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ESPAD Report 2024

Results from the European School Survey Project on Alcohol and Other Drugs

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Preface

The primary aim of the European School Survey Project on Alcohol and Other Drugs (ESPAD) is to support the effective formulation and evaluation of substance use policies for young people by providing reliable and comparable information on patterns of substance use and risk behaviours among school students. This latest ESPAD report offers valuable new insights into the experiences and realities of a younger generation, who are in the process of establishing themselves in a rapidly evolving social context. It also highlights shifts in substance use, the growing relevance of digital lifestyles, and associated mental health concerns that may link to behavioural patterns in this young group.

This current report presents the results of the eighth data-collection wave, which took place in 2024, and marks an impressive 30 years of data collection by this long-standing collaboration. More than 113 000 15- to 16-year-old students from 37 countries, including 25 EU Member States, took part. Since 1995, over 800 000 students have contributed, making ESPAD the most extensive harmonised data collection on substance use and risk behaviours in Europe, and the largest cross-national research project on adolescent substance use worldwide. The ESPAD database remains accessible to researchers for independent or collaborative analyses, ensuring broad knowledge sharing.

Over three decades, ESPAD has become a unique and highly valued initiative in the drugs and youth arena, with increasing international relevance. Since 2013, the EMCDDA, and now the European Union Drugs Agency (EUDA), has progressively strengthened its engagement with the project, supporting coordination, national participation, and the production of this report. This collaboration reflects a shared vision: *acting today, anticipating tomorrow* — ensuring that robust data on young people's experiences informs timely policy choices and prepares Europe for the challenges ahead. In this way, ESPAD directly contributes to the EUDA mission: helping to anticipate emerging trends in youth substance use, alert policymakers to new challenges, respond with evidence-based strategies, and learn from long-term data to improve and better target our future prevention efforts. We would also like to highlight the important contribution of the National Research Council of Italy, who have coordinated the ESPAD project since 2016, supporting participating countries and managing database production, analysis and report drafting.

The 2024 ESPAD wave represents a considerable achievement, made possible by extensive and constructive collaboration among diverse European research groups. We extend our deepest gratitude to the national teams, principal investigators, national institutions, schools, students and experts whose dedicated efforts made this data collection possible. Their commitment ensures that policymakers, educators and public health professionals have the robust evidence needed to design effective prevention and intervention strategies. Above all, this report underlines a shared ambition of ESPAD and the EUDA: to increase well-being and resilience among emerging generations, ensuring both evidence-based decisions and enhanced dialogue on how to best support Europe's young people to live healthier and safer lives.

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(*) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Summary

Summary

The main purpose of the European School Survey Project on Alcohol and Other Drugs (ESPAD) is to collect comparable data on substance use and other forms of risk behaviour among 15- to 16-year-old students in order to monitor trends within, as well as between, countries. Between 1995 and 2024, eight waves of data collection were conducted across 49 European countries.

This report presents selected key results deriving from the most recent ESPAD data collection, which was conducted across 37 European countries in 2024. This edition marks 30 years of monitoring adolescent risk behaviours across Europe. The full set of data on which this report is based, including all the additional tables, is available online (https://www.espad.org/espad-report-2024). All tables can be downloaded in Excel format and used for further analysis.

The report provides information on the perceived availability of substances, early onset of substance use and prevalence estimates of substance use (cigarettes and e-cigarettes, alcohol, illicit drugs, inhalants, new psychoactive substances and pharmaceuticals). The descriptive information includes indicators of intensive and high-risk substance use; prevalence estimates of gambling for money, including online gambling, estimates of the proportion of students who gamble and display excessive or problem gambling behaviour; and prevalence estimates of social media use and gaming, including estimates of self-perceived problem use, by both country and gender. ESPAD 2024 also introduces a new focus on mental well-being and prevention activities, recognising the growing importance of these factors in shaping adolescent health outcomes. In addition, overall ESPAD trends between 1995 and 2024 are presented. For selected indicators, ESPAD trends are shown based on data from 32 countries that participated in at least four (including the 2024 data collection) of the eight surveys. Finally, for some indicators, country-specific trends are shown.

For the 2024 ESPAD data collection, 113 882 students took part from 37 countries: Austria, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, the Faroes, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kosovo ([1]), Latvia, Liechtenstein, Lithuania, Malta, Moldova, Monaco, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden and Ukraine. For comparative reasons, the tables in this report contain, in addition to country-specific estimates, the ESPAD average across the 37 countries participating in 2024, calculated as an unweighted mean of national averages, with each country contributing equally to the overall estimate.

Methodology

The ESPAD target population is defined as students who reach the age of 16 years in the calendar year of the survey and who are present in the classroom on the day of the survey. Students who were enrolled in regular, vocational, general or academic studies were included; those who were enrolled in either special schools or special classes for students with learning disorders or severe disabilities were excluded.

A homogeneous and standardised sampling design was used to select the target population in all participating countries except the Faroes, Liechtenstein, Malta, Monaco and Montenegro, where all target students born in 2008 were included.

Data were collected through self-administered questionnaires. While 14 countries continued to use the traditional paper-and-pencil method due to their specific national contexts, 20 countries implemented a web-based questionnaire. In Ukraine, an offline computer-based administration mode was used to cope with unstable internet

([1]) This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

connectivity, while in Kosovo and Latvia a mixed-mode approach was adopted, combining both paper-and-pencil and web-based administration.

The students answered the questionnaires anonymously in the classroom. All samples had national geographical coverage, except for Germany, where only three federal states were included, and a few other countries where specific territorial exclusions were applied due to administrative, political or logistical constraints. Sample sizes varied between 152 in Cyprus and 8 543 in Romania.

Cigarette use

In 2024, cigarettes are perceived as the least easily accessible legal substance, with 55 % of the students in the ESPAD participating countries reporting that it would be 'fairly easy' or 'very easy' (hereafter referred to as 'easy') for them to obtain cigarettes if they wanted to. Students in Denmark were most likely to find them easy to obtain (76 %), followed by students in Germany and Norway (70 %, both). Perceived availability was lowest in Moldova (23 %), followed by Kosovo (32 %). Overall, boys are more likely than girls to perceive cigarettes as easily accessible (61 % for boys versus 50 % for girls).

On average, 15 % of ESPAD students reported first smoking cigarettes at age 13 or younger. The highest proportions were observed in Slovakia (24 %) and Kosovo (23 %), while the lowest were recorded in Iceland (6.4 %) and Malta (7.1 %). In just over half of the countries, early smoking initiation was more common among girls, particularly in Bulgaria (23 % for girls versus 17 % for boys). Among the countries where boys were more likely to start smoking early, Kosovo showed the largest gender gap (31 % for boys versus 16 % for girls).

Cigarette use continues to be widespread among adolescents in ESPAD countries, with nearly one in three students having smoked cigarettes at least once in their lives (32 % on average). The highest prevalence rates were observed in Hungary (51 %) and Slovakia (46 %), while the lowest were in Iceland (13 %) and Malta (16 %). Gender differences showed a slightly higher prevalence among girls (32 % versus 31 % among boys). This trend was evident in more than two-thirds of the countries, with the largest differences in Romania (47 % versus 36 %) and Bulgaria (46 % versus 36 %). However, in some countries, this trend was reversed, notably in Kosovo (47 % among boys versus 36 % among girls) and Georgia (35 % versus 24 %).

Electronic cigarette use

A high percentage of students (60 %) believe that obtaining e-cigarettes is either 'fairly' or 'very easy' if they want to, with large differences between countries, ranging from 33 % in Kosovo to 82 % in Denmark. In 20 countries, this perception was above average. On average, boys and girls reported similar levels of perceived availability.

On average, 16 % of students tried e-cigarettes at the age of 13 or younger, with the highest proportions registered in Estonia (33 %) and Lithuania (31 %), and the lowest in Portugal (5.4 %) and Montenegro (7.4 %). Early e-cigarette use was more common among girls than boys in the majority of countries, with the largest differences observed in Estonia (37 % for girls versus 29 % for boys), Latvia (34 % versus 27 %) and Ireland (18 % versus 12 %). Conversely, in Kosovo boys reported a 12-percentage-point higher prevalence than girls (25 % for boys versus 13 % for girls).

On average, 44 % of the students in ESPAD participating countries reported having used e-cigarettes at least once in their lifetime, with national prevalence ranging from 22 % in Portugal to 57 % in Hungary. In 13 out of 37 ESPAD countries, at least half of the students had tried e-cigarettes, whereas in only six countries (Portugal, Malta, Iceland, North Macedonia, Montenegro and Ireland), had less than one-third of students reported lifetime use.

Overall, girls (46 %) reported a higher lifetime prevalence of e-cigarette use than boys (41 %), with exceptions in Kosovo, Georgia, Moldova, the Faroes, North Macedonia, Ukraine and Portugal. The largest gender differences were found in Liechtenstein and Malta, where the prevalence among girls exceeded that of boys by 13 percentage points, and in Kosovo, where, conversely, boys report a 12-percentage-point

higher prevalence than girls (51 % among boys versus 39 % among girls).

Alcohol use

Alcoholic beverages are perceived to be easy to obtain compared with other substances, with 75 % of ESPAD students stating that they would find it easy to obtain an alcoholic beverage if they wanted to. This perception was highest in Denmark and Germany (94 %, both), followed by Greece (92 %), while the lowest proportions were reported in Kosovo (42 %) and Iceland (54 %). Overall, girls tended to perceive alcohol as easier to obtain than boys did (77 % for girls versus 73 % for boys), particularly in Lithuania (64 % versus 51 %), Cyprus (78 % versus 66 %) and Latvia (74 % versus 62 %).

On average, 33 % of ESPAD students reported having had their first alcoholic drink at age 13 or younger, while 8 % stated they experienced drunkenness at the same age. The highest rates of early drinking were reported in Georgia (64 %) and Moldova (49 %), while the lowest were recorded in Iceland (12 %), Kosovo and Norway (14 %). Similarly, early-age drunkenness was most prevalent in Georgia (25 %) and Bulgaria (14 %), and least common in Kosovo (3.0 %), France and Portugal (3.6 %, both) and the Faroes (3.9 %).

Boys reported slightly higher rates than girls, both for drinking alcohol (34 % versus 33 %) and getting drunk (8.2 % versus 7.8 %). However, with regard to alcohol consumption at age 13 or earlier, in some countries the gap widened, showing higher rates for boys, such as in North Macedonia (35 % versus 22 %), Montenegro (47 % versus 36 %) and Serbia (49 % versus 37 %). Conversely, in Latvia and Lithuania, it was girls who reported the highest proportions of early alcohol use (46 % versus 35 % and 35 % versus 26 %, respectively). With regard to drunkenness at an early age, gender differences also emerged at the national level. Notably, in Georgia, boys showed a higher prevalence than girls (30 % versus 20 %). By contrast, the pattern was reversed in Czechia (14 % among girls versus 7.6 % among boys) and Estonia (14 % versus 9.3 %).

Lifetime alcohol consumption was reported by 73 % of adolescents in ESPAD countries. The highest prevalence rates were observed in Hungary (91 %) and Denmark (90 %), while the lowest were recorded in Kosovo (29 %) and Iceland (41 %). Gender differences indicated a slightly higher prevalence among girls (74 %) than boys (72 %), a trend observed in more than half of the countries. The most pronounced gender differences were found in Iceland (48 % among girls versus 34 % among boys), Latvia (84 % versus 73 %) and Lithuania, Malta and Monaco, each showing a 10-percentage-point gap. However, in some countries, the trend was reversed, most notably in Kosovo (37 % among boys versus 23 % among girls).

Alcohol intoxication on at least one occasion in the last 30 days was reported by 13 % of all ESPAD students, with the highest rates observed in Denmark (36 %), Austria (24 %) and Hungary (22 %), and the lowest in Kosovo (4.9 %). Overall, the percentages were equal between genders. However, at the national level, girls more often reported higher rates of drunkenness than boys, with the widest gap observed in Cyprus (12 % for girls versus 4.4 % for boys).

A key measure of heavy drinking is binge drinking, defined as the intake of five or more drinks on a single occasion in the last 30 days. On average, the prevalence across ESPAD countries stood at 31 %, with higher proportions reported in Denmark (55 %), Germany (49 %) and Austria (48 %), and the lowest in Iceland (8.9 %). Boys and girls showed similar rates for this pattern on average. However, at the national level, notable gender differences emerged: boys reported higher prevalence rates in Montenegro (27 % versus 18 %) and Liechtenstein (41 % versus 35 %), whereas girls reported higher rates in Malta (34 % versus 25 %).

Illicit drug use

Cannabis was perceived to be the easiest illicit substance to obtain, with around one fourth of ESPAD students (26 %) rating cannabis as easily available. The highest perceived availability rates of cannabis were reported by students in Denmark, Germany, Slovenia (41 %, each) and Norway (40 %), while the lowest ratings were reported in Moldova (5.3 %), Ukraine (7.1 %), the Faroes (11 %), Kosovo

and Georgia (12 %, both). Boys were more likely than girls to consider cannabis to be easily available (ESPAD average: 28 % for boys versus 24 % for girls).

Compared with cannabis, perceived availability was low for cocaine (13 %), ecstasy/MDMA (11 %), amphetamine (9.0 %), crack and methamphetamine (8.0 %, both). Norway reported a higher percentage of students perceiving substances to be easily available, with the highest rates recorded for cocaine (28 %), ecstasy/MDMA (25 %) and amphetamine (19 %). Slovenia reported the highest rate of students perceiving crack as easily available (13 %) among the 16 countries that collected this information. High rates of perceived availability were also found for both amphetamine (18 %) and methamphetamine (15 %) in Montenegro. In contrast, perceived availability of other illicit drugs remained low in Georgia, Moldova and the Faroes, generally ranging between 1.8 % and 3.6 %.

Perceived availability of substances was generally higher among boys than girls, with the exception of cocaine, which was reported as more easily accessible by girls (13 %) than boys (12 %) on average. For each substance, the average gender difference remained below 1.5 percentage points. However, gender disparity patterns vary across countries and substances. In some countries, such as Liechtenstein and Monaco, boys reported higher perceived availability of illicit substances, while in others, including Cyprus, Slovakia, Bulgaria and Malta, girls reported a higher perceived availability than boys.

On average, 2.4 % of ESPAD students reported having used cannabis for the first time at age 13 or younger. The highest proportions were found in Ukraine (4.9 %) and Czechia (4.1 %), while the lowest was in Moldova (0.7 %). Early cannabis use was generally more common among boys than girls, except in Cyprus, Czechia, Malta, Slovenia, Austria, Slovakia, Latvia, Germany and Liechtenstein. The rate of cocaine/crack use at age 13 or younger stood at 0.9 % on average among the 17 countries that collected this information in 2024, with the highest prevalence recorded in Ukraine (4.0 %). Overall, boys (1.2 %) were more likely to start early than girls (0.5 %), although the average difference remained under 1 percentage point. Similar patterns emerge for amphetamine/methamphetamine and ecstasy/MDMA, with Ukraine reporting the highest rates (3.3 % and 3.7 %, respectively) and Kosovo showing the next highest prevalence (1.4 % for both).

The average prevalence of lifetime use of illicit drugs was 13 %, with considerable variation across ESPAD countries. It should be noted that this mainly relates to cannabis use (average lifetime prevalence of 12 %), with an average lifetime prevalence of any illicit drug use other than cannabis considerably lower, standing at 5 %. The highest proportions of students reporting lifetime use of any illicit drug were found in Liechtenstein (25 %) and Czechia (24 %), and the lowest in Georgia and Moldova (both 3.9 %). Regarding illicit drug use other than cannabis, rates varied from 1.7 % in Georgia to 9.9 % in Cyprus, with relatively high prevalence rates also reported in Iceland (7.9 %) and Montenegro (7.6 %).

Overall, only a small gender disparity was observed, with 14 % of boys and 12 % of girls reporting lifetime use of illicit drugs. A relatively large 8-percentage-point difference was observed between boys and girls in Ukraine. Malta stood out, where lifetime prevalence among girls exceeded that of boys by 6 percentage points (15 % versus 9.3 %).

Cannabis was the most widely used illicit drug in all ESPAD countries. On average, 12 % of students had used cannabis at least once in their lifetime. The countries with the highest prevalence of cannabis use were Czechia (24 %) and Liechtenstein (23 %), while the lowest levels of cannabis use were reported in Moldova (2.5 %) and Georgia (3.3 %). Although the overall gender gap has decreased over time, boys continued to report higher cannabis use than girls on average (13 % versus 11 %). This trend was evident in most countries, particularly in Ukraine (15 % versus 6.7 %) and Montenegro (13 % versus 6.8 %). However, Malta stood out as an exception, where cannabis use was more prevalent among girls (14 %) than boys (8.6 %).

To estimate the risk of cannabis-related problems, a core module, the CAST (Cannabis Abuse Screening Test) scale, was included in the ESPAD questionnaire. The prevalence of high-risk cannabis users (see the methodology section for a definition) ranged from below 1 % in Moldova and Georgia, to

a maximum of 5.9 % in Czechia and Slovenia. Only a few ESPAD countries reported sizeable gender differences in high-risk cannabis use, and in all cases, boys showed higher figures, except in Malta, where the prevalence was slightly higher among girls (4.4 % versus 2.6 %).

Other substance use

The ESPAD survey also gathered data on other substances, including new psychoactive substances (NPS), synthetic drugs designed to mimic the effects of traditional controlled substances while avoiding legal restrictions; pharmaceuticals, including tranquillisers or sedatives, used without a doctor's prescription; painkillers, used to get high; attention/hyperactivity medication, used without a doctor's prescription, as well as anabolic steroids; inhalants; and, for the first time, nitrous oxide.

On average, the lifetime prevalence of use of new psychoactive substances was about 3 %, with the highest rates observed in Poland (6.4 %) and Slovenia (6.0 %), and the lowest in the Netherlands, Liechtenstein, the Faroes and Moldova (below 1.0 %). The average prevalence of lifetime use was higher among boys than girls (2.8 % versus 2.6 %), although gender differences varied between countries. In 13 countries, girls reported a higher lifetime prevalence of NPS use in 2024. The largest gaps in favour of girls were observed in Cyprus (6.6 % for girls versus 2.9 % for boys) and Slovakia (6.4 % versus 4.3 %), while in Ukraine, boys reported higher lifetime use than girls (3.6 % versus 2 %).

With regard to specific substances, 3.5 % of ESPAD students (average calculated across 23 out of 37 countries) reported having used synthetic cannabinoids at least once in their lifetime, ranging from 0.7 % in Georgia to 16 % in Slovakia (where semi-synthetic cannabinoids such as HHC were included by students among synthetic cannabinoids). Similarly, 1.1 % of students reported lifetime use of synthetic cathinones (average calculated across 14 out of 37 countries), with the highest figures found in Hungary (3.7 %). The lifetime use of synthetic opioids varied between 0.6 % in Georgia, Ireland and Portugal, to 2.2 % in Estonia, with an average prevalence of 1.1 % (based on data from 15 out of 37 countries).

On average, boys had a slightly higher prevalence of use than girls of all three of the classes of new synthetic substances included in the survey. The only exceptions were found in Cyprus, where girls reported a higher prevalence of synthetic cannabinoid use (9.1 % among girls versus 4.3 % among boys), Malta (4.7 % versus 2.4 %), Latvia (2.9 % versus 2.6 %) and Portugal (2.1 % versus 1.7 %). In addition, in Hungary, girls reported higher lifetime use of both synthetic cannabinoids (7.9 % versus 5.6 % among boys) and synthetic cathinones (4.3 % versus 2.9 %).

Lifetime use of inhalants was reported by 6.4 % of the students, with large differences between countries. The countries with the highest proportions of students who had tried inhalants were Sweden (17 %) and Liechtenstein (16 %). The lowest rates were found in Kosovo (1.3 %) and North Macedonia (2.1 %). In 2024, inhalant use was higher among girls on average (6.7 % among boys versus 7.9 % among girls) and exceeded that of boys in 25 out of 37 ESPAD countries.

For the first time, nitrous oxide use has been included in the ESPAD survey, with students in 18 countries reporting an average lifetime use of 3.1 %. The highest prevalence rates were recorded in Bulgaria (9.4 %) and Liechtenstein (7.2 %), with both countries showing higher figures for girls than boys.

Approximately 2.2 % of ESPAD students reported first using inhalants at age 13 or younger, with notable differences between countries. Early onset of inhalant use ranged from less than 1 % of students in Portugal (0.3 %) and Italy (0.4 %), to 5.9 % in Germany and 5.0 % in Slovenia.

The prevalence of lifetime use of pharmaceuticals for non-medical purposes averaged 14 % in ESPAD countries, with higher rates among girls (16 %) than boys (11 %). The highest prevalence was observed in Lithuania (29 % overall, 36 % among girls).

The most commonly used category of pharmaceuticals was non-prescribed tranquillisers and sedatives (8.5 %), followed by painkillers to get high, reported by 6.9 % of students on average. Overall, 3.4 % of students reported the use of attention/hyperactivity drugs, which were included in the 2024 ESPAD survey for the first time in a

subsample of 18 countries. Across all pharmaceutical categories, use was generally higher among girls, except in Bulgaria, where boys reported higher use across all types of medicines; the Faroes and Ireland for tranquillisers and sedatives; Cyprus, Bulgaria, Greece, Italy, Ukraine, Georgia, Norway and Spain for painkillers; and Denmark and Kosovo for attention/hyperactivity drugs.

On average, 19 % of students perceived non-prescribed tranquillisers and sedatives as fairly or very easy to obtain, with the highest perceived availability recorded in Poland (49 %), Denmark (39 %) and Czechia (38 %). The countries reporting the lowest perceived availability of pharmaceuticals were Moldova (3.4 %) and Ukraine (5.9 %). Girls in all countries were more likely to perceive tranquillisers and sedatives as easily available, except for Monaco, North Macedonia, Moldova and Latvia, where boys reported higher perceived availability.

A relatively small number of students across ESPAD countries reported the use of anabolic steroids, with an average of 1.5 %. The highest proportion was recorded in Cyprus (4.2 %), followed by Poland (3.3 %) and Ukraine (2.8 %). Overall, boys were more likely than girls to have tried anabolic steroids.

Gambling, land-based and online

On average, 23 % of ESPAD students reported having gambled for money in the last 12 months, either in person or online, through games of chance, such as slot machines, card or dice games, lotteries, or betting on sports or animal races. Italy had the highest prevalence of gambling among students (45 %), followed by Iceland (41 %) and Greece (36 %), while the lowest rate was observed in Georgia (9.5 %).

Boys reported notably higher gambling participation than girls, both on average (29 % versus 16 %) and in most countries. The only exception was Iceland, where the prevalence was nearly equal, with 42 % of boys and 41 % of girls having gambled in the last 12 months.

Among ESPAD students who reported gambling for money in the last 12 months, the vast majority (85 %) chose to gamble in physical locations, such as bars and clubs. This proportion ranged from 68 % in Sweden to 98 % in Italy and 97 % in Cyprus. Although the prevalence of land-based gambling among boys was almost double that among girls (25 % versus 14 %), the proportion who gambled in physical locations was slightly higher among girls (86 %) than boys (84 %) on average, with only modest gender differences observed in most countries.

Roughly two out of three (65 %) ESPAD students who reported having gambled for money in the last 12 months did it through online platforms, either exclusively or in combination with physical locations. The highest proportions were observed in Sweden (81 %), Slovenia (77 %), Kosovo (76 %), Iceland (75 %), Montenegro (75 %), Bulgaria and Slovakia (74 %, both), while the lowest proportions were found in Italy (28 %) and Spain (44 %).

The prevalence of online gambling engagement among boys (20 %) was more than double that among girls (8.7 %). Even among students reporting gambling for money in the last 12 months, the proportion of those choosing the online channel was higher among boys (70 %) than among girls (54 %). Unlike land-based gambling, great variability was observed in gender differences across countries: the highest was observed in Portugal (80 % among boys versus 43 % among girls), while no or very small gender differences were found in North Macedonia, Kosovo, Moldova, Iceland, Spain, Germany and Liechtenstein.

The 2024 ESPAD survey also assessed the presence of a possible harmful gambling behaviour through the Lie/Bet screening instrument, applied to students who reported gambling engagement in the last 12 months. The proportion of student gamblers exhibiting potential harmful gambling behaviour ranged from less than 5 % in Liechtenstein, Czechia, the Faroes and Monaco, to a maximum of 22 % in Kosovo. While on average and in the vast majority of countries, the proportion of student gamblers with a possible harmful behaviour was highest among boys (11 % versus 4.6 % among girls), this was not the case in Malta (3.7 % among boys versus 7.1 % among girls) and Cyprus (5.0 % versus 8.3 %).

Gaming and social media

Overall, 80 % of ESPAD students reported having played digital games at least once in the last month. About 70 % played on a typical school day within the last 30 days, while 77 % played on a non-school day. The countries reporting the lowest prevalence rates of gaming in the last month were Kosovo (59 %) and Moldova (66 %), while the highest rates were reported in Liechtenstein (95 %) and Germany (91 %).

Boys were more likely to engage in gaming than girls (89 % versus 71 %), reflecting a consistent gender gap in gaming engagement across countries. This gap was particularly wide in Greece and Iceland, ranging from 33 to 35 percentage points, while it was minimal or absent in Cyprus, Ukraine and Bulgaria (0 to 5 percentage points).

Within the last 30 days, 17 % of all ESPAD students reported an average 4 or more hours of game time on a typical school day and 32 % on a typical non-school day, with rates among boys twice those among girls in both cases.

ESPAD also assessed the self-perceived risk associated with gaming and social media use through a three-item scale developed by Holstein and colleagues in 2014. In 2024, 22 % of ESPAD students reported a high level of risk related to gaming. The lowest proportions were observed in Czechia (12 %), Denmark (13 %), Austria and Finland (14 %), while the highest were found in Cyprus (37 %), Lithuania and the Netherlands (31 %, both).

Overall, boys (30 %) were more than twice as likely as girls (13 %) to score positively on the perceived gaming risk scale. The largest gender differences were observed in Portugal and Germany, where boys outscore girls by 25–26 percentage points. In contrast, the gap was reversed in the Netherlands, where girls scored 7 percentage points higher than boys.

Regarding social media use, nearly half of the students (47 %) scored 2–3 points on the perceived social media use risk scale. The highest prevalence rates were found in Austria (58 %), Liechtenstein (57 %) and Germany (56 %), while the lowest were recorded in Czechia (29 %), Hungary and Poland (32 %, both).

Girls (53 %) were more likely than boys (42 %) to score positively on the perceived social media use risk scale. In this case, the gender differences fell within a narrower range, from 3 to 17 percentage points, consistently in favour of girls. The largest gaps were observed in the Faroes, Liechtenstein and Slovakia (17 %, each).

Mental well-being

In the aftermath of the COVID-19 pandemic and amid ongoing conflicts in Europe and the Middle East, ESPAD has strengthened its focus on adolescent mental well-being. The persistent effects of social isolation, educational disruptions and socio-economic instability have heightened concerns regarding youth mental health.

To systematically assess and monitor this issue, the 2024 ESPAD survey included for the first time the WHO-5 Well-being Index, a validated measure of mental state based on recent life experiences. A score above 50 out of 100 is considered indicative of good mental well-being.

On average, 59 % of students reported having a good mental well-being. Regionally, the highest rates of well-being were found in northern Europe, with the Faroes (77 %), Iceland (75 %) and Denmark (72 %) showing the highest prevalence. The country with the lowest rate of self-reported well-being was Ukraine (43 %), where, since 2022, adolescents have been exposed to traumatic events and limited access to mental health care, followed by Czechia (46 %), Hungary (47 %), Cyprus and Poland (49 %, both).

Mental well-being tended to be generally higher among boys than girls, both on average (69 % versus 49 %) and across all ESPAD countries. The largest gender differences were observed in Italy (66 % for boys versus 35 % for girls), Poland (64 % versus 33 %) and Sweden (78 % versus 48 %). The smallest gender gaps were found in Cyprus (52 % for boys versus 46 % for girls), Ukraine (48 % versus 39 %), the Faroes (83 % versus 72 %) and Georgia (75 % versus 62 %).

Prevention activities

Around 72 % of ESPAD students reported having participated in at least one prevention intervention in the two years preceding the survey. These interventions ranged from awareness events to skills-based programmes. The 2024 survey is the first ESPAD data collection to include information on participation in prevention programmes, providing new insights into youth engagement in such initiatives. It is important to stress that not all prevention interventions are evidence-based.

More than half of the students (56 %) reported having attended awareness or information events on licit and illicit substances or risk behaviours. Participation rates were highest in Slovakia (77 %) and Hungary (74 %), while the lowest were in Kosovo (31 %) and Montenegro (38 %).

Alcohol was the most frequently addressed topic, with 49 % of students reporting participation in related information events. At the national level, percentages were highest in Slovakia (70 %) and Croatia (67 %), while the lowest was recorded in Kosovo (18 %). Tobacco-related events were the second most frequently reported, attended by 38 % of students. The highest attendance rates were observed in Slovakia and Hungary (59 %, both), while the lowest were in Cyprus (22 %) and Georgia (23 %).

Only 31 % of ESPAD students, on average, reported having attended awareness or information events on illicit substances. Participation rates were highest in Slovakia (60 %) and Iceland (56 %), and lowest in Kosovo (10 %), Georgia and Sweden (11 %, both). The least frequently addressed topics were non-substance-related risk behaviours, such as gambling, gaming or internet disorders, with an average of 28 % of ESPAD students reporting participation. The highest participation rate was recorded in Iceland and Slovenia (48 %, both), while Kosovo showed the lowest (9.4 %).

Participation in substance-related awareness or information events was more frequently reported by girls. However, for events related to gambling, gaming and internet disorders, boys (30 %) reported higher involvement than girls (24 %).

Regarding interactive training activities, a key component of prevention efforts, 55 % of ESPAD students reported participating in interventions focused on developing social skills, personal skills or media literacy. At the national level, participation ranged from 36 % in Sweden and 35 % in the Faroes, to 71 % in Malta and Spain and 72 % in Finland.

The most frequently reported type of training focused on social skills, 41 % on average, aiming to enhance interaction and communication with others (e.g. expressing feelings, empathy and dealing with peer pressure). Finland recorded the highest participation rate (64 %), while Sweden showed the lowest (25 %).

A similar proportion of students (40 %) reported participating in media literacy training, which focuses on critically analysing advertisements and media content to recognise intended messages and reduce susceptibility to manipulation. These training activities were most prevalent in Finland (60 %) and Denmark (59 %), and least common in Kosovo (20 %).

The least widespread type of training focuses on improving personal skills, generally equipping students with strategies to cope with challenging life situations in a healthy way, reported by just over one-third of ESPAD students (36 %). Participation rates were highest in Lithuania (56 %) and Malta (55 %), and lowest in the Faroes (23 %) and Sweden (24 %).

Overall, the gender gap in participation was more pronounced for these interventions, with 60 % of girls reporting involvement compared to 51 % of boys. This pattern remained consistent across all types of training.

While awareness or information events tended to be more concentrated in eastern Europe, skills-based prevention initiatives, deemed to have a higher potential for effectiveness compared to awareness or information events, were more prevalent in western and southern Europe.

Introduction

Introduction

The European School Survey Project on Alcohol and Other Drugs (ESPAD) is a cross-sectional study on substance use and other forms of risk behaviours among European students aged 15 to 16, typically conducted every four years. In this wave, data collection was postponed by one year to align with the WHO Health Behaviour in School-aged Children (HBSC) study, enabling biennial monitoring data for adolescents across Europe.

ESPAD is an independent project managed by national institutions and researchers, coordinated since 2016 by the Italian National Research Council (CNR-IFC), and supported by the European Union Drugs Agency (EUDA). It was first conducted in 1995, with an increasing number of participating countries reaching an all-time high of 37 countries in 2024, with the participation of 113 882 students, marking 30 years of collaborative work.

Adolescent substance use and other risk behaviours are rapidly evolving phenomena requiring reliable, continuous and comparable monitoring over time. ESPAD aims to provide the best available evidence to inform policy and targeted actions for adolescents, addressing future challenges. Protecting the physical and mental health and well-being of young people and reducing negative impacts associated with psychoactive substance use and risk behaviours are priority policy objectives at both national and international levels.

ESPAD's primary objective is collecting comparable data on substance use and risk behaviours (such as gambling, social media use and gaming) among students aged 15 to 16. The target group consists of students who turn 16 in the year of data collection; in 2024, this included students born in 2008. Data collection occurs simultaneously in schools across participating countries using a standardised methodology described in detail in the ESPAD 2024 methodological report.

The ESPAD questionnaire has consistently maintained its historical core information on substance use trajectories among students across three decades, regularly updated to include emerging phenomena. Since 2019, sections on perceived well-being and prevention interventions, as well as new questions related to alternative tobacco and nicotine products, nitrous oxide and attention/hyperactivity drugs have been included.

The extensive information collected has enabled the development of analytical models essential for evaluating public policies in participating countries, demonstrated by the increasing number of articles utilising ESPAD data to analyse the effectiveness and sustainability of prevention policies and restrictive regulations.

The strength of the ESPAD project lies not only in providing a comprehensive overview of adolescent substance use and related risk and protective factors but also in facilitating international comparisons and analysing trends over time. Data collected since 1995 has been integrated into a single database, which is accessible to researchers online upon request.

This report aims to present the main results of the 2024 study, serving as a useful tool for interested readers, policymakers and practitioners who wish to base their strategies on the most recent information.

Background

In the 1980s, a subgroup of collaborating researchers within the Expert Committee on Drug Epidemiology of the Council of Europe's Pompidou Group was formed to develop a standardised questionnaire for school surveys. A common questionnaire was successfully piloted in eight countries, showing validity and reliability, despite methodological and timing differences (Johnston et al., 1994). In 1993, the Swedish Council for Information on Alcohol and Other Drugs (CAN), in collaboration with the Pompidou Group, initiated

simultaneous surveys on tobacco, alcohol and drug use, leading to the first ESPAD study in 1995. Since then, the survey has been repeated every four years, involving an increasing number of European countries.

A cooperation framework was established between the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), now known as the European Union Drugs Agency (EUDA), and the ESPAD group to strengthen the already existing collaboration. ESPAD data have regularly featured in the EUDA's annual drug reports, providing crucial insights into substance use among students aged 15 to 16 and allowing trends to be evaluated over time. Cooperation areas included action such as integrating ESPAD into the broader EU data collection framework; encouraging country participation in ESPAD; analytical use of ESPAD data within the EUDA context; and fostering contact between ESPAD experts and EUDA population survey experts. In addition, ESPAD and the EUDA have worked together to enhance information and expertise exchange, improve data availability, quality and comparability, and maximise the in-depth analysis of available survey data.

To improve decision-making effectiveness within the ESPAD group, the ESPAD Assembly in Pisa in 2017 approved a revision of the ESPAD constitution, identifying the EUDA as a strategic partner. Under the rules defined therein, ESPAD coordination is jointly ensured by the ESPAD coordination group and an EUDA representative. The ESPAD coordinator became an elected position, with the first elections held in 2016. In 2021, the second election added the roles of project manager and communication manager to the elected coordination group.

The ESPAD coordination work is supported by the Steering Committee, also elected, responsible for appointing principal investigators (PIs) in each country and proposing study modifications. The principal researcher in each participating country is designated as 'principal investigator' (PI) or 'ESPAD associate researcher,' responsible for securing national funding and participating autonomously in ESPAD and assemblies. Data collected within ESPAD is autonomously owned by each country, specifically the hosting institution of the PI (see 'Acknowledgments'). Table 1 provides an overview of the countries that have participated in data collection since 1995 and the responsible persons. The PI or ESPAD associate researcher is responsible for the use of his or her national data set.

