and no significances are shown).

52 percentage points, respectively) and United Kingdom (Scotland) (26 and 52 percentage points, respectively). Gender differences also increased with age. At age 11, fewer than a third of countries/regions showed a gender difference, with six having higher prevalence among girls and eight higher prevalence among boys. **At age 15, girls reported a significantly higher prevalence of schoolwork pressure than boys** in 35 countries/regions, with the largest difference in Slovenia (28 percentage points).

Social inequalities in schoolwork pressure were found in 11 countries/regions for boys and 17 for girls. **In general, adolescents from high-affluence families felt more pressured by schoolwork,** with the largest differences for boys (14 percentage points) in Lithuania and for girls (23 percentage points) in Albania. The opposite pattern was observed in Denmark and United Kingdom (Scotland) for boys only.

A significant increase in schoolwork pressure was observed in some countries/regions between 2014 and 2018, with around a third for boys and slightly more for girls (depending on age group). While increases were generally small, the highest increase of 19 percentage points was seen among 13-year-old girls in Poland. A few countries/regions had significant decreases in schoolwork pressure in some age groups, with the Russian Federation showing particularly large decreases (17 percentage points) among boys and girls aged 11 and Greenland demonstrating decreases of more than 10 percentage points among boys and girls at ages 13 and 15.

STUDENT SUPPORT

Around three fifths (59%) of adolescents reported high levels of support from other students at school. Boys (62%) were more likely to report higher student support than girls (56%). Gender differences were greater at ages 13 and 15. Boys showed higher prevalence in 14 countries/regions at age 11, 28 at age 13 and 26 at age 15.

There was wide cross-national variation in perceived student support. For boys, prevalence of high student support ranged from 37% in Greece among 15-year-olds to 85% in North Macedonia among 11-year-olds. Prevalence among girls ranged from 27% of 15-year-olds in United Kingdom (Wales) to 87% of 13-year-olds in Azerbaijan.

Adolescents from high-affluence families were more likely to report high support from their fellow students in around half of countries/regions (17 for boys and 21 for girls). The largest inequalities (an over 12 percentage-point difference between the highest and lowest family-affluence groups) were found in Austria, Estonia, Malta and United Kingdom (England and Scotland) among boys, and in Denmark, Estonia, Luxembourg, Malta, Spain, Sweden and United Kingdom (Scotland) for girls.

TEACHER SUPPORT

Over half of adolescents (56%) reported high levels of support from their teachers. This was higher among younger pupils, with 72% of 11-year-olds reporting high support compared to only 52% by age 13 and less than half (44%) by age 15. Belgium (Flemish) had particularly large age-related declines in teacher support, with high prevalence at age 11 (82%) falling to 42% at age 15.

Gender differences in teacher support changed with age. Significant gender differences were seen in only about a quarter of countries/regions at ages 11 and 13 but were observed in half among 15-year-olds. The direction of the difference also changed. Specifically, girls at age 11 in 13 countries/regions reported a significantly higher prevalence than boys. In contrast, boys were more likely to report high levels of support from their teachers than girls in 16 countries/regions at age 13 and 23 at age 15. At age 15, 48% of boys and 41% of girls reported high teacher support, with the largest gender differences found in Croatia, Finland and Sweden.

There was wide variation in levels of teacher support among countries/regions across all age groups. Prevalence ranged from 21% of 15-year-old girls in Poland to 90% of 11-year-old girls in Greenland. Some countries/regions consistently reported high teacher support across all three age groups: Albania, Azerbaijan, Greenland, Kazakhstan, Norway and Sweden were among the top 10 countries in each age group. By contrast, some central and eastern European countries consistently were ranked poorly (Czechia, Hungary, the Russian Federation, Serbia, Slovakia and Ukraine).

> "Teachers need to be approachable."

There was little evidence of an association between teacher support and family affluence. Significant inequalities were found in seven countries/regions for boys and 11 for girls, but with inconsistent patterns.

SUMMARY

Adolescents who enjoy being in school and experience school as a nurturing and supportive environment are more engaged with school, leading to improved long-term educational outcomes and higher well-being. Research has shown that pupils who like school also have higher overall life satisfaction, lower risk of substance use and better mental health (McCarty et al., 2012; Guo et al., 2014; Joyce & Early, 2014; Vogel et al., 2015). It therefore is concerning to see that the most consistent changes since the last survey are decreases in liking school and increases in feelings of school pressure, with only a few countries/regions showing the opposite trend.

