Growing up unequal: gender and socioeconomic differences in young people’s health and well-being

Health Behaviour in School-aged Children (HBSC) study: main findings from the 2013/2014 survey

Key findings
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 latest international report from the study, Growing up unequal: gender and socioeconomic differences in young people’s health and well-being, presents findings from the 2013/2014 survey of 42 countries in Europe and North America. This brief summary highlights the main findings from the survey, which collected data from almost 220 000 young people.

Keywords

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Main findings from the 2013/2014 HBSC survey report

The survey report presents a number of positive findings in relation to children and adolescents’ health and well-being.

- **Life satisfaction is generally high.** Eighty per cent of 11–15-year-olds indicate high life satisfaction, but the proportion decreases slightly with age. Differences between boys and girls appear at 13, with boys having higher levels. Life satisfaction is linked to higher family affluence in almost every country in the survey.

- **Girls and boys’ tobacco and alcohol use has reduced markedly in recent years.** Boys are still more likely to smoke and drink alcohol in most countries, but gender differences are decreasing.

- **Encouraging trends in risk behaviour are seen.** Levels of substance use and fighting have reduced substantially for boys and girls in many countries.

The report nevertheless demonstrates ongoing challenges.

- **Girls have poorer mental health.** By age 15, 20% of girls perceive their health as fair or poor and 50% experience health complaints more than once a week. Differences with boys increase with age.

- **Overweight and obesity is higher among boys, but girls are more likely to think they are too fat.** The proportion of girls who think they are too fat increases from 26% at age 11 to 43% at 15. One quarter of 15-year-old girls are on a diet or doing something else to lose weight.

- **Eating habits worsen with age.** The frequency of breakfast consumption, eating fruit and having family meals decreases between 11 and 15. Only 52% of 15-year-old girls have breakfast every school day and 37% eat fruit daily. For boys, 29% of 15-year-olds eat fruit daily and 22% take soft drinks every day.

- **Levels of physical activity remain very low.** Only 25% of 11-year-olds and 16% of those aged 15 meet current guidelines for physical activity. Girls are less likely to achieve the recommended levels.

Other key findings include the following.

- **Family support and ease of communication with parents decreases with age,** especially for girls. Peers provide a more consistent source of support during the adolescent years.

- **Family and peer relationships are more strongly associated with family affluence than school experience.** This suggests that school has the potential to provide a supportive environment for all young people, irrespective of family background.

- **Family affluence continues to affect young people.** Adolescents from lower-affluence families tend to have poorer health and well-being. Many of the inequalities they face are persistent and may be increasing.
1. The Health Behaviour in School-aged Children (HBSC) study

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 latest international report from the study, *Growing up unequal: gender and socioeconomic differences in young people’s health and well-being*, presents findings from the 2013/2014 survey of 42 countries in Europe and North America. It was prepared by members of the HBSC Research Network and is published by the WHO Regional Office for Europe.

HBSC focuses on understanding young people’s health in their social context – at home, school, and with family and friends. It seeks to understand how these factors influence adolescents’ health as they move into young adulthood. Data are collected in all participating countries and regions through school-based surveys using a standard methodology.

The study analyses data in relation to:
- **age**: reflecting the rapid changes in physical and mental development that occur across the adolescent years;
- **gender**: highlighting differences in reporting of health and well-being between boys and girls; and
- **family affluence**: acknowledging the impact of socioeconomic factors on young people’s health and well-being.

This brief summary highlights the main findings from the international report of the 2013/2014 survey, which collected data from almost 220 000 young people. The focus is on:
- **social context**: relating to family, peers and school
- **health outcomes**: young people’s current levels of health and well-being
- **health behaviours**: activities seen as potentially health-sustaining
- **risk behaviours**: those seen as potentially health-damaging.

2. Social context

2.1 Family

The picture on easy communication with mother is similar to the previous HBSC survey in 2009/2010 and is generally high across all ages. Twenty per cent of 15-year-olds, however, do not find it easy to talk to their mother about things that really bother them, and ease of communication declines with age. No clear gender pattern is seen, although there is a positive link with higher affluence for girls in most countries (less so for boys).

Some improvements in easy communication with father since the previous survey are seen, but it remains lower than for mother (especially among girls). Boys are much more likely to have easy communication with their father, a gender difference that increases with age. Higher family affluence is linked in almost all countries (that is, the higher the family affluence, the easier is communication with father).

Most young people have high levels of family support at 11, but it declines with age (more markedly in girls, although gender differences generally are small). Higher family affluence is
linked to stronger family support in most countries, particularly for girls in Greenland, Israel and Poland.