Table 1. Overview of countries participating in ESPAD data collections 1995–2024

Country	Principal Investigator / Associate Researcher	1995	1999	2003	2007	2011	2015	2019	2024
Albania	Vacant	–	–	–	–	Yes	Yes	–	–
Armenia	Vacant	–	–	–	Yes	–	–	–	–
Austria	Julian Strizek	–	–	Yes	Yes	–	Yes	Yes	Yes
Belgium (Flanders)	Vacant	–	–	Yes	Yes [a]	Yes [b]	Yes [b]	–	–
Belgium (Wallonia)	Vacant	–	–	Yes	–	–	–	–	–
Bosnia and Herzegovina (FBiH)	Vacant	–	–	–	Yes [c]	Yes [a]	–	–	–
Bosnia and Herzegovina (RS)	Vacant	–	–	–	Yes [c]	Yes	–	–	–
Bulgaria	Anina Chileva	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Croatia	Martina Markelić	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cyprus	Ioanna Yiasemi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Czechia	Pavla Chomynová	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Denmark	Ola Ekholm	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estonia	Sigrid Vorobjov	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Faroes	Maria Skaalum Petersen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Country	Principal Investigator / Associate Researcher	1995	1999	2003	2007	2011	2015	2019	2024
Finland	Kirsimarja Raitasalo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
France	Stanislas Spilka	–	Yes	Yes	Yes	Yes	Yes	Yes [e]	Yes
Georgia	Lela Sturua	–	–	–	–	–	Yes [a]	Yes	Yes
Germany	Sally Olderbak	–	–	6 federal states	7 federal states	5 federal states	–	1 federal state	3 federal states
Greece	Anastasios Fotiou	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Greenland	Vacant	–	Yes	Yes	–	–	–	–	–
Hungary	Zsuzsanna Elekes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Iceland	Ragný Þóra Guðjohnsen	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ireland	Luke Clancy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Isle of Man	Vacant	–	–	Yes	Yes	Yes [d]	–	–	–
Italy	Sabrina Molinaro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kosovo	Mytaher Haskuka	–	–	–	–	Yes [a]	–	Yes	Yes
Latvia	Diāna Vanaga–Arāja	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Liechtenstein	Martin Birnbaumer–Onder	–	–	–	–	Yes	Yes	–	Yes
Lithuania	Liudmila Rupšienė	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Malta	Sharon Arpa	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Moldova	Valeriu Plesca	–	–	–	Yes [c]	Yes	Yes	–	Yes
Monaco	Julie Marty	–	–	–	Yes	Yes	Yes	Yes	Yes
Montenegro	Tatijana Djurisic	–	–	–	Yes [c]	Yes	Yes	Yes	Yes
Netherlands	Karin Monshouwer	–	Yes	Yes	Yes	Yes [a]	Yes [a]	Yes [a]	Yes [b]
North Macedonia	Elena Kjosevska	–	Yes	–	Yes [c]	–	Yes	Yes	Yes
Norway	Elin K. Bye	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Poland	Janusz Sierosławski	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Portugal	Elsa Lavado	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Romania	Vacant	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Russia	Vacant	–	Moscow	Moscow	Yes	Moscow	–	–	–
Serbia	Biljana Kilibarda	–	–	–	Yes [c]	Yes	–	Yes	Yes
Slovakia	Alena Kopányiová	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Slovenia	Tanja Urdih Lazar	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Spain	Begoña Brime	–	–	–	–	–	–	Yes	Yes
Sweden	Johan Svensson	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Switzerland	Vacant	–	–	Yes	Yes	–	–	–	–
Turkey	Vacant	Istanbul	–	6 cities	–	–	–	–	–
Ukraine	Tetiana Bondar	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
United Kingdom	Vacant	Yes	Yes	Yes	Yes	Yes	–	–	–

[a] Data collected in autumn.
[b] Data collected in the previous autumn.
[c] Data collected in spring 2008.
[d] Data collected but not delivered.
[e] Data collected in spring 2018.

The 2024 ESPAD Report

This report presents main results from the ESPAD 2024 survey, conducted in 37 countries: Austria, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, the Faroes, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Kosovo, Latvia, Liechtenstein, Lithuania, Malta,

Moldova, Monaco, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden and Ukraine.

The report provides data on perceived substance availability, early initiation of substance use, prevalence estimates of substance consumption (cigarettes and e-cigarettes, alcohol, cannabis, other illicit drugs, new psychoactive substances and pharmaceuticals). It also includes descriptive prevalence estimates for problematic cannabis use, gambling behaviours (including excessive and problematic gambling), social media use and gaming by country and gender, as well as perceptions of problems related to social media and gaming and, for the first time, there will be sections on perceived mental health and well-being, and dissemination of prevention interventions. General ESPAD trends from 1995 to 2024 are also presented. It is important to highlight that this report contains selected key results rather than the full range of results and tables ([2]).

All results tables and the ESPAD master questionnaire are available on the ESPAD website (http://www.espad.org). The tables can be downloaded in Excel format and used for further analysis.

ESPAD Data Portal

Embracing the open data philosophy, ESPAD has shared microdata with interested researchers since 2021 through the ESPAD Data Portal (www.data.espad.org), a centralised and secure web platform with a user-friendly interface and powerful analytical capabilities facilitating international comparative analysis of data collected over nearly 30 years. The portal attracts over 32 000 annual visitors, providing interactive maps, historical trend data, thematic research capabilities and advanced analysis features accessible after registration. Among its key functionalities, the portal allows users to perform semantic keyword searches across the entire trend database, which contains the complete historical records from all eight ESPAD waves conducted since 1995. Users can explore the results through various measures and dimensions (gender, year, country, etc.), with the aid of interactive graphical representations that enhance the interpretation and communication of complex data patterns. In addition, customised datasets can be downloaded for local use to support further offline analysis. This open-access tool supports evidence-based prevention strategies by providing timely, accessible and high-quality data to researchers, policymakers and public health professionals, reinforcing ESPAD's role as a reference model for monitoring youth risk behaviours across Europe, fostering data-driven decision-making, cross-national comparisons and the development of targeted interventions aimed at reducing substance use and other risk behaviours among adolescents.

ESPAD's commitment to open data

The ESPAD community is deeply committed to open science, data transparency and responsible sharing of the research data in the public health research field. Over nearly three decades, the ESPAD collaborative effort has produced one of the most robust and comprehensive cross-national databases on adolescent risk behaviours in Europe, widely used by researchers, policymakers and public health stakeholders. Since its inception and across its eight survey waves, ESPAD has recognised that the true potential of its data, meticulously gathered through a standardised and shared methodology, lies not solely within the borders of its core research community, but in its accessibility to the wider scientific community, policymakers, educators, and even the public at large. The ESPAD group's dedication to transparency and collaboration is further strengthened by the commitment to making its data findable, accessible, interoperable and reusable, in accordance with the FAIR principles for open data.

At the heart of ESPAD's open data ethics lies the proactive and systematic dissemination of its rich datasets, both through knowledge sharing by all its members via peer-reviewed publications, international conferences and policy dialogues, and

([2]) It has to be noted that for descriptive purposes in this report all result figures are rounded. Sometimes, this might give the impression of minor discrepancies between the comments and the figures that appear in the tables, which are uniquely due to this operation.

through data summaries and visual tools, making key trends and indicators accessible to a wider audience beyond academia. To encourage broader engagement with ESPAD data, and in line with the principles of open science, the ESPAD Data Portal has been publicly available since 2021 at https://data.espad.org.

This digital gateway serves as a crucial resource, democratising access to a vast amount of information on substance use patterns, time trends and contextual factors shaping adolescent behaviours across a large number of European countries. By removing access barriers, ESPAD actively aims to enable a global network of researchers to conduct independent and rigorous analyses, explore research questions that go beyond ESPAD's primary scope, and investigate emerging trends with scientific rigour. We firmly believe that this external use and the application of diverse analytical perspectives enrich the overall understanding of substance use among adolescents.

Moreover, ESPAD's commitment to open data directly supports the development of more effective, evidence-based public health policies. By providing policymakers with direct access to comprehensive and cross-nationally comparable data, ESPAD equips them with crucial information for understanding the scope and nature of risk behaviours among adolescents in their own countries, as well as in comparison with their European neighbours. This evidence base is essential for designing targeted prevention strategies, evaluating the impact of existing interventions and making informed decisions on public health priorities.

Beyond research and policy, ESPAD's open data initiative also serves as a valuable resource for educators and public health professionals working in the field. Access to the ESPAD detailed datasets enables them to gain deeper insights into prevalent risk behaviours among youth, allowing for the adaptation of educational programmes, the refinement of outreach efforts and the development of evidence-based interventions that respond to specific local needs and trends, with the goal of enhancing the relevance and effectiveness of prevention work.

ESPAD's commitment to open data represents a core principle underpinning the scientific integrity of the project and its dedication to maximising social impact. By actively promoting broad access to its data, ESPAD fosters a collaborative ecosystem in which knowledge is shared and insights are amplified, significantly strengthening the collective capacity to understand and address the complex issue of adolescent substance use and other risky behaviours.

This dedication not only ensures the enduring legacy and scientific value of ESPAD's data collections but also embodies a powerful model for other large-scale international research projects striving to make a meaningful contribution to public health and well-being. The project acknowledges that, in the pursuit of a healthier future for young people, open access to reliable data is not just beneficial; it is essential.

Methodology

Methodology

ESPAD 2024

Sample

The ESPAD target population is defined as students who reach the age of 16 in the calendar year of the survey and are present in the classroom on the day of the survey. Students enrolled in regular, vocational, general or academic studies were included, while those enrolled in special schools or special classes for students with learning disorders or severe disabilities were excluded. Table 2 shows the main sample characteristics. The methods used are largely comparable across all countries, although certain characteristics, such as sample type, mode of administration and timing of data collection, vary in some cases to accommodate country-specific factors.

The study was carried out on a representative sample of the target population in all participating countries except the Faroes, Liechtenstein, Malta, Monaco and Montenegro, where all 2008-born target students were included. Data were collected by self-administered questionnaires.

The 2024 data collection marked a significant transition for many ESPAD countries, as they moved toward the online administration of the ESPAD questionnaire. This shift reflects both technological advancements and the encouraging results regarding data comparability reported by countries that had previously adopted web-based data collection methods (Colasante et al., 2019).

Although regional disparities in technological infrastructure within schools still persist, the COVID-19 pandemic has undeniably accelerated this necessary transition. Online administration offers long-term benefits, including improved time and cost efficiency, as well as reduced logistical burdens.

In this context, the Italian National Research Council, which holds the ESPAD Coordination, developed a pilot project featuring a centralised online multilingual web survey platform as its contribution to the methodological development of the ESPAD study. In 2024, five countries (Germany, Ireland, Latvia, Lithuania and Slovakia) joined Italy in this pilot project, which may serve as the standard method for ESPAD data collection in the near future.

Other countries, most of which had already adopted online data collection in previous cycles, used their own platforms for data collection. These included Austria, Czechia, Denmark, Estonia, the Faroes, Finland, France, Greece, Iceland, Liechtenstein, Monaco, the Netherlands, Norway, Portugal and Sweden. Ukraine, due to frequent blackouts and alarms resulting from the ongoing conflict, employed an offline computer-based administration mode.

Fourteen countries (Bulgaria, Croatia, Cyprus, Georgia, Hungary, Malta, Moldova, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovenia and Spain) continued to use the traditional paper-and-pencil method due to their specific national context. Meanwhile, Kosovo and Latvia opted for a mixed-mode administration combining paper-based and web-based approaches.

The students answered the questionnaires anonymously in the classroom, with teachers or research assistants functioning as survey leaders. The questionnaires were handed to students by school staff (teachers, teacher assistants, psychologists, etc.) in 18 countries, by external staff (researchers, research assistants, staff from the organisation conducting the study) in 16 countries, and by school and external staff in three countries. In the majority of countries, data collection took place in the period between March and June 2024, with the exception of the Netherlands, where data were collected between October and November

2023. In most countries, where sampling occurred, class was the last unit in a multistage stratified random sampling process.

Data were collected from 113 882 students in 37 countries. Sample sizes ranged from 152 in Cyprus to 8 543 in Romania. National geographical coverage was achieved in all countries, with the exception of the following specific territorial exclusions due to administrative, political or logistical constraints: Cyprus (limited to government-controlled areas); Finland (Åland Islands excluded); France (overseas territories not included); Georgia (territories of Abkhazia and South Ossetia excluded); Germany (data collected only from the federal states of Baden-Württemberg, Bavaria and Thuringia); Kosovo (about 4 % of the target population enrolled in schools in Northern Kosovo and/or functioning under the parallel structures of the Ministry of Education of Serbia within Serbian municipalities was excluded); Moldova (Transnistria region was excluded); and Ukraine (regions not under government control at the time of the survey, including Donetsk and Luhansk oblasts, the Autonomous Republic of Crimea, and parts of Zaporizhzhia, Kherson and Mykolaiv oblasts, were not included).

The school participation rate (share of selected schools taking part in the survey) was generally high, at 79 % on average, ranging from 15 % in Germany to 100 % in Bulgaria, Kosovo, Liechtenstein, Moldova, Monaco, Montenegro and Slovakia. The class participation rate (share of selected classes participating) was also generally high, at 80 % on average, ranging from 14 % in Germany to 100 % in Bulgaria, Kosovo, Liechtenstein, Monaco, Montenegro, Slovakia and Ukraine. The proportion of students in the selected classes who were present on the day of the survey and who answered the questionnaire was very high (83 % on average). The coverage of students was very high, with almost all countries reaching 80 % or more of the target population. The lowest rates were reported in Cyprus (20 %), Moldova (69 %) and Liechtenstein (73 %). Data were weighted in 10 countries to adjust the sample to the sociodemographic composition of the target population. Sampling weights were typically calculated to account for gender (in five countries), geographical distribution of the target population (in seven countries), and school type and size (in seven countries).

Table 2. Sampling characteristics of ESPAD 2024

Country	Geographic coverage ([a])	Data collection mode	Sample type	Sampling unit(s)	Data weighted	Weight type	Student representativeness (%) ([b])	Class participation rate (%) ([c])	Students' presence rate (%) ([d])	Final sample (*n*)
Austria	National	Web–based	Multi–stage stratified random	Class	Yes	School type and gender	98	24	87	3 469
Bulgaria	National	Paper–and–pencil	Stratified random	Class	No	–	89	100	85	2 747
Croatia	National	Paper–and–pencil	Stratified random	Class	No	–	100	90	87	3 038
Cyprus	National	Paper–and–pencil	Multi–stage random	Class	No	–	20	38	90	152
Czechia	National	Web–based	Multi–stage stratified random	Class	Yes	School type and gender	100	70	81	2 949
Denmark	National	Web–based	Random	School	Yes	Geographical area	100	20 ([f])	85	5 484
Estonia	National	Web–based	Multi–stage stratified random	Class	No	–	97	60	81	2 011
Faroes	National	Web–based	Total population	No sample	No	–	95	79 ([e])	85	337
Finland	National	Web–based	Multi–stage stratified random	Class	No	–	100	83	84	3 173
France	National	Web–based	Multi–stage stratified random	Class	Yes	Geographical area, school type, grade and gender	91	84	–	3 376
Georgia	National	Paper–and–pencil	Multi–stage stratified random	Class	No	–	93	97	71	2 618
Germany	Regional	Web–based	Stratified random	Class	No	–	96	14	84	3 362
Greece	National	Web–based	Multi–stage stratified random	Class	Yes	Geographical area and school type	100	79	91	6 810
Hungary	National	Paper–and–pencil	Stratified random	Class	Yes	Geographical area, school type and grade	93	78	85	2 675
Iceland	National	Web–based	Random	Student	No	–	99	89	–	1 679
Ireland	National	Web–based	Stratified random	Class	No	–	100	88	78	1 880
Italy	National	Web–based	Multi–stage stratified random	Class	Yes	Geographical area and gender	100	85	82	4 041
Kosovo	National	Mixed–mode	Multi–stage random	Class	No	–	97	100	81	3 050
Latvia	National	Mixed–mode	Stratified random	Class	No	–	98	90	83	3 142
Liechtenstein	National	Web–based	Total population	No sample	No	–	73	100	–	167
Lithuania	National	Web–based	Stratified random	Class	No	–	94	94	82	4 885
Malta	National	Paper–and–pencil	Total population	Class	No	–	97	95	73	2 880
Moldova	National	Paper–and–pencil	Random	Class	No	–	69	97	89	2 552
Monaco	National	Web–based	Total population	No sample	No	–	100	100	87	427
Montenegro	National		Total population	No sample	No	–	99	100	87	5 510
Netherlands	National	Web–based	Multi–stage stratified random	Class ([g])	Yes	School type, grade and gender	99	68 ([g])	–	1 893
North Macedonia	National	Paper–and–pencil	Systematic random	Class	No	–	96	98	87	2 826

Country	Geographic coverage ([a])	Data collection mode	Sample type	Sampling unit(s)	Data weighted	Weight type	Student represent-ativeness (%) ([b])	Class participation rate (%) ([c])	Students' presence rate (%) ([d])	Final sample (*n*)
Norway	National	Web–based	Multi–stage stratified random	Class	No	–	100	41	88	3 471
Poland	National	Paper–and–pencil	Multi–stage stratified random	Class	No	Geographical area	97	92	78	2 939
Portugal	National	Web–based	Stratified random	Class	Yes	Geographical area	100	69	74	1 979
Romania	National	Paper–and–pencil	Multi–stage stratified random	Class	No	–	89	95	85	8 543
Serbia	National	Paper–and–pencil	Multi–stage stratified random	Class	No	Geographical area, school type and gender	91([e])	74	84	1 908
Slovakia	National	Web–based	Multi–stage stratified random	Class	No	–	100	100	80	1 359
Slovenia	National	Paper–and–pencil	Stratified random	Class	No	–	100	94	86	3 728
Spain	National	Paper–and–pencil	Multi–stage stratified random	Class	Yes	Geographical area and school type	99	79	86	5 836
Sweden	National	Web–based	Multi–stage stratified random	Class	No	–	98	82	81	2 535
Ukraine	National	Computer–based ([h])	Multi–stage stratified random	Class	No	–	81	100	72	4 451
AVERAGE OR SUM							93	82	83	113 882

([a]) All samples had a full national geographical coverage, with the following exceptions: Cyprus (only government–controlled areas); Finland (Åland Islands not included); France (overseas territories not included); Georgia (occupied territories of Abkhazia and South Ossetia not included); Germany (only the federal states of Baden–Wuerttemberg, Bavaria and Thuringia included); Kosovo (about 4 % of the target population enrolled in schools in Northern Kosovo and/or functioning under the parallel structures of the Ministry of Education of Serbia within Serbian municipalities not included); Moldova (Transnistria region not included); Ukraine (the regions of Donetsk and Luhansk oblasts, the Autonomous Republic of Crimea, part of Zaporizhzhia, Kherson and Mykolaiv that at the time of the survey were occupied and therefore not controlled by the Ukrainian government were not included).
([b]) Proportion of ESPAD target students covered by the sampling frame.
([c]) Proportion of selected classes participating in the survey.
([d]) Proportion of students of participating classes answering the questionnaire.
([e]) Estimated by the Principal Investigator.
([f]) School participation rate (class participant rate unknown).
([g]) The sampling unit was class in grade 3, but individual student in grade 4.
([h]) Data collection was performed using an offline software due unstable internet connection.

Measures

The questionnaire covers young people's awareness of and experience with different licit and illicit substances, gambling for money, and social media and gaming. The questions are designed to collect information on these behaviours over different time frames: lifetime and the last 12 months, last 30 days and last 7 days prior to the survey. Questions on consumption patterns, such as frequency or quantity (e.g. volume, hours), and questions that allow for screening of high-risk and problematic behaviour are also included. Furthermore, for the first time in 2024, the questionnaire included a self-report instrument to assess mental well-being, as well as additional questions on students' involvement in prevention activities.

Availability of substances

Perceived availability of substances serves as a proxy for how easy or difficult it is for students to obtain a particular substance (cigarettes and alternative smoking products, alcohol, tranquillisers or sedatives without a doctor's prescription and illicit drugs). Students were asked how difficult they thought it would be to obtain each substance if they wanted to. Response options included 'impossible', 'very difficult', 'fairly difficult', 'fairly easy', 'very easy' and 'don't know'. The proportions of students in each country who responded 'fairly easy' or 'very easy' were combined to indicate perceived ease of availability. The availability of each type of alcoholic beverage (beer, wine and spirits) was assessed separately. Where relevant, countries included other alcoholic beverages such as cider or

premixed drinks in the questionnaire. Alcohol availability was defined as the proportion of students indicating that at least one of the five beverage types was 'fairly easy' or 'very easy' to obtain.

Age at first substance use

Students were asked how old they were when they first used a particular substance, began using it daily (for cigarettes and e-cigarettes) or experienced excessive use (drunkenness). Where relevant, countries included other alternative smoking products such as water pipes, moist snuff, heated tobacco products and nicotine pouches in the questionnaire. Response options ranged from '9 years old or younger' to '16 years or older', in one-year increments, and included the category 'never'. An age at initiation of 13 years or younger was defined as early onset. Rates of early onset were calculated separately for cigarettes, e-cigarettes, alcohol and illicit drugs.

Cigarette use

Students were asked if they had smoked cigarettes (excluding e-cigarettes) in their life, in the last 12 months and in the last 30 days. The frequency of smoking and number of cigarettes smoked in the last 30 days were also collected. The response categories were 'not at all', 'less than 1 cigarette per week', 'less than 1 cigarette per day', '1–5 cigarettes per day', '6–10 cigarettes per day', '11–20 cigarettes per day' and 'more than 20 cigarettes per day'.

Lifetime prevalence and last-30-day prevalence were calculated based on use on at least one occasion. Daily use of cigarettes was considered as having smoked a minimum of one cigarette per day in the last 30 days.

In the trends section of the report, cigarette use is reported both on its own and in combination with e-cigarette use, in order to show both the specific trend in traditional tobacco consumption and the broader pattern of cigarette and/or e-cigarette use over time.

Electronic cigarettes and other alternative smoking products

Students were asked about lifetime, last-year and last-30-day use of e-cigarettes and water pipes. Where relevant, countries also included moist snuff, heated tobacco products and nicotine pouches in their questionnaires. Information on the frequency of e-cigarette use in the last 30 days was also collected. The response categories were 'not at all', 'less than once per week', 'at least once a week' and 'almost every day or every day'. Students were also asked about their prior tobacco use at the time they first tried e-cigarettes and, in some countries optionally, about their main reasons for starting e-cigarette use and the content of their first e-cigarette. The response options for the content question included 'nicotine', 'flavouring', 'cannabidiol (CBD)', 'tetrahydrocannabinol (THC)', 'don't know' and 'I have never tried e-cigarettes'.

Lifetime prevalence and last-30-day prevalence were calculated based on use on at least one occasion.

Alcohol use

Students were asked on how many occasions they had consumed any alcoholic beverages and had been intoxicated in their lifetime, during the last 12 months and during the last 30 days. The response categories were '0', '1–2', '3–5', '6–9', '10–19', '20–39' and '40 or more'. Furthermore, the frequency of beer, wine and spirits consumption in the last 30 days was assessed separately. Where relevant, countries also included other alcoholic beverages, such as cider or premixed drinks, in the questionnaire. Heavy episodic drinking was assessed by asking about any occurrence of consuming at least five drinks of alcoholic beverages on a single occasion in the last 30 days, corresponding to a cut-off of approximately 9 centilitres of pure alcohol. A 'drink' was defined as 1 glass/bottle/can of beer (33 cl), 1 glass of wine (15 cl), 1 glass of spirits (4 cl), 1 glass/bottle of cider (33 cl), 1 glass/bottle of premixed drinks (spritz, alcopops, etc. — 33 cl). Additional optional questions addressed the usual means of obtaining alcohol, details of the last drinking occasion —

including beverage type and quantity consumed — and a self-assessment of intoxication.

The prevalence of any use (lifetime, last 12 months and last 30 days) and prevalence of experiencing any intoxication were calculated.

Cannabis use

Students were asked on how many occasions they had used cannabis in their lifetime, during the last 12 months and during the last 30 days. The response categories were '0', '1–2', '3–5', '6–9', '10–19', '20–39' and '40 or more'. Lifetime prevalence and last-30-day prevalence (any use) were calculated. The average frequency of cannabis use in the last 12 months was calculated using the mean value for each response category, for example, 29.5 for the category '20–39'. For '40 or more' a value of 41 was used.

The Cannabis Abuse Screening Test (CAST) was used to screen for possible cannabis-related problems (Legleye et al., 2007, 2011). The six items of the CAST are worded as follows: (1) 'Have you smoked cannabis before midday?', (2) 'Have you smoked cannabis when you were alone?', (3) 'Have you had memory problems when you smoke cannabis?', (4) 'Have friends or members of your family told you that you ought to reduce your cannabis use?', (5) 'Have you tried to reduce or stop your cannabis use without succeeding?' and (6) 'Have you had problems because of your use of cannabis (arguments, fights, accidents, bad results at school, etc.)?' All of these questions refer to the last 12 months. The response categories for the CAST are 'never', 'rarely', 'from time to time', 'fairly often' and 'very often'. The possible scores for each item are 0 or 1, with the threshold for scoring 1 point being 'from time to time' for the first two items and 'rarely' for the remaining items (which refer to more serious problems). A total score of 2 or more points (range 0–6) is considered to indicate high-risk use. This cut-off score has been shown to best distinguish individuals at high risk of cannabis-related problems from individuals at low risk of such problems in community samples (Legleye et al., 2007, 2011). It should be noted that there is an ongoing debate about the validity of screening tests, including the CAST. With regard to the CAST specifically, over time, different coding systems and cut-off scores have been validated on representative samples (Bastiani et al., 2013; Legleye et al., 2007, 2011, 2013, 2017), and there is no definitive agreement about the best system or scores to use. Clearly, different computation methods will generate different prevalence results.

A binary scoring approach was adopted, using a cut-off of two or more points to indicate 'high-risk use', as proposed in adolescent samples (Gyepesi et al., 2014; Legleye et al., 2011). This approach allows for comparability with the CAST results published in earlier ESPAD reports.

When used in the context of self-reported surveys, the CAST may allow the early identification of adolescents who are liable to present with problem cannabis use or dependence. It should be noted, however, that this test is a screening tool — it can be used to make comparisons and perform epidemiological analyses but cannot provide a clinical diagnosis.

This report provides prevalence estimates of high-risk users in the total sample based on the CAST instrument. The additional tables available on the ESPAD website provide estimates of the proportion of high-risk users among those students who answered positively to the introductory question of the CAST (i.e. claimed to have used cannabis in the year prior to the survey); the frequency of responses for each of the six CAST items among 12-month users; and the CAST item averages presented separately for each country using a continuous five-point scale from 1, 'never', to 5, 'very often'.

Other illicit drug use

To measure experience with other illicit drugs, students were asked on how many occasions they had tried different drugs in their lifetime and during the last 12 months, with response categories of '0', '1–2' and '3 or more'. Frequency of use was asked separately for ecstasy, amphetamine, methamphetamine, cocaine, crack, heroin, LSD or other hallucinogens and GHB (gamma-hydroxybutyrate). Lifetime prevalence (any use) for

each substance was based on intake on at least one occasion.

Other substance use

Inhalant use

Students were asked how often they had used inhalants in their lifetime, during the last 12 months and during the last 30 days, with response categories of '0', '1–2' and '3 or more'. Prevalence of any use of inhalants was based on intake on at least one occasion (i.e. students reporting use on '1–2' or '3 or more' occasions). The prevalence of inhalant use was calculated by aggregating responses to the general inhalant use question and, in the 18 countries where it was administered, the optional question on nitrous oxide use. These countries were Bulgaria, Denmark, the Faroes, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Norway, Portugal, Romania, Spain and Sweden.

New psychoactive substance use

New psychoactive substances (NPS) were defined as 'substances that imitate the effects of illicit drugs such as cannabis or ecstasy and are sometimes called 'legal highs', 'ethnobotanicals' or 'research chemicals' and can come in different forms (herbal mixtures, powders, crystals or tablets)'. Countries could provide the nationally used descriptions and terminology, which could have an impact on the findings in different countries. Students were asked about the number of occasions they had used new psychoactive substances in their lifetime and during the last 12 months, with response categories of '0', '1–2', '3 or more' and 'don't know/not sure'. Prevalence of any use of new psychoactive substances was based on intake on at least one occasion (i.e. students reporting use on '1–2' or '3 or more' occasions).

Optionally, in some countries, students were also asked on how many occasions in their lifetime they had used synthetic cannabinoids (asked in 23 countries), synthetic cathinones (asked in 14 countries) and synthetic opioids (asked in 15 countries), with response categories of '0', '1–2', '3 or more'. Prevalence of any use of synthetic cannabinoids, cathinones and opioids was based on intake on at least one occasion. It should be noted that in some countries semi-synthetic cannabinoids such as hexahydrocannabinol (HHC) might have been included by students among synthetic cannabinoids (e.g. in Slovakia, where in 2024 it was readily available in vending machines, retail stores and online).

In addition, prevalence of any use of new psychoactive substances in the last 12 months was calculated. Students who reported using new psychoactive substances in the last 12 months were asked about the forms of new psychoactive substances used according to the following answer options: 'herbal smoking mixtures with drug-like effects', 'powders, crystals or tablets with drug-like effects', 'liquids with drug-like effects' or 'other'. Data on the proportions of users in the last 12 months reporting having used the different forms of new psychoactive substances are provided in the text, and prevalence results are available in the additional tables that can be accessed online.

Use of pharmaceuticals for non-medical purposes

To measure lifetime use of pharmaceuticals for non-medical purposes, students were asked on how many occasions they had used tranquillisers or sedatives without a doctor's prescription, painkillers to get high, anabolic steroids and, optionally, medication for attention or hyperactivity. Response options were '0', '1–2' and '3 or more' occasions. Lifetime prevalence was defined as having used at least one of the following substances on one or more occasions: tranquillisers/sedatives without medical prescription, painkillers to get high, attention/hyperactivity drugs, anabolic steroids.

In 2024, data from Croatia, Iceland, Kosovo, Montenegro, the Netherlands and North Macedonia were excluded from analyses on the prevalence of using painkillers to get high. This was due to concerns about data validity, as the survey question on painkiller use in these countries did not specify use 'in order to get high'.

Gambling

Gambling for money was assessed by asking students about the frequency of their gambling activity in general, as well as the types of games they had played in the last 12 months — distinguishing between land-based and online formats — including slot machines, card or dice games, lotteries and betting on sports or animal races. The response categories for these questions were 'I have not gambled', 'monthly or less', '2–4 times a month' and '2–3 times or more a week'. As the response options provide a frequency interval, an overall index of gambling activity was created by dichotomising the response options ('yes'/'no'), with any response other than 'I have not gambled' coded as 'yes' for each game, both land-based and online. In this report, gambling prevalence was calculated as the rate of those who had gambled for money on at least one of the four games of chance (playing on slot machines, playing cards or dice for money, playing the lottery, betting on sports or animal races), either land-based or online, in the last 12 months. On this basis, the proportions playing the different types of games among those who had gambled for money in the last 12 months were also calculated, by land-based and online formats.

The method used to calculate gambling prevalence in this report differs from that used in the 2015 and 2019 reports. In 2015, a direct question, 'How often (if ever) did you gamble for money in the last 12 months?', was used to estimate prevalence. Since asking the specific type of game played is believed to produce a more reliable estimate of gambling prevalence (Molinaro et al., 2018), in 2019 a general question (not distinguishing between land-based and online formats) about the four specific games was used for the estimation. Asking more specific questions may lead to higher prevalence rates, as it helps respondents recall past gambling activities more accurately. Therefore, direct comparisons with previous results are not possible, and any differences should be interpreted with caution.

Furthermore, two specific screening scales were used to assess for the presence of excessive gambling and problem gambling behaviour.

An adapted version of the Consumption Screen for Problem Gambling (CSPG; Rockloff, 2012), a three-item scale assessing the intensity of gambling, was used to calculate the proportion of gamblers displaying excessive gambling behaviour. The three questions measure (1) gambling frequency — 'How often (if ever) have you gambled for money in the last 12 months?', reported on the following scale: 'I have not gambled for money' = 0, 'monthly or less' = 1, '2–4 times a month' = 2, '2–3 times or more a week' = 3; (2) time spent on gambling — 'How much time did you spend gambling on a typical day in which you gambled in the last 12 months?', reported on the following scale: 'I have not gambled for money' = 0 and 'less than 30 min' = 0, 'between 30 min and 1 hour' = 1, 'between 1 and 2 hours' = 2, 'between 2 and 3 hours' = 3, '3 hours or more' = 4; and (3) gambling intensity — 'How often did you spend more than 2 hours gambling (on a single occasion) in the last 12 months?', reported on the following scale: 'I have not gambled for money' = 0 and 'never' = 0, 'less than monthly' = 1, 'monthly' = 2, 'weekly' = 3, 'daily or almost daily' = 4. A score of 4 or more points was considered to indicate excessive gambling.

The Lie/Bet screening scale (Johnson et al., 1997), a two-item screening tool, was used to assess the proportion of gamblers with a problem gambling behaviour. The two questions used in the tool are 'Have you ever lied to family and friends about how much money you have spent on gambling?' and 'Have you ever felt that you needed to gamble for more and more money?'; both questions have the response categories 'yes' = 1 and 'no' = 0, and the Lie/Bet sum score therefore ranges from 0 to 2. A score of 2 points was considered to indicate problem gambling.

This report presents the proportion of excessive and problem gamblers among students who reported gambling activity in the last 12 months, while prevalence estimates of excessive and problem gambling are available in the additional tables that are available online.

Gaming and social media use

To assess gaming patterns, students were asked about the number of days in the last week and the average number of hours during the last 30 days they had spent playing games on electronic devices

(i.e. computers, tablets, consoles, smartphones or other devices), distinguishing between school and non-school days. The answer options for the questions on the average number of hours spent during the last 7 days on social media and during the last 30 days on gaming were 'none', 'half an hour or less', 'about 1 hour', 'about 2–3 hours', 'about 4–5 hours' and '6 hours or more'. Prevalence of use and average and modal class of mean number of hours spent gaming were reported separately for a typical school day and a typical non-school day for the last 30 days.

In addition, a specific screening scale (Holstein et al., 2014) was adapted to assess for the presence of self-perceived problems related to two distinct behaviours: (1) gaming and (2) social media use. This tool is a non-clinical instrument focusing on a student's perception of problems related to three items: too much time spent on these activities, bad feelings because of restricted access and parents' concerns related to the time spent on these activities. Students were asked to what extent they agreed with the above three statements, with the response categories being 'strongly agree', 'partly agree', 'neither agree nor disagree', 'partly disagree' and 'strongly disagree'. Positive answers ('strongly agree' and 'partly agree') were summed to produce an index score. An index score of 0–1 points was considered to indicate a low or non-existent level of self-perceived problems, and a score of 2–3 points was considered to indicate a high level of self-perceived problems related to social media use and gaming.

Mental well-being

To systematically assess and monitor students' mental health, the 2024 ESPAD survey included the WHO-5 Well-being Index (World Health Organization, 2024a), a validated self-report tool designed to measure subjective psychological well-being. The index comprises five statements related to positive mood, vitality and general interest over the past two weeks. Responses are rated on a 6-point Likert scale, ranging from 'all of the time' to 'at no time'. Raw scores are converted into a scale ranging from 0 to 100, with lower scores indicating poorer well-being. As a score of 50 or higher is considered indicative of good mental well-being, in this report the prevalence of good mental well-being is reported as the proportion of students scoring at least 50 points.

It should be noted that the ESPAD study reports on the prevalence of good mental well-being, while some other studies use the average value of the indicator (mean mental well-being score) for cross-national comparison (Cosma et al., 2023). Therefore, comparisons with data from other studies should reflect this methodological difference.

Prevention activities

In 2024, for the first time, ESPAD investigated students' exposure to prevention and health promotion activities. The questionnaire included a series of items covering the students' participation in various types of interventions over the past two years. Students were asked whether they had participated in awareness or information activities addressing the effects and potential harms of alcohol, tobacco, other drugs, as well as gambling, gaming or internet-related disorders. For each topic, three response options were provided: 'never,' 'once,' or 'more than once'. This information was collected in all ESPAD participating countries except Czechia and the Netherlands.

Students were also asked whether they had taken part in interactive, non-lesson-based training activities aimed at developing social skills (e.g. expressing feelings, showing empathy, giving compliments, resisting peer pressure), personal self-regulation skills (e.g. controlling impulses or anger, setting goals, practicing mindfulness) and media literacy skills (e.g. critically analysing advertisements and identifying persuasive intent). Each of these items used the same three-point response format. This information was collected in all ESPAD participating countries except Czechia, the Netherlands and Norway.

To further contextualise these interventions, students were asked who primarily delivered the activities (teachers, other school staff, law enforcement officers, external professionals, former drug users or others) and where they took place (in school during class, in school after hours or in

out-of-school settings). For both questions, students could select multiple responses or indicate that they had not participated in any of the listed activities.

This report presents the prevalence of student participation in any awareness or information activity, as well as by specific topic, and the prevalence of participation in interactive training activities, both overall and by training objective.