Compared to older students, younger students report liking school more, feel less pressured by school and feel more supported by their teachers. Across the HBSC countries/regions generally, gender differences become stronger and are seen in more countries/regions among older students.

Girls tend to like school more than boys but feel more pressured by schoolwork and report lower levels of support from their fellow students. Gender differences in teacher support show a more complex picture; girls feel more supported by their teachers at age 11 but this pattern reverses by age 15, when boys are more likely to report high teacher support and more countries/regions show a gender difference. Liking school and teacher support showed little pattern by family affluence. On the other hand, adolescents from more affluent families in certain countries/regions were more likely to feel supported by their classmates but also to feel more pressured by their schoolwork.

The life circumstances in which adolescents grow up vary greatly, and large differences are observed at both individual and country/region levels.

KEY POINTS

- **Around three quarters (73%) of young people live with both their mother and father.**
- **One in 20 adolescents have at least one parent who is unemployed.**
- **Young people are more likely to have an unemployed mother than an unemployed father.**
- **Across all countries/regions, 5% of adolescents are first-generation and 14% second-generation immigrants, but there is wide cross-national variation.**

FAMILY STRUCTURE

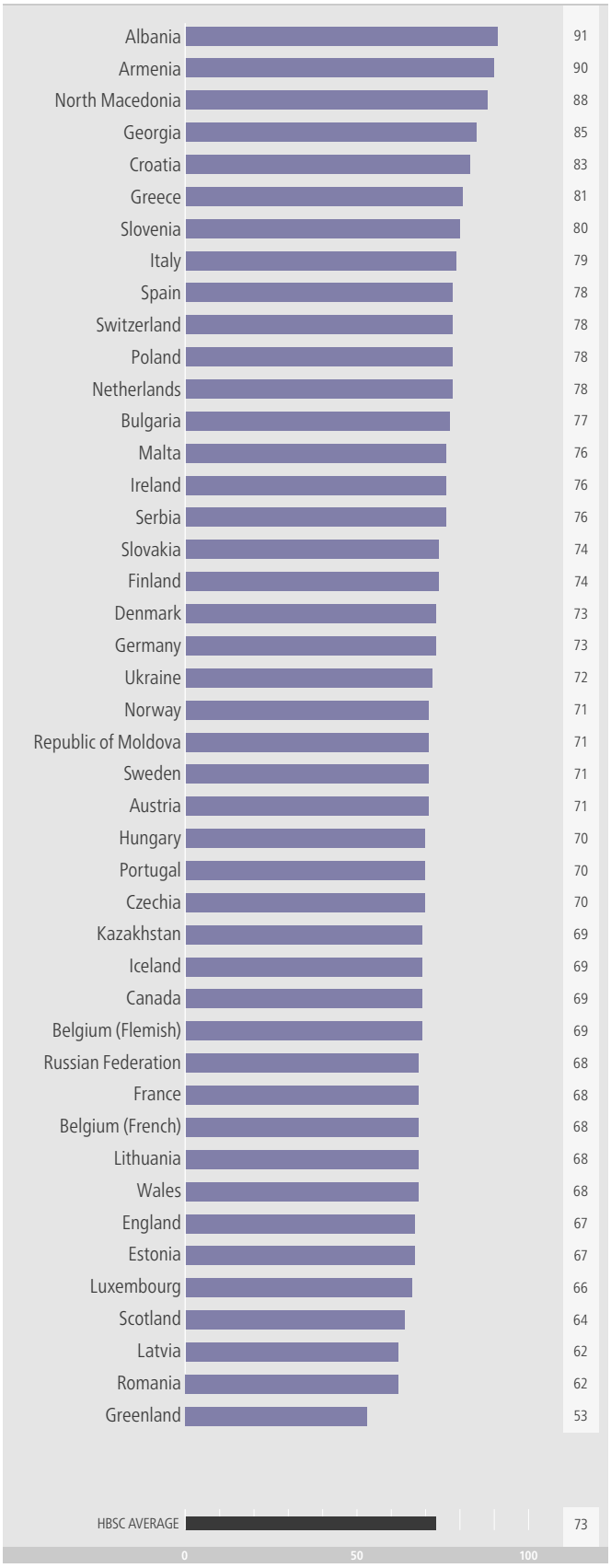
Young people were asked who they lived with in their main home to understand the types of family structures within which young people across the HBSC countries/regions are growing up. Overall, 73% live with both their mother and father, and a further 8% live with two parents, one of whom is a step parent. There was much variability between countries, with more than nine out of 10 young people in Albania and Armenia living with both their parents, compared with just over half in Greenland. One in six young people (17%) live in a single-parent family, ranging from 7% in Albania to over 30% in Romania and United Kingdom (Wales). Most single-parent families are headed by a mother, with rates of single-father families being 5% or less in all countries/regions. Two per cent of adolescents live in other types of household, such as being cared for by extended family or the state (in foster homes, for instance).