### 2.2 Peers

Proportions reporting **high peer support** range widely across countries, from 87% among 15-year-old girls in Switzerland to 23% of 13-year-old boys in Greenland. It is higher for girls at all ages and is linked with higher family affluence in most countries.

One in five adolescents **spends time with friends every day after school before 8 pm**. It is more common among boys in most countries and is linked to higher family affluence in around half.

**Daily social media contact with friends** varies widely, involving 63% of girls of 15 in Austria but less than 5% of boys and girls in the Czech Republic. It tends to increase with age (20% at age 11 to 33% at 15), is generally higher among girls of 13 and 15, and is linked to higher affluence in almost all countries.

### 2.3 School

**Liking school** is highest among 11-year-olds. Girls are more positive about school at this age, but the gender difference decreases with age. Family affluence has no consistent impact.

Three quarters of 11-year-olds report their **school performance** positively, but this falls to 60% at age 15, with wide variation across countries at 13 and 15. Girls tend to report better performance, and positive perceptions are higher among those from higher-affluence families.

Perceptions of **school pressure** are highest in boys at age 11, but in girls at 13 and 15. The increase with age is marked, especially for girls (51% at 15 against 22% at 11). Country variations are wide, ranging from 83% of 15-year-old girls in Malta to 9% of boys of 11 in the Netherlands perceiving high school pressure, but links to higher family affluence are seen in less than a third of countries.

There are also wide variations across countries in levels of perceived **classmate support**. It declines with age, especially for girls, and is positively linked to higher affluence in around half of countries.

### 3. Health outcomes

#### 3.1 Subjective health

**Self-rated health** is low among all age groups. It starts low for boys and girls at age 11, but girls are more likely to continue to rate their health as only fair or poor as they grow: by age 15, one in five girls does so (see maps overleaf). Lower family affluence is associated with low self-rated health in most countries.

That said, **life satisfaction** is generally high, and is reported by 80% of 11–15-year-olds. It decreases slightly with age and differences between boys and girls appear at 13, with boys having higher levels. Greater life satisfaction is linked to higher family affluence in every country, except Albania.
The survey asks young people to report how often they experience a range of **health complaints** – stomach ache, backache or feeling low or nervous, for example. There is a marked increase in incidence of these kinds of conditions with age: 27% of 11-year-olds experience them, rising to 39% of those aged 15. Girls are especially prone, again increasing with age. By 15, 50% of girls...
and 27% of boys have multiple health complaints more than once a week. Young people from lower-affluence groups are more susceptible in around two thirds of countries.

### 3.2 Body weight

The survey seeks information about young people’s perceptions of their weight and body image, and whether they are doing anything to reduce their weight.

In relation to weight, overweight and obesity remain stable during adolescence or show a slight decrease with age. It is higher among boys of all ages and tends to be linked with lower family affluence, except in some eastern European countries.

Despite this, perceptions of overweight (body image) increase markedly in girls during this time. Despite less than a fifth of girls being classified as obese or overweight, against a quarter of boys, girls are more likely to think they are too fat. This increases as girls age, growing from 26% at age 11 to 43% at 15. Like overweight and obesity, perceptions of being too fat are associated with lower family affluence in most countries.

There is no gender difference in doing something to reduce weight at age 11, but girls are involved in weight-reduction activity more commonly as they age. By 15, one quarter of girls are on a diet or doing something else to lose weight.

### 3.3 Injuries

Injuries are a leading cause of death among young people across the world. The survey asked adolescents how many times over the last year they had been injured to the extent that they needed to be treated by a doctor or nurse.

On average, half of the boys and two fifths of girls had had at least one treated injury. Boys were more likely to be injured at all ages, as were young people from higher-affluence families: it is possible that these groups are likelier to take part in sports and consequently are more susceptible to sustaining injuries. The survey found large differences between countries, suggesting that country/regional factors might be influential.

### 4. Health behaviours

#### 4.1 Eating

The survey looked at four eating behaviours: breakfast consumption, eating fruit daily, taking soft drinks daily and having an evening meal with at least one parent each day.

Generally, age differences in eating behaviour among adolescents may partly reflect greater independence in food choice as they get older. Social and economic factors also play a role and contribute to differences in eating patterns within and between countries, with young people from lower-affluence families being more likely to report having a poorer diet.

Skipping breakfast continues to be widespread. Taking breakfast daily is less common for girls, those from lower-affluence families and older children: by age 15, only around half of girls report eating breakfast every day on weekdays. Boys do so more frequently. There are wide variations across countries, ranging from 92% of 11-year-old boys in the Netherlands taking breakfast daily to only 34% of 15-year-old girls in Albania.
Rates of **eating fruit daily** are higher among girls, those from higher-affluence families and younger children, but remain well below recommended levels in many countries. Less than half of 11-year-olds and only a third of those at 15 eat fruit daily. Again, large differences between countries suggest the influence of cultural norms and national policies.