Data processing and data quality

Data were centrally cleaned using two steps. First, logical substitution of missing values was performed in a rather conservative way. In cases where students indicated that they had never used a specific substance and did not respond to other questions about such use, any missing values were substituted with no use for that substance. However, no substitutions were made if any contradictory indications of use were reported.

Overall, this generated minor changes in the data. For example, for seven selected substance use variables, the average reduction in the non-response rate resulting from logical substitution was rather small, ranging from 0.1 % to 0.8 %. The single highest country-specific reduction was found in Liechtenstein, where the non-response rate for lifetime intoxication from alcoholic beverages was reduced by 20 percentage points. The reductions in non-responses had only minor effects on the final prevalence estimates.

Second, all cases with missing information on gender were excluded from the database. The other major reason for exclusion was poor data quality. All cases with responses to less than half of the core items were discarded, as were all cases where the respondent appeared to have followed patterns involving repetitive marking of extreme values. Across all ESPAD countries, an average of 4.2 % (range: 0.6–24 %) of cases were excluded because of poor data quality or missing information on gender.

A few countries experienced modest methodological problems, but not of a big enough magnitude to seriously hinder the comparability of the results. Compared with the ESPAD averages, higher rates of inconsistencies indicate a somewhat lower data quality for the samples from Cyprus, the Netherlands and the Faroes. The number of incomplete questions (less than 50 % of core questions answered) in the Netherlands was higher than in previous waves, most likely because the administration in grade 4 was led by teachers instead of research assistants.

Low school/class participation rates in Germany (14 %), Denmark (20 %), Austria (24 %), Cyprus (38 %) and Norway (41 %) resulted in relatively small net sample sizes, particularly in Cyprus. In Cyprus (24 %), the Netherlands (23 %) and the Faroes (18 %), a relatively high proportion of cases had to be discarded during the central data-cleaning process.

Overall, coverage of the target student population was good, with sampling frames including an average of 84 % of ESPAD target students. At the country level, the lowest coverage rates were observed in Cyprus (40 %), Moldova (52 %), Romania (55 %) and Ukraine (56 %).

Finally, a relatively high proportion of parents in Greece (16 %) and Germany (6.9 %) refused permission for their child to participate in the survey. It should be noted that in Greece, where active parental consent was required, the reported figure includes both explicit parental refusals and cases in which pupils were excluded by school principals for not returning a signed consent form.

More details on the ESPAD methodology are available online (http://www.espad.org).

Analysis

Prevalence estimates and means were calculated for each participating country, taking sampling weights into account where present (see Table 2). Due to the limited size of student samples in some countries, prevalence rates, as well as gender differences, should be interpreted with caution.

In the majority of tables, totals and gender-specific estimates are presented by country. In 2024, 19 countries included 'Other' and 'Prefer not to answer'

as response options to the question on respondents' sex. Although students selecting these options are included in national sample averages, results are disaggregated only by 'boys' and 'girls' to ensure comparability across countries and over time. This may result in minor differences in prevalence estimates between the figures presented in this report and those published in specific national ESPAD reports. Gender differences reported in Figures 1b–9b were tested using either simple linear regression for quasi-continuous frequency measures or logistic regression for prevalence, with gender as a predictor.

The ESPAD average is based on 37 countries, with an equal weight assigned to each country. All percentages in the report were calculated based on valid responses and are shown for the total sample, boys and girls. With the exception of the frequency of alcohol intake (Figures 3a, 3b) and of cannabis use (Figures 6a, 6b), the proportion of high-risk cannabis users (Figures 7a, 7b), the types of games chosen by those who had gambled for money in the last 12 months (Table 11b) and the proportion of excessive and problem gamblers (Table 11c), for which the estimates are based on consumers of a particular substance or students engaging in a particular risk behaviour, all estimates are based on the total sample and represent population estimates.

Trend analysis

For trends in time, country estimates were averaged across 32 countries with valid estimates on at least four (including 2024) out of eight time points. It should be noted that in this report, trends for selected indicators were calculated using the ESPAD 1995–2024 trend database, which includes data from all of the national survey waves since the inception of the ESPAD project.

The ESPAD trend database was created in 2017 according to the following procedure. For the years 1995, 1999 and 2003, national raw datasets were provided by each participating country, as at the time of these surveys participating countries were requested to deliver to the ESPAD coordination standard information in predefined data tables, but no ESPAD international datasets were produced.

The available national raw datasets from 1995, 1999 and 2003 were centrally cleaned using the ESPAD 2015 routines in order to harmonise the data. For the years from 2007 to 2024, the ESPAD international databases were used, as for these data collections each participating country had to provide its raw dataset to the ESPAD coordination, which then prepared unique international datasets. It should be noted that, for the years 1995, 1999 and 2003, some countries were not able to provide the national dataset for a specific year for various reasons (e.g. changes in the PI representing the country), even though the survey was conducted. In these cases, data could not be included in the ESPAD trend database, nor in the trend estimates shown in the 'Trends 1995–2024' section of this report. In other cases, the datasets provided for the ESPAD trend database had a different number of observations or were provided in a non-standard format; in the latter case some information could not be included.

Because of these issues, it is possible that the results presented in 'Trends 1995–2024' differ slightly from those presented in the same section of the 2015 report, as at the time the ESPAD trend database had not yet been finalised, and the trend estimates were produced using the results published in the previous ESPAD reports.

The 32 countries included in the trend analysis were Austria, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, the Faroes, Finland, France, Germany (selected federal states), Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Monaco, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Sweden and Ukraine. The averages across the means of the 32 countries were calculated using a weight of 1, and data for each survey year were summed and divided by the number of countries with valid data for that particular year.

In the 1995–2024 trend database, data across all eight time points are available for 14 countries (Czechia, Denmark, the Faroes, Finland, Hungary, Iceland, Italy, Norway, Poland, Portugal, Slovakia, Slovenia, Sweden and Ukraine). A full description of the countries and samples included in the 1995–2024 trend database is provided in Table 14 in the 'Trends 1995–2024' section of this report.

Trends across the 32 countries are shown for a selected number of indicators by gender. Country-specific trends are shown for all countries that participated in the 2024 data collection and that have at least two valid data points over the period 1995–2024.

Country-specific trends were estimated based on the ESPAD 1995–2024 trend database using a Chi-squared test to assess which years were responsible for significant changes in prevalence. The significance level was set at 0.05. The test was made only for countries with at least three valid data points over the period 1995–2024.

In cases where two consecutive surveys were not available, the test was not performed. Trends are illustrated graphically, with statistically significant decreases between successive surveys indicated in green, statistically significant increases in red and unchanged situations in yellow.

Reporting

Based on the 2024 ESPAD data, selected substance use indicators are presented, including students' perceptions of the availability of cigarettes, alcohol and illicit drugs, early onset of substance use and prevalence estimates of substance use. In addition, patterns of current drug use among users of the specific substances are presented for cigarettes (prevalence of daily smoking), e-cigarettes (prevalence in the last 30 days), alcohol (mean number of occasions of alcohol use in the last 30 days; beverage preference and average alcohol volume intake on the last drinking occasion; prevalence of heavy episodic drinking, defined as consumption of five or more drinks on at least one occasion, in the last 30 days), cannabis (prevalence in the last 30 days; mean number of occasions of cannabis use in the last 12 months; proportion of high-risk users among those having used cannabis in the last 12 months) and new psychoactive substances (prevalence in the last 12 months). The average results by country are presented using maps, and gender differences by country are shown using bar charts, including tests for significance ($p < 0.05$).

In the 'Trends 1995–2024' section, trends between 1995 and 2024 are presented for the averages across the 32 country means and for all ESPAD countries separately.

The situation in 2024

The situation in 2024

This chapter presents selected indicators for substance use and other risk behaviours in the 37 ESPAD countries participating in the 2024 survey. Each results section begins with a table containing a summary of the main results, including the ESPAD average estimate and country range (minimum (min.) and maximum (max.)) for each selected measure.

Perceived availability of substances

ESPAD average Perceived availability of substances (%) ([a])			
	Average	Min.	Max.
Alcohol	75	42	94
Cigarettes	55	23	76
e-Cigarettes	60	33	82
Water pipes	27	7.8	51
Cannabis	26	5.0	41
Cocaine	13	2.5	28
Crack	7.9	1.8	13
Ecstasy	11	2.4	25
Amphetamine	9.3	2.2	19
Methamphetamine	7.8	2.1	15
Tranquillisers without medical prescription	19	3.4	49

([a]) Percentage of students rating a substance as either 'fairly easy' or 'very easy' to obtain.

Cigarettes

On average, 55 % of students in the participating countries reported that they would find it 'fairly easy' or 'very easy' (hereafter referred to as 'easy') to obtain cigarettes if they wanted to (Table 3a). Students in Denmark were most likely to find it easy (76 %). In Germany and Norway, the perceived availability was also comparatively high, with 70 % of students in both countries reporting access to be easy. The perceived availability was lowest in Moldova (23 %), Kosovo (32 %), Ukraine (34 %), Iceland (35 %) and North Macedonia (36 %). Figures of less than 50 % were also observed in Cyprus (42 %), France (42 %), Georgia (44 %), Romania (46 %), Portugal (48 %), Lithuania and Monaco (49 %, both). Gender differences were small at the aggregate level (56 % for boys versus 54 % for girls). Where differences were observed, figures were higher for boys than girls in 25 countries, with the greatest difference (13 percentage points) found in Kosovo, followed by Monaco (10 percentage points). In nine countries, the perceived availability was higher for girls than boys, with the difference reaching 7 percentage points in Norway.

Electronic cigarettes

e-Cigarettes were perceived as easy to obtain by more than 60 % of students, with country-level differences ranging from 33 % to 82 % (Table 3a). The lowest perceived availability was reported in Kosovo (33 %), the Faroes (35 %), Moldova (36 %) and North Macedonia (38 %). In ten countries, 70 % or more of students perceived e-cigarettes as easy to obtain, with the highest proportions reported in Denmark (82 %) and Norway (79 %). There was no overall difference between boys and girls. However, in 23 out of 37 countries, girls reported higher perceived availability compared to boys, with the highest differences of eight prevalence points found in Croatia (75 % for girls versus 67 % for boys).

Alcohol

Alcoholic beverages were perceived to be easily available in most countries and, in general, the perceived availability appeared to be higher for girls (77 %) than boys (73 %) (Table 3a). On average, three out of four students (75 %) stated that they would find it easy to acquire alcoholic beverages if

they wanted to. In Denmark, Germany and Greece, more than 90 % of students reported easy access. The lowest proportions reporting easy access were found in Kosovo (42 %), which is also the only country with a figure of less than 50 %, followed by Iceland (54 %), Lithuania (57 %) and Moldova (59 %). Considerable gender differences were found in Lithuania (13 percentage points), Latvia and Cyprus (12 percentage points, both), with a higher rate among girls than boys. In Kosovo, higher rates were observed among boys than girls (5 percentage points).

Illicit drugs

A quarter of students (26 %) rated cannabis to be easily obtainable (Table 3b). The highest proportions were found in Denmark, Germany and Slovenia (41 %, each), followed by Norway (40 %) and Czechia (39 %). The countries with the lowest perceived availability of cannabis were Moldova (5.3 %), Ukraine (7.1 %), the Faroes (11 %), Kosovo and Georgia (12 %, both). On average, boys were more likely than girls to consider cannabis to be easily available (28 % for boys versus 24 % for girls). This was the case in most countries, with gender differences of up to 9.6 percentage points. The countries in which more girls than boys reported easy availability of cannabis were Bulgaria, Malta and Slovakia.

On average, the perceived availability of other illicit drugs was relatively low (Tables 3b and c). The proportion of students that reported easy access was 13 % for cocaine, 11 % for ecstasy, 9.3 % for amphetamine, 7.9 % for crack and 7.8 % for methamphetamine. Illicit drugs were perceived to be more easily available overall in Norway, Montenegro and Denmark than elsewhere in Europe. The perceived availability of cocaine was highest in Norway, Denmark and Slovenia (over 20 %), and the perceived availability of ecstasy was highest in Norway, Montenegro, Czechia and Slovenia (over 17 %). The countries with the lowest perceptions of availability for nearly all illicit drugs were Georgia, Moldova and the Faroes, with rates ranging between 1.8 % and 4.5 %.

Noticeable gender differences of 5 or more percentage points were found for cocaine availability in Cyprus and Slovakia (rates were higher for girls than boys), and in Liechtenstein (rates were higher for boys than girls). Such gender differences in accessibility were also found in Liechtenstein for amphetamines and ecstasy; in Monaco for ecstasy and crack; and in Italy for crack (availability rates were higher for boys than girls). In Cyprus, figures for amphetamine and methamphetamine accessibility were over 5 percentage points higher for girls than boys.

Tranquillisers without medical prescription

On average, 19 % of students perceived tranquillisers without medical prescription to be easily obtainable (Table 3c). Almost half of students in Poland (49 %) perceived tranquillisers to be easily available, and high proportions were also found in Denmark (39 %), Czechia (38 %), Montenegro (35 %) and Germany (30 %). The countries with the lowest proportions of perceived availability were Moldova (3.4 %), Ukraine (5.9 %), Ireland (7.9 %) and Georgia (8.5 %).

Girls in all countries apart from Moldova, Monaco, North Macedonia and Latvia were more likely than boys to consider tranquillisers to be easily available (ESPAD average: 21 % for girls versus 17 % for boys). Gender differences varied from less than 1 up to 16 percentage points. The countries with the highest gender differences in the perceived availability of tranquillisers were Lithuania, Cyprus, Hungary and Poland.

Table 3a. Perceived availability of substances: prevalence of students responding substance 'fairly easy' or 'very easy' to obtain (alcohol, cigarettes, e-cigarettes, water pipes) (percentage)

Country	Alcohol	Cigarettes	e-Cigarettes	Water pipe	Alcohol		Cigarettes		e-Cigarettes		Water pipes	
					Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	87	65	69	34	87	87	66	63	69	69	37	31
Bulgaria	81	60	64	51	79	83	59	62	62	66	51	51
Croatia	83	67	71	27	81	85	66	67	67	75	28	26
Cyprus	72	42	51	35	66	78	46	38	50	51	36	33
Czechia	86	69	77	–	83	88	72	66	76	77	–	–
Denmark	94	76	82	33	93	95	77	75	81	83	38	28
Estonia	66	50	64	17	61	70	50	50	62	67	19	15
Faroes	71	63	35	7.8	71	72	64	62	40	30	11	4.1
Finland	70	64	69	13	68	72	65	63	68	71	15	10
France	67	42	50	21	63	70	42	43	48	52	24	18
Georgia	81	44	44	13	80	82	47	40	45	43	18	8.5
Germany	94	70	70	41	95	93	73	67	72	68	44	39
Greece	92	65	77	50	91	93	66	64	75	78	53	46
Hungary	86	67	65	28	84	88	68	66	64	65	29	27
Iceland	54	35	46	11	51	58	36	35	44	48	11	10
Ireland	71	59	66	12	71	71	60	58	67	65	11	12
Italy	78	55	56	15	76	80	56	54	57	55	19	12
Kosovo	42	32	33	31	44	39	39	26	39	28	36	27
Latvia	68	53	60	16	62	74	52	53	59	61	17	15
Liechtenstein	84	68	76	38	83	85	71	65	75	76	44	33
Lithuania	57	49	55	13	51	64	48	50	53	57	14	11
Malta	79	54	58	24	76	83	53	55	56	60	23	25
Moldova	59	23	36	21	57	60	26	19	37	36	23	18
Monaco	74	49	61	25	70	80	53	43	59	63	30	18
Montenegro	75	58	56	40	75	75	61	56	57	54	42	39
Netherlands	71	53	64	27	72	70	57	50	64	63	32	21
North Macedonia	60	36	38	38	61	59	37	34	40	35	42	34
Norway	83	70	79	28	79	86	67	74	77	81	31	25
Poland	73	66	71	25	72	74	67	66	71	71	29	20
Portugal	70	48	41	21	67	74	47	48	40	42	23	19
Romania	69	46	52	27	69	69	47	45	50	54	29	25
Serbia	83	60	68	34	81	85	62	58	65	71	34	33
Slovakia	81	64	64	35	78	84	67	61	66	63	33	35
Slovenia	85	65	72	32	83	86	65	65	71	72	32	32
Spain	84	59	68	45	83	85	59	59	68	67	46	43
Sweden	68	64	74	22	62	73	62	67	71	77	22	22
Ukraine	63	34	42	22	61	65	39	30	45	41	23	21
AVERAGE	**75**	**55**	**60**	**27**	**73**	**77**	**56**	**54**	**60**	**60**	**29**	**25**
Min.	42	23	33	7.8	44	39	26	19	37	28	11	4.1
Max.	94	76	82	51	95	95	77	75	81	83	53	51

Table 3b. Perceived availability of substances: prevalence of students responding substance 'fairly easy' or 'very easy' to obtain (cannabis, cocaine, crack, ecstasy) (percentage)

Country	Cannabis	Cocaine	Crack	Ecstasy	Cannabis		Cocaine		Crack		Ecstasy	
					Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	30	13	–	11	31	28	12	13	–	–	11	9.6
Bulgaria	25	14	10	12	24	26	12	15	10	10	12	12
Croatia	32	17	12	16	33	32	16	18	11	12	17	16
Cyprus	24	18	–	11	26	21	13	21	–	–	11	11
Czechia	39	14	–	17	42	36	14	14	–	–	19	16
Denmark	41	25	–	16	45	37	26	25	–	–	17	15
Estonia	30	11	–	12	30	29	12	10	–	–	14	10
Faroes	11	4.5	3.0	2.4	14	8.4	4.4	4.7	3.8	2.3	2.5	2.3
Finland	25	11	–	11	28	22	12	11	–	–	13	8.5
France	22	11	–	6.9	23	20	11	9.6	–	–	8.1	5.6
Georgia	12	2.5	1.8	3.6	15	9.4	2.7	2.2	2.6	1.1	4.9	2.3
Germany	41	13	8.4	11	46	36	14	12	9.3	7.6	12	8.7
Greece	34	17	–	10	34	34	16	18	–	–	11	10
Hungary	24	14	10	15	26	23	13	15	11	10	16	15
Iceland	19	8.9	–	9.3	20	17	9.5	8.4	–	–	8.8	9.5
Ireland	28	14	9.9	9.6	29	28	12	16	8.6	11	9.8	9.3
Italy	31	9.0	7.8	5.7	34	28	11	6.4	10	5.1	7.1	4.1
Kosovo	12	7.8	6.1	5.3	16	7.8	9.8	6.1	7.3	5.0	7.2	3.6
Latvia	24	13	8.6	11	25	22	13	13	10	7.3	12	9.6
Liechtenstein	36	14	6.6	9.0	39	35	17	10	8.1	5.1	12	6.4
Lithuania	16	8.9	–	8.1	17	15	8.2	9.7	–	–	8.0	8.5
Malta	30	15	–	11	27	33	12	17	–	–	10	12
Moldova	5.3	2.8	–	2.6	6.8	3.8	2.9	2.7	–	–	3.0	2.2
Monaco	26	8.8	7.9	8.9	29	22	11	6.1	10	5.0	12	4.5
Montenegro	29	18	–	20	33	24	18	17	–	–	21	19
Netherlands	33	12	–	12	35	31	12	12	–	–	12	12
North Macedonia	17	10	–	7.6	21	12	10	9.8	–	–	8.9	6.3
Norway	40	28	–	25	41	39	27	30	–	–	24	25
Poland	32	16	–	15	35	29	16	17	–	–	16	13
Portugal	21	11	7.2	8.5	22	20	10	11	6.7	7.7	8.1	8.9
Romania	14	9.7	–	5.9	14	14	8.6	11	–	–	5.4	6.3
Serbia	20	12	–	12	22	18	13	11	–	–	13	11
Slovakia	31	12	–	14	30	31	8.5	15	–	–	13	15
Slovenia	41	21	13	17	42	40	18	23	12	14	17	17
Spain	29	13	11	9.4	31	27	13	13	11	10	9.3	9.5
Sweden	27	16	–	13	27	26	14	18	–	–	12	14
Ukraine	7.1	4.4	3.7	3.8	9.4	5.2	6.1	2.9	5.5	2.2	5.3	2.6
AVERAGE	**26**	**13**	**7.9**	**11**	**28**	**24**	**12**	**13**	**8.6**	**7.2**	**11**	**10**
Min.	5.3	2.5	1.8	2.4	6.8	3.8	2.7	2.2	2.6	1.1	2.5	2.2
Max.	41	28	13	25	46	40	27	30	12	14	24	25

Table 3c. Perceived availability of substances: prevalence of students responding substance 'fairly easy' or 'very easy' to obtain (amphetamine, methamphetamine, tranquillisers without medical prescription) (percentage)

Country	Amphetamine	Methamphetamine	Tranquillisers without medical prescription	Amphetamine		Methamphetamine		Tranquillisers without medical prescription	
				Boys	Girls	Boys	Girls	Boys	Girls
Austria	11	6.4	19	12	10	6.8	6.0	17	20
Bulgaria	14	13	11	12	16	12	15	10	12
Croatia	11	11	14	12	10	12	9.6	14	15
Cyprus	9.5	8.9	16	6.0	12	3.0	13	7.6	22
Czechia	9.9	12	38	12	8.1	14	11	35	40
Denmark	15	11	39	16	14	12	10	38	40
Estonia	9.7	8.4	21	12	7.5	10	6.5	20	23
Faroes	2.4	2.4	10	3.1	1.7	3.1	1.8	8.8	10
Finland	10	8.6	18	12	8.5	10	7.2	17	18
France	6.2	6.1	18	7.0	5.4	6.9	5.2	15	21
Georgia	2.2	2.1	8.5	3.1	1.4	2.8	1.5	7.1	9.8
Germany	13	7.9	30	16	11	9.7	6.2	28	31
Greece	9.4	8.3	26	9.5	9.4	8.5	8.1	25	28
Hungary	16	10	29	16	17	11	9.3	24	33
Iceland	9.2	7.3	17	9.6	8.5	7.2	7.3	14	20
Ireland	5.4	4.3	7.9	5.7	4.8	4.9	3.5	7.7	8.0
Italy	5.7	5.5	20	7.0	4.3	6.9	4.0	17	24
Kosovo	3.6	4.3	18	4.4	3.0	5.5	3.2	17	18
Latvia	11	9.0	8.9	12	10	10	8.1	9.1	8.7
Liechtenstein	7.8	3.6	17	12	3.8	4.7	2.5	16	18
Lithuania	8.5	6.5	22	8.7	8.5	6.5	6.7	14	30
Malta	7.5	6.9	15	7.1	7.5	6.3	7.5	14	17
Moldova	2.7	2.5	3.4	3.0	2.4	2.8	2.2	3.5	3.2
Monaco	6.0	6.3	13	7.5	4.0	7.9	4.0	13	12
Montenegro	18	15	35	18	17	14	16	33	38
Netherlands	11	8.0	20	13	9.6	8.8	7.3	18	23
North Macedonia	6.8	5.2	10	7.7	5.9	5.9	4.6	11	9.8
Norway	19	–	25	19	19	–	–	22	28
Poland	16	14	49	16	15	15	13	44	53
Portugal	7.5	7.5	14	7.2	7.8	7.0	7.9	10	18
Romania	6.2	6.4	8.8	5.4	6.8	5.6	7.0	7.0	10
Serbia	8.6	7.3	18	9.3	7.9	8.1	6.7	18	18
Slovakia	9.1	10	12	8.0	9.8	8.8	11	11	14
Slovenia	9.4	11	19	9.7	9.1	11	11	17	21
Spain	7.7	7.6	15	7.7	7.7	7.8	7.5	15	16
Sweden	12	11	23	12	12	11	11	20	25
Ukraine	3.5	4.0	5.9	4.3	2.9	5.4	2.9	5.8	6.1
AVERAGE	**9.3**	**7.8**	**19**	**9.8**	**8.7**	**8.1**	**7.4**	**17**	**21**
Min.	2.2	2.1	3.4	3.0	1.4	2.8	1.5	3.5	3.2
Max.	19	15	49	19	19	15	16	44	53

Early onset of substance use

ESPAD average Early onset of substance use (%) [a]			
	Average	Min.	Max.
Cigarettes	15	6.4	24
Daily smoking	3.6	1.2	8.7
e-Cigarettes	16	5.4	33
Daily e-cigarettes	2.9	0.0	8.7
Drink alcohol (at least one glass)	33	12	64
Intoxication	8.0	3.0	25
Cannabis	2.4	0.7	4.9
Ecstasy	0.8	0.0	3.3
Amphetamine/ methamphetamine	0.9	0.0	3.7
Cocaine/crack	0.9	0.2	4.0
Inhalants	2.2	0.3	5.9

(a) Percentage of students using a substance at the age of 13 or younger. Questions regarding the age of first use of ecstasy, amphetamines/ methamphetamines, cocaine/crack and inhalants were not included in 20 countries. As a result, the averages for these substances are based only on data from the 17 countries that included the relevant questions (see Table 4b).

Cigarettes

Almost one in seven ESPAD students (15 %) had smoked cigarettes at age 13 or younger (Table 4a). The proportions varied considerably across countries, from 6.4 % in Iceland, 7.1 % in Malta and 8 % in the Netherlands to 24 % in Slovakia, 23 % in Kosovo and 22 % in Estonia. On average, more boys than girls had smoked cigarettes at age 13 or younger (15 % for boys versus 14 % for girls). In 19 countries, more boys than girls had smoked cigarettes by the age of 13, while in 18 countries, more girls than boys had done so. The largest gender difference was found in Kosovo (31 % for boys versus 16 % for girls). After Kosovo (31 %), the next highest proportions among boys were recorded in Slovakia (23 %), Georgia and Ukraine (22 %, both). The highest proportions among girls were recorded in Estonia and Slovakia (24 %, both) and Bulgaria and Hungary (23 %, both).

The ESPAD average rate for students who began smoking cigarettes on a daily basis at age 13 or younger was 3.6 %. The rates were highest in Bulgaria (8.7 %), Kosovo and Slovakia (6.6 %, both) and lowest in the Faroes and Liechtenstein (1.2 %, both), followed by Denmark, France, Malta and Sweden (1.4–1.6 %). Apart from Kosovo, where the gender difference was 5.1 percentage points (9.3 % for boys versus 4.2 % for girls), because of the small proportion of students reporting onset of daily smoking at an early age, gender differences were generally less than 2 percentage points (ESPAD average: 3.6 % for boys versus 3.5 % for girls).

Girls and boys were equally likely to begin smoking cigarettes on a daily basis at age 13 or younger in Italy (3.8 %) and Spain (1.9 %). In about half of the remaining countries, more girls reported early onset of smoking and in the other half more boys did so. The countries with the highest prevalence estimates for boys were Kosovo (9.3 %), Ukraine (7.8 %) and Bulgaria (7.5 %). Liechtenstein reported a 0 % rate for early onset of daily smoking among boys. Among girls, the highest rate of early onset of daily smoking was reported in Bulgaria (10 %), followed by Cyprus (6.6 %), Latvia (6.4 %), Estonia, Hungary and Romania (6.2 %, each) and the lowest rates were reported in Norway and Portugal (1.1 %, both).

Electronic cigarettes

On average, 16 % of students, slightly more girls (16 %) than boys (15 %) had tried e-cigarettes at age 13 or younger (Table 4a), with country-level rates ranging from 5.4 % in Portugal to 33 % in Estonia. In three countries, 30 % or more students reported early initiation of e-cigarette use: Estonia (33 %), Lithuania (31 %) and Latvia (30 %). Fewer than one in ten students had tried e-cigarettes before the age of 13 in only four countries: the Netherlands (8.9 %), the Faroes (7.7 %), Montenegro (7.4 %) and Portugal (5.4 %).

In the majority of countries (24 out of 37), more girls than boys reported early use of e-cigarettes. The largest gender differences in favour of girls were observed in Estonia (37 % for girls versus 29 % for boys), Malta (16 % versus 6.7 %) and Latvia (34 % versus 27 %), while in three countries the difference was less than 1 percentage point. Greece and Monaco were the only countries where no gender difference in early e-cigarette use was observed. In 11 countries, a higher percentage of boys than girls

reported early e-cigarette use, with the largest differences found in Kosovo (25 % for boys versus 13 % for girls) and Georgia (15 % versus 9 %).

The ESPAD average prevalence rate for students who reported becoming daily e-cigarette users at age 13 or younger was 3.9 % (3.7 % for boys and 4.0 % for girls). There was a 9-percentage-point difference between countries with the lowest prevalence (0.0 % in the Faroes) and the highest (8.7 % in Lithuania), followed by Estonia (8.6 %) and Latvia (8.0 %). In 17 out of 37 ESPAD countries, the prevalence of daily e-cigarette use at age 13 or younger was higher among girls than boys, and in another 17 countries, it was higher among boys than girls. In three countries, there was no gender difference in the early onset of daily e-cigarette use. The largest gender differences were observed in Kosovo, where more boys than girls reported early onset of daily e-cigarette use (7.2 % for boys versus 2.4 % for girls), and in Estonia, where the opposite was found (12 % for girls versus 5.6 % for boys).

Alcohol

One in three ESPAD students (33 %) reported alcohol use at age 13 or younger (Table 4a). The highest rates of students reporting alcohol use at an early age were found in Georgia (64 %) and Moldova (49 %). The countries with the lowest rates were Iceland (12 %), Kosovo (14 %) and Norway (14 %). In 19 countries, boys were more likely than girls to have used alcohol at age 13 or younger, with the highest gender differences found in North Macedonia (35 % for boys versus 22 % for girls), Serbia (49 % versus 37 %) and Montenegro (47 % versus 36 %). Notably, in 15 countries, more girls than boys reported early use of alcohol, with the highest gender difference found in Latvia (46 % for girls versus 35 % for boys) and Lithuania (35 % versus 26 %). In Cyprus, Finland and Norway, no gender differences were found.

On average, one in fifteen ESPAD students (8.0 %) reported alcohol intoxication at age 13 or younger, with proportions ranging from 3 % in Kosovo to 25 % in Georgia. Higher rates were more likely to be found in the eastern part of Europe and, in general, more boys than girls reported intoxication at an early age (ESPAD average: 8.2 % for boys versus 7.8 % for girls), although the gender gap has narrowed since the 2019 data collection. The highest gender difference was found in Georgia (30 % for boys versus 20 % for girls). Czechia reported the highest gender difference in favour of girls (14 % for girls versus 7.6 % for boys).

Table 4a. Early onset of substance use: prevalence of students experiencing substance use (cigarettes, daily smoking, e-cigarettes, daily e-cigarettes, alcohol, intoxication) at the age of 13 or younger (percentage)

Country	Cigarettes	Daily smoking	e–Cigarettes	Daily e–cigarettes	Drink alcohol (at least one glass)	Get drunk on alcohol	Cigarettes		Daily smoking		e–Cigarettes		Daily e–cigarettes		Drink alcohol (at least one glass)		Intoxication	
							Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	15	2.4	13	2.2	37	12	13	17	1.7	3.1	12	14	1.8	2.4	36	39	12	12
Bulgaria	20	8.7	17	4.6	41	14	17	23	7.5	10	16	18	4.6	4.6	42	41	13	15
Croatia	17	5.4	16	3.8	46	8.2	17	18	6.2	4.4	15	18	3.9	3.7	47	44	10	6.2
Cyprus	13	4.8	17	6.0	22	7.3	13	13	3.0	6.6	17	17	7.2	5.3	21	21	7.2	7.7
Czechia	18	4.3	21	4.6	44	11	17	18	4.8	3.8	19	23	2.9	6.2	43	45	7.6	14
Denmark	9.7	1.4	12	2.3	46	12	9.1	10	1.4	1.5	11	14	1.9	2.6	49	43	12	11
Estonia	22	5.0	33	8.6	32	12	21	24	3.8	6.2	29	37	5.6	12	29	35	9.3	14
Faroes	18	1.2	7.7	0.0	15	3.9	21	16	1.3	1.2	7.5	7.6	0.0	0.0	16	14	4.4	3.5
Finland	15	3.4	15	3.8	23	8.9	15	15	3.6	3.2	15	14	3.4	4.3	23	23	8.3	9.5
France	9.4	1.4	12	1.6	32	3.6	8.4	10	1.3	1.6	12	12	2.2	1.0	33	31	4.1	3.1
Georgia	18	4.3	12	3.4	64	25	22	14	5.8	3.0	15	9.3	4.9	2.0	68	61	30	20
Germany	12	2.6	11	2.3	37	8.6	11	13	2.3	3.0	10	12	1.7	2.9	35	39	8.6	8.5
Greece	14	3.6	17	5.0	40	6.7	15	14	3.8	3.4	17	17	5.1	4.9	44	37	7.3	6.1
Hungary	21	5.7	20	5.7	46	12	20	23	5.0	6.2	19	21	5.3	6.0	48	45	12	12
Iceland	6.4	2.5	13	5.1	12	4.1	6.2	5.8	2.2	2.4	11	15	4.9	4.9	11	13	3.7	4.5
Ireland	10	3.0	15	4.1	21	6.6	8.6	11	1.7	3.7	12	18	2.6	5.1	20	22	6.2	6.9
Italy	15	3.8	11	2.5	34	6.0	13	17	3.8	3.8	11	11	2.5	2.6	34	33	6.3	5.5
Kosovo	23	6.6	19	4.7	14	3.0	31	16	9.3	4.2	25	13	7.2	2.4	19	9.2	4.3	1.8
Latvia	19	5.9	30	8.0	40	9.7	19	19	5.4	6.4	27	34	6.4	9.5	35	46	8.0	11
Liechtenstein	12	1.2	11	1.8	24	4.4	13	11	0.0	2.5	10	13	1.2	2.5	26	23	3.8	5.2
Lithuania	21	5.2	31	8.7	30	7.1	21	20	6.1	4.3	30	33	9.0	8.5	26	35	5.9	8.2
Malta	7.1	1.6	11	3.4	34	6.4	4.8	9.3	1.0	2.2	6.7	16	1.5	5.3	31	37	5.2	7.7
Moldova	14	2.3	14	2.7	49	7.7	18	9.6	3.2	1.3	16	12	2.9	2.4	50	48	9.3	6.0
Monaco	13	3.5	21	4.5	40	7.1	15	9.8	4.6	2.2	21	21	5.4	3.3	43	36	8.3	5.5
Montenegro	11	2.1	7.4	1.2	42	5.1	13	9.2	2.7	1.5	8.4	6.4	1.7	0.7	47	36	7.0	3.3
Netherlands	8.0	1.9	8.9	2.8	23	4.6	7.0	9.1	2.4	1.4	7.9	10	2.7	2.9	25	22	4.4	4.6
North Macedonia	15	3.6	11	2.1	29	6.7	18	13	4.5	2.8	13	8.3	2.6	1.6	35	22	8.4	5.2
Norway	8.6	2.0	11	2.3	14	4.5	9.4	7.7	2.6	1.1	12	10	2.9	1.7	14	14	4.3	4.6
Poland	20	3.7	22	4.6	30	5.1	21	19	3.3	4.1	23	20	4.6	4.5	29	31	5.2	5.1
Portugal	8.6	1.7	5.4	1.7	31	3.6	9.4	7.9	2.3	1.1	6.0	4.8	1.9	1.5	31	32	3.9	3.3
Romania	21	5.4	19	4.2	41	11	19	22	4.6	6.2	17	20	3.3	4.9	46	37	12	9.0
Serbia	12	3.0	10	2.0	42	7.9	13	12	3.6	2.6	9.1	12	2.8	1.3	49	37	11	5.1
Slovakia	24	6.6	18	5.5	36	11	23	24	6.7	5.3	16	20	5.0	5.3	36	37	8.8	13
Slovenia	12	3.0	15	3.5	42	8.4	11	14	2.4	3.3	13	17	2.2	4.6	43	42	8.1	8.5
Spain	11	1.9	14	2.0	24	6.7	10	12	1.9	1.9	13	14	2.2	1.9	23	25	6.5	6.9
Sweden	9.8	1.6	16	4.3	16	5.9	9.9	9.7	1.3	1.9	14	18	4.0	4.6	15	17	5.3	6.2
Ukraine	18	6.2	21	7.2	36	9.4	22	15	7.8	4.9	21	21	7.9	6.6	34	38	10	8.7
AVERAGE	**15**	**3.6**	**16**	**3.9**	**33**	**8.0**	**15**	**14**	**3.6**	**3.5**	**15**	**16**	**3.7**	**4.0**	**34**	**33**	**8.2**	**7.8**
Min.	6.4	1.2	5.4	0.0	12	3.0	4.8	5.8	0.0	1.1	6.0	4.8	0.0	0.0	11	9.2	3.7	1.8
Max.	24	8.7	33	8.7	64	25	31	24	9.3	10	30	37	9.0	12	68	61	30	20

Illicit drugs

On average, 2.4 % of ESPAD students reported that they had first used cannabis at age 13 or younger (Table 4b). The highest rates were found in Ukraine (4.9 %), Czechia (4.1 %), Iceland and Estonia (3.6 %, both). The lowest rates were observed in Moldova (0.7 %), Georgia and Liechtenstein (1.2 %, both). Overall, boys (2.8 %) were more likely to use cannabis at age 13 or younger than girls (2.0 %).