Fig. 18 shows the percentage of adolescents living with both parents by country/region.

FAMILY AFFLUENCE

Countries/regions participating in the HBSC survey span a range of economic circumstances, from those classified

Fig. 18. Adolescents living with both parents, by country/region (%)



Note: no data were received from Azerbaijan.

as lower-middle-income countries/regions to some of the richest in Europe. Households with children do not always reflect the national/regional average for wealth; money coming into households is affected by national/regional payments and transfers for families and norms around working outside of the home when children are young. Family economic circumstances differ, and children are not able to give the sort of information traditionally collected about job roles and salary that would give an indication of how rich or poor families may be.

HBSC uses an alternative measure, the Family Affluence Scale (Currie et al., 2008; Torsheim et al., 2016; Elgar et al., 2017), which asks young people about material assets such as family cars, number of foreign holidays, computers, bathrooms and dishwashers in the household, holidays and having a bedroom to oneself. The scale, which enables users to add up how many of these assets a young person has in their home compared with other adolescents in their country/region, has been shown to provide a valid indicator of relative affluence.

A family affluence index, ranging from 0 (poor) to 100 (rich), has been created to compare the average affluence of families among countries/regions (see Volume 2). The HBSC countries/regions vary substantially on the affluence index (as would be expected based on their relative gross domestic product), from Azerbaijan, Kazakhstan and the Republic of Moldova with a family affluence index of less than 40, to Luxembourg, Norway and Switzerland, which have an affluence index of over 75. This means, for example, that adolescents living in the Republic of Moldova have relatively fewer material assets within the home compared with adolescents living in countries such as Norway.

PARENTAL EMPLOYMENT

Data on parental unemployment were available for 44 countries/regions. On average, 95% of adolescents reported that both parents were working or were not looking for a job. **One in 20 adolescents had at least one unemployed parent who was searching for a job.** Adolescents were more likely to live with an unemployed mother (3%) than father (1%). Fewer than one per cent of the adolescents had two unemployed parents (or one parent unemployed but not having/seeing the other parent).

Notable differences in parental employment across countries/regions were observed. Azerbaijan had the lowest percentage of both parents working (84%), followed by Armenia (88%), the Republic of Moldova (90%), Georgia (91%) and Albania (91%). Related to this, the highest percentages of unemployed mothers were found in Azerbaijan (10%), while unemployment of fathers was most common in the Republic of Moldova (5%) followed by Albania, Armenia and Azerbaijan (around 4%).