While no major change has been seen in eating fruit daily since the previous HBSC survey, **taking soft drinks daily** has reduced, particularly among 15-year-olds. It is especially low in Scandinavian countries, although differences between countries are large. Boys generally report greater consumption at all ages: their soft-drink intakes increase with age in just over half of countries (around a third for girls). It is more commonly associated with lower affluence, but increases among higher-affluence groups in a few eastern European countries.

**Eating an evening meal with at least one parent every day** decreases with age, from around two thirds of 11-year-olds to less than half of those aged 15. There is no real difference between boys and girls, and while it is more commonly associated with higher affluence, the relationship is not consistent. Wide variations are seen across countries, ranging from 88% of 11-year-old girls in Portugal taking an evening meal with at least one parent each day to 13% of 15-year-old girls in Finland and Poland.

### 4.2 Oral health

Poor oral hygiene has a strong link with serious adult illnesses, such as cardiovascular disease, high blood pressure and diabetes. HBSC therefore asks young people how often they brush their teeth (twice-a-day toothbrushing is considered the main method of improving oral health and minimizing the links to serious illnesses).

**Toothbrushing** is higher for girls at all ages, with the differences increasing with age, and is associated in most countries with higher family affluence. Cross-country variations in brushing teeth at least twice a day are large, ranging from 91% of 15-year-old girls in Switzerland to 28% of 15-year-old boys in the Republic of Moldova. The lowest frequency is found in southern and eastern European countries.

### 4.3 Physical activity and sedentary behaviour

HBSC measures physical activity by asking young people to report the number of days over the previous week during which they had been physically active for at least 60 minutes. The standard is defined as activity that increases the heart rate and makes the person get out of breath some of the time: this is termed moderate-to-vigorous physical activity (MVPA). As an indicator of sedentary behaviour, young people are asked how many hours a day in their free time they usually spend watching television, videos (including YouTube or similar services), DVDs and other screen entertainments on weekdays.

The current worldwide guideline for **physical activity** is 60 minutes of MVPA daily. Less than half of adolescents in all countries in the survey meet this recommendation, a finding that is largely unchanged from the previous survey. Physical activity is lower among girls in almost all countries and decreases with age: by 15, only 20% of boys and 10% of girls meet the guideline. Those from higher-affluence families are more likely to do so in most countries.

**Sedentary behaviour**, as measured by TV-viewing, has decreased among 11- and 13-year-olds since the 2009/2010 survey but remains high and increases with age. Half of 11-year-olds and nearly two thirds of 13- and 15-year-olds watch at least two hours of TV every day on weekdays.
TV-viewing is more common among lower-affluence groups in around half of countries, particularly those in northern and central Europe, but the opposite is seen in a few in eastern Europe. Gender differences are generally small and decrease with age.

5. Risk behaviours

5.1 Tobacco use

Smoking behaviours have reduced markedly from the previous survey. The proportion of 15-year-olds who first smoked at age 13 or younger, for example, has fallen from 24% to 17% on average, although variation across countries is large. The average decrease is bigger for girls (from 22% to 13%) than boys (26% to 22%). Weekly smoking has also reduced, from 18% in 2009/2010 to 12% (boys: 19% to 12%; girls: 17% to 11%).

Generally, boys are still more likely to smoke, but gender differences are small and are not present in all countries. The lack of a consistent association with family affluence suggests that smoking behaviour is only partially determined by socioeconomic factors.

5.2 Alcohol use

Like smoking, alcohol use among adolescents has declined considerably since the 2009/2010 survey. Reductions are seen in the proportion of 15-year-olds reporting weekly drinking (from 21% to 13%), with similar declines for boys (25% to 16%) and girls (17% to 9%), and in those who have been drunk at least twice (down from 32% to 22%). Boys are more likely to drink regularly and to have been drunk, but the gender gap has reduced. Weekly drinking and drunkenness are more common among higher-affluence groups in some countries, although this is not a consistent finding.

5.3 Cannabis use

Cannabis use varies widely. While 29% of boys in France, Estonia and Switzerland have tried it at some point in their lives, no girls in Armenia have done so. There appears to have been a small decrease in ever having used cannabis since the previous survey.

Use is higher in boys, but gender differences are small. No consistent picture on association with family affluence emerges: taking cannabis is strongly associated with higher affluence in some countries (such as Denmark and Estonia) but lower affluence in others (Canada and Scotland). Most countries show either no association or a weak one.