Rates of early onset of amphetamine/methamphetamine use were lower on average (0.9 %), with the highest rate of use found in Ukraine (3.7 %). Overall, boys were more likely than girls to have used amphetamine/methamphetamine at age 13 or younger. Gender differences across countries were modest, typically ranging between 0.1 and 1.3 percentage points, with the exception of Ukraine, where a larger difference was observed (5.7 % for boys versus 2.1 % for girls). Similar results were found for early onset of ecstasy and cocaine/crack use.

Inhalants

Among the 17 countries that collected the relevant data, an average of 2.2 % of students reported early onset of inhalant use, with no notable gender difference at the European level (2.2 % boys and 2.3 % girls). Countries with the highest rates of students reporting use of inhalants at an early age included Germany (5.9 %), Slovenia (5.0 %), Estonia (4.0 %) and Ukraine (4.0 %).

Early onset of inhalant use was more frequently reported by girls in nine countries, with the largest gender difference observed in Estonia (2.7 % for boys versus 5.4 % for girls), followed by Latvia and Monaco, where the difference in favour of girls reached 1.2 percentage points. Conversely, boys reported higher levels of early onset in six countries, particularly in Ukraine (5.6 % for boys versus 2.7 % for girls). In Portugal and Romania, no gender differences were observed.

Table 4b. Early onset of substance use: prevalence of students experiencing substance use (cannabis, ecstasy, amphetamine/methamphetamine, cocaine/crack, inhalants) at the age of 13 or younger (percentage) ([a])

Country	Cannabis	Ecstasy	Amphetamine/methamphetamine	Cocaine/crack	Inhalants	Cannabis		Ecstasy		Amphetamine/methamphetamine		Cocaine/crack		Inhalants	
						Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	2.5	–	–	–	–	2.3	2.8	–	–	–	–	–	–	–	–
Bulgaria	3.1	1.1	1.2	1.0	1.6	3.3	2.7	1.5	0.5	1.8	0.5	1.3	0.5	1.9	1.3
Croatia	2.2	–	–	–	–	3.2	1.2	–	–	–	–	–	–	–	–
Cyprus	2.0	–	–	–	–	1.4	2.6	–	–	–	–	–	–	–	–
Czechia	4.1	–	–	–	–	3.5	4.7	–	–	–	–	–	–	–	–
Denmark	1.8	–	–	–	–	2.0	1.6	–	–	–	–	–	–	–	–
Estonia	3.6	1.1	0.9	0.8	4.0	3.8	3.5	0.9	1.4	0.9	0.9	0.8	0.8	2.7	5.4
Faroes	1.5	0.9	0.6	0.9	1.5	2.5	0.6	1.3	0.6	1.3	0.0	1.3	0.6	1.9	1.2
Finland	1.9	–	–	–	–	2.3	1.5	–	–	–	–	–	–	–	–
France	2.5	–	–	–	–	2.7	2.2	–	–	–	–	–	–	–	–
Georgia	1.2	0.4	0.5	0.4	1.6	1.8	0.6	0.5	0.3	0.7	0.3	0.6	0.3	1.8	1.3
Germany	1.9	0.4	0.6	0.4	5.9	1.8	1.9	0.2	0.5	0.6	0.6	0.5	0.2	5.6	6.1
Greece	2.0	–	–	–	–	2.8	1.3	–	–	–	–	–	–	–	–
Hungary	2.2	–	–	–	–	2.5	1.9	–	–	–	–	–	–	–	–
Iceland	3.6	–	–	–	–	4.3	2.4	–	–	–	–	–	–	–	–
Ireland	3.0	–	–	–	–	3.1	2.7	–	–	–	–	–	–	–	–
Italy	3.4	0.1	0.1	0.3	0.4	4.2	2.7	0.1	0.0	0.2	0.0	0.5	0.1	0.2	0.4
Kosovo	1.9	1.4	1.4	1.0	1.3	2.9	1.0	2.0	0.8	2.1	0.8	1.6	0.6	2.0	0.6
Latvia	3.4	0.7	0.8	0.8	3.1	3.3	3.5	0.8	0.6	1.2	0.4	1.0	0.7	2.5	3.7
Liechtenstein	1.2	–	–	–	–	1.2	1.3	–	–	–	–	–	–	–	–
Lithuania	2.0	–	–	–	–	2.2	1.9	–	–	–	–	–	–	–	–
Malta	2.1	–	–	–	–	1.7	2.4	–	–	–	–	–	–	–	–
Moldova	0.7	–	–	–	–	1.1	0.4	–	–	–	–	–	–	–	–
Monaco	1.7	0.0	0.0	0.2	0.9	2.1	1.1	0.0	0.0	0.0	0.0	0.4	0.0	0.4	1.6
Montenegro	3.0	–	–	–	–	4.5	1.5	–	–	–	–	–	–	–	–
Netherlands	3.4	–	–	–	–	4.0	2.8	–	–	–	–	–	–	–	–
North Macedonia	1.3	–	–	–	–	1.7	0.8	–	–	–	–	–	–	–	–
Norway	2.0	–	–	–	–	2.4	1.5	–	–	–	–	–	–	–	–
Poland	2.7	1.0	1.6	1.1	3.4	3.1	2.3	1.4	0.6	1.7	1.6	1.6	0.6	3.6	3.3
Portugal	1.8	0.3	0.4	0.8	0.3	2.3	1.4	0.2	0.3	0.3	0.4	1.2	0.4	0.3	0.3
Romania	1.4	0.3	0.4	0.5	0.9	1.4	1.4	0.4	0.3	0.3	0.4	0.4	0.5	0.9	0.9
Serbia	1.8	0.5	0.6	0.8	2.1	2.7	1.1	0.7	0.4	0.9	0.4	0.9	0.7	1.5	2.5
Slovakia	2.4	0.6	0.7	0.4	0.9	2.2	2.4	0.6	0.3	0.6	0.5	0.3	0.2	0.4	1.0
Slovenia	3.2	1.0	0.9	1.0	5.0	2.8	3.4	1.2	0.8	1.4	0.5	1.2	0.7	4.4	5.4
Spain	3.0	0.7	0.4	0.4	1.2	3.7	2.4	0.7	0.7	0.5	0.4	0.4	0.3	1.1	1.3
Sweden	1.9	–	–	–	–	2.9	1.1	–	–	–	–	–	–	–	–
Ukraine	4.9	3.3	3.7	4.0	4.0	7.5	2.7	5.0	1.8	5.7	2.1	6.2	2.1	5.6	2.7
AVERAGE	**2.4**	**0.8**	**0.9**	**0.9**	**2.2**	**2.8**	**2.0**	**1.0**	**0.6**	**1.2**	**0.6**	**1.2**	**0.5**	**2.2**	**2.3**
Min.	0.7	0.0	0.0	0.2	0.3	1.1	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.2	0.3
Max.	4.9	3.3	3.7	4.0	5.9	7.5	4.7	5.0	1.8	5.7	2.1	6.2	2.1	5.6	6.1

([a]) Data regarding the age of first use of ecstasy, amphetamine/methamphetamine, cocaine/crack, and inhalants were not collected in 20 countries. As a result, the averages for these substances are based only on data from the 17 countries that included the relevant questions

Cigarette use

ESPAD average Cigarette use (%) [a]			
	Average	Min.	Max.
Lifetime	32	13	51
Last 30 days	18	4.2	32

[a] Percentage of students reporting use of cigarettes.

Lifetime

On average, 32 % of students in ESPAD countries had ever smoked cigarettes, with the lifetime prevalence rate ranging from 13 % in Iceland to 51 % in Hungary (Table 5). In 18 of the 37 ESPAD countries, at least a third of the students had tried cigarette smoking in their lifetime. The average prevalence of lifetime cigarette smoking was slightly higher among girls (32 %) than boys (31 %). Girls were more likely than boys to have tried cigarettes in a majority of the participating countries (24 versus 10 countries). The largest gender differences were found in Bulgaria (33 % for boys versus 46 % for girls), Georgia (35 % versus 24 %) and Kosovo (47 % versus 36 %). The countries with the highest lifetime prevalence estimates for boys were Hungary and Kosovo (47 %, both), followed by Slovakia (43 %), Croatia and the Faroes (41 %, both). The countries with the lowest lifetime prevalence estimates for boys were Malta (12 %), Iceland (13 %) and France (17 %). The countries with the highest lifetime prevalence estimates for girls were Hungary (53 %), Slovakia (49 %), Bulgaria, Croatia and Romania (46 %, each). The countries with the lowest lifetime prevalence estimates for girls were Iceland (13 %), Moldova (19 %), Malta and Portugal (21 %, both).

Last 30 days

On average, 18 % of ESPAD students had used cigarettes during the last 30 days (Table 5). The highest rates of current smokers were found in Croatia and Hungary (32 %, both) and Bulgaria and Slovakia (29 %, both). Countries that reported a last-30-day prevalence of 10 % or lower included Iceland (4.2 %), Sweden (8.2 %), Ireland (9.0 %), Malta (9.3 %) and France, Moldova, Monaco and Portugal (10 %, each). Kosovo (33 %), Croatia (31 %) and Hungary (30 %) reported a high smoking rate for boys and Bulgaria, Croatia, Hungary (34 %, each), Slovakia (32 %) and Romania (30 %) reported a high smoking rate for girls. The average ESPAD rates of current smoking were about the same for boys (17 %) and girls (18 %). The lowest rate of current smoking was reported in Iceland: 3.9 % for both boys and girls. In 21 countries, rates of current smoking were higher for girls, in 11 countries they were higher for boys, and in 5 countries they were the same. Countries with noticeably higher rates among boys than girls were Kosovo (33 % for boys versus 23 % for girls) and Georgia (18 % versus 9.5 %). Rates were higher among girls than boys in Bulgaria (34 % for girls versus 25 % for boys) and Romania (30 % versus 22 %).

Table 5. Cigarette use: prevalence of lifetime and 30-day use (percentage)

Country	Lifetime	30–day	Lifetime		30–day	
			Boys	Girls	Boys	Girls
Austria	41	22	39	42	21	24
Bulgaria	39	29	33	46	25	34
Croatia	43	32	41	46	31	34
Cyprus	24	16	27	22	16	16
Czechia	35	21	33	36	18	23
Denmark	31	13	29	33	14	14
Estonia	34	13	31	36	13	13
Faroes	38	13	41	35	14	13
Finland	31	12	31	31	13	11
France	20	10	17	23	8.4	11
Georgia	29	14	35	24	18	9.5
Germany	37	19	35	38	19	20
Greece	35	24	34	36	24	25
Hungary	51	32	47	53	30	34
Iceland	13	4.2	13	13	3.9	3.9
Ireland	24	9.0	22	25	8.0	9.4
Italy	39	24	35	44	21	26
Kosovo	41	28	47	36	33	23
Latvia	30	14	28	33	12	15
Liechtenstein	41	23	40	42	21	24
Lithuania	33	14	33	34	15	14
Malta	16	9.3	12	21	6.8	12
Moldova	24	10	28	19	12	7.2
Monaco	26	10	26	25	12	7.0
Montenegro	24	14	26	23	15	12
Netherlands	26	15	24	28	14	16
North Macedonia	33	24	34	32	24	23
Norway	25	13	26	25	14	12
Poland	37	20	36	37	19	20
Portugal	21	10	21	21	10	10
Romania	41	26	36	46	22	30
Serbia	32	25	31	33	23	25
Slovakia	46	29	43	49	26	32
Slovenia	33	24	31	35	22	26
Spain	27	13	25	30	11	14
Sweden	23	8.2	21	24	6.9	9.3
Ukraine	27	14	31	25	17	12
AVERAGE	**32**	**18**	**31**	**32**	**17**	**18**
Min.	13	4.2	12	13	3.9	3.9
Max.	51	32	47	53	33	34

Electronic cigarette use

ESPAD average e-Cigarette use (%) ([a])			
	Average	Min.	Max.
Lifetime	44	22	57
Last 30 days	22	6.4	36

([a]) Percentage of students reporting use of e-cigarettes.

Lifetime

The average lifetime prevalence of e-cigarette use was 44 % with variation across ESPAD countries, from 22 % to 57 % (Table 6). In 13 out of 37 ESPAD countries, half or more of the students had tried e-cigarettes at least once in their lifetime, with the highest prevalence countries predominantly located in the central, eastern and south-eastern part of Europe: Hungary (57 %), Slovakia (56 %) and Czechia, Poland and Estonia, with country-level prevalence of 55 % each.

Only in a few countries had less than one third of students tried e-cigarettes: Portugal (22 %), Malta (26 %), Iceland (29 %), North Macedonia (30 %), Montenegro (31 %) and Ireland (32 %).

The overall prevalence was higher among girls (46 %) than boys (41 %), and only in Kosovo, Moldova, Georgia, Ukraine, the Faroes, North Macedonia and Portugal, were boys more likely than girls to have tried e-cigarettes. Among countries where boys reported higher lifetime prevalence of e-cigarette use, the highest gender difference was found in Kosovo (51 % for boys versus 39 % for girls) and Georgia (44 % versus 36 %), while in countries where more girls reported higher lifetime use of e-cigarettes, the largest gender differences were in Malta (32 % for girls versus 19 % for boys) and Liechtenstein (57 % versus 44 %).

Last 30 days

Overall, 22 % of students had used e-cigarettes in the last 30 days (Table 6), with the rate ranging from 6.4 % in Portugal to 36 % in Poland. In only 13 countries did fewer than one in five students report current e-cigarette use, while in five countries more than 30 % of students were current users: Poland (36 %), Serbia (34 %), Croatia (32 %), Hungary and Czechia (31 %, both). On average, the prevalence was higher among girls (25 %) than boys (19 %), with the difference exceeding 10 percentage points in Sweden, Serbia, Bulgaria, Croatia, the Netherlands and Romania. In four countries, the gap was either absent or below 1 percentage point, while the only two countries where boys showed higher prevalence rates than girls were Georgia (18 % for boys versus 11 % for girls) and Kosovo (26 % versus 21 %).

Table 6. e-Cigarette use: prevalence of lifetime and 30-day use (percentage)

Country	Lifetime	30–day	Lifetime		30–day	
			Boys	Girls	Boys	Girls
Austria	52	28	51	54	23	31
Bulgaria	47	25	42	54	19	31
Croatia	53	32	48	58	27	38
Cyprus	35	16	30	41	13	19
Czechia	55	31	52	59	28	34
Denmark	40	22	36	45	19	26
Estonia	55	24	51	59	20	28
Faroes	35	6.5	37	33	3.8	8.1
Finland	39	20	37	40	18	22
France	38	20	35	41	19	22
Georgia	40	14	44	36	18	11
Germany	46	27	45	48	25	29
Greece	52	27	48	55	24	30
Hungary	57	31	54	60	28	34
Iceland	29	12	25	33	10	14
Ireland	32	16	29	34	14	17
Italy	44	22	40	49	19	27
Kosovo	45	23	51	39	26	21
Latvia	51	21	45	56	17	26
Liechtenstein	50	28	44	57	24	33
Lithuania	51	19	47	54	16	21
Malta	26	10	19	32	6.7	12
Moldova	44	17	46	42	17	17
Monaco	44	22	40	49	18	27
Montenegro	31	17	31	31	16	17
Netherlands	39	22	36	43	17	28
North Macedonia	30	12	32	28	12	12
Norway	38	20	35	42	16	23
Poland	55	36	54	56	35	37
Portugal	22	6.4	23	22	6.2	6.7
Romania	53	29	48	59	23	34
Serbia	51	34	45	57	27	40
Slovakia	56	28	52	60	24	32
Slovenia	47	28	44	50	24	31
Spain	46	24	45	47	23	25
Sweden	43	19	37	48	13	26
Ukraine	37	17	38	37	17	18
AVERAGE	**44**	**22**	**41**	**46**	**19**	**25**
Min.	22	6.4	19	22	3.8	6.7
Max.	57	36	54	60	35	40

Alcohol use

ESPAD average Alcohol use (%) [a]			
	Average	Min.	Max.
Lifetime	73	29	91
Last 30 days	42	14	68
Intoxication [b]	13	4.9	36

[a] Percentage of students reporting use of alcohol.
[b] Percentage of students having reported alcohol intoxication at least once in the last 30 days.

Lifetime

In all ESPAD countries except Kosovo (29 %) and Iceland (41 %), over half of the students reported having consumed alcohol at least once in their lifetime (Table 7). The ESPAD average was 73 %, ranging from 29 % to 91 %. The highest rates of lifetime alcohol use were found in Hungary (91 %), Denmark (90 %) and Czechia (88 %). In addition to Kosovo and Iceland, the countries with the lowest rates were Norway (54 %) and Sweden (56 %). In 21 countries, the rate for girls was higher than that for boys, particularly in Iceland (48 % for girls versus 34 % for boys) and Latvia (84 % versus 73 %). In seven countries, the rate was higher for boys than girls, most notably in Kosovo (37 % for boys versus 23 % for girls), which was also the largest gender difference observed.

Last 30 days

Overall, 42 % of the students in ESPAD countries reported alcohol use during the 30 days prior to the survey. In Austria, Germany and Denmark, at least 60 % had consumed alcohol in the last month. Particularly low prevalence rates were found in Iceland (12 %) and Kosovo (14 %). Low rates were also reported in most of the Nordic countries (24 % in Sweden, 27 % in Finland and 32 % in Norway), as well as in Lithuania (24 %), Latvia and Estonia (30 %, both). On average, no gender difference in current alcohol use was found (43 % for girls versus 41 % for boys). At the country level, particularly large gender differences, with higher rates for boys than girls (differences of more than 5 percentage points), were found in Cyprus, Kosovo, Montenegro, Romania, Georgia and North Macedonia. Conversely, girls reported rates at least 5 percentage points higher than those of boys in ten countries, with the largest gender difference in Latvia (difference of 10 percentage points), Malta and Ukraine (9 percentage points, both).

Intoxication

An average of 13 % of ESPAD students reported having been intoxicated in the last 30 days prior to the survey. Denmark had the highest prevalence, with over one third of the students (36 %) reporting intoxication. Twelve countries had rates of less than 10 %; the lowest rates were found in Kosovo (4.9 %), Lithuania (5.8 %) and Iceland (6.1 %). On average, the same proportion of boys and girls (13 %) reported that they had been intoxicated in the last 30 days.

In 17 out of 37 ESPAD countries, girls reported higher rates of alcohol intoxication than boys, with the largest gender differences observed in Cyprus (12 % for girls versus 4.4 % for boys), Malta (11 % versus 5.8 %), Monaco (14 % versus 9.9 %) and Sweden (13 % versus 9.4 %). In 14 countries, boys showed higher rates of intoxication than girls, while in the remaining six countries, gender differences were either absent or below 1 percentage point.

Table 7. Alcohol use: prevalence of lifetime use, 30-day use and intoxication (percentage)

Country	Lifetime use	30–day use	Intoxication, last 30 days	Lifetime use		30–day use		Intoxication, last 30 days	
				Boys	Girls	Boys	Girls	Boys	Girls
Austria	83	60	24	83	83	61	60	25	22
Bulgaria	77	46	13	77	77	44	47	12	13
Croatia	87	56	17	86	89	55	56	18	17
Cyprus	71	44	8.9	72	68	49	35	4.4	12
Czechia	88	56	17	87	89	55	57	15	18
Denmark	90	68	36	90	90	64	72	34	38
Estonia	75	30	7.0	72	77	26	34	7.4	6.6
Faroes	64	27	12	62	66	28	26	13	11
Finland	64	27	12	64	64	25	29	11	13
France	68	40	8.1	67	70	38	41	7.8	8.4
Georgia	83	49	14	83	83	52	46	15	13
Germany	85	62	19	84	87	61	63	19	18
Greece	86	59	13	86	87	60	59	12	14
Hungary	91	58	22	91	91	57	58	22	23
Iceland	41	12	6.1	34	48	9.2	15	5.1	7.3
Ireland	67	35	12	66	67	33	37	12	12
Italy	80	53	12	79	81	53	54	9.9	13
Kosovo	29	14	4.9	37	23	18	10	6.7	3.4
Latvia	78	30	9.1	73	84	25	35	8.1	10
Liechtenstein	78	50	19	78	78	50	50	20	18
Lithuania	72	24	5.8	67	77	20	27	5.5	6.2
Malta	74	37	8.1	69	79	33	42	5.8	11
Moldova	70	44	6.7	68	71	43	46	8.1	5.3
Monaco	76	43	12	72	82	41	45	9.9	14
Montenegro	73	41	7.2	75	71	45	37	9.8	4.7
Netherlands	67	40	16	67	67	38	43	15	16
North Macedonia	63	37	8.6	64	62	40	35	9.5	7.7
Norway	54	32	13	51	56	28	36	10	16
Poland	71	37	12	70	73	36	37	12	12
Portugal	64	37	8.4	65	62	38	35	9.7	7.1
Romania	81	50	11	82	80	54	47	13	10
Serbia	81	57	17	82	80	58	56	19	16
Slovakia	84	46	12	83	86	43	50	11	12
Slovenia	85	53	16	84	85	54	51	16	16
Spain	71	38	14	70	72	37	40	13	14
Sweden	56	24	11	53	58	21	28	9.4	13
Ukraine	78	41	13	73	82	36	45	13	12
AVERAGE	**73**	**42**	**13**	**72**	**74**	**41**	**43**	**13**	**13**
Min.	29	12	4.9	34	23	9.2	10	4.4	3.4
Max.	91	68	36	91	91	64	72	34	38

Illicit drug use

ESPAD average Lifetime use of illicit drugs (%) [a]			
	Average	Min.	Max.
Any illicit drug	13	3.9	25
Cannabis	12	2.5	24
Ecstasy	2.1	0.5	4.7
Amphetamine	1.8	0.7	4.3
Methamphetamine	1.4	0.5	3.1
Cocaine	2.3	0.7	6.2
Crack	1.2	0.5	4.1
LSD or other hallucinogens	1.8	0.2	6.8
Heroin	1.2	0.0	4.1
GHB	0.9	0.0	3.4

[a] Percentage of students reporting use of illicit drugs.

Any drug use

Lifetime use of illicit drugs varied considerably across the ESPAD countries (Table 8a). On average, 13 % of ESPAD students reported having used any illicit drug at least once. The highest percentage of students reporting lifetime use of any illicit drug was found in Liechtenstein (25 %), followed by Czechia (24 %), Slovakia (21 %) and Italy (21 %). Low levels (10 % or less) of illicit drug use were reported in Moldova, Georgia, the Faroes, Romania, North Macedonia, Serbia, Kosovo, Sweden, Portugal, France and Finland.

On average, 14 % of boys and 12 % of girls reported lifetime use of illicit drugs. In most ESPAD countries, the prevalence rate was higher among boys than girls. Noticeably higher rates were recorded for boys compared to girls in Ukraine (18 % for boys versus 9.7 % for girls), Kosovo (11 % versus 5.1 %), Montenegro (15 % versus 9.7 %), Norway (15 % versus 9.3 %) and Monaco (14 % versus 8.6 %). Conversely, among girls in Malta the lifetime prevalence of illicit drug use exceeded that of boys by 6 percentage points (15 % for girls versus 9.3 % for boys).

Cannabis use

Cannabis was the most widely used illicit drug in all ESPAD countries. On average, 12 % of students had used cannabis at least once in their lifetime (Table 8a). The countries with the highest prevalence of lifetime cannabis use were Czechia (24 %), Liechtenstein (23 %), Slovakia (19 %) and Estonia, Italy and Slovenia (18 %, each). The lowest levels of cannabis use, ranging from 2.5 % to 5.7 %, were reported in Moldova, Georgia, Romania, the Faroes, North Macedonia and Kosovo.

On average, boys reported cannabis use to a larger extent than girls (13 % for boys versus 11 % for girls). This was the case in nearly all ESPAD countries except for Bulgaria, Latvia, Czechia, Hungary, Spain, Liechtenstein, Romania, Slovenia, Ireland and Croatia, where rates were about the same for boys and girls. Malta registered a higher prevalence among girls than boys. The largest gender difference (over 8 percentage points) was found in Ukraine (15 % for boys versus 6.7 % for girls).

Other illicit drug use

Some ESPAD students also reported the lifetime use of other illicit substances, although the rates of use for such substances were substantially lower than those for cannabis. The most widely used illicit drugs other than cannabis were cocaine, ecstasy, amphetamine and LSD or other hallucinogens (Table 8a and b). On average, about 5 % of ESPAD students reported having used illicit drugs other than cannabis at least once during their lifetime (Table 15). Cyprus, Iceland, Montenegro, Slovakia and Ukraine reported the highest frequency of use (above 7 %). The largest gender differences, of about 4 to 5 percentage points, were found in Cyprus, Ukraine, Montenegro and Kosovo. These countries reported higher rates for boys than girls. In countries reporting higher rates for girls than boys, the differences were not as large, with the greatest difference (1.4 percentage points) observed in Estonia (7.5 % girls versus 6.1 % boys).

Lifetime prevalence rates for methamphetamine, crack, heroin and GHB were lower than those for the other illicit drugs (about 1 % on average). At the country level, Cyprus recorded the highest lifetime prevalence for LSD and other hallucinogens (6.8 %), cocaine (6.2 %), ecstasy (4.7 %), crack and heroin (4.1 %, both) and GHB (3.4 %). Amphetamine use was highest in Hungary (4.3 %), and methamphetamine use was most prevalent in Poland (3.1 %). On average, boys reported higher lifetime prevalence rates than girls for each substance. The most marked gender differences were observed in Cyprus with regard to ecstasy, LSD or other hallucinogens and heroin, with differences of about 3 to 6 percentage points. The largest differences for cocaine and amphetamines (at 4 and 2.7 percentage points, respectively) were found in Montenegro. Ukraine reported relatively high gender differences for most other illicit substances (about 2–3 percentage points), with higher figures reported among boys than girls.

Table 8a. Illicit drug use: lifetime prevalence of the use of any drug, cannabis, ecstasy, amphetamine and methamphetamine (percentage)

Country	Any drug	Cannabis	Ecstasy	Ampheta-mine	Metham-phetamine	Any drug		Cannabis		Ecstasy		Ampheta-mine		Metham-phetamine	
						Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	19	17	2.2	1.3	0.9	20	17	19	16	2.1	2.3	1.4	1.1	0.8	1.1
Bulgaria	12	11	2.1	2.0	1.5	12	13	10	11	2.4	1.7	2.4	1.6	1.9	1.1
Croatia	16	15	2.6	1.9	1.5	17	15	15	14	3.0	2.2	2.4	1.5	2.0	1.0
Cyprus	12	8.2	4.7	2.7	2.7	14	10	10	6.8	7.5	2.6	3.0	2.6	3.0	2.6
Czechia	24	24	2.6	1.4	1.4	25	24	24	24	2.9	2.4	1.3	1.4	1.2	1.3
Denmark	13	12	1.2	1.2	0.7	15	11	14	10	1.6	0.8	1.5	0.8	1.0	0.4
Estonia	19	18	3.3	2.9	1.8	20	18	19	16	3.4	3.3	3.1	2.8	2.1	1.6
Faroes	5.9	5.1	1.2	2.1	1.5	5.6	6.4	5.7	4.7	1.9	0.6	2.5	1.7	1.9	1.2
Finland	9.9	9.3	1.3	1.5	1.0	11	8.6	10	8.5	1.7	1.0	1.8	1.2	1.4	0.5
France	9.9	8.4	1.1	1.3	0.9	11	9.2	9.4	7.5	1.2	1.1	1.1	1.5	0.8	1.1
Georgia	3.9	3.3	0.8	0.7	0.6	5.9	2.1	5.5	1.3	1.3	0.3	0.8	0.5	1.0	0.3
Germany	19	17	1.8	2.3	1.0	21	16	20	15	1.7	1.9	2.5	2.0	1.2	0.7
Greece	13	11	1.9	1.7	1.8	14	12	12	11	2.6	1.2	2.5	1.0	2.6	1.1
Hungary	16	15	4.6	4.3	2.2	16	16	15	15	4.5	4.6	3.8	4.7	2.4	1.9
Iceland	12	7.8	2.4	2.5	2.0	13	11	8.3	6.8	2.1	2.4	2.6	2.0	2.2	1.3
Ireland	13	12	1.6	0.8	0.7	13	12	12	11	1.2	1.4	0.8	0.5	0.9	0.2
Italy	21	18	1.3	1.5	1.1	23	18	20	16	1.7	0.6	2.1	0.9	1.5	0.6
Kosovo	7.9	5.7	1.9	1.8	2.0	11	5.1	8.2	3.6	3.0	1.0	2.6	1.1	3.1	1.0
Latvia	17	16	2.8	2.4	1.4	16	18	15	16	3.0	2.5	2.5	2.4	1.4	1.5
Liechtenstein	25	23	0.6	1.8	1.2	26	25	24	23	0.0	1.3	2.3	1.3	0.0	2.5
Lithuania	13	11	1.6	1.7	1.4	14	11	13	9.7	2.0	1.1	2.1	1.4	1.6	1.1
Malta	12	11	1.5	1.0	0.9	9.3	15	8.6	14	1.2	1.9	0.7	1.3	0.7	0.9
Moldova	3.9	2.5	1.1	0.8	0.8	4.6	3.2	3.1	1.8	1.7	0.6	0.9	0.6	1.1	0.5
Monaco	11	11	0.5	0.7	0.5	14	8.6	13	8.2	0.4	0.5	0.8	0.5	0.4	0.5
Montenegro	13	9.6	3.9	3.4	2.3	15	9.7	13	6.8	5.7	2.1	4.8	2.1	2.6	1.9
Netherlands	16	15	2.3	1.3	0.8	17	15	16	14	2.5	2.2	1.4	1.2	1.2	0.5
North Macedonia	6.4	5.5	0.8	1.1	0.5	7.8	5.1	7.1	4.1	1.1	0.5	1.2	1.1	0.8	0.1
Norway	12	10	3.3	2.3	–	15	9.3	12	8.2	3.5	2.9	3.3	1.1	–	–
Poland	17	15	3.1	3.4	3.1	19	15	18	13	3.6	2.6	3.8	3.0	3.0	3.2
Portugal	9.6	8.6	1.3	1.2	1.0	11	7.8	10	7.0	1.5	1.0	1.2	1.1	1.1	1.0
Romania	6.2	4.9	1.1	1.1	1.1	6.4	6.0	5.2	4.5	1.1	1.1	1.0	1.1	1.1	1.1
Serbia	7.9	6.2	1.5	1.2	0.9	9.2	6.7	7.3	5.3	2.0	1.2	1.5	0.9	1.3	0.7
Slovakia	21	19	3.0	1.9	1.6	21	20	19	17	2.1	3.8	1.0	2.3	1.1	1.5
Slovenia	20	18	3.2	1.6	2.3	20	20	19	18	2.9	3.4	1.8	1.3	2.5	2.1
Spain	10	9.2	1.6	1.1	1.3	10	10	9.4	9.0	1.6	1.7	1.2	1.1	1.4	1.2
Sweden	8.6	6.5	2.1	2.4	1.6	10	7.3	8.1	5.3	1.8	2.5	2.7	2.0	2.1	1.2
Ukraine	13	10	4.5	2.9	2.8	18	9.7	15	6.7	6.2	3.1	4.3	1.8	4.2	1.7
AVERAGE	**13**	**12**	**2.1**	**1.8**	**1.4**	**14**	**12**	**13**	**11**	**2.4**	**1.8**	**2.1**	**1.5**	**1.6**	**1.2**
Min.	3.9	2.5	0.5	0.7	0.5	4.6	2.1	3.1	1.3	0.0	0.3	0.7	0.5	0.0	0.1
Max.	25	24	4.7	4.3	3.1	26	25	24	24	7.5	4.6	4.8	4.7	4.2	3.2

Table 8b. Illicit drug use: lifetime prevalence of the use of cocaine, crack, LSD or other hallucinogens, heroin and GHB (percentage)

Country	Cocaine	Crack	LSD/ other hallu-cinogens	Heroin	GHB	Cocaine		Crack		LSD/other hallucino-gens		Heroin		GHB	
						Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	2.6	1.1	1.8	0.9	1.1	2.3	2.8	1.1	1.1	1.8	1.8	0.8	1.0	1.1	1.1
Bulgaria	2.6	1.5	1.7	1.4	1.0	2.9	2.2	2.3	0.6	1.9	1.6	2.0	0.8	1.4	0.6
Croatia	2.7	1.3	2.2	1.2	0.8	3.4	1.9	1.7	0.8	2.8	1.5	1.6	0.7	1.2	0.2
Cyprus	6.2	4.1	6.8	4.1	3.4	6.1	6.6	4.5	3.9	10	4.0	6.0	2.6	2.9	4.0
Czechia	1.9	–	3.0	0.9	0.6	1.8	1.8	–	–	2.9	2.9	1.0	0.6	0.7	0.5
Denmark	2.0	1.0	1.3	0.7	0.6	2.5	1.3	1.3	0.5	1.5	1.0	0.9	0.4	0.6	0.7
Estonia	2.6	1.6	3.3	1.4	1.0	2.7	2.6	1.6	1.6	3.4	3.2	1.2	1.6	0.9	1.1
Faroes	1.2	0.9	0.9	1.2	0.6	1.9	0.6	1.9	0.0	1.9	0.0	1.9	0.6	1.3	0.0
Finland	1.1	0.9	1.2	0.9	0.8	1.4	0.9	1.5	0.4	1.6	0.8	1.4	0.4	1.3	0.3
France	1.7	1.2	0.7	0.6	0.6	1.6	1.8	1.4	0.9	1.0	0.5	0.7	0.6	0.3	0.9
Georgia	1.0	0.7	0.4	0.7	0.4	0.9	1.0	1.0	0.4	0.7	0.2	1.0	0.5	0.7	0.1
Germany	2.0	0.8	1.5	0.4	0.9	2.2	1.9	1.1	0.6	1.9	1.2	0.6	0.2	0.7	1.0
Greece	2.4	1.8	2.3	1.4	1.0	3.5	1.5	2.9	0.8	2.9	1.7	2.4	0.6	2.1	0.2
Hungary	3.0	2.4	2.3	1.5	1.7	3.0	3.0	2.8	2.0	2.1	2.5	1.6	1.4	1.8	1.6
Iceland	4.5	1.6	2.0	2.1	3.0	4.9	2.9	2.2	0.8	1.8	1.6	2.9	0.9	3.2	2.0
Ireland	2.0	1.1	1.6	0.7	0.5	1.9	1.7	1.4	0.5	1.3	1.6	0.8	0.4	0.6	0.3
Italy	1.7	1.2	1.3	0.9	1.2	2.0	1.3	1.8	0.6	1.7	0.6	1.2	0.4	1.3	0.9
Kosovo	2.0	1.7	0.9	1.9	1.1	3.0	1.1	2.6	0.8	1.5	0.4	2.9	1.1	1.6	0.8
Latvia	2.5	1.2	3.1	0.9	0.6	2.5	2.6	1.4	1.0	3.1	3.1	0.9	0.9	0.9	0.4
Liechtenstein	2.4	1.2	1.2	1.8	0.0	3.5	1.3	2.4	0.0	1.2	1.3	1.2	2.5	0.0	0.0
Lithuania	2.3	1.0	2.3	1.0	0.9	2.6	2.0	1.6	0.5	2.6	1.9	1.3	0.6	1.4	0.4
Malta	1.3	0.7	1.0	0.6	0.3	1.1	1.5	0.8	0.4	0.7	1.2	0.5	0.7	0.3	0.1
Moldova	1.2	0.6	0.8	0.7	0.6	1.3	1.1	0.7	0.5	1.0	0.6	0.8	0.6	0.6	0.6
Monaco	0.7	0.7	0.2	0.0	0.2	1.2	0.0	0.4	1.1	0.4	0.0	0.0	0.0	0.4	0.0
Montenegro	5.4	0.6	1.9	2.2	1.1	7.4	3.4	0.9	0.4	2.7	1.1	3.3	1.1	1.8	0.5
Netherlands	1.2	0.7	0.9	0.6	0.3	1.4	0.9	0.7	0.6	0.9	0.9	0.5	0.6	0.6	0.1
North Macedonia	1.5	0.5	0.5	0.7	0.5	1.9	1.2	1.0	0.0	0.7	0.4	1.1	0.3	0.7	0.2
Norway	2.9	–	2.2	1.4	1.4	3.8	1.9	–	–	2.9	1.2	2.0	0.8	1.9	0.7
Poland	3.0	2.1	3.2	2.1	1.1	3.4	2.6	3.1	1.0	3.7	2.6	2.4	1.8	1.6	0.6
Portugal	1.9	0.9	1.0	0.8	0.7	2.6	1.1	0.9	1.0	1.2	0.9	0.9	0.7	0.8	0.5
Romania	1.7	0.6	1.0	0.5	0.4	1.6	1.7	0.6	0.5	1.0	0.9	0.6	0.4	0.5	0.3
Serbia	1.3	1.0	1.2	1.0	0.9	1.5	1.2	1.3	0.8	1.0	1.4	1.3	0.7	1.3	0.7
Slovakia	2.4	1.3	4.4	1.2	0.6	1.8	2.8	1.2	1.0	4.5	4.0	1.0	1.0	0.6	0.3
Slovenia	3.3	1.3	2.7	1.6	0.9	3.1	3.4	1.4	1.2	3.1	2.4	1.3	1.8	1.1	0.6
Spain	1.3	0.9	0.9	0.5	0.5	1.4	1.2	0.9	0.9	0.9	0.9	0.5	0.5	0.6	0.4
Sweden	2.4	1.3	1.7	1.3	1.0	2.4	2.5	1.8	0.9	2.3	1.2	1.7	0.9	1.5	0.6
Ukraine	3.1	2.6	2.6	2.9	2.0	4.6	1.9	4.0	1.4	3.8	1.6	4.4	1.6	3.3	0.9
AVERAGE	**2.3**	**1.3**	**1.8**	**1.2**	**0.9**	**2.6**	**1.9**	**1.7**	**0.8**	**2.2**	**1.5**	**1.5**	**0.9**	**1.2**	**0.6**
Min.	0.7	0.5	0.2	0.0	0.0	0.9	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Max.	6.2	4.1	6.8	4.1	3.4	7.4	6.6	4.5	3.9	10	4.0	6.0	2.6	3.3	4.0

Other substance use

ESPAD average Lifetime use (%) ([a])			
	Average	Min.	Max.
Inhalants	7.3	1.3	17
New psychoactive substances	2.8	0.6	6.4
Pharmaceuticals	14	6.3	29

([a]) Percentage of students reporting use.