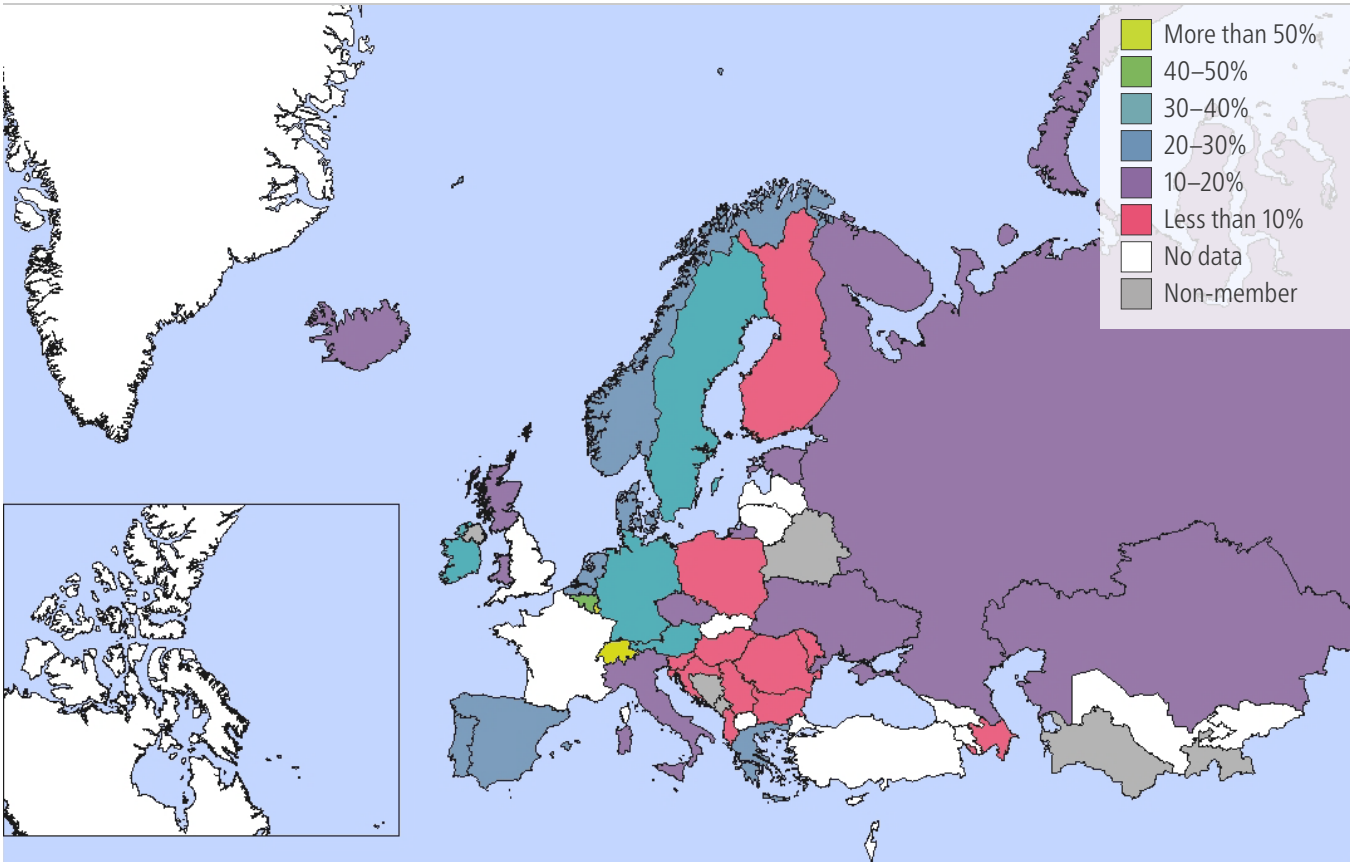
IMMIGRANT STATUS

The 2017/2018 HBSC survey was carried out within the backdrop of the recent waves of immigration across Europe. Data on adolescent immigration status were available from 35 HBSC countries/regions.

Overall, 5% of adolescents were first-generation and 14% were second-generation immigrants. Differences between countries/regions were substantial. **The proportion of immigrants varied from 2% in Poland to 72% in Luxembourg.** For almost half of the countries/regions (mostly in western Europe), over 20% of adolescents had an immigration background. In all but two countries (Albania and Bulgaria), the percentage of second-generation immigrants was larger than that of first-generation adolescents.

Fig. 19 summarizes percentages of immigrants (first- and second-generation) across HBSC member countries and regions.

Fig. 19. Percentages of immigrants (total of first- and second-generation) across HBSC member countries and regions



SUMMARY

The life circumstances in which adolescents grow up vary greatly and large differences are observed at both individual and country/region levels. Most adolescents live with both their mother and father, while one in six live in a single-parent family, mainly headed by a mother.

Although levels of parental employment are high, one in 20 adolescents have a parent who is currently unemployed and looking for work. Considering the scientific evidence showing that parental unemployment has a negative impact on adolescents' health and well-being both at individual (Pförtner et al., 2015; Frasquilho et al., 2016) and national/regional level (Johansson et al., 2019), it is very important to take unemployment into account when considering risk factors for adolescents' well-being.

Immigrant status is another important factor as it has been found to increase the risk for poorer health outcomes, including mental health problems, bullying victimization and risk behaviours (Stevens et al., 2015; Walsh et al., 2016; Barsties et al., 2017; Stevens et al., 2020).