5.4 Sexual behaviour

Reports of experiencing sexual intercourse have declined for girls and boys since the previous survey. The rate is down from 29% to 24% for boys and 23% to 17% for girls. Boys are more likely to report having had sex, although girls report it more commonly in England and Wales. The association with family affluence varies, but is strongest for boys from higher-affluence families.

When young people were asked by the survey whether they or their partner had used a condom or birth control pills the last time they had had intercourse, around two thirds reported they had used a condom and over a quarter had used the pill. Boys are more likely to report having used a condom, but no clear gender differences are seen for pill use.
5.5 Fighting

A small reduction in fighting across all age groups since 2009/2010 is seen, continuing the downward trend. It remains more common among boys, but declines with age. The picture in countries varies widely, ranging from 36% of 15-year-old boys in Armenia being in fights over the previous year to only 4% in Greenland.

5.6 Bullying

The survey looked at how frequently young people are bullied, and how often they bully others. Around 12% of boys and 10% of girls had been bullied in the previous year, while 11% of boys and 6% of girls had bullied others. Boys at all ages are more likely to bully and to be bullied, although this reduces with age. There is no change since 2009/2010 in rates of being bullied, but a small reduction in bullying others is seen among 13- and 15-year-olds. Generally, levels of bullying and being bullied vary widely across countries.

Cyberbullying is generally rare, ranging from 1% to 12% of young people experiencing it, with no clear gender pattern across countries.

6. Conclusion and areas for policy action

The HBSC study raises the profile of adolescence as a critical period in the life-course. It is a unique instrument for understanding new challenges to adolescent health and provides a common voice that speaks to the national and international realities of young people’s lives.

Overall, HBSC describes a positive picture of young people’s health and behaviours, but the need to address existing social, age and gender inequities persists. Many of the findings vary markedly across countries, reinforcing the importance of country-level factors and cultural norms to young people’s health and well-being.

HBSC shows that family relationships change during the adolescent years, especially for girls. The protective role of family may diminish while perceived support from friends remains relatively stable.

Increased use of mobile devices and media technology can potentially open the door to increases in online/electronic aggression. Overall, young people report cyberbullying less often than traditional bullying, but this may change in the future.

School has an important influence on young people’s lives. Younger children tend to have more positive experiences, although younger boys are more likely to experience school-related stress. The opposite is seen for older students, where stress is higher among girls.

There is a marked decline in subjective well-being in girls. On average, one in five reports fair or poor health by age 15 and half experience multiple health complaints more than once a week. Body dissatisfaction also increases significantly during this period for girls, despite actual levels of overweight and obesity remaining stable, and 15-year-old girls report the lowest levels of life satisfaction, daily breakfast consumption and physical activity.

Positive behaviours that seem to be influenced by gender include girls being more likely to include fruit and vegetables in their diet and brush their teeth, and boys being more physically
active. But **negative health outcomes and risk behaviours** are also strongly gender-related: boys, for example, are more likely to be injured and take part in physical fights, drink alcohol and smoke tobacco (although the gender gap has been closing in some countries). Despite this, encouraging trends in risk behaviour are seen compared with previous surveys, with substantial reductions in substance use and fighting among boys and girls in many countries.

**Family affluence** continues to affect young people’s health and well-being. Adolescents from lower-affluence families tend to have poorer health, lower life satisfaction, higher levels of obesity and sedentary behaviours, poorer communication with their parents, less social interaction via social media and lower levels of support from friends and family. Many of these inequalities are persistent and may be increasing.

HBSC can support a range of policy actions to improve young people’s health and well-being. These include:

- innovative interventions that make use of new communication technologies to disseminate health-promoting messages, foster healthy and responsible online interactions with peers, and include educational messages about the potentially negative consequences of online activities;
- prevention programmes developed for the specific needs of boys and girls on issues such as fighting, sexual behaviour, subjective health, toothbrushing and school perception;
- access to modern contraceptives and confidential sexual and reproductive health services, especially for boys from lower-affluence backgrounds;
- scaling-up of interventions that focus on preventing young people experimenting with alcohol and policies to restrict their access to tobacco products;
- an approach to addressing obesity and overweight that includes the provision of healthy and nutritious food, safe neighbourhoods, and opportunities for physical activity and sports participation;
- continuation of existing approaches to injury prevention, such as product and environmental modifications to promote children’s safety; and
- policies to support and enhance social relationships among adolescents.

Comprehensive policies to achieve positive health outcomes for adolescents are only possible with the necessary political will. It is also important to ensure young people have a stronger voice and more opportunities for engagement in activities related to their health and well-being.