Inhalant use

The ESPAD average for lifetime use of inhalants (combined general question and/or nitrous oxide use) was 7.3 % (Table 9), with 3.1 % of students reporting lifetime use of nitrous oxide (data collected in 18 out of 37 countries). The highest rates of lifetime use of inhalants were reported in Sweden (17 %), Liechtenstein (16 %) and Germany (13 %), which explicitly included nitrous oxide in their questionnaire. The lowest rates were found in Kosovo (1.3 %), North Macedonia (2.1 %) and Norway (2.9 %). The average prevalence of lifetime use among ESPAD students was higher among girls (7.9 %) than boys (6.7 %). The highest gender differences were found in Liechtenstein (18 % for girls versus 13 % for boys), Croatia (13 % versus 8.4 %) and Bulgaria (13 % versus 8.9 %). However, in 12 ESPAD countries the rate of lifetime use of inhalants was higher among boys, with the largest gender difference found in Ukraine (7.6 % for boys versus 4.4 % for girls).

Table 9. Inhalants, new psychoactive substances and pharmaceuticals: prevalence of lifetime use (percentage)

Country	Inhalants (a)	NPS	Pharmaceuticals (b)	Inhalants		NPS		Pharmaceuticals	
				Boys	Girls	Boys	Girls	Boys	Girls
Austria	12	3.4	15	12	13	3.3	3.6	14	16
Bulgaria	11	2.9	8.5	8.9	13	3.3	2.5	9.3	7.7
Croatia	11	4.1	–	8.4	13	4.2	3.9	–	–
Cyprus	7.6	4.7	28	7.5	8.1	2.9	6.6	26	29
Czechia	3.7	4.3	22	2.8	4.4	3.7	5.0	18	25
Denmark	7.6	2.4	9.4	7.7	7.3	3.1	1.7	7.5	11
Estonia	9.4	3.8	16	7.9	11	4.1	3.6	11	20
Faroes	7.1	0.9	7.4	5.0	9.3	1.3	0.6	7.5	6.4
Finland	9.9	1.5	6.3	9.3	10	1.7	1.2	6.6	5.9
France	7.8	–	9.7	6.7	9.0	–	–	6.2	13
Georgia	5.1	1.4	18	5.4	4.8	1.3	1.6	13	23
Germany	13	3.5	20	13	12	3.6	3.3	18	23
Greece	11	3.6	15	9.3	13	4.3	3.0	15	16
Hungary	6.4	4.8	16	4.5	8.0	4.9	4.7	11	19
Iceland	5.3	3.1	–	5.7	4.2	3.2	2.4	–	–
Ireland	7.2	2.2	7.7	7.4	6.5	2.2	1.9	6.9	8.0
Italy	7.1	3.2	11	6.1	7.9	3.4	2.9	10	11
Kosovo	1.3	2.2	–	2.0	0.7	2.8	1.7	–	–
Latvia	12	2.9	8.9	11	14	2.2	3.7	7.3	10
Liechtenstein	16	0.6	16	13	18	1.2	0.0	10	22
Lithuania	9.6	3.5	29	8.8	10	3.3	3.7	22	36
Malta	5.2	2.0	6.7	4.7	5.4	1.8	2.1	5.5	8.0
Moldova	3.8	0.9	14	3.6	4.1	0.8	0.9	8.3	19
Monaco	4.4	1.9	9.1	4.5	4.3	2.1	1.6	6.6	12
Montenegro	6.3	1.4	–	6.8	5.9	1.5	1.2	–	–
Netherlands	3.9	0.6	–	3.5	4.4	0.9	0.3	–	–
North Macedonia	2.1	1.4	–	2.0	2.1	1.4	1.4	–	–
Norway	2.9	3.1	16	3.5	2.3	3.7	2.4	15	16
Poland	6.0	6.4	25	4.5	7.6	6.6	6.1	19	30
Portugal	3.0	1.5	7.7	3.6	2.5	2.0	1.0	4.9	11
Romania	3.2	1.8	11	2.6	3.8	1.6	2.0	8.2	13
Serbia	4.3	1.7	17	2.9	5.5	1.6	1.8	12	21
Slovakia	8.4	5.4	22	6.9	9.4	4.3	6.4	16	28
Slovenia	10	6.0	12	8.7	11	5.3	6.4	11	13
Spain	4.7	1.5	9.5	4.6	4.7	1.5	1.5	9.3	9.7
Sweden	17	3.0	12	17	16	3.3	2.7	12	12
Ukraine	5.8	2.7	8.2	7.6	4.4	3.6	2.0	8.5	7.9
AVERAGE	**7.3**	**2.8**	**14**	**6.7**	**7.9**	**2.8**	**2.7**	**11**	**16**
Min.	1.3	0.6	6.3	2.0	0.7	0.8	0.0	4.9	5.9
Max.	17	6.4	29	17	18	6.6	6.6	26	36

(a) Prevalence of students reporting lifetime use of inhalants (general question) and/or nitrous oxide. The question on nitrous oxide was included only in the following countries: Bulgaria, Denmark, Faroes, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Norway, Portugal, Romania, Spain and Sweden.

(b) Prevalence of students reporting lifetime use of tranquillisers/sedatives without medical prescription, painkillers to get high, attention/hyperactivity drugs, anabolic steroids. Data related to painkillers to get high for Croatia, Iceland, Kosovo, Montenegro, the Netherlands, and North Macedonia were excluded due to validity concerns, as the question on the non-prescribed use of painkillers did not include the specification 'in order to get high.'

Nitrous oxide use

Eighteen ESPAD countries also collected information about the use of nitrous oxide for the first time. Lifetime use of this inhalant was reported by 3.1 % of students on average, with large differences observed across countries. The highest lifetime rates of use were reported by students in Bulgaria (9.4 %) and Liechtenstein (7.2 %), and the lowest rates were reported in Romania (0.4 %) and Georgia (0.5 %). At European level, the rate was similar for boys and girls (3.1 % for boys versus 3.2 % for girls). However, gender differences were observed at national level — while higher lifetime use was reported by boys in Denmark, Finland, Ireland, Norway and Portugal, girls reported higher use in Bulgaria, the Faroes, France, Liechtenstein and Sweden.

New psychoactive substance use

The ESPAD average for lifetime NPS use was 2.8 % (Table 9), with the highest rates reported in Poland (6.4 %) and Slovenia (6.0 %), followed by Slovakia (5.4 %) and Hungary (4.8 %). The lowest rates of lifetime NPS use were reported in Liechtenstein and the Netherlands (below 0.5 %). The average prevalence of lifetime use was similar for boys and girls (2.8 % and 2.7 %, respectively). Gender differences were significant in some ESPAD countries including Cyprus (6.6 % for girls versus 2.9 % for boys), Latvia (3.7 % versus 2.2 %) and Slovakia (6.4 % versus 4.3 %). In a few countries, however, the rate of use among boys exceeded that of girls (e.g. Faroes, France and Liechtenstein).

When asking students about the consumption of specific new synthetic substances, 3.5 % of ESPAD students (average calculated across 23 out of 37 countries) reported having used synthetic cannabinoids at least once in their lifetime, ranging from 0.7 % in Georgia to 6.8 % in Germany and Hungary, and up to 16 % in Slovakia (where students included semi-synthetic cannabinoids such as HHC among synthetic cannabinoids) (Table 10a). Similarly, 1.1 % of ESPAD students reported lifetime use of synthetic cathinones (average calculated across 14 countries), with the highest rates found in Hungary (3.7 %) and Bulgaria (1.8 %) (Table 10a). On average, boys reported a slightly higher prevalence of use than girls for synthetic cannabinoids (3.7 % for boys versus 3.2 % for girls) and synthetic cathinones (1.3 % versus 0.9 %). In most countries, boys reported higher synthetic cannabinoid use, except in Cyprus, Hungary and Malta, where girls reported higher rates of use. For synthetic cathinones, Hungary was the only country where girls reported a higher prevalence of use than boys. Use of synthetic opioids was reported by 1.1 % of students (1.5 % for boys versus 0.7 % for girls), with the highest rate of lifetime use reported by students in Estonia (2.2 %) and Kosovo (2.0 %).

Table 10a. New psychoactive substances: lifetime prevalence of the use of synthetic cannabinoids, synthetic cathinones and synthetic opioids (percentage)

Country	Synthetic cannabin-oids	Synthetic cathin-ones	Synthetic opioids	Synthetic cannabinoids		Synthetic cathinones		Synthetic opioids	
				Boys	Girls	Boys	Girls	Boys	Girls
Austria	4.9	–	–	5.7	4.1	–	–	–	–
Bulgaria	2.9	1.8	1.7	3.0	2.9	2.3	1.2	2.3	1.0
Croatia	2.8	–	–	3.0	2.6	–	–	–	–
Cyprus	6.6	–	–	4.3	9.1	–	–	–	–
Czechia	–	–	–	–	–	–	–	–	–
Denmark	–	–	–	–	–	–	–	–	–
Estonia	–	–	2.2	–	–	–	–	2.6	1.9
Faroes	–	–	1.2	–	–	–	–	2.5	0.0
Finland	1.0	0.6	0.9	1.7	0.4	1.1	0.2	1.3	0.6
France	2.1	0.4	–	3.0	1.1	0.4	0.4	–	–
Georgia	0.7	0.6	0.6	1.0	0.4	1.0	0.2	1.0	0.3
Germany	6.8	1.5	1.4	7.2	6.4	1.7	1.2	1.5	1.2
Greece	–	–	–	–	–	–	–	–	–
Hungary	6.8	3.7	–	5.6	7.9	2.9	4.3	–	–
Iceland	–	–	–	–	–	–	–	–	–
Ireland	3.2	0.6	0.6	3.7	2.3	0.7	0.3	0.7	0.4
Italy	4.2	1.6	0.9	5.0	3.2	1.6	1.5	1.0	0.7
Kosovo	2.0	–	2.0	3.1	1.0	–	–	2.9	1.2
Latvia	2.7	1.0	1.0	2.6	2.9	1.0	0.9	1.2	0.7
Liechtenstein	1.8	–	–	2.3	1.3	–	–	–	–
Lithuania	3.2	1.0	1.2	4.2	2.2	1.4	0.5	1.7	0.6
Malta	3.6	–	–	2.4	4.7	–	–	–	–
Moldova	0.8	–	–	1.3	0.4	–	–	–	–
Monaco	–	–	–	–	–	–	–	–	–
Montenegro	1.9	1.0	0.9	2.3	1.4	1.3	0.7	1.4	0.5
Netherlands	–	–	–	–	–	–	–	–	–
North Macedonia	–	–	–	–	–	–	–	–	–
Norway	–	–	–	–	–	–	–	–	–
Poland	–	–	–	–	–	–	–	–	–
Portugal	1.9	0.8	0.6	1.7	2.1	1.1	0.6	0.8	0.4
Romania	1.3	0.4	0.7	1.5	1.1	0.6	0.3	0.8	0.7
Serbia	1.0	–	–	1.2	0.9	–	–	–	–
Slovakia	16	–	–	16	14	–	–	–	–
Slovenia	–	–	–	–	–	–	–	–	–
Spain	2.1	0.9	0.9	2.5	1.8	1.1	0.8	1.1	0.8
Sweden	–	–	–	–	–	–	–	–	–
Ukraine	–	–	–	–	–	–	–	–	–
AVERAGE	**3.5**	**1.1**	**1.1**	**3.7**	**3.2**	**1.3**	**0.9**	**1.5**	**0.7**
Min.	0.7	0.4	0.6	1.0	0.4	0.4	0.2	0.7	0.0
Max.	16	3.7	2.2	16	14	2.9	4.3	2.9	1.9

Pharmaceutical use for non-medical purposes

The ESPAD average for lifetime pharmaceutical use for non-medical purposes was 14 %, ranging from 6.3 % to 29 % (Table 9). The highest proportions of students who had used pharmaceuticals for non-medical purposes were found in Lithuania (29 %) and Cyprus (28 %), followed by Poland (25 %) and Czechia and Slovakia (22 %, both). The lowest rates were found in Finland (6.3 %), Malta (6.7 %), Ireland and Portugal (7.7 %, both). Both on average and in the vast majority of the ESPAD countries, girls were more likely than boys to have used pharmaceuticals for non-medical purposes. The largest gender differences were reported in Lithuania (36 % for girls versus 22 % for boys), Liechtenstein (22 %versus 10 %) and Slovakia (28 % versus 16 %).

Tranquillisers and sedatives without a doctor's prescription

The use of tranquillisers or sedatives without a doctor's prescription was reported by 8.5 % students on average, with the highest rates reported in Lithuania (22 %), Poland (18 %) and Germany (16 %). The lowest levels of use of tranquillisers or sedatives (below 3.0 %) were reported by students from Moldova, Romania and Ireland. On average, more girls than boys reported the use of tranquillisers or sedatives for non-medical purposes (10 % for girls versus 6.4 % for boys). The largest gender differences were found in Poland, Liechtenstein and Georgia, where more girls than boys had used non-prescribed tranquillisers or sedatives, with differences of more than 10 percentage points.

Painkillers

On average, the use of painkillers in order to get high was reported by 6.9 % of ESPAD students. The countries with the highest prevalence rates were Cyprus (18 %), Slovakia (17 %) and Czechia (16 %). Like for tranquillisers and sedatives, more girls (7.9 %) than boys (5.8 %) reported lifetime use of painkillers. Large gender differences were found in Moldova (18 % for girls versus 6.9 % for boys) and Slovakia (22 % versus 11 %).

Attention/hyperactivity drugs

Use of attention/hyperactivity drugs without a doctor's prescription was reported by 3.4 % ESPAD students on average, ranging from 1.5 % to 5.5 % (Table 10b). The highest prevalence rates were found in Cyprus (5.5 %), Italy (5.4 %) and Romania (5.3 %). Slightly more girls (3.6 %) than boys (3.2 %) reported lifetime use of attention/hyperactivity drugs for non-medical purposes. In Romania, use by girls was more than 50 % greater than that by boys (4.1 % versus 6.4 %); for Slovakia and Ireland the figure is over 70 % more than that of the boys. Kosovo was the only country where the rate reported by boys was more than double that reported by girls.

Anabolic steroids

Few students in the participating countries reported the use of anabolic steroids (ESPAD average: 1.5 %). The highest rates were found in Cyprus (4.2 %), Poland (3.3 %) and Ukraine (2.8 %) while the lowest rate was reported in Monaco (0.2 %). In general, more boys (2.3 %) than girls (0.7 %) reported use of anabolic steroids, and the largest gender differences were observed in Cyprus, Bulgaria and Greece.

Table 10b. Tranquillisers, painkillers, attention/hyperactivity drugs without prescription, anabolic steroids and nitrous oxide: prevalence of lifetime use (percentage)

Country	Tranquillisers/ sedatives	Painkillers (a)	Attention/ hyperactivity drugs	Anabolic steroids	Nitrous oxide	Tranquillisers/ sedatives		Painkillers		Attention/ hyperactivity drugs		Anabolic steroids		Nitrous oxide	
						Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	11	6.2	–	1.3	–	11	12	5.5	6.7	–	–	1.7	0.8	–	–
Bulgaria	3.9	3.8	3.2	2.2	9.4	4.3	3.5	4.2	3.4	3.7	2.6	3.4	0.9	7.4	12
Croatia	4.2	–	–	1.5	–	4.0	4.4	–	–	–	–	2.2	0.6	–	–
Cyprus	9.3	18	5.5	4.2	–	7.4	12	21	16	4.5	6.6	6.1	2.7	–	–
Czechia	14	16	–	1.6	–	10	17	13	19	–	–	2.6	0.5	–	–
Denmark	5.8	3.4	1.8	0.7	4.6	3.7	7.5	2.6	4.1	2.1	1.5	1.2	0.3	4.7	4.3
Estonia	12	5.3	3.2	0.9	–	7.6	16	3.7	6.8	3.2	3.3	1.2	0.5	–	–
Faroes	3.0	3.9	1.5	1.2	4.5	3.8	2.3	3.1	3.5	1.3	1.7	2.5	0.0	3.1	5.8
Finland	3.2	4.4	–	1.2	2.8	3.2	3.3	4.1	4.7	–	–	2.2	0.2	3.3	2.3
France	7.4	3.8	–	0.6	5.0	4.1	11	2.6	5.0	–	–	0.9	0.2	4.3	5.7
Georgia	14	5.5	3.6	0.7	0.5	8.1	19	5.7	5.3	3.6	3.7	0.8	0.5	0.7	0.3
Germany	16	5.7	4.0	0.9	0.8	13	19	4.7	6.6	3.9	4.1	1.5	0.4	1.0	0.6
Greece	7.8	10	–	1.5	–	7.1	8.4	11	10	–	–	2.7	0.5	–	–
Hungary	11	6.1	2.8	1.4	2.1	7.9	14	4.3	7.6	2.7	2.9	1.7	1.2	2.0	2.2
Iceland	12	–	–	2.5	–	8.9	15	–	–	–	–	3.8	0.8	–	–
Ireland	2.9	3.9	2.3	1.2	2.1	3.0	2.6	2.7	4.5	1.6	2.7	1.6	0.5	3.4	0.6
Italy	6.3	2.9	5.4	1.9	1.0	4.2	7.9	3.1	2.5	4.7	6.0	2.7	0.9	1.2	0.5
Kosovo	9.7	–	3.3	1.8	–	8.1	11	–	–	4.7	2.2	2.7	1.0	–	–
Latvia	3.1	5.4	2.6	1.5	3.1	2.8	3.4	3.8	6.9	2.2	2.9	2.4	0.6	3.0	3.2
Liechtenstein	12	6.7	–	0.6	7.2	5.9	18	5.8	7.8	–	–	0.0	1.3	5.8	8.9
Lithuania	22	12	2.8	2.3	1.6	14	31	9.5	14	2.3	3.2	4.3	0.2	1.9	1.4
Malta	3.6	3.3	–	1.2	–	3.0	4.4	2.7	3.9	–	–	1.1	1.2	–	–
Moldova	2.1	12	–	1.0	–	1.7	2.5	6.9	18	–	–	1.3	0.8	–	–
Monaco	7.5	3.5	–	0.2	–	5.0	11	2.5	4.9	–	–	0.4	0.0	–	–
Montenegro	11	–	–	2.7	–	8.4	13	–	–	–	–	4.3	1.1	–	–
Netherlands	10	–	3.5	0.5	–	7.6	13	–	–	3.4	3.6	0.8	0.1	–	–
North Macedonia	6.6	–	–	0.9	–	5.7	7.5	–	–	–	–	1.7	0.2	–	–
Norway	13	4.4	–	2.3	1.8	11	14	4.5	4.1	–	–	3.3	0.9	2.5	1.2
Poland	18	12	–	3.3	–	11	25	9.5	14	–	–	4.8	1.8	–	–
Portugal	6.0	3.4	–	0.9	1.5	3.4	8.5	2.7	4.1	–	–	1.3	0.5	2.0	1.0
Romania	2.5	6.6	5.3	0.6	0.4	2.2	2.7	4.4	8.7	4.1	6.4	1.0	0.3	0.5	0.4
Serbia	8.5	11	–	1.3	–	5.4	11	7.6	14	–	–	1.9	0.8	–	–
Slovakia	8.1	17	4.4	2.2	–	5.5	10	11	22	3.0	5.1	3.0	0.7	–	–
Slovenia	5.5	6.3	3.9	1.2	–	4.9	5.9	5.7	6.9	3.9	3.8	1.8	0.7	–	–
Spain	6.5	2.3	2.5	1.4	1.3	6.1	7.0	2.5	2.1	2.5	2.5	1.7	1.1	1.5	1.2
Sweden	9.0	5.5	–	1.6	6.8	8.1	9.6	5.3	5.5	–	–	2.5	0.9	6.6	7.0
Ukraine	5.0	3.0	–	2.8	–	4.3	5.6	3.3	2.7	–	–	4.4	1.4	–	–
AVERAGE	**8.5**	**6.9**	**3.4**	**1.5**	**3.1**	**6.4**	**10**	**5.8**	**7.9**	**3.2**	**3.6**	**2.3**	**0.7**	**3.1**	**3.2**
Min.	2.1	2.3	1.5	0.2	0.4	1.7	2.3	2.5	2.1	1.3	1.5	0.0	0.0	0.5	0.3
Max.	22	18	5.5	4.2	9.4	14	31	21	22	4.7	6.6	6.1	2.7	7.4	12

(a) Data for Croatia, Iceland, Kosovo, Montenegro, the Netherlands, and North Macedonia were excluded due to validity concerns, as the question on the non-prescribed use of painkillers did not include the specification "in order to get high.

Patterns of current use

Daily smoking

Overall, 7.9 % of ESPAD students had smoked cigarettes every day in the last 30 days (Figure 1a). When considering both cigarettes and/or e-cigarettes this proportion was 13 % (see Additional Table 6b). Daily cigarette smoking ranged from 0.8 % in Iceland to 20 % in Bulgaria and Croatia. High rates of daily smoking were also found in Hungary (19 %), Romania (16 %), Greece and Kosovo (14 %, both) and Serbia and Slovakia (13 %, both). Countries with the lowest rates of daily smoking were Iceland (0.8 %), Monaco and Sweden (1.9 %, both), Ireland (2.1 %), Norway (2.5 %), Denmark (3.0 %), France and Malta (3.1 %, both).

Average rates of daily smoking were 8.5 % for boys and 7.3 % for girls (see Additional Table 4). Slight gender differences were also seen when considering both cigarette smoking and/or e-cigarette use (14 % for girls versus 12 % for boys) (see Additional Table 102). At the country level, significant gender differences in daily cigarette use ($p < 0.05$) were found in 11 countries (Figure 1b). Boys reported higher rates than girls in Kosovo (20 % for boys versus 8.5 % for girls), North Macedonia (15 % versus 10 %), Georgia (12 % versus 4.8 %), Montenegro (11 % versus 7.4 %), Ukraine (7.7 % versus 3.9 %), Moldova (7.2 % versus 2.9 %), Lithuania (4.6 % versus 1.9 %) and Denmark (3.9 % versus 2 %). Higher rates among girls than boys were reported in Bulgaria (21 % for girls versus 18 % for boys), Romania (18 % versus 14 %) and Italy (13 % versus 10 %).

Figure 1a. Daily cigarette use: prevalence in the last 30 days (percentage)

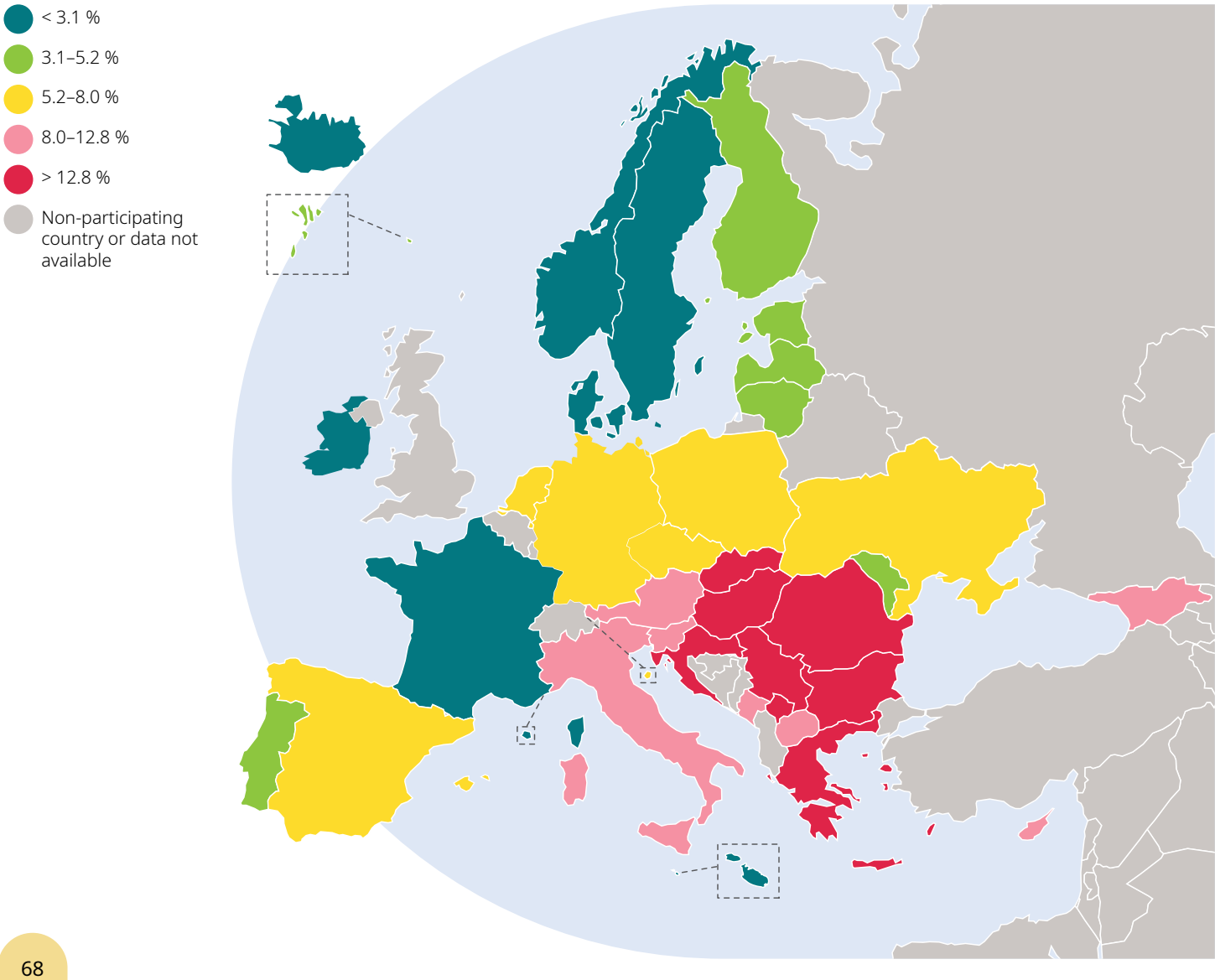
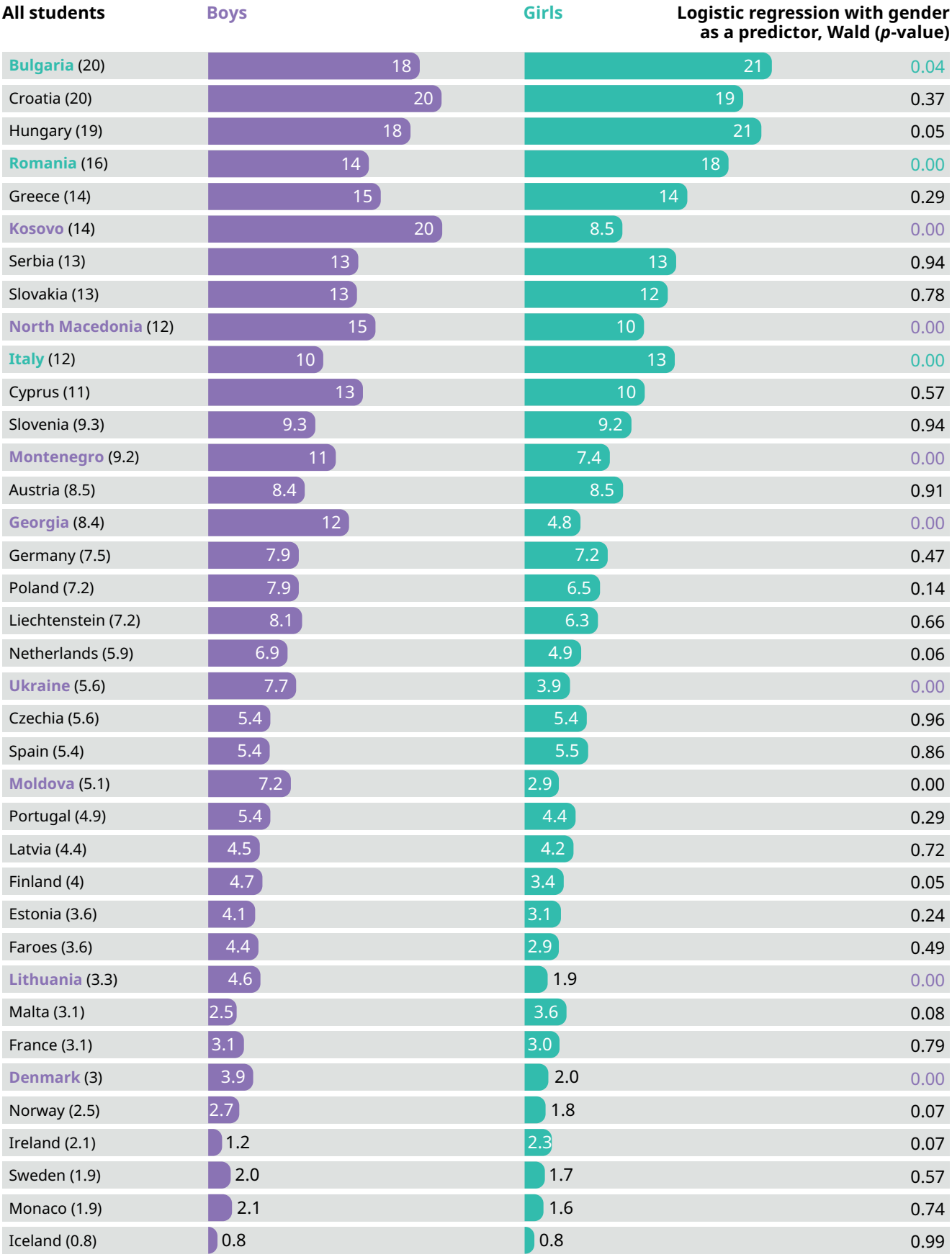


Figure 1b. Daily cigarette use: prevalence in the last 30 days by gender (percentage)



Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.

Daily electronic cigarette use

Overall, 8.8 % of ESPAD students reported daily use of e-cigarettes in the last 30 days (Figure 2a). Current daily e-cigarette use ranged from 1.5 % in the Faroes to 20 % in Poland. High rates of daily vaping were also found in Slovenia, Czechia and Serbia (15 %, each), Hungary (14 %), Liechtenstein (13 %) and Bulgaria and Croatia (12 %, both). Georgia, Portugal and Norway registered rates below 3 %.

On average, current daily e-cigarette use was higher among girls (11 %) compared to boys (7.1 %) (Figure 2b). Only two countries reported higher current daily e-cigarette use among boys than girls: Kosovo (7.7 % for boys versus 5.8 % for girls) and Georgia (4.2 % versus 1.2 %) (see Additional Table 7b). In 22 countries, girls reported a higher prevalence of current daily use, with a difference of 17 percentage points observed in Liechtenstein (22 % for girls versus 4.7 % for boys) (Figure 2b).