The findings show that one in 20 adolescents are first-generation and over one in seven second-generation immigrants. Although wide cross-national variation is observed, almost half of countries/regions have over a fifth of adolescents with immigrant backgrounds. Considering the large number of immigrants throughout Europe, it is crucially important to understand the experiences of immigrant adolescents, particularly the impact of immigration on young people's health and well-being.

CONCLUSIONS

Daria, aged 10 (Estonia)

Liise, aged 13 (Estonia)

SCIENTIFIC CONCLUSIONS

Despite the social, economic and political pressures facing many European countries/regions during the past decade, the 2017/2018 HBSC survey finds that most adolescents experience positive and supportive social relationships, relatively few health problems, and good overall health and well-being. The results also reflect the salient role of social relationships in shaping inequalities in adolescent health. Positive and supportive social connections in family, school and community settings each contribute to better mental and physical health and fewer risk behaviours.

Several disconcerting trends nevertheless emerge. Since the previous HBSC survey in 2013/2014, fewer adolescents today like school and more experience intense pressure to do well academically. The proliferation of electronic media communication across all aspects of adolescent life has resulted in a subgroup of adolescents (one in 14) who report problematic use of social media. Compared to four years ago, the prevalence of multiple health complaints has increased and overweight and obesity continue to rise in some countries/regions, now affecting one in five adolescents. Levels of physical activity in most countries/regions show little or no improvement, with fewer than one in five adolescents meeting the global physical activity recommendation of at least 60 minutes of MVPA each day. Daily fruit and vegetable consumption improved slightly but is still too low. Further research is needed, but these results point to numerous opportunities for policy intervention.

Adolescence is a formative stage of the life-course in which gender differences in social relationships and several aspects of mental and physical health begin to emerge. These differences become more rigid with age and define health inequalities throughout adult life. The HBSC survey shows a developmental divergence in social and emotional well-being from ages 11–15, with older girls at greatest risk. During the transition from early to mid-adolescence, girls show steeper declines in perceived family support, ease of communication with parents, teacher support and school satisfaction. Girls also show higher levels of intense electronic media communication and problematic social media use. Boys and younger adolescents are more active, less likely to skip breakfast and family meals, and report higher life satisfaction and fewer health complaints than girls and older adolescents, respectively. Boys nevertheless face different risks as they get older. They are more likely to be perpetrators of physical and online violence and to be treated for injuries, while girls are more likely to be victims of cyberbullying.

> Social and emotional well-being decreases as adolescents get older, especially among girls.

Despite sustained policy attention over the past few decades and recent improvements in many countries/regions, a significant minority of adolescents still engage in behaviours such as cigarette-smoking and alcohol misuse that compromise their health. The prevalence of these behaviours increases with age, and they are more common among boys than girls. One in three 15-year-olds have drunk alcohol in the past month – far more than have smoked cigarettes or used cannabis.

These results also show socioeconomic differences in health and in the quality of social networks that support health. The HBSC survey estimates socioeconomic position using a list of material assets in the home and scores these relative to other adolescents in the country/region. Differences in this socioeconomic index are positively related to most health indicators in both genders and in most countries/regions. Adolescents from more affluent families, for instance, benefit from more supportive social relationships at school and home, are more physically active, have better diets and report greater life satisfaction and better health. More affluent adolescents are also more likely to have breakfast and family meals and eat fruit and vegetables each day, and are less likely to be overweight or obese. Exceptions to this socioeconomic pattern are found in reports of school pressure and medically attended injuries, which are higher in more affluent adolescents.

The findings presented in this report show that health inequalities in adolescence are universal and pose concerns in every country/region in the HBSC network. The good news is that the differences in the distribution of health, both between and within countries/regions, offer clues to how policy can be used to improve and equalize health in adolescence. As research on health inequalities shifts toward more explanatory and experimental methods, robust information about adolescents is needed. It is vital that such information includes adolescents' perspectives on

the social conditions that shape and constrain their health and well-being. The HBSC survey remains a unique and invaluable resource in such efforts.

POLICY CONCLUSIONS

Recognition is growing that investing in adolescence yields triple benefits, bringing health, social and economic gains to today's adolescents, tomorrow's adults and future generations. The HBSC study provides important evidence on the state of adolescent health and well-being for informing policy and programming, and highlights priority areas for investment and action. As it is carried out every four years, it allows analyses of trends in and between countries/regions. These trends are of major interest to the public and to policy-makers, as are comparisons with neighbouring countries/regions.