Figure 2a. Daily e-cigarette use: prevalence in the last 30 days (percentage)

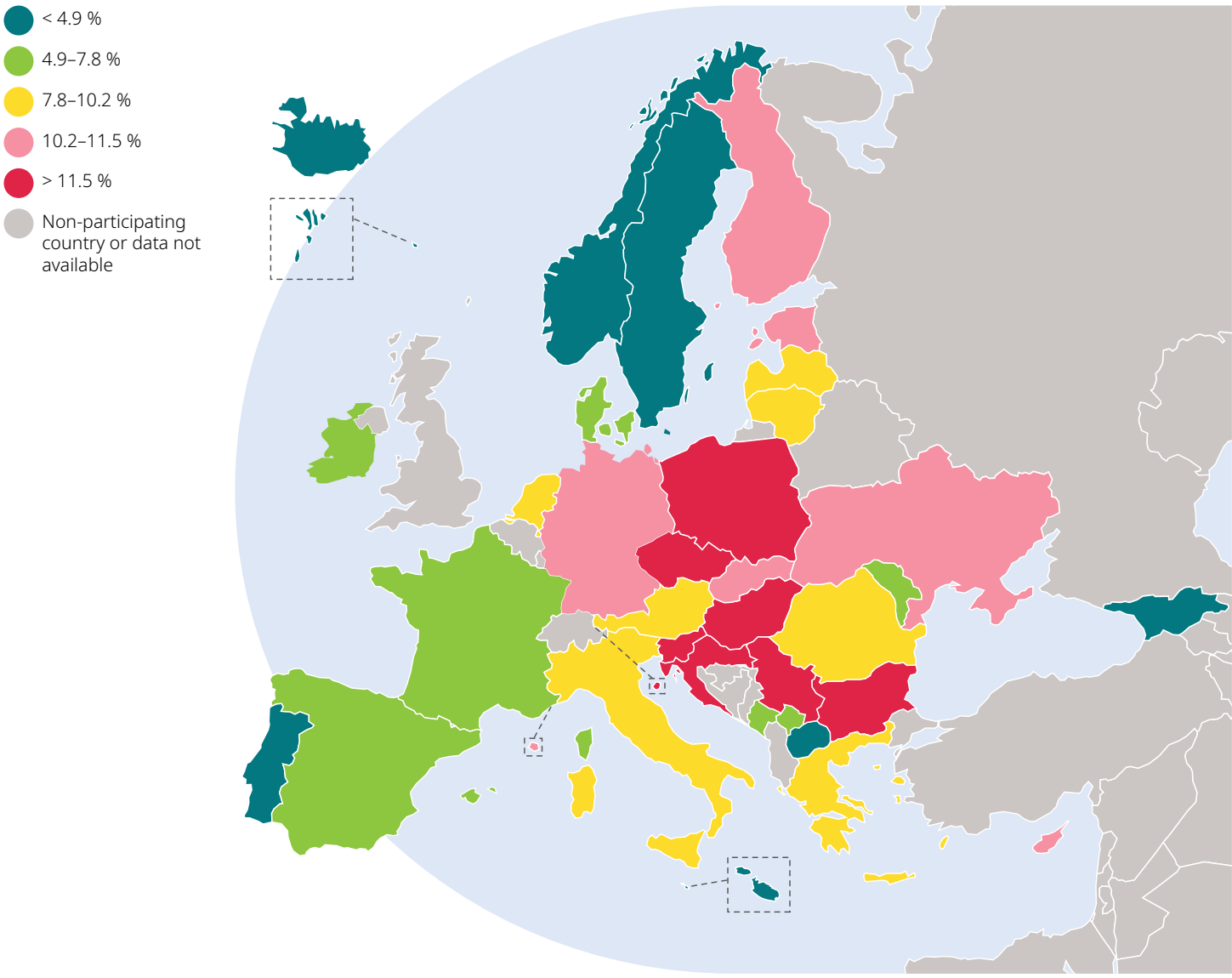
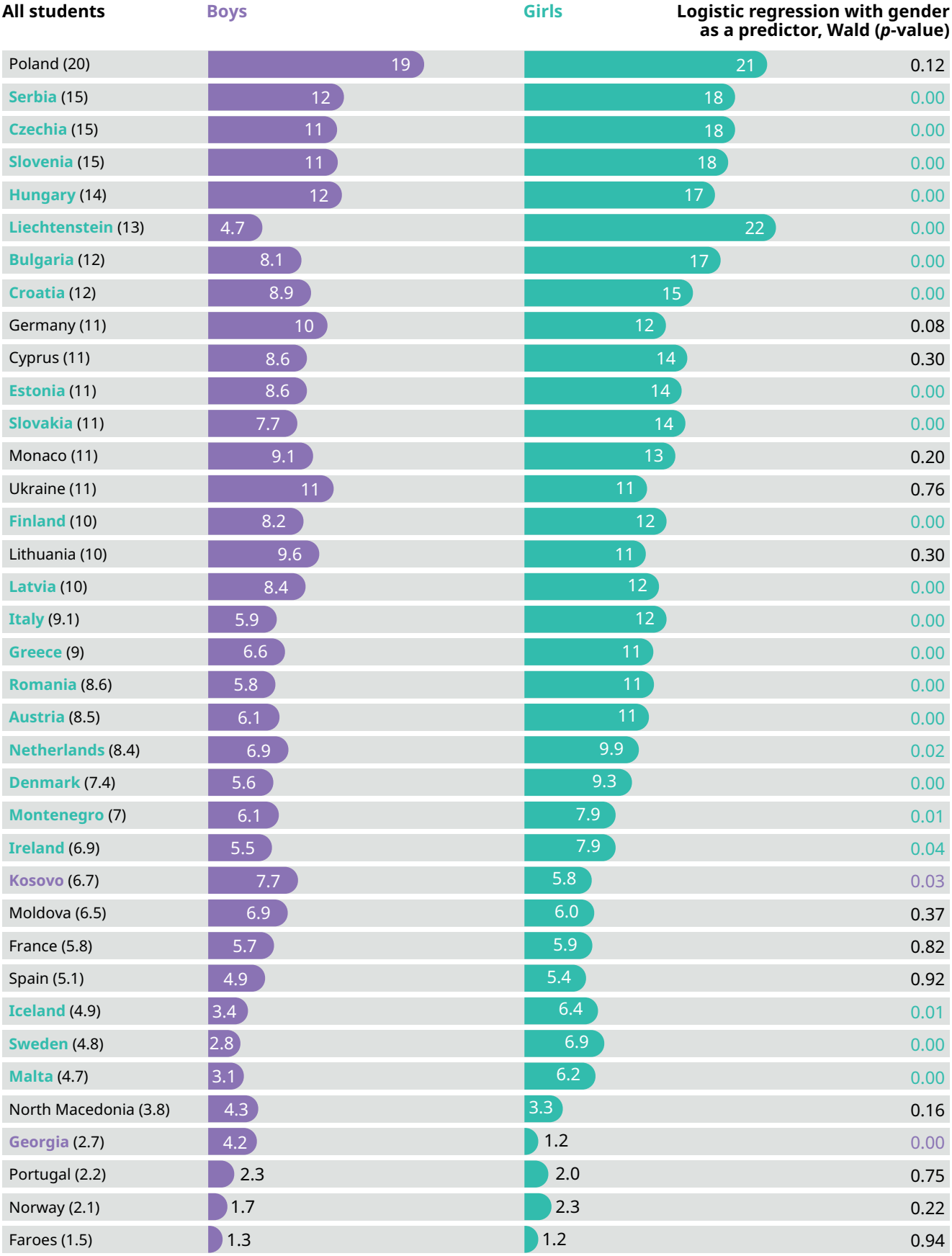


Figure 2b. Daily e-cigarette use: prevalence in the last 30 days by gender (percentage)



Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.

Frequency of alcohol use in the last 30 days

Among all students who had used alcohol, alcohol was consumed on 5.4 occasions on average in the last 30 days (Figure 3a). Students from Germany consumed alcohol on 9.4 occasions, followed by the Netherlands and Kosovo (7.8 occasions, both) and Austria (7 occasions). Students from Sweden, Finland, the Faroes, Iceland, Lithuania and Monaco drank alcohol on fewer than four occasions on average.

In almost all countries, boys who drank did so more frequently than girls who drank, with the highest differences found in Montenegro (6.8 occasions for boys versus 3.8 occasions for girls) and Kosovo (8.9 versus 6.1) (Figure 3b). In most countries, the difference between boys and girls in the number of drinking occasions was significant.

Figure 3a. Frequency of alcohol intake in the last 30 days (mean number of occasions among users)

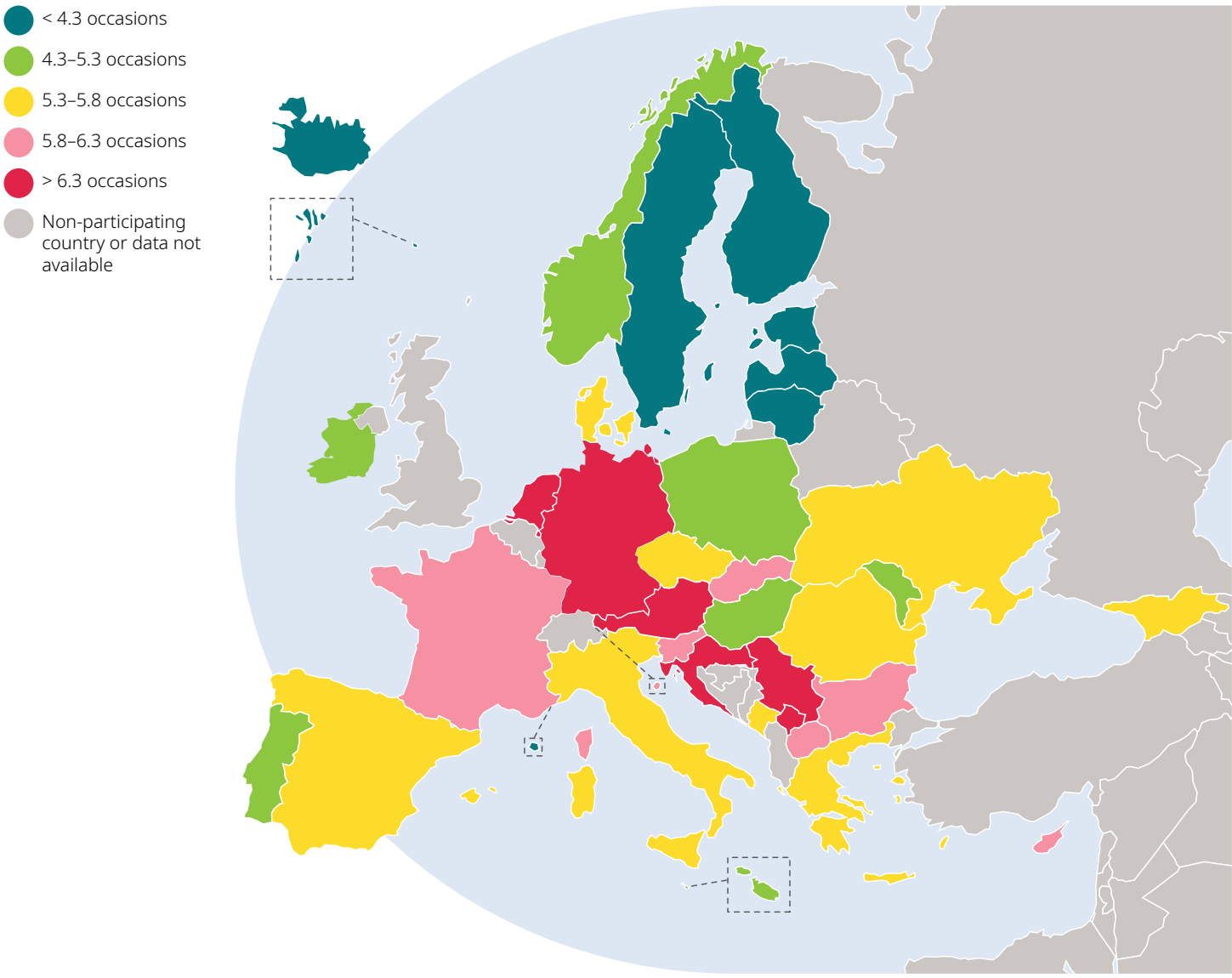
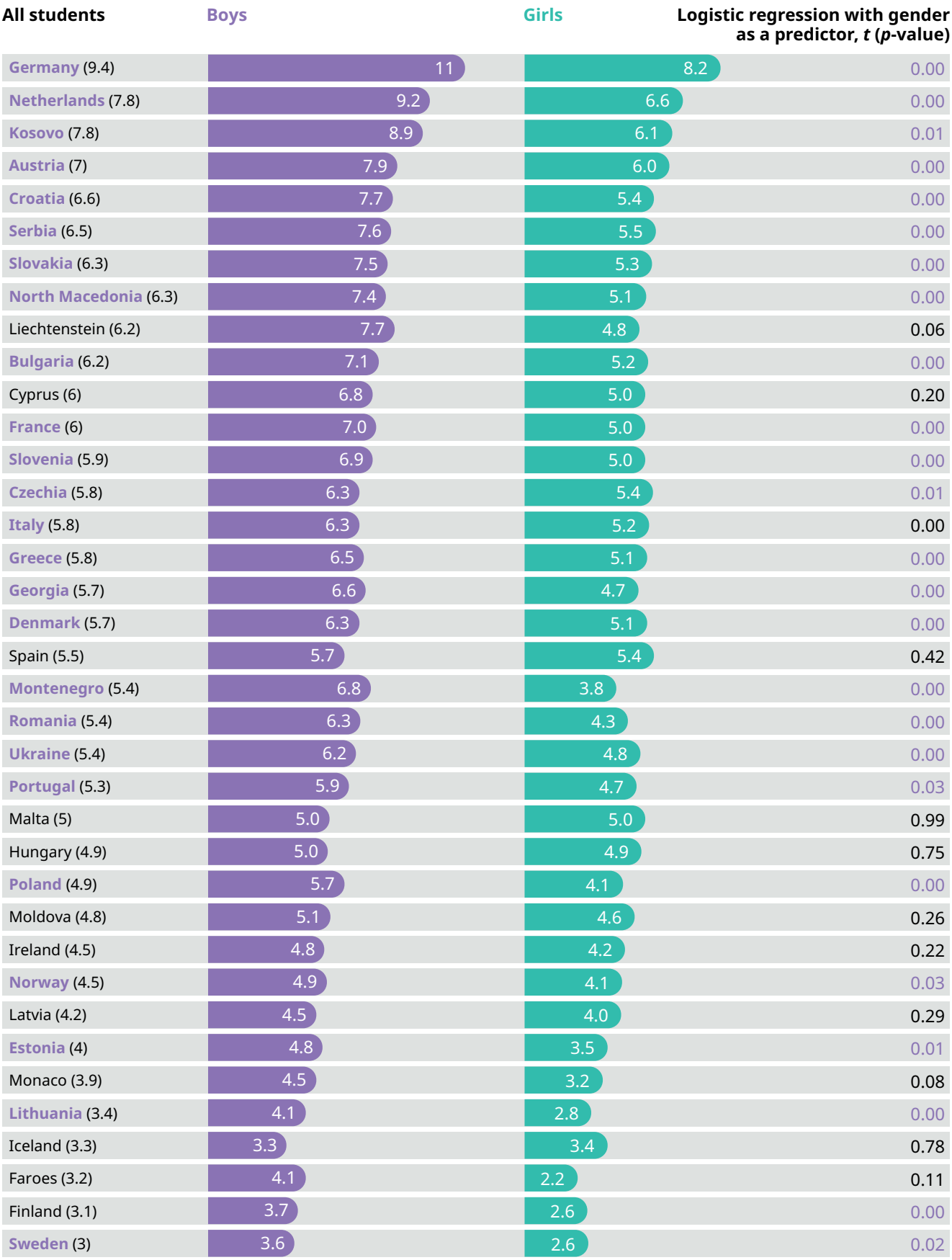


Figure 3b. Frequency of alcohol intake in the last 30 days by gender (mean number of occasions among users)



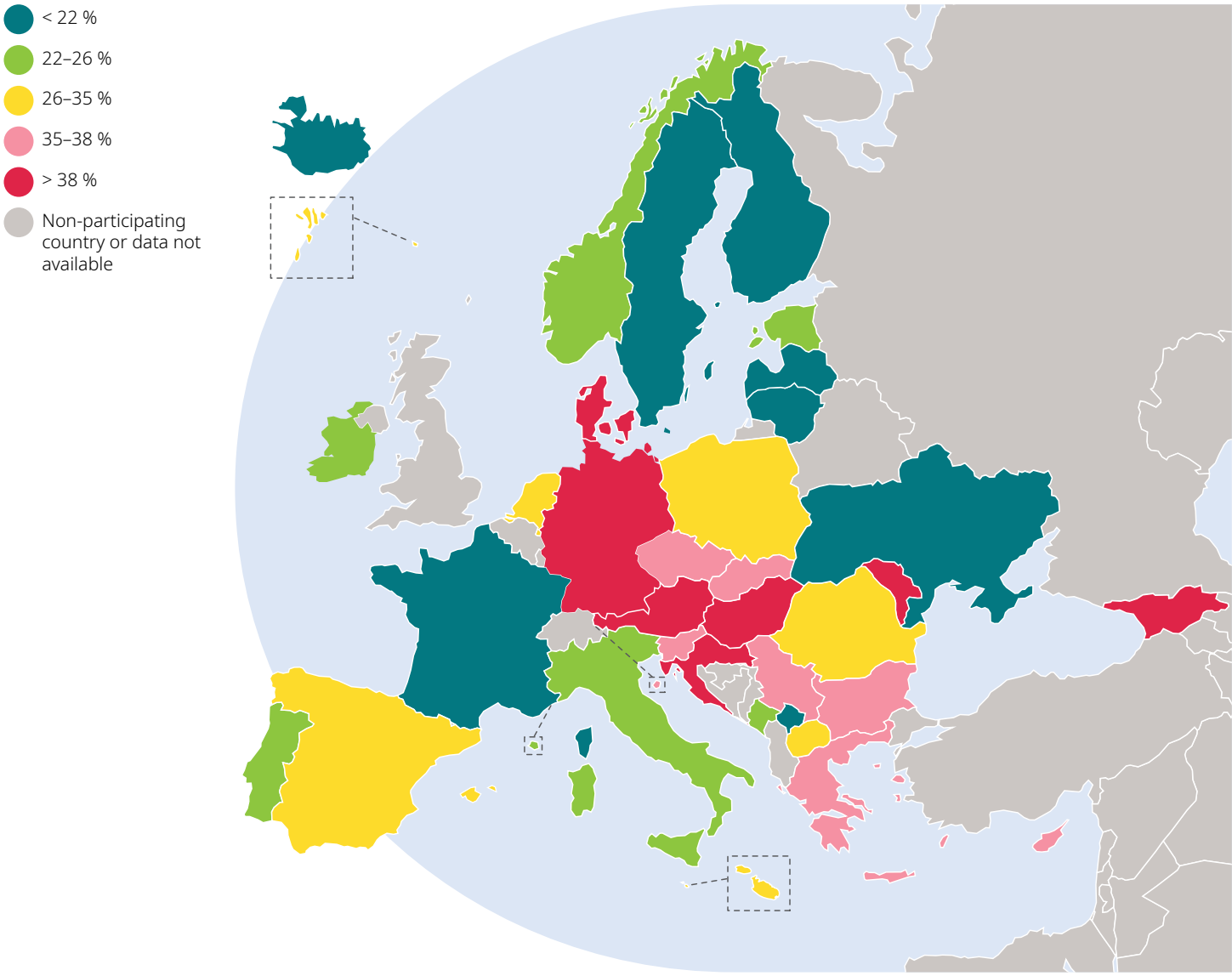
Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.

Heavy episodic drinking in the last 30 days

Almost one in three students (31 %) reported heavy episodic drinking during the last 30 days (Figure 4a). This drinking pattern was the most widespread in Denmark, Germany and Austria, with between 48 % and 55 % of students reporting heavy episodic drinking. The lowest rate was found in Iceland (8.9 %).

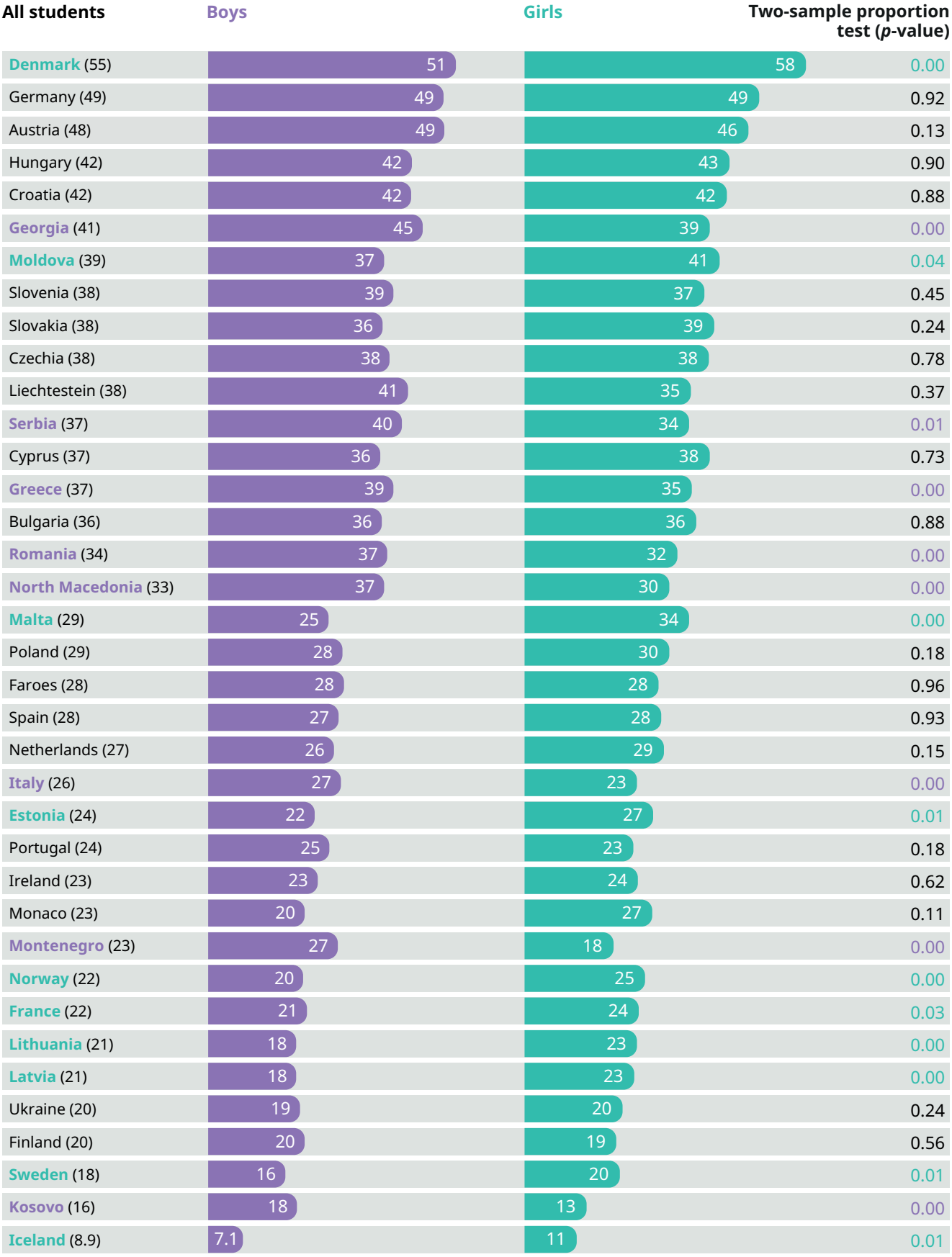
In 18 out of 37 countries, gender differences were statistically significant (Figure 4b), with higher rates of heavy episodic drinking among boys in eight countries — particularly in Montenegro (27 % for boys versus 18 % for girls) and North Macedonia (37 % versus 30 %) — and higher rates among girls in the remaining ten, especially in Malta (34 % for girls versus 25 % for boys) and Denmark (58 % versus 51 %).

Figure 4a. Prevalence of heavy episodic drinking (five or more drinks on one occasion) at least once in the last 30 days (percentage)



Note: One drink contains approximately 2 centilitres of ethanol. National examples are given so that a 'drink' is understood to contain roughly the same amount of pure alcohol as a glass of wine.

Figure 4b. Prevalence of heavy episodic drinking (five or more drinks on one occasion) at least once in the last 30 days by gender (percentage)



Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.
Note: One drink contains approximately 2 centilitres of ethanol. National examples are given so that a 'drink' is understood to contain roughly the same amount of pure alcohol as a glass of wine.

Current cannabis use

Overall, 4.8 % of the students had used cannabis in the last 30 days (Figure 5a). The highest rates were reported in Liechtenstein (9.6 %), Italy and Slovenia (8.6 %, both), Czechia (8.2 %) and the Netherlands (8.1 %). The lowest rates were observed in Moldova (1.1 %), Georgia and Romania (1.4 %, both) and the Faroes (1.5 %).

On average, more boys than girls reported cannabis use in the last 30 days (5.5 % for boys versus 4.1 % for girls) (Figure 5b). In approximately half of the countries, statistically significant gender differences were found ($p < 0.05$), with boys reporting higher use than girls in all cases. The largest differences were found in Liechtenstein and Ukraine (8 and 5.9 percentage points).

Figure 5a. Prevalence of cannabis use in the last 30 days (percentage)

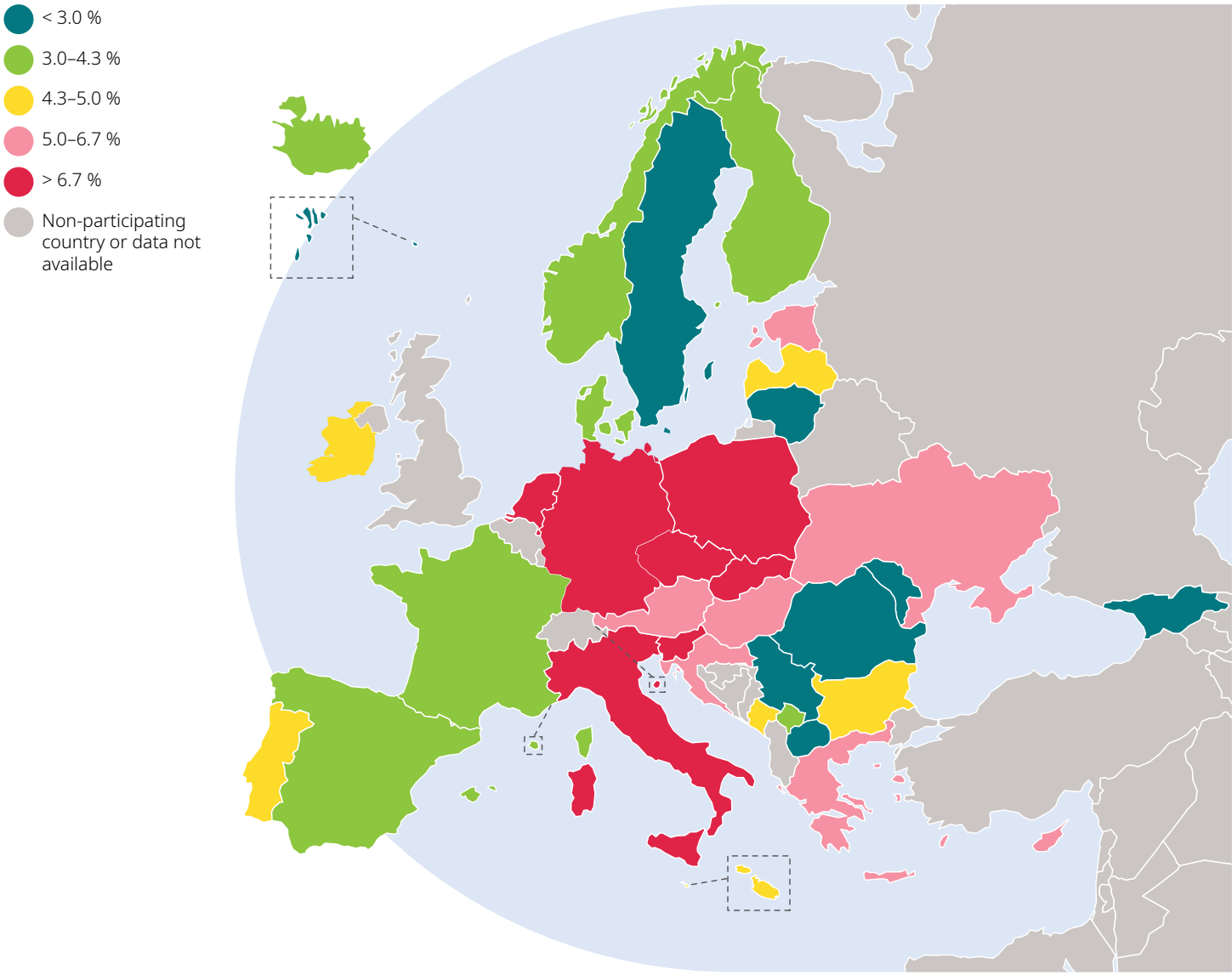
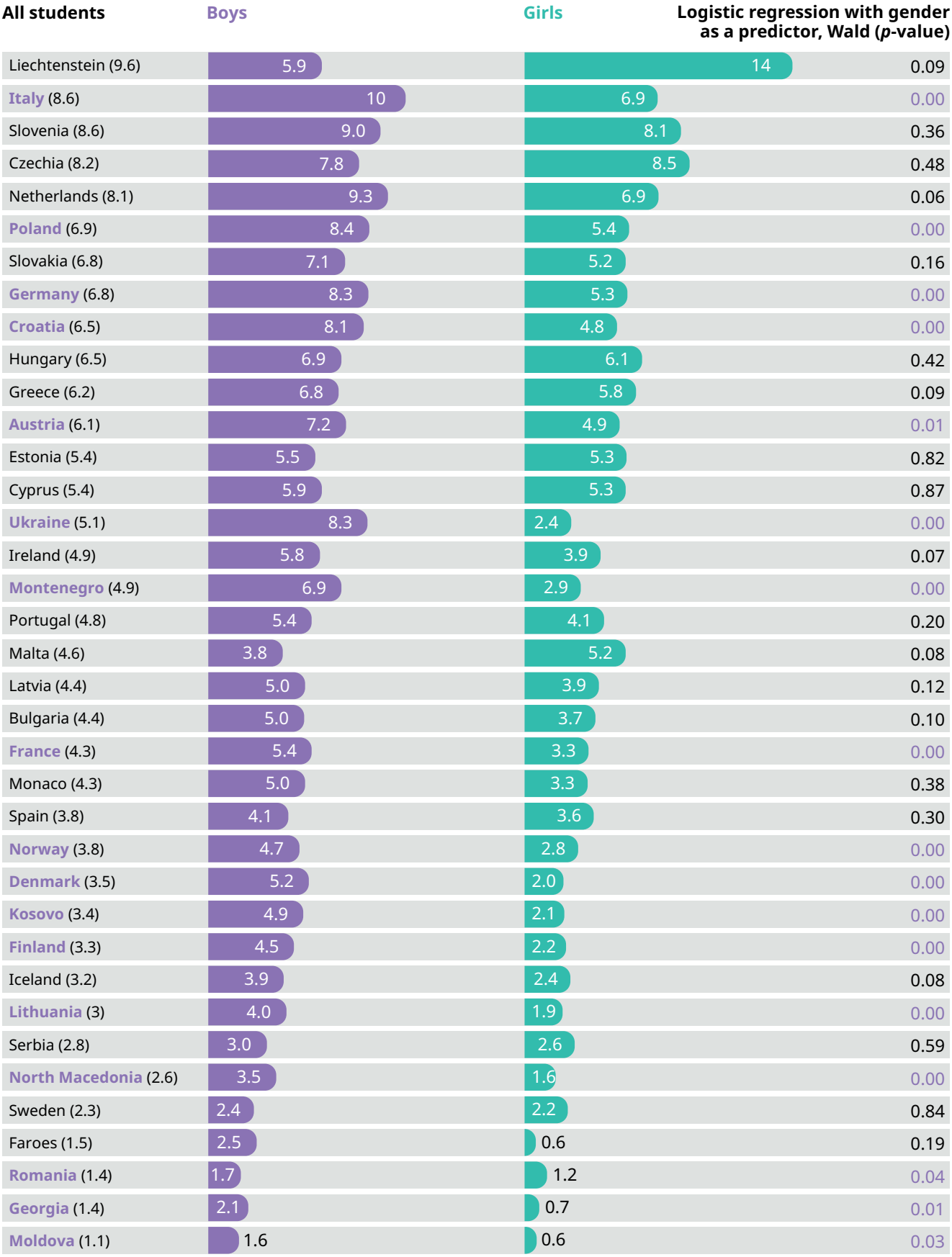


Figure 5b. Prevalence of cannabis use in the last 30 days by gender (percentage)



Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.

Frequency of cannabis use in the last 12 months

Among all students who had used cannabis in the last 12 months, the drug was used on 9.9 occasions on average (Figure 6a). In the Netherlands, Ireland and Cyprus, cannabis was used once a month (12–13 occasions). The countries with the lowest average frequency of cannabis use were Lithuania (6.9 occasions) and Liechtenstein (7.6 occasions).

A higher frequency of cannabis use among those using the drug in the last 12 months was observed among boys (11 occasions) than girls (8.2 occasions), overall (Figure 6b). In most countries, significant gender disparities ($p < 0.05$) emerged, with boys showing greater use than girls in every case. The largest differences were found in the Faroes and Georgia.

Figure 6a. Frequency of cannabis use in the last 12 months (mean number of occasions among users)

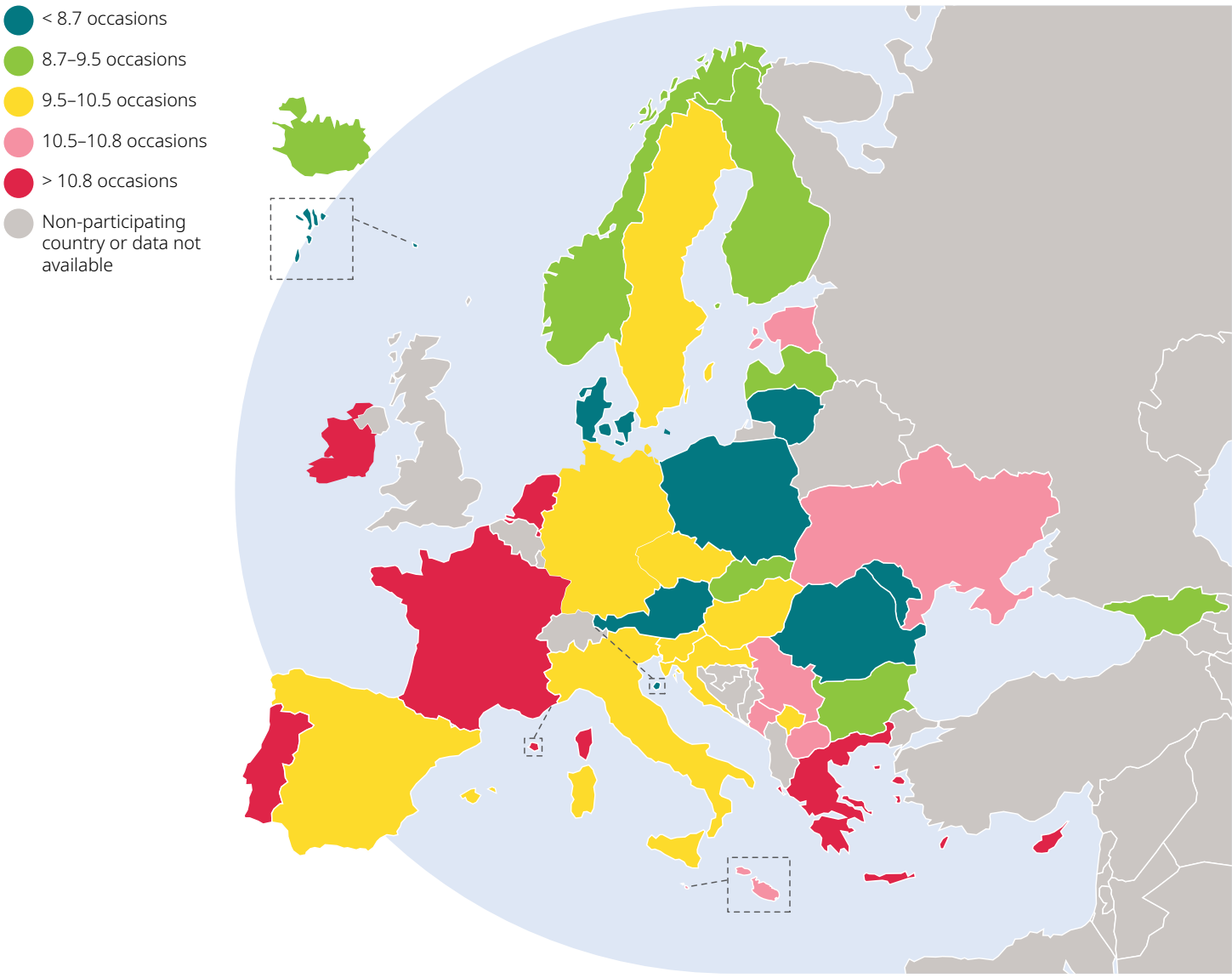


Figure 6b. Frequency of cannabis use in the last 12 months by gender (mean number of occasions among users)

All students	Boys	Girls	Logistic regression with gender as a predictor, *t* (*p*-value)
Netherlands (13)	15	11	0.05
Ireland (12)	13	11	0.32
Cyprus (12)	14	11	0.81
France (11)	12	10	0.40
Monaco (11)	12	11	0.84
Portugal (11)	13	8.6	0.04
Greece (11)	12	10	0.12
Malta (11)	12	10	0.38
Montenegro (11)	13	7	0.00
Serbia (11)	13	8.2	0.09
Ukraine (11)	12	8.5	0.04
Estonia (11)	12	9.5	0.22
North Macedonia (11)	12	8.5	0.19
Hungary (11)	12	9.0	0.03
Sweden (10)	10	11	0.82
Italy (10)	12	8.2	0.00
Germany (10)	11	9.9	0.37
Spain (10)	11	9.4	0.12
Slovenia (10)	12	9.1	0.02
Kosovo (10)	11	8.1	0.14
Croatia (10)	12	7.3	0.00
Czechia (9.7)	11	9.0	0.16
Norway (9.4)	11	6.4	0.00
Latvia (9.3)	11	7.7	0.01
Slovakia (9.2)	11	6.9	0.03
Bulgaria (9.2)	9.3	9.2	0.96
Iceland (9.2)	9.6	8.4	0.61
Finland (9)	10	7.2	0.05
Georgia (8.8)	10	2.5	0.07
Austria (8.7)	9.8	7.1	0.01
Moldova (8.5)	11	4.8	0.12
Faroes (8.5)	13	3.3	0.18
Denmark (8.2)	9.3	6.6	0.01
Romania (8.1)	8.0	8.1	1.00
Poland (8)	8.6	7.1	0.20
Liechtenstein (7.6)	5.9	9.2	0.32
Lithuania (6.9)	8.3	4.5	0.00

Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.

High-risk cannabis use

As described in the methodology section, the Cannabis Abuse Screening Test (CAST) score, which screens the possible presence and extent of cannabis-related problems, was calculated only for participants who gave a valid response to the introductory question of the CAST module, which asks about cannabis use in the last 12 months.

In this section, country-level prevalence estimates of high-risk cannabis users in the total sample of ESPAD students are reported. Detailed estimates of the proportions of high-risk users among the group of students having used cannabis in the last 12 months are provided elsewhere (see Additional Table 61a). Prevalence of cannabis use in the last 12 months based on the introductory question of the CAST module, as well as averages for each of the six CAST items, presented separately by country, are also available online (see Additional Tables 55–61).

Among the total ESPAD sample, 3.4 % of students were classified as high-risk cannabis users using this measure (Figure 7a). The highest rates were observed in Czechia and Slovenia (5.9 %, both), Croatia and Italy (5.2 %, both), the Netherlands (5.0 %), Cyprus (4.9 %) and Hungary (4.8 %). The lowest rates were found in Moldova (0.2 %), Georgia (0.9 %), the Faroes (1.0 %) and Romania (1.3 %).

Overall, the prevalence of high-risk cannabis use was higher among boys (3.6 %) than girls (3.1 %) (Figure 7b). A small number of countries reported statistically significant gender differences ($p < 0.05$), with higher prevalence among boys than girls, including Denmark, Georgia, Kosovo, Lithuania, Montenegro, Portugal and Ukraine. In most of the countries, no difference was observed between boys and girls. Malta was the only country where a significantly higher prevalence was found among girls compared to boys (4.4 % for girls versus 2.6 % for boys).

Figure 7a. Prevalence of high-risk cannabis users (percentage)

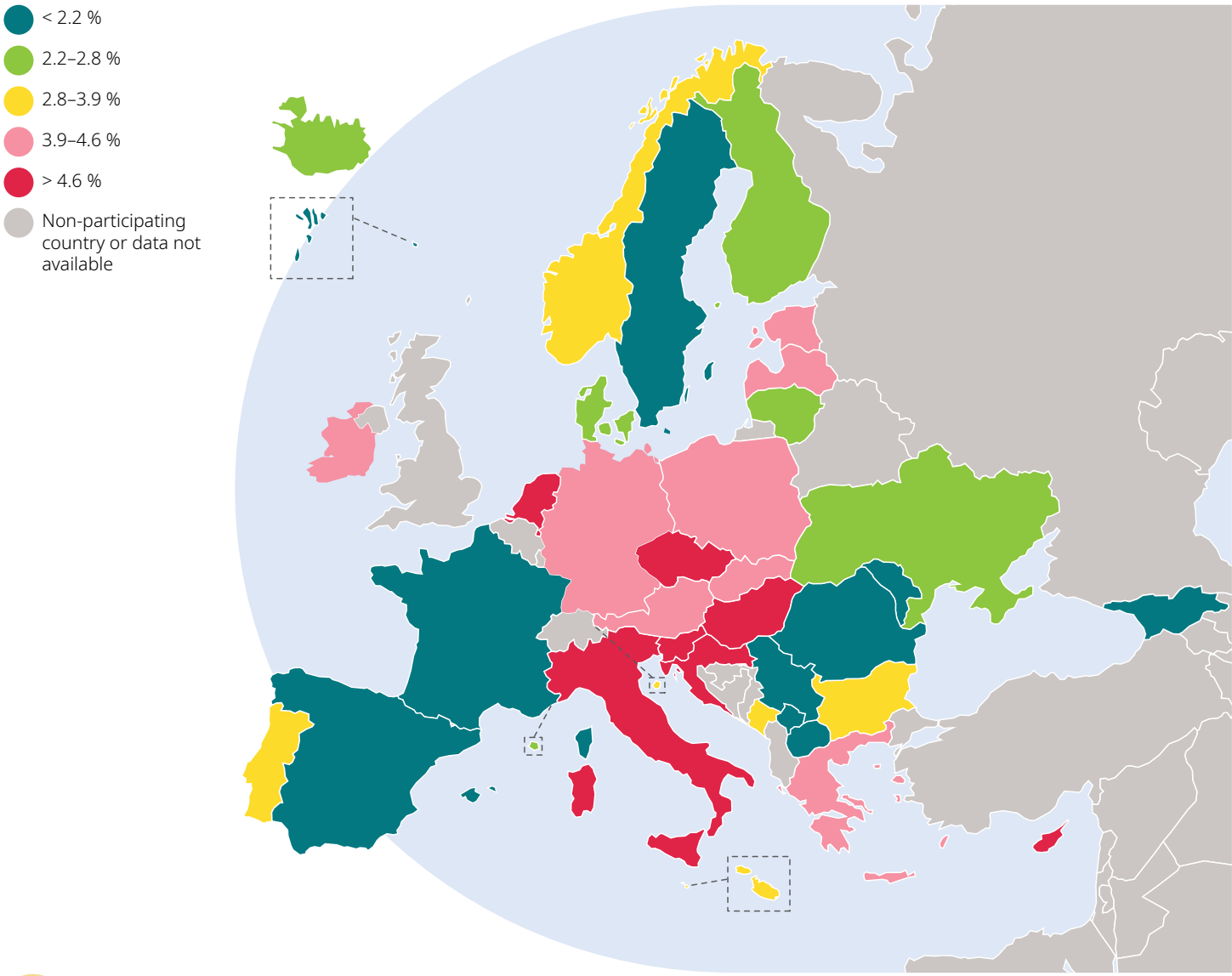
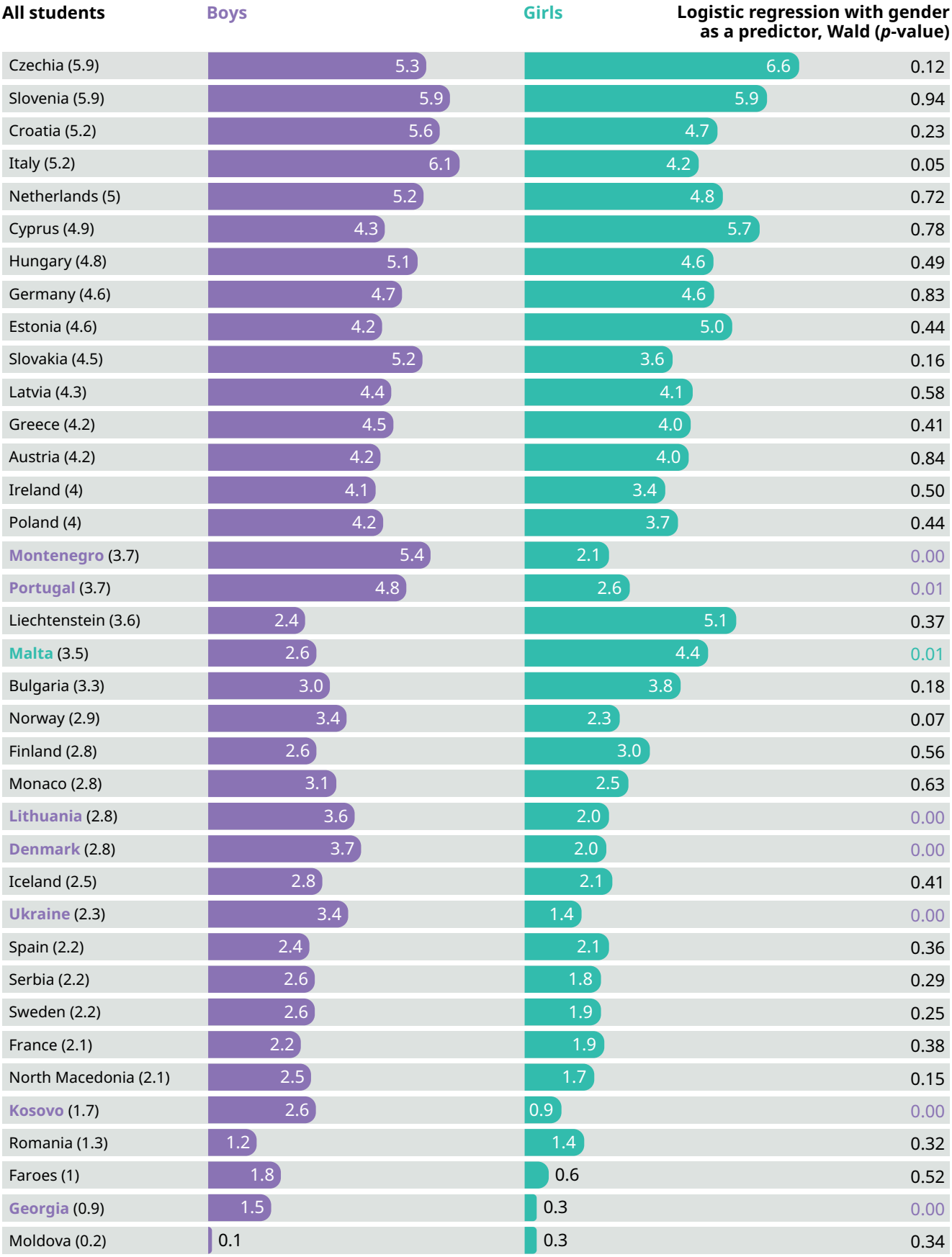


Figure 7b. Prevalence of high-risk cannabis users by gender (percentage)



Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.

New psychoactive substance use

Overall, an average of 2.1 % of the students had used a new psychoactive substance at least once in the last 12 months, with the highest prevalence reported in Cyprus, Slovenia, Poland, Slovakia and Hungary (above 3.5 %) and the lowest prevalence reported in the Netherlands, the Faroes, Portugal, Montenegro and Moldova (below 1.0 %) (Figure 8a). Generally, differences in NPS use at least once in the last 12 months between boys (2.2 %) and girls (2.0 %) were small (Figure 8b). However, statistically significant gender differences ($p < 0.05$) at national level, with higher prevalence among boys than girls reported in Denmark, Greece, Kosovo, Serbia and Ukraine. About one third of students who reported NPS use in the last 12 months had used these substances three times or more in that time — a measure of frequent use. The highest proportions of frequent NPS users were observed in Finland and the Faroes, where half of those who had used new psychoactive substances reported this pattern of use.

Among all students who had used new psychoactive substances in the last 12 months, the majority (46 %) reported use of herbal substances, 29 % reported use of powders or tablets, 18 % reported the use of liquids, and 17 % reported the use of other forms of new psychoactive substances (see Additional Table 71a). Only a few countries reported higher rates of use of new psychoactive substances in forms other than herbal smoking mixtures. In particular, powders/tablets were used by the majority of last-year NPS users in Norway (70 %), the Faroes (50 %), and a high proportion of users in Latvia (40 %); liquids were reported by 50 % of the users in Liechtenstein and 29 % in Austria and Norway; and the use of other forms of new psychoactive substances was reported by 35 % of users in Austria. Even though on average the differences between boys and girls in the reported appearance of new psychoactive substances used in the last 12 months were low, noticeable gender differences were found in most countries. Focusing only on differences higher than 15 percentage points, with regard to herbal new psychoactive substances, boys reported higher prevalence rates than girls in Ireland, Latvia and Ukraine, while girls reported higher rates in Serbia. For powders/tablets, girls reported higher prevalence rates, especially in Ireland, while a higher rate was found among boys in Latvia. Among those using liquid forms of new psychoactive substances, boys reported higher rates of use compared to girls in Italy and Ukraine, whereas girls reported higher rates in Liechtenstein. Other forms were mostly reported by girls in Ireland, Latvia, Ukraine, Slovakia, Italy and Bulgaria (see Additional Table 71b).

Figure 8a. New psychoactive substance: prevalence in the last 12 months (percentage)

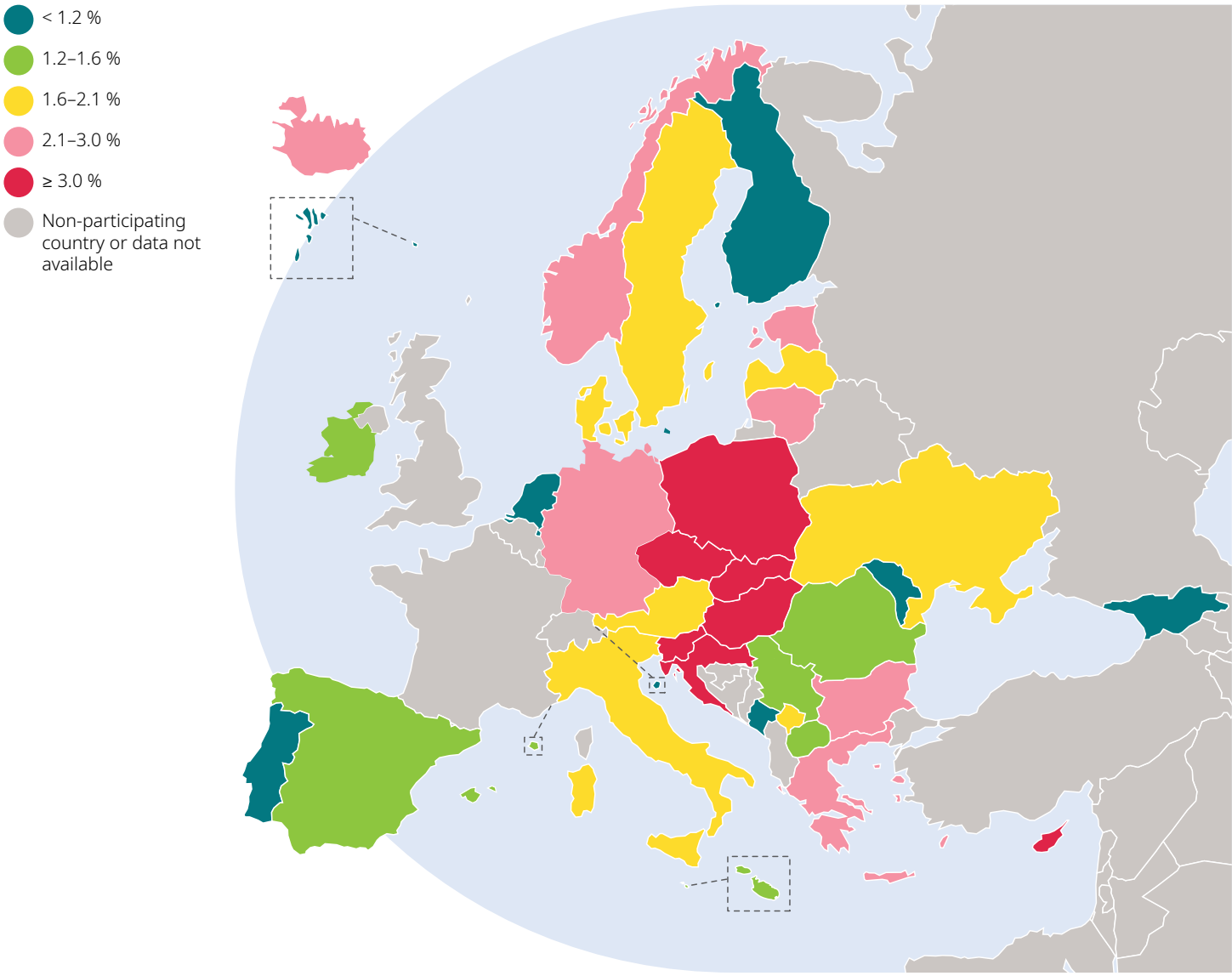
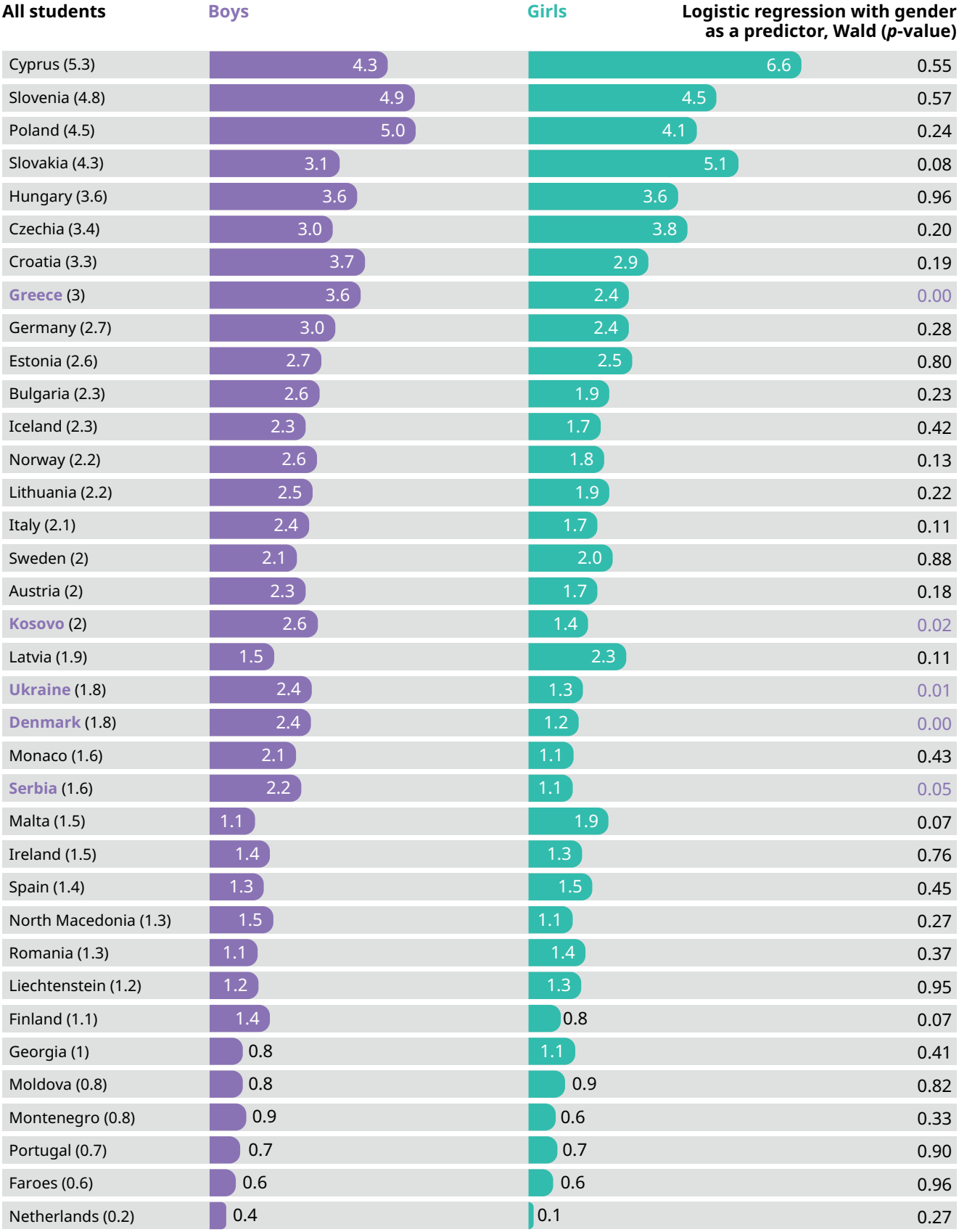


Figure 8b. New psychoactive substance use: prevalence in the last 12 months by gender (percentage)



Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.

Gambling for money

ESPAD average Gambling in the last 12 months, land-based and online: prevalence of excessive and problem gambling (%)			
	Average	Min.	Max.
Gambling (%) ([a])	23	9.5	45
Land-based	19	7.0	44
Online	14	6.2	31
Estimated excessive gambling (%) ([b])	22	7.0	39
Estimated problem gambling (%) ([c])	8.9	0.0	22

([a]) Percentage of students having gambled with money on at least one out of four games (slot machines; cards or dice; lotteries; sport or animal betting) either land-based or online in the last 12 months.
([b]) Estimation of excessive gamblers based on the CSPG scale, adopted from Rockloff (2012): percentage of gamblers in the past 12 months.
([c]) Estimation of problem gamblers based on the Lie/Bet Questionnaire, adopted from Johnson et al. (1997): percentage of gamblers in the past 12 months.

Gambling, land-based gambling and online gambling

In 2024, 23 % of ESPAD students reported gambling for money on at least one type of game in the last 12 months, either land-based, online or both. The highest prevalence rates were found in Italy (45 %), Iceland (41 %) and Greece (36 %). Notably, Italy and Greece were also among the countries with the highest prevalence in both 2015 and 2019. The lowest rates were observed in Georgia (9.5 %), Sweden (11 %), Finland (12 %) and Austria (13 %).

For all of these countries, except Finland, prevalence rates were also below the ESPAD average in 2019. By contrast, Finland had one of the highest rates in 2019. In almost all countries, boys reported markedly higher prevalence rates than girls, while in Iceland the rates were similar (42 % for boys versus 41 % for girls).

Overall, 19 % of ESPAD students reported gambling for money in a land-based setting in the last 12 months. The highest rates were found in Italy (44 %), Iceland (34 %) and Greece (33 %). In every country, a higher prevalence of boys than of girls was observed. The largest gender differences in land-based gambling were found in Croatia (32 % for boys versus 8.4 % for girls) and Montenegro (36 % versus 13 %). A substantial difference (20 percentage points) was also observed in Greece. The countries with the smallest gender differences (less than 5 percentage points) were Estonia, Ireland, Latvia, Malta, Iceland, Liechtenstein, Georgia and Austria.

On average, 14 % of ESPAD students reported engaging in online gambling activities in the last 12 months. The highest prevalence rates were found in Iceland (31 %) and Greece (26 %). In all countries, boys reported a higher prevalence rate than girls. The largest difference in online gambling was found in Greece (39 % for boys versus 15 % for girls). Other countries with gender differences greater than 20 percentage points were Poland and Montenegro. The smallest gender differences (less than 5 percentage points) were observed in Iceland, Liechtenstein, Spain, Georgia and Malta.

Table 11a. Gambling for money, land-based and online: prevalence in the last 12 months (percentage)

Country	Gambling prevalence			Land-based gambling prevalence			Online gambling prevalence		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
Austria	15	9.6	13	13	8.9	11	9.8	3.9	6.9
Bulgaria	28	15	22	22	13	18	22	8.8	16
Croatia	34	9.4	23	32	8.4	21	22	4.3	14
Cyprus	33	19	26	31	19	25	23	8.1	15
Czechia	36	20	27	31	18	24	25	11	18
Denmark	24	4.9	14	17	4.1	10	17	2.5	9.8
Estonia	29	21	25	20	18	19	22	10	16
Faroes	35	15	24	32	14	22	23	5.1	14
Finland	21	2.7	12	17	2.6	9.8	14	1.0	7.3
France	–	–	–	–	–	–	–	–	–
Georgia	12	7.2	9.5	11	6.3	8.4	8.4	4.2	6.2
Germany	22	11	16	18	8.4	13	12	5.6	9.0
Greece	47	26	36	44	24	33	39	15	26
Hungary	38	21	29	33	18	25	27	12	19
Iceland	42	41	41	35	32	34	32	30	31
Ireland	31	27	29	28	25	27	19	14	17
Italy	54	35	45	53	35	44	18	6.2	12
Kosovo	27	21	24	24	18	21	21	16	18
Latvia	32	26	29	25	22	23	26	15	20
Liechtenstein	28	24	26	25	21	23	16	13	14
Lithuania	27	14	20	20	12	16	19	7.0	13
Malta	18	14	16	16	13	14	11	6.7	9.1
Moldova	19	13	16	16	9.2	13	14	8.5	11
Monaco	19	8.9	15	14	7.3	11	13	3.9	9.0
Montenegro	40	16	28	36	13	24	31	11	21
Netherlands	–	–	–	–	–	–	–	–	–
North Macedonia	34	16	25	30	12	21	21	9.4	15
Norway	–	–	–	–	–	–	–	–	–
Poland	38	18	28	30	16	23	30	8.9	20
Portugal	22	13	17	19	11	15	18	5.4	11
Romania	34	16	25	29	14	21	26	9.7	18
Serbia	27	12	19	24	10	17	19	7.2	13
Slovakia	32	13	23	27	11	19	25	7.9	17
Slovenia	27	11	19	20	9.4	14	23	6.6	14
Spain	21	14	17	18	12	15	9.7	6.0	7.7
Sweden	17	4.1	11	11	2.8	7.0	14	3.0	8.5
Ukraine	27	16	21	23	13	18	19	10	14
AVERAGE	**29**	**16**	**23**	**25**	**14**	**19**	**20**	**8.7**	**14**
Min.	12	2.7	9.5	11	2.6	7.0	8.4	1.0	6.2
Max.	54	41	45	53	35	44	39	30	31

As shown in Table 11b, lottery gambling (including scratch cards, bingo and keno) was the most common land-based gambling activity, reported by 56 % of students who gambled in physical settings. At the country level, the highest proportions were found in Cyprus (87 %), Italy (80 %) and Iceland (75 %), while the lowest proportions (below 40 %) were found in Kosovo and Moldova. The second most popular land-based gambling activity was playing cards (e.g. poker) or dice, reported by 50 % of students who gambled in physical settings. Rates above 70 % were observed in Georgia, Sweden and Liechtenstein, while less than 30 % of students who engaged in land-based gambling in Serbia reported this activity. Sport or betting on animal races was reported by 45 % of ESPAD students gambling in land-based settings, with the highest rates found in Croatia and Montenegro (76 %, both) and the lowest in Austria and Iceland (28 % and 29 %, respectively). The least popular activity was slot machines, reported by 30 % of students who engaged in land-based gambling. In this case, proportions ranged from 17 % in Ireland to 57 % in Finland.

Regarding online gambling, betting on sports or animals was the most common activity, reported by 55 % of students who gambled online. The highest proportions were found in Montenegro (80 %) and Croatia (76 %), while the lowest (below 40 %) were observed in Iceland, Latvia and Georgia. Roughly half of the students who gambled online reported spending money on playing cards (e.g. poker) or dice (51 %), with the highest rates observed in Liechtenstein (76 %) and Kosovo (71 %), and the lowest in Ireland, Montenegro, Hungary, Serbia and Germany (all below 40 %). Slightly less than half of the students who gambled online reported spending money on lotteries in the last 12 months (47 %), with proportions ranging from 35 % in Denmark and Romania to 83 % in Cyprus. The least popular online gambling activity was slot machines. Overall, 38 % of students who gambled online in the last 12 months spent money on this activity, with proportions ranging from 12 % in the Faroes to 62 % in Romania.

Table 11b. Proportion of types of games among those having gambled for money, land-based and online, in the last 12 months (percentage)

Country	Slot machines		Cards or dice		Lotteries		Sport or animal betting	
	Land-based	Online	Land-based	Online	Land-based	Online	Land-based	Online
Austria	19	37	64	61	46	39	28	45
Bulgaria	33	50	65	57	43	37	53	59
Croatia	38	53	36	44	51	43	76	76
Cyprus	41	56	56	68	87	83	47	68
Czechia	23	35	48	45	58	41	43	55
Denmark	21	39	55	44	52	35	38	64
Estonia	35	46	47	60	63	55	30	41
Faroes	26	12	51	42	55	47	41	47
Finland	57	57	60	55	53	39	49	58
France	–	–	–	–	–	–	–	–
Georgia	18	34	77	69	40	46	33	39
Germany	23	44	41	38	55	37	39	51
Greece	31	40	46	44	61	57	47	53
Hungary	20	23	32	33	60	45	56	69
Iceland	23	25	44	49	75	63	29	34
Ireland	17	22	37	31	58	44	55	63
Italy	21	25	35	45	80	45	44	63
Kosovo	35	41	67	71	38	42	60	63
Latvia	22	41	55	60	66	57	30	37
Liechtenstein	26	29	71	76	59	48	38	52
Lithuania	19	35	51	57	66	53	33	41
Malta	24	25	38	43	58	46	32	44
Moldova	24	29	70	65	39	38	37	44
Monaco	22	25	46	61	61	44	37	47
Montenegro	41	43	30	32	56	60	76	80
Netherlands	–	–	–	–	–	–	–	–
North Macedonia	29	30	33	40	57	46	55	55
Norway	–	–	–	–	–	–	–	–
Poland	44	42	41	40	48	41	54	66
Portugal	27	38	36	41	56	40	50	64
Romania	47	62	61	51	41	35	45	52
Serbia	41	52	29	35	65	51	58	61
Slovakia	33	40	54	55	46	42	60	67
Slovenia	32	42	46	52	56	48	49	54
Spain	38	32	40	46	57	46	30	46
Sweden	33	32	71	56	47	56	45	63
Ukraine	54	58	64	67	46	51	43	48
AVERAGE	**30**	**38**	**50**	**51**	**56**	**47**	**45**	**55**
Min.	17	12	29	31	38	35	28	34
Max.	57	62	77	76	87	83	76	80

Excessive gambling

In 2024, 5.7 % of ESPAD students reported gambling behaviour that could be considered excessive. The lowest rates were observed in Monaco (1.9 %), Georgia (2.2 %), the Faroes (2.3 %) and Malta (2.4 %). The highest rates were found in three countries in south-east Europe: Kosovo (19 %), Montenegro (12 %) and Greece (11 %).

On average, 22 % of student gamblers across all ESPAD countries showed excessive gambling behaviour (Table 11c). At country level (Additional Table-101a), the highest rates were found in Kosovo and Montenegro (39 %, both), Sweden and Finland (35 %, both) and the Netherlands (34 %), while the lowest were observed in the Faroes (6.6 %), Ireland (10 %), Iceland and Monaco (12 %, both).

Overall, the proportion of excessive gamblers among 12-month gamblers was substantially higher among boys than girls (28 % versus 10 %). The largest gender differences (30 percentage points or more) were found in Greece and Finland, while the smallest differences (6 percentage points or less) were observed in Sweden, Spain and Malta.

Problem gambling

In 2024, signs of problem gambling behaviour were reported by 1.9 % of ESPAD students on average. The prevalence was below 1 % in Liechtenstein, Georgia, Monaco and Malta, and exceeded 3 % in Kosovo and Croatia. More detailed country-level prevalence estimates for the total sample are available in the online additional result tables (Additional Table 100).

Among 12-month gamblers, the overall proportion of problem gamblers across all ESPAD countries was 8.9 % (Table 11c). At the country level, the proportion exceeded 10 % in eight ESPAD countries. The highest rate was observed in Kosovo (22 %), followed by Croatia (17 %) and Moldova (16 %). Apart from Liechtenstein, where no students met the criteria for problem gambling behaviour, the lowest rates were found in Czechia (4.0 %), the Faroes (4.1 %) and Monaco (4.9 %).

Overall, the proportion of 12-month gamblers displaying problems related to gambling was higher among boys than girls, both on average (11 % versus 4.6 %) and in the vast majority of countries.

Table 11c. Estimation of excessive and problem gamblers among those having gambled in the last 12 months by gender (percentage)

Country	Excessive gambling [a]	Problem gambling [b]	Excessive gambling [a]		Problem gambling [b]	
			Boys	Girls	Boys	Girls
Austria	19	7.9	26	6.3	10	2.7
Bulgaria	24	8.3	30	12	10	3.8
Croatia	22	17	24	9.6	19	8.5
Cyprus	24	6.1	35	9.1	5.0	8.3
Czechia	21	4.0	27	11	5.2	1.4
Denmark	31	9.7	34	14	11	3.0
Estonia	23	9.5	34	8.5	12	5.4
Faroes	6.6	4.1	9.4	0.0	5.9	0.0
Finland	35	8.3	38	7.1	9.1	2.3
France	–	–	–	–	–	–
Georgia	19	5.9	27	6.7	8.3	2.2
Germany	16	11	21	5.2	15	4.6
Greece	30	7.0	44	7.7	10	1.8
Hungary	18	7.5	24	7.7	9.0	4.9
Iceland	12	6.3	18	3.4	8.1	2.4
Ireland	10	5.8	16	2.4	7.6	2.9
Italy	16	6.6	23	4.9	9.7	0.9
Kosovo	39	22	49	28	29	14
Latvia	20	8.8	28	9.9	13	3.6
Liechtenstein	–	0.0	–	–	0.0	0.0
Lithuania	24	9.8	32	7.7	13	2.7
Malta	13	5.5	15	8.4	3.7	7.1
Moldova	16	16	22	6.6	21	9.2
Monaco	12	4.9	16	0.0	6.7	0.0
Montenegro	39	11	45	24	13	6.4
Netherlands	34	13	35	27	15	6.3
North Macedonia	13	7.6	17	5.1	9.3	4.1
Norway	–	–	–	–	–	–
Poland	21	8.2	28	7.2	10	4.3
Portugal	18	8.1	26	4.8	9.8	5.1
Romania	23	9.3	28	14	11	6.5
Serbia	16	8.5	21	6.2	11	3.6
Slovakia	25	13	29	12	13	10
Slovenia	24	10	32	7.1	12	5.0
Spain	15	7.6	17	12	9.7	5.0
Sweden	35	–	35	33	–	–
Ukraine	27	14	31	21	17	9.0
AVERAGE	**22**	**8.9**	**28**	**10**	**11**	**4.6**
Min.	6.6	0.0	9.4	0.0	0.0	0.0
Max.	39	22	49	33	29	14

[a] Estimation of excessive gamblers based on CSPG scale, adopted from Rockloff, 2012. Percentage of gamblers in the past 12 months.
[b] Estimation of problem gamblers based on Lie/Bet, adopted from Johnson, 1997. Percentage of gamblers in the past 12 months.

Gaming and social media use

ESPAD average			
	Average	Min.	Max.
Gaming in the last 30 days (%) [a]			
School day	70	46	87
Non-school day	77	58	94
Self-perceived problems (%)			
Social media	47	29	58
Gaming	22	12	38

[a] Percentage of students reporting gaming in the last 30 days.

Gaming

About 70 % of ESPAD students reported having played digital games on a typical school day in the last 30 days, while 77 % reported have done so on a typical non-school day.

The highest levels of engagement in gaming activities were observed in Liechtenstein and Germany, where more than 85 % of students reported playing on a typical school day and 90 % or more on a typical non-school day. In contrast, the lowest rates were recorded in Kosovo and Moldova, with less than 55 % reporting gaming on a school day and less than 65 % on a non-school day. Students in eastern and Nordic countries tended to report higher levels of engagement in gaming activities compared to their peers in southern countries (Table 12a).

The prevalence of students reporting gaming for more than 6 hours on a typical school day ranges from 2 % to 3 % (Cyprus, Austria, France, Slovenia) to more than 10 % (Ukraine, Germany, Netherlands, Latvia, Estonia, Slovakia, Iceland, Lithuania and Bulgaria). Considering typical non-school days, the prevalence is much higher, with rates between 7.9 % and 9.2 % observed in Italy, Slovenia and Greece and between 21 % and 27 % in Estonia, Germany, Lithuania, Sweden, Bulgaria, Latvia and Denmark.

Among gamers, the modal class for gaming time on a typical school day was half an hour in seven countries, around 1 hour in ten countries and 2 to 3 hours in twenty countries. On a typical non-school day, the most common gaming duration across countries was also 2 to 3 hours, although in seven countries the modal category rose to 6 hours or more.

Noticeable gender differences were observed in the large majority of countries, with boys more frequently engaged in gaming than girls, both on a typical school day and a typical non-school day; boys reported spending twice as much time on gaming than girls in most countries.

In some countries, such as Denmark, France, Iceland and Liechtenstein, the percentage of boys engaged in gaming on a school day was between 1.2 and 1.5 times higher than the percentage of girls engaged in gaming on a school day. These differences become even more evident when looking at the engagement in gaming among boys and girls on non-school days (Table 12a and Table 12b).