Risk factors for noncommunicable diseases, such as unhealthy eating behaviours, tobacco use, alcohol use and physical inactivity, can be addressed effectively during adolescence. In this way, HBSC drives improvements in making children's and adolescents' lives visible and supports progress towards achieving the United Nations Sustainable Development Goals and recommendations of the WHO Accelerated Action for the Health of Adolescents (AA-HA!) guidance (WHO, 2017a).

The report shows positive changes in adolescent health behaviours since the last survey cycle, which reflect international and national/regional efforts to promote healthy lifestyles. Adolescents are more satisfied with their lives, have healthier food intake, more positive body image, experiment less with alcohol and tobacco and are less involved in bullying others. These positive changes nevertheless are overshadowed by the persistence of gender and social inequalities across many aspects of young people's lives, and overall declines in mental and social well-being and daily physical activity. Adolescents from poorer families shoulder the greatest burden of negative health and well-being outcomes. It is important to mobilize actions to maximize the positive changes while reducing the impact of negative stressors and risk factors. Health improvement programmes need to be implemented with a gendered lens, where possible, particularly for issues such as violence, sexual well-being, mental well-being, eating behaviours, oral hygiene and school experience.

Adolescents from less well-off families experience poorer health and well-being.

Stark differences in health and well-being are revealed when disaggregating data by age, pointing to the importance of early prevention and intervention as well as developmentally informed policy and legal frameworks. Increasing age brings a decline in mental and social well-being, physical activity, healthy eating habits and positive school experience, and an increase in substance use. More support is needed to balance increasing adolescent autonomy, identity formation and social experimentation with protection, capacity, risk and responsibility as individuals transition from early to late adolescence.

Investing in adolescence yields triple benefits, bringing health, social and economic gains to today's adolescents, tomorrow's adults and future generations.

Poor eating behaviours, physical inactivity and the rise in adolescent overweight and obesity indicate that insufficient progress has been made in the implementation of policies and actions. Programmes that target both the environment (such as provision of healthy and nutritious food, safe neighbourhoods, and opportunities for physical activity and sports participation) and critical periods during the life-course are required. Introducing policies that increase the availability, affordability and consumption of healthy foods and which enable the fortification of staple foods could mitigate some of the observed social inequalities.

The marketing of unhealthy foods and sugar-sweetened beverages to children, which is directly linked to overweight and obesity (Sadeghirad et al., 2016), needs to be regulated (WHO, 2012). Over half of the countries/regions do so, but most marketing regulations only apply to children up to the age of 12 or 13 (WHO Regional Office for Europe, 2018a). The current HBSC data suggest that the age limit should be increased, especially in relation to soft-drinks consumption.

Schools remain an ideal setting in which to modify unhealthy eating habits and promote physical activity. This can be

done through provision of school meals that meet healthy nutrition standards, safe drinking-water free of charge, and nutrition and physical education, especially targeting at-risk groups (girls, older adolescents and those from low-affluence families). The decline in daily MVPA since 2014 is deeply worrying. Stronger efforts should therefore be made to support habitual daily physical activity such as active transportation and active play in line with the Toronto Charter (Global Advocacy Council for Physical Activity & International Society for Physical Activity and Health, 2010) and the WHO European physical activity strategy (WHO Regional Office for Europe, 2015).

Poverty can make it hard to create supportive relationships – adolescents from poorer backgrounds experience less social support from family, friends and classmates.

School and home are two of the main social environments in which adolescents grow and learn. Many school-aged children report that they lack supportive environments, especially as they get older. The HBSC data show that economic hardship can hinder the creation of supportive relationships, with adolescents from poorer backgrounds experiencing lower levels of social support from family, friends and classmates. Policies should be developed to promote supportive social relationships by teaching positive parenting skills and increasing opportunities for social interactions in schools and local communities, targeting older adolescents and those from lower social strata.
A significant decline in school satisfaction and an increase in school pressure since 2014 require attention. School policies should aim to facilitate student and family engagement and staff empowerment, improve academic, social and emotional skills, and adopt collaborative teaching methods to foster a positive learning environment and create trusting and caring relationships (Centers for Disease Control and Prevention, 2009).

Digitalization presents an unparalleled opportunity to engage adolescents, who increasingly use digital technology to connect and communicate. As well as encouraging positive health behaviours, however, technology can amplify vulnerabilities and introduce new threats such as problematic social media use and cyberbullying, which disproportionately affect girls. Investment is needed in programmes that contribute to adolescents being informed, responsible and critical users of media, and in those that improve parental involvement and oversight.

Violent behaviours continue to be an important public health concern, especially among boys. Anti-violence programmes should involve adolescents at an early age (when they are most vulnerable to bullying and fighting), strengthen family and parenting skills and reduce risk factors, such as poor academic performance, high absenteeism, school drop-out and unstructured free time. Schools should provide safe, secure and nurturing environments that support children's development and guide them towards values of tolerance and respect, underpinned by strong antibullying and antidiscrimination policies. Targeted actions should be developed with a gendered lens to address the increased likelihood of boys being the perpetrators of violent behaviours and girls being cyberbullied. Injury prevention should be addressed at structural, environmental and community levels to ensure safer play areas, homes, vehicles and roads.

International and national/regional prevention strategies have brought encouraging declines in smoking and drinking among adolescents, but current alcohol and tobacco use remain high among older adolescents. HBSC data suggest that alongside population-level prevention measures, innovative interventions are needed for those adolescents who already exhibit substance-use behaviours. Information campaigns and programmes that teach skills to resist peer and other social pressures to smoke or drink demonstrate promising results, especially peer-led and school-based programmes combined with community-wide efforts (Rosen, 2004). The most effective prevention measures remain more stringent policies on affordability and availability of products, including comprehensive bans on advertising, price increases through taxation, and creation of alcohol- and smoke-free public places that can drive changes in social norms.

Many health problems, such as poor mental well-being, begin to manifest during adolescence. It is imperative that countries/

Technology can have positive benefits but can also amplify vulnerabilities and introduce new threats such as cyberbullying, which disproportionately affect girls.

regions provide adequate policy frameworks and financial investment to support adolescent mental health, ensuring that good-quality assessment mechanisms, guidance for facilitating transition from child to adult mental health services and community services for providing early interventions are in place (WHO Regional Office for Europe, 2018b).

It is important that all countries/regions have adolescent-responsive health systems, with services that are accessible, equitable, acceptable and appropriate, particularly for mental and sexual health (WHO, 2017a). A package of universal initiatives and targeted approaches aimed at supporting the mental well-being of girls, older adolescents and those from lower social strata who are in the higher-risk group should be developed and maintained. Too many countries/regions report that their national school policy does not include adolescent mental health (WHO Regional Office for Europe, 2018b). School health services could encourage positive mental health through programmes on the management of cognitive, socioemotional, behavioural and relationship skills. Access to modern contraceptives should be increased, and confidential reproductive and sexual health services provided by trained professionals.

There should be more focus on oral hygiene, especially among boys, with provision of accessible and affordable preventive and intervention services. Different determinants of health need to be addressed through an integrated approach among relevant sectors and enhanced coordination between key actors at national/regional and local levels.

Schools play an important role in the health and well-being of adolescents. Every school should be a health-promoting school (WHO, 2017b), using a whole-school systems approach to improve physical and social environments, management and organization, teaching, school health services, health promotion and extracurricular activities (Lancet Commission on Adolescent Health and Wellbeing, 2016). Schools should consider the potential of digital technologies for health promotion, combined with peer strategies that are shown to be effective in school settings (Al-sheyab et al., 2012). Under-resourcing and overburdening with duties and expectations nevertheless should be acknowledged when considering policy actions at school level (Carta et al., 2015). Improving the health of adolescents requires action across all sectors and at all levels of society.

Improving the health of adolescents requires action across all sectors and at all levels of society.

In conclusion, countries/regions should ensure that adolescent needs are visible, their engagement in policy and programming reinforced, and investment in their health and well-being maintained. Evidence of substantial cross-national variation in adolescent health suggests that each country/region should develop its own policy package, taking into account their economic, epidemiological and social constraints and cultural sensitivities. The diversity of adolescents should be recognized in terms of age, gender and socioeconomic status, and different strategies applied to reach different subgroups. Comprehensive programmes should be designed to address multiple adolescent needs and contextual constraints using a sustainable, rights-based and evidence-informed approach.

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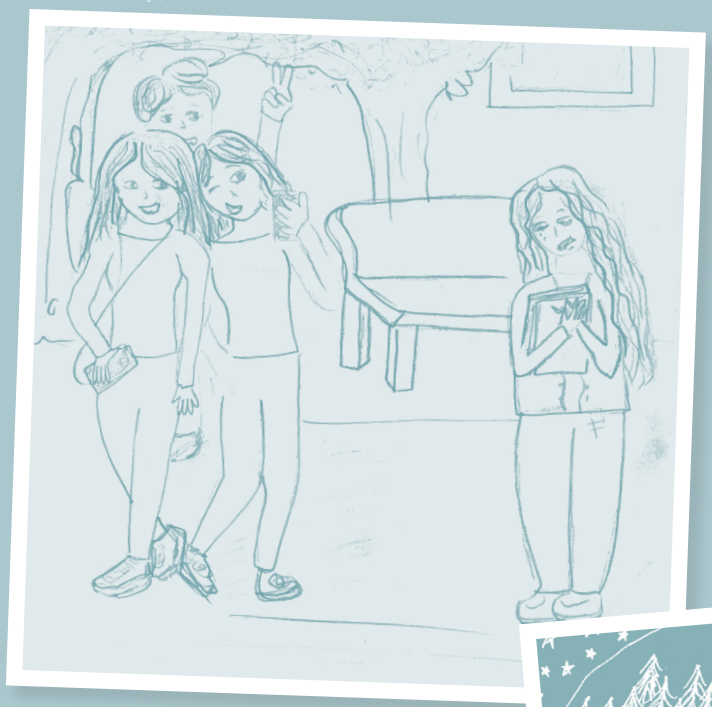

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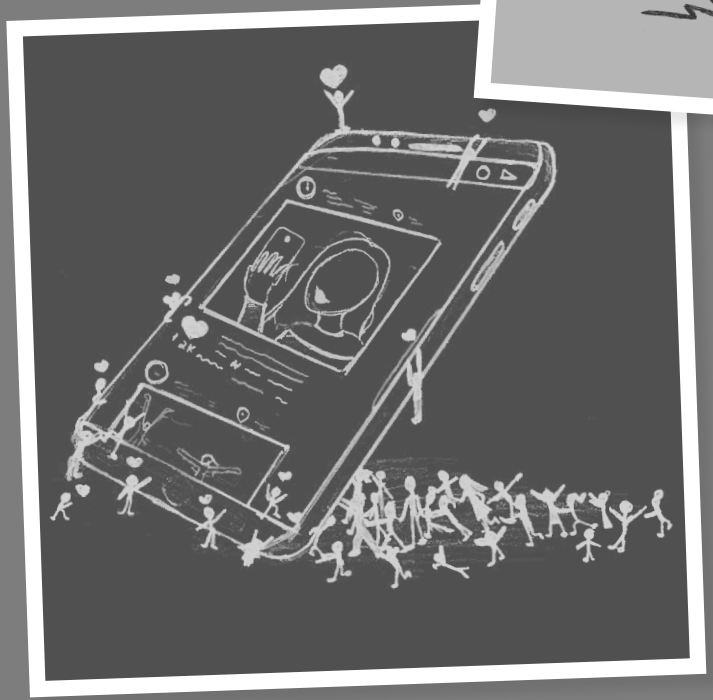
ANNEX. CONTRIBUTORS

Alijona, aged 10 (Estonia)



Leanor, aged 13 (Portugal)

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The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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Spotlight on adolescent health and well-being

Health Behaviour in School-aged Children (HBSC), a WHO collaborative cross-national study, has provided information about the health, well-being, social environment and health behaviour of 11-, 13- and 15-year-old boys and girls for over 30 years. The 2017/2018 survey report presents data from over 220 000 young people in 45 countries and regions in Europe and Canada. The data focus on social context (relations with family, peers, school and online communication), health outcomes (subjective health, mental health, overweight and obesity, and injuries), health behaviours (patterns of eating, physical activity and toothbrushing) and risk behaviours (use of tobacco, alcohol and cannabis, sexual behaviour, fighting and bullying) relevant to young people's health and well-being. New items on electronic media communication and cyberbullying and a revised measure on family meals were introduced to the HBSC survey in 2017/2018 and measures of individual health complaints and underweight are also included for the first time in the international report. Volume 1 of the international report presents key findings from the 2017/2018 survey, and Volume 2 provides key data disaggregated by country/region, age, gender and family affluence.

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