Table 12a. Average number of hours spent on gaming in the last 30 days on a typical school day

Country	Gaming hours last 30 days: school day						Gaming hours last 30 days: school day											
	None	Half an hour	About 1 hour	2-3 hours	4-5 hours	6+ hours	None		Half an hour		About 1 hour		2-3 hours		4-5 hours		6+ hours	
							Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	34	20	18	18	6.4	2.8	22	47	17	24	22	14	26	9.9	9.0	3.5	3.5	2.0
Bulgaria	24	15	18	23	9.2	11	21	27	11	20	19	17	26	19	11	7.4	12	9.5
Croatia	35	15	20	18	6.2	5.7	22	49	11	20	23	16	26	9.9	9.7	2.2	8.9	2.1
Cyprus	39	14	20	16	8.1	2.2	38	39	17	12	28	12	15	17	0	17	1.5	3.0
Czechia	26	18	19	20	10	7.4	11	40	11	24	22	17	28	12	16	4.2	12	2.8
Denmark	22	16	16	24	15	6.5	7.1	37	8.5	23	19	13	37	12	21	10	7.9	5.0
Estonia	19	13	17	26	14	12	12	25	7.5	18	17	17	33	19	17	12	14	9.3
Faroes	23	15	20	21	13	7.9	13	32	8.6	21	23	17	27	15	18	9.2	9.9	5.5
Finland	18	15	20	26	15	6.6	8.5	28	9.0	20	19	20	37	15	19	11	7.7	5.6
France	39	19	19	16	4.7	3.0	21	57	17	21	26	12	25	6.8	7.5	2.0	4.8	1.3
Georgia	37	15	17	18	7.8	6.0	27	46	14	15	19	14	23	13	8.7	6.9	7.9	4.3
Germany	13	11	15	29	17	14	7.8	19	7.0	15	16	14	34	25	20	15	15	12
Greece	41	17	18	15	5.4	3.8	23	56	15	18	26	12	23	7.4	7.6	3.5	4.9	2.8
Hungary	26	17	21	22	8.0	6.4	14	36	12	21	24	19	30	15	11	5.1	9.2	4.0
Iceland	29	13	15	21	9.9	11	12	49	10	17	17	13	28	12	14	5.7	18	3.4
Ireland	23	18	19	24	9.2	6.9	17	29	15	20	24	15	27	22	9.7	8.7	7.9	5.6
Italy	33	18	27	14	4.4	3.8	20	47	14	21	37	18	18	8.8	5	3.5	4.6	2.4
Kosovo	54	12	12	11	4.8	5.8	45	62	9.9	14	15	10	15	8.2	7.5	2.5	8.1	3.7
Latvia	22	15	16	23	12	12	13	30	10	20	16	16	28	18	15	8.9	17	7.2
Liechtenstein	14	31	21	25	5.0	4.1	5.7	24	29	37	20	20	37	8.2	1.4	10	7.1	0.0
Lithuania	28	12	14	23	13	11	20	36	9.4	15	15	13	28	18	15	11	14	7.6
Malta	31	16	20	20	7.7	5.6	22	42	12	21	21	18	27	11	10	4.6	8.3	2.7
Moldova	45	13	14	14	5.9	7.2	30	61	12	14	17	11	22	6.3	8.5	3.3	11	3.7
Monaco	32	18	21	17	8.3	4.5	21	46	12	25	28	11	25	7.6	8.3	8.2	6.3	2.2
Montenegro	34	17	18	17	7.2	6.5	23	46	14	19	23	14	22	11	9.6	4.9	8.6	4.3
Netherlands	25	11	17	23	11	13	12	38	7.9	15	19	14	30	16	12	11	20	7.0
North Macedonia	36	20	18	15	5.6	5.2	25	46	18	23	21	15	22	9.5	7.5	3.7	7.1	3.3
Norway	27	17	14	20	12	9.7	14	39	15	20	15	12	27	13	15	9.2	13	6.0
Poland	20	13	19	26	12	9.0	11	29	7.3	19	20	19	34	18	17	7.7	11	7.2
Portugal	39	17	18	16	5.5	4.9	26	51	13	21	22	14	23	9.0	9.3	1.7	6.2	3.6
Romania	24	16	21	22	9.4	7.8	14	33	10	21	21	21	31	15	13	6.2	11	4.8
Serbia	30	20	19	19	7.0	4.7	18	41	15	25	22	16	27	12	11	4	7.3	2.6
Slovakia	37	14	14	17	6.9	11	24	52	12	16	16	12	22	11	8.9	3.8	17	5.1
Slovenia	33	23	22	16	3.7	3.1	21	44	18	27	29	15	23	9.1	5.2	2.5	4.5	1.9
Spain	33	17	17	17	8.1	7.7	25	41	17	18	20	14	21	14	9.2	7.1	8.7	6.8
Sweden	22	15	19	23	14	7.8	15	28	11	19	22	16	28	17	16	12	8.4	7.1
Ukraine	26	11	12	20	14	18	23	29	8.1	13	13	12	21	19	14	14	22	14
AVERAGE	**30**	**16**	**18**	**20**	**9.1**	**7.4**	**19**	**40**	**13**	**20**	**21**	**15**	**26**	**13**	**11**	**7.1**	**10**	**4.9**
Min.	13	11	12	11	3.7	2.2	5.7	19	7.0	12	13	10	15	6.3	0	1.7	1.5	0.0
Max.	54	31	27	29	17	18	45	62	29	37	37	21	37	25	21	17	22	14

All the students - modal class
Males - modal class
Females - modal class
Modal class among gamers
Modal class among male gamers
Modal class among female gamers

Table 12b. Average number of hours spent on gaming in the last 30 days on a typical non-school day

Country	Gaming hours last 30 days: school day						Gaming hours last 30 days: school day											
	None	Half an hour	About 1 hour	2-3 hours	4-5 hours	6+ hours	None		Half an hour		About 1 hour		2-3 hours		4-5 hours		6+ hours	
							Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	27	16	13	21	13	10	14	40	11	21	14	13	27	14	19	7.2	15	5.6
Bulgaria	18	8.7	13	21	17	23	15	21	5.2	13	12	13	23	20	20	13	25	20
Croatia	28	11	14	21	14	12	15	42	8.1	15	13	16	25	16	21	5.9	18	4.7
Cyprus	30	7.4	13	22	13	14	29	31	7.6	7.7	14	11	30	15	11	17	9.1	18
Czechia	24	13	15	20	13	16	9.6	38	6.7	19	14	16	27	14	18	7.5	25	6.3
Denmark	19	12	10	18	20	21	5.4	33	4.7	19	8.2	12	23	13	29	11	30	12
Estonia	14	8.2	9.9	21	20	27	8.9	19	4.0	12	7.8	12	20	22	24	17	35	18
Faroes	24	11	8.8	22	17	18	12	34	5.9	15	6.5	10	27	17	22	13	25	11
Finland	16	11	13	22	20	18	8.2	24	6.1	16	9.9	16	26	18	27	13	23	12
France	20	11	15	21	14	18	5.4	35	4.9	18	12	18	28	14	21	7.5	29	7.7
Georgia	27	11	13	20	15	14	21	34	8.3	14	13	13	24	15	17	13	17	11
Germany	10	7	9.3	22	24	27	5.0	15	3.2	11	7.9	11	26	19	28	20	30	24
Greece	31	12	15	20	12	9.2	12	48	7.4	15	17	14	31	11	20	5.4	13	6.0
Hungary	19	10	14	23	17	17	8.4	28	6.6	14	12	15	27	19	23	12	23	11
Iceland	27	12	12	20	15	14	10	46	8.2	17	13	12	27	12	20	8.3	22	4.9
Ireland	15	9.8	13	25	19	18	7.5	23	5.7	14	13	14	32	17	21	17	21	16
Italy	29	11	24	19	8.8	7.9	16	42	8.7	14	29	20	25	12	11	6.1	9.7	5.6
Kosovo	42	9.5	12	16	8.5	12	35	48	6.7	12	12	13	20	12	11	6.5	15	9.1
Latvia	17	9.7	12	20	19	23	10	23	4.7	15	10	13	20	20	24	14	31	15
Liechtenstein	5.8	14	19	30	21	11	1.4	12	8.6	22	16	24	31	24	31	6.1	11	10
Lithuania	19	7.4	8.7	19	21	25	12	26	4.8	10	6.4	11	20	18	25	16	32	18
Malta	18	12	14	22	18	17	8.9	28	5.3	19	11	17	24	19	26	8.6	25	7.9
Moldova	36	12	13	17	11	12	21	50	6.8	16	13	12	23	11	17	4.8	18	5.7
Monaco	20	12	13	22	16	17	13	31	5.4	21	8.3	18	31	11	22	8.2	21	11
Montenegro	27	13	16	19	12	12	19	36	9.4	17	17	15	24	14	15	9.4	15	8.6
Netherlands	24	8.9	12	22	17	16	10	38	4.0	13	10	13	30	16	24	11	22	8.9
North Macedonia	22	15	17	20	13	14	15	28	9.0	20	16	18	24	16	17	8.1	19	9.9
Norway	26	11	11	18	18	17	13	40	8.1	14	11	11	22	13	24	11	23	11
Poland	16	8.6	11	25	20	19	8.7	24	4.0	13	8.5	14	27	22	26	15	26	12
Portugal	29	11	12	18	13	17	15	43	7.0	16	9.9	15	22	13	19	6.5	26	6.7
Romania	18	10	14	22	17	18	10	26	5.3	15	11	17	25	20	23	12	25	11
Serbia	24	14	16	22	13	12	13	33	7.7	18	14	18	29	16	18	8.1	18	7.2
Slovakia	30	8.6	13	20	11	18	16	43	5.0	13	13	12	25	14	15	7.8	25	10
Slovenia	25	15	17	24	11	8.3	13	36	9.7	21	16	18	34	15	16	6.5	12	4.9
Spain	22	11	13	23	16	14	12	31	7.2	14	12	15	28	18	22	11	19	9.9
Sweden	17	8.9	9.3	20	21	24	10	23	4.0	14	6.6	12	24	16	27	16	28	20
Ukraine	27	9.3	11	19	14	19	25	29	7.5	11	10	12	19	19	14	14	23	15
AVERAGE	**23**	**11**	**13**	**21**	**16**	**16**	**13**	**32**	**7.0**	**15**	**12**	**14**	**26**	**16**	**21**	**11**	**22**	**11**
Min.	5.8	7	8.7	16	8.5	7.9	1.4	12	3.2	7.7	6.4	10	19	11	11	4.8	9.1	4.7
Max.	42	16	24	30	24	27	35	50	11	22	29	24	34	24	31	20	35	24

All the students - modal class
Males - modal class
Females - modal class
Modal class among gamers
Modal class among male gamers
Modal class among female gamers

Self-perceived problems with gaming and social media use

Two summary indices were calculated to estimate perceived risks associated with social media use and gaming (range: 0–3). These non-clinical screening tools (Holstein et al., 2014) assess students' perceptions of problems related to time spent on these activities, negative emotions when access is restricted and concerns expressed by family members. Index scores of 0–1 were considered indicative of self-perceived low or non-existent risk of problematic use, while scores of 2–3 reflected a high perceived risk (see the methodology section for details).

On average, 22 % of ESPAD students scored 2–3 points on the index for self-perceived problems with gaming, suggesting the presence of a possible problem gaming behaviour; this ranged from 12 % in Czechia to 38 % in Cyprus (Table 12c). In almost all ESPAD countries, higher rates of self-perceived problems related to gaming were reported among boys than among girls. The gap was reversed in the Netherlands, where girls scored 7 percentage points higher than boys. The largest gender differences, exceeding 20 percentage points, were observed in Portugal, Germany, France, Kosovo, the Faroes, Latvia and Malta.

Regarding social media use, nearly half of the students (47 %) scored 2–3 points on the perceived risk scale. The highest prevalence rates were found in Austria (58 %), Liechtenstein (57 %) and Germany (56 %), while the lowest were recorded in Czechia (29 %), Hungary and Poland (32 %, both). Noticeable gender differences were observed also in relation to this indicator, but in contrast to gaming, the higher rates of self-perceived problems related to social media use were found among girls than among boys, both on average (53 % for girls versus 42 % for boys) and in all countries. The gender difference was more than 5 percentage points in all countries except Ukraine, Kosovo and Germany. Particularly large gender differences, exceeding 15 percentage points, were observed in Slovakia, Liechtenstein, the Faroes and Bulgaria.

Table 12c. Self-perceived problems related to gaming and social media use (percentage)

Country	Social media	Gaming	Social media		Gaming	
			Boys	Girls	Boys	Girls
Austria	58	14	53	63	23	5.6
Bulgaria	47	27	40	55	34	20
Croatia	49	20	42	56	30	10
Cyprus	43	38	36	49	38	37
Czechia	29	12	23	34	18	6.5
Denmark	43	13	36	50	20	6.3
Estonia	40	21	33	48	30	11
Faroes	51	19	42	59	30	9.2
Finland	40	14	32	47	21	7.3
France	41	18	36	47	29	7.9
Georgia	55	28	51	58	38	19
Germany	56	24	54	59	37	12
Greece	48	21	42	54	30	13
Hungary	32	15	25	37	21	10
Iceland	38	16	32	46	23	7.6
Ireland	55	18	52	58	26	10
Italy	55	26	49	62	32	18
Kosovo	54	27	52	56	38	17
Latvia	51	27	44	57	37	17
Liechtenstein	57	18	49	66	25	6.1
Lithuania	50	31	44	56	41	21
Malta	47	22	41	54	32	12
Moldova	44	23	38	49	32	14
Monaco	44	16	38	51	23	5.7
Montenegro	55	24	48	61	33	16
Netherlands	47	31	40	54	28	35
North Macedonia	54	24	49	59	33	15
Norway	–	–	–	–	–	–
Poland	32	16	27	38	23	9.2
Portugal	54	28	49	58	41	15
Romania	53	25	47	58	34	16
Serbia	55	22	48	61	33	13
Slovakia	49	19	41	59	27	10
Slovenia	55	17	47	62	26	8.9
Spain	39	15	36	42	21	9.9
Sweden	46	21	42	51	30	13
Ukraine	40	27	38	42	37	19
Average	**47**	**22**	**42**	**53**	**30**	**13**
Min.	29	12	23	34	18	5.6
Max.	58	38	54	66	41	37

Mental well-being and prevention

ESPAD average (%)			
	Average	Min.	Max.
Mental well-being (a)	59	43	77
Prevention activities (b)			
Awareness/information events (b)	56	31	77
Training activities (b)	55	35	72

(a) Percentage of students reporting good mental well-being (WHO-5 Well-Being Index ≥ 50).
(b) Percentage of students reporting participation in the last 24 months.

Mental well-being

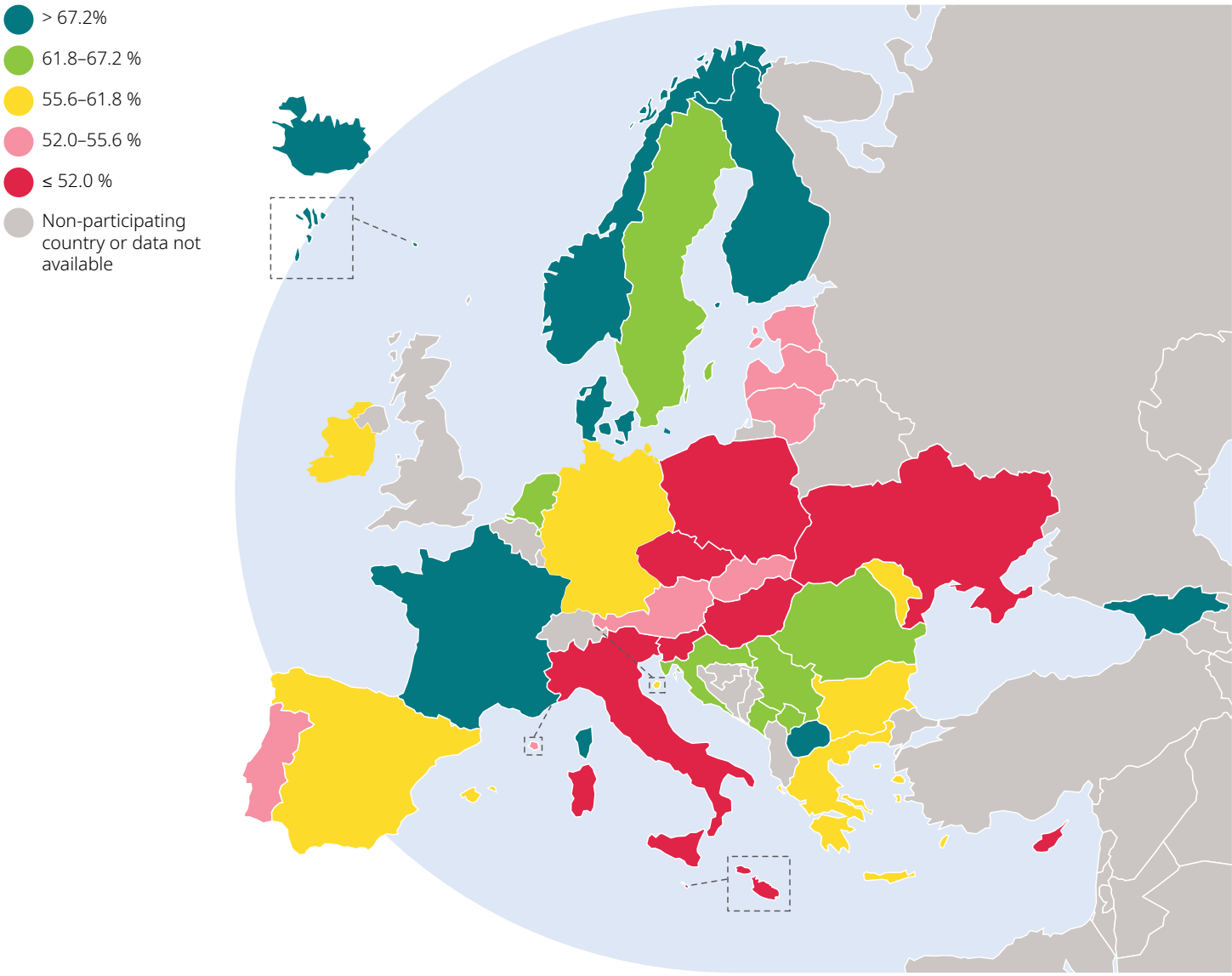
In the aftermath of the COVID-19 pandemic and amid ongoing conflicts in Europe and the Middle East, ESPAD 2024 has strengthened its focus on adolescent mental well-being. The persistent effects of social isolation, educational disruptions and socio-economic instability have heightened concerns regarding youth mental health.

To systematically assess and monitor this issue, the 2024 ESPAD survey included for the first time the WHO-5 Well-being Index, a validated self-report tool designed to measure subjective psychological well-being based on recent life experiences (past two weeks). Higher scores indicate higher mental well-being, and scores of 50 or higher are considered indicative of good mental well-being (see the methodology section for more details).

On average 59 % of ESPAD students reported good mental well-being, with prevalence varying widely across countries (Figure 9a). The highest rates of well-being were found in northern Europe, with the Faroes (77 %), Iceland (75 %) and Denmark (72 %), followed by North Macedonia (71 %). In Czechia (46 %), Hungary (47 %), Poland and Cyprus (49 %, both) less than half of students reported good mental well-being. The country with the lowest rate of mental well-being was Ukraine (43 %), where, since 2022, adolescents have been exposed to traumatic events connected with war and limited access to mental health care.

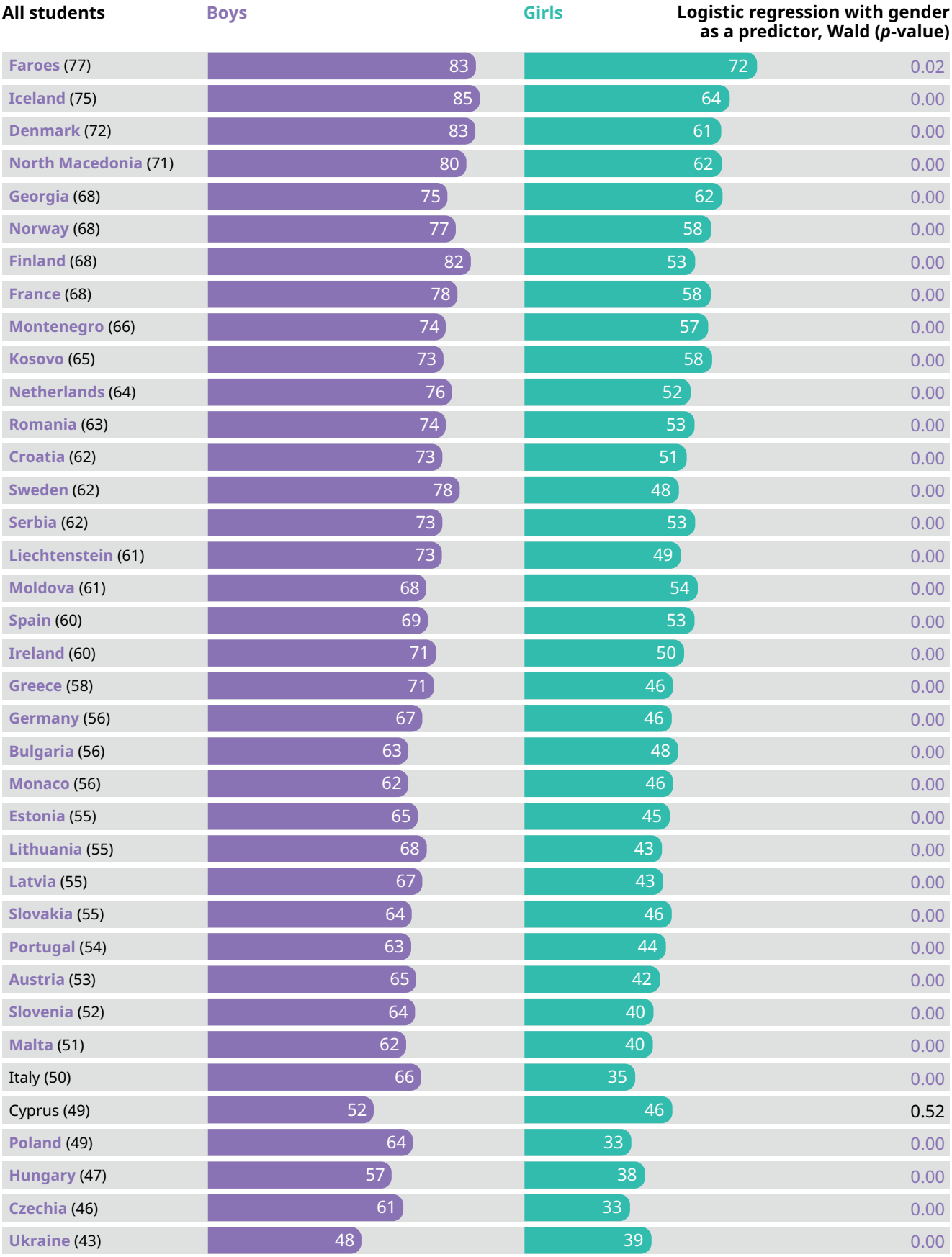
Mental well-being was generally higher among boys than girls, with an average of 70 % compared to 49 %, a trend consistent across all ESPAD countries, regardless of whether mental well-being was widely reported or limited to less than half of the students (Figure 9b). The largest gender differences in mental well-being were observed in Italy (66 % for boys versus 35 % for girls), Poland (64 % versus 33 %) and Sweden (78 % versus 48 %). The smallest gender gaps were found in Cyprus (52 % versus 46 %), where no statistically significant difference was found, Ukraine (48 % versus 39 %), the Faroes and Georgia (83 % and 75 % for boys versus 72 % and 62 % for girls, respectively).

Figure 9a. Mental well-being: self-assessment in the last 2 weeks (percentage)



(a) Percentage of students reporting good mental well-being (WHO-5 Well-being Index ≥ 50).

Figure 9b. Mental well-being: self-assessment in the last 2 weeks by gender (percentage)



Colour indicates a significant difference between **boys** and **girls**. Statistical significance levels are reported for each country.
Note: Percentage of students reporting good mental well-being (WHO-5 Well-being Index ≥ 50).

Prevention activities

Prevention is a newly introduced topic in the ESPAD survey, providing an overview of students' participation in prevention programmes and the various types of activities undertaken in the two years preceding the survey.

In 2024, about three in four ESPAD students (72 %) reported having participated in at least one prevention activity in the past two years. These activities ranged from awareness events focused solely on providing information about the effects and harms of substances such as alcohol, tobacco and other drugs, or behaviours like gambling, gaming and internet disorder, to skills-based programmes incorporating interactive components aimed at developing personal and social skills. It is important to note that not all prevention interventions are evidence-based, and this aspect could not be assessed by ESPAD.

Regarding awareness or informational events specifically, slightly more than half of students (56 %, on average) reported participation in the past two years. At the country level, the highest rates were observed in Slovakia, Hungary, Croatia and Denmark (above 70 %, each). Overall, girls tended to report participation more frequently than boys (58 % versus 54 %). This was particularly evident in Monaco, Finland and Cyprus, where the gender gap in favour of girls exceeded 10 percentage points.

Regarding awareness or informational events on alcohol, tobacco and other drugs or risk behaviours, 56 % of ESPAD students attended at least one such event (Table 13a). Participation rates were highest in Slovakia (77 %) and Hungary (74 %), while the lowest were in Kosovo (31 %) and Montenegro (38 %).

Alcohol was the most frequently addressed topic among awareness or informational events, with 49 % of ESPAD students reporting participation. The highest rates were observed in Slovakia (70 %) and Croatia (67 %), while the lowest was recorded in Kosovo (18 %). Noticeable gender differences were found in Monaco (67 % for girls versus 54 % for boys), Finland (63 % versus 51 %) and Malta (61 % versus 49 %).

Tobacco-related informational events ranked second, with 38 % of ESPAD students reporting participation. These events were most common in Slovakia and Hungary (59 %, both), while the lowest rates were observed in Cyprus (22 %) and Georgia (23 %). In most countries, girls were more likely than boys to report having participated in tobacco-related events, with the largest gender differences found in Liechtenstein (36 % for girls versus 25 % for boys), Poland (59 % versus 48 %) and Finland (60 % versus 50 %). Notably, in Cyprus, more boys than girls reported attending such events (29 % versus 17 %).

Less than one third (31 %) of ESPAD students reported having participated in informational activities related to other drugs. The highest rate was observed in Slovakia (60 %), and the lowest in Kosovo (10 %). The largest gender differences were found in Poland (52 % for girls versus 41 % for boys) and Finland (56 % versus 46 %).

The least frequently addressed topic was behavioural addictions such as gambling, gaming or internet disorder, with an average of 28 % of ESPAD students reporting participation. The highest participation was observed in Slovenia and Iceland (48 %, both), while the lowest was recorded in Kosovo (9.4 %). While participation in substance-related awareness or informational events tended to be reported more frequently among girls, in most countries boys were more likely than girls to report participation in informational or awareness events related to behavioural addictions. The largest gender differences were found in the Faroes (39 % for boys versus 24 % for girls), Denmark (28 % versus 14 %) and Cyprus (28 % versus 15 %).

Concerning interactive training activities, 55 % of ESPAD students reported participation in interventions focused on developing social and personal skills or media literacy, which are key components of prevention efforts (Table 13b). The highest participation rates were observed in Finland (72 %), Malta and Spain (71 %, both), while the lowest were recorded in the Faroes (35 %), Sweden (36 %), Kosovo and Ukraine (39 %, both).

Overall, girls tended to report participation in training activities more frequently than boys (60 % versus 51 %). This pattern was consistent across all types of training and in all countries except the

Faroes, where the rate among boys was higher (39 % for boys versus 33 % for girls) although this country has the lowest prevalence of participation in trainings. The largest gender differences were observed in Finland (81 % for girls versus 63 % for boys) and Liechtenstein (59 % versus 42 %), while the smallest were in Cyprus (46 % versus 43 %), Kosovo (41 % versus 37 %) and Germany (58 % versus 54 %).

The most frequently mentioned activity was social skills training (41 %, on average), aimed at improving communication, empathy and the ability to handle peer pressure. The highest participation rates were observed in Finland (64 %), Lithuania (56 %) and Malta (55 %), while the lowest were reported in Sweden (25 %), Kosovo (26 %), the Faroes (27 %) and Estonia (28 %). Girls were more likely than boys to report participation in this type of training in most countries, with the exception of the Faroes and France. The largest gender differences were found in Finland (74 % for girls versus 55 % for boys) and Liechtenstein (53 % versus 36 %), while the smallest was in Austria (49 % versus 48 %).

A similar share of students (40 %) reported participation in media literacy trainings aimed at developing skills to critically analyse media, detect intended messages and reduce susceptibility to manipulation. This type of training was most common in Finland (60 %), Denmark (59 %) and Monaco (57 %), and least common in Kosovo (20 %).

In most countries, girls reported higher participation rates than boys, with the largest gender difference observed in Finland (68 % for girls versus 51 % for boys). Boys reported higher participation only in Cyprus and the Faroes (29 % for boys versus 22 % for girls, both), Kosovo (21 % versus 19 %) and Bulgaria (26 % versus 25 %).

A slightly lower share of ESPAD students (36 %) reported participation in personal skills training, which focuses on managing difficult emotions such as anger, improving impulse control and developing coping strategies. The highest participation rates were observed in Lithuania (56 %), Malta (55 %) and Spain (53 %), while the lowest were in the Faroes (23 %) and Sweden (24 %). Boys reported higher participation than girls in only five countries: Cyprus, the Faroes, Austria, Monaco and France. The largest gender difference was found in Cyprus (38 % for boys versus 20 % for girls).

The greatest cross-country variation in participation rates was seen in awareness or informational initiatives, particularly those addressing illicit drugs and addictive behaviours, which were more common in eastern Europe. In contrast, skills-based programmes, considered to have higher potential effectiveness, were more frequently reported in western and southern Europe.

Table 13a. Awareness/information events: prevalence in the last 24 months by topic (percentage)

Country	Any event	Alcohol	Tobacco	Other drugs	Gambling/ gaming/ internet	Any event		Alcohol		Tobacco		Other drugs		Gambling/ gaming/ internet	
						Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	55	45	40	28	29	55	55	43	46	39	40	28	28	33	24
Bulgaria	50	44	34	20	20	48	52	42	47	30	38	19	23	22	17
Croatia	72	67	56	48	46	69	75	63	72	53	61	44	51	49	43
Cyprus	46	37	22	15	21	41	52	39	35	29	17	17	15	28	15
Czechia	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Denmark	71	65	34	23	21	68	73	61	70	33	36	23	23	28	14
Estonia	55	46	37	26	27	53	58	41	51	35	39	25	26	33	22
Faroes	59	50	30	16	30	60	59	44	55	32	28	15	18	39	24
Finland	59	57	55	51	–	53	64	51	63	50	60	46	56	–	–
France	61	52	51	48	27	60	62	50	54	49	53	47	48	31	22
Georgia	44	39	23	11	20	45	43	40	37	23	23	10	11	20	19
Germany	58	52	35	39	27	55	62	47	56	34	36	36	42	31	23
Greece	58	45	46	35	33	54	61	39	49	41	50	32	37	34	33
Hungary	74	65	59	48	37	75	74	65	65	58	59	47	49	42	33
Iceland	68	61	58	56	48	66	71	58	65	55	61	53	60	49	47
Ireland	57	51	29	29	26	57	57	49	54	29	29	29	28	32	20
Italy	43	34	26	29	30	40	45	32	36	25	26	27	30	31	29
Kosovo	31	18	27	10	9.4	35	28	20	16	31	24	12	8.1	15	5.0
Latvia	52	45	32	26	28	48	56	40	50	29	34	24	28	31	26
Liechtenstein	41	34	30	17	18	37	46	31	37	25	36	16	19	15	21
Lithuania	62	56	51	46	27	58	66	52	61	49	53	42	49	30	24
Malta	61	55	28	25	22	57	66	49	61	24	31	23	27	26	17
Moldova	56	52	34	24	24	54	59	48	56	32	35	22	27	25	23
Monaco	64	60	50	39	25	57	72	54	67	46	55	38	39	27	23
Montenegro	38	31	24	18	23	38	38	29	32	22	27	16	20	26	21
Netherlands	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
North Macedonia	48	38	28	14	16	49	47	38	38	28	28	13	14	20	11
Norway	45	37	27	29	21	45	46	35	40	26	28	28	31	25	16
Poland	68	61	53	46	39	64	72	56	66	48	59	41	52	39	40
Portugal	45	38	31	29	27	43	47	35	42	28	34	26	32	30	25
Romania	65	58	49	38	29	66	65	58	58	46	52	37	40	32	26
Serbia	52	47	35	28	25	49	55	43	51	31	38	25	30	26	24
Slovakia	77	70	59	60	38	74	81	66	75	57	62	56	64	38	37
Slovenia	65	56	37	28	48	62	68	51	59	35	38	26	30	45	49
Spain	63	57	37	30	29	62	65	55	59	36	39	30	30	32	26
Sweden	50	41	25	11	23	49	51	36	45	26	25	12	9.3	30	18
Ukraine	47	37	32	30	26	45	49	34	40	31	33	29	30	26	25
AVERAGE	**56**	**49**	**38**	**31**	**28**	**54**	**58**	**46**	**52**	**36**	**40**	**29**	**32**	**31**	**25**
Min.	31	18	22	10	9.4	35	28	20	16	22	17	10	8.1	15	5.0
Max.	77	70	59	60	48	75	81	66	75	58	62	56	64	49	49

Table 13b. Training activities: prevalence in the last 24 months by topic (percentage)

Country	Any training	Social skills	Personal skills	Media literacy	Any training		Social skills		Personal skills		Media literacy	
					Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Austria	60	49	42	45	57	62	48	49	42	41	44	46
Bulgaria	43	31	26	26	40	45	29	33	24	28	26	25
Croatia	58	45	36	41	52	64	41	50	34	37	39	44
Cyprus	44	38	28	25	43	46	33	42	38	20	29	22
Czechia	–	–	–	–	–	–	–	–	–	–	–	–
Denmark	67	50	41	59	62	71	44	55	38	43	55	63
Estonia	46	28	26	33	43	50	24	32	23	28	30	35
Faroes	35	27	23	25	39	33	31	24	28	20	29	22
Finland	72	64	48	60	63	81	55	74	43	53	51	68
France	62	36	33	51	59	65	38	35	34	33	49	53
Georgia	47	35	28	31	41	53	30	40	25	32	25	36
Germany	56	30	25	44	54	58	28	33	24	27	44	45
Greece	62	49	42	42	56	67	42	55	38	45	37	46
Hungary	54	36	30	38	51	57	33	38	27	33	36	40
Iceland	65	51	49	46	60	70	45	58	46	52	44	49
Ireland	56	42	40	38	52	60	37	47	37	43	36	39
Italy	52	40	35	33	48	55	37	42	34	36	32	35
Kosovo	39	26	25	20	37	41	24	28	23	27	21	19
Latvia	49	35	30	37	42	55	30	39	26	34	34	40
Liechtenstein	51	45	36	38	42	59	36	53	32	41	32	44
Lithuania	65	56	56	54	59	72	50	63	50	62	51	57
Malta	71	55	55	46	67	76	49	62	50	61	45	48
Moldova	57	41	35	41	49	64	35	47	31	40	35	47
Monaco	68	36	31	57	65	71	33	40	31	30	52	64
Montenegro	51	44	39	36	47	55	40	47	38	41	34	39
Netherlands	–	–	–	–	–	–	–	–	–	–	–	–
North Macedonia	56	41	38	34	51	61	37	45	36	40	30	38
Norway	–	–	–	–	–	–	–	–	–	–	–	–
Poland	69	52	41	50	61	76	46	59	36	47	44	56
Portugal	53	37	35	32	46	60	30	45	30	39	28	37
Romania	65	50	46	45	61	69	46	54	43	49	42	49
Serbia	48	39	29	32	43	53	34	42	28	29	29	34
Slovakia	60	43	36	43	55	65	39	48	32	42	42	45
Slovenia	56	40	32	38	51	60	36	43	30	34	34	42
Spain	71	54	53	52	68	74	51	57	49	55	48	55
Sweden	36	25	24	28	33	39	22	27	21	26	26	28
Ukraine	39	30	28	27	36	43	26	33	25	30	25	28
Average	55	41	36	40	51	60	37	45	34	38	37	42
Min.	35	25	23	20	33	33	22	24	21	20	21	19
Max.	72	64	56	60	68	81	55	74	50	62	55	68

Trends 1995–2024

Trends 1995–2024

This chapter presents changes in selected indicators of substance use from 1995 to 2024. The indicators covered include students' perceptions of substance availability, early onset of substance use, prevalence and patterns of substance use, gambling and gaming. Trends in the selected indicators were calculated using the ESPAD 1995–2024 trend database, which includes data from all of the available national survey waves since the inception of the ESPAD project. It is therefore possible that the results presented in this section differ slightly from those in the 2015 report, as at the time no such database existed and the trends in selected indicators of substance use were calculated using the survey prevalence results reported in previous ESPAD reports. It is also possible that for specific years data from some countries were not included because, even though the survey was conducted, the respective dataset was not available to be merged into the ESPAD 1995–2024 trend database. For more detailed information on the ESPAD 1995–2024 trend database, see the methodology section.

Sample sizes for all countries that participated in the 2024 data collection are shown in Table 14.

Table 14. Overview of ESPAD surveys conducted between 1995 and 2024 by country included in the ESPAD trend database 1995–2024. Sample size.

Country	1995	1999	2003	2007	2011	2015	2019 [a]	2024 [b]
Albania	–	–	–	–	3 189	2 553	–	–
Armenia	–	–	–	4 055	–	–	–	–
Austria	–	–	2 354	2 571	–	3 694	4 334	3 469
Belgium (Flanders)	–	–	1 291	1 889	1 797	1 771	–	–
Belgium (Wallonia)	–	–	973	–	–	–	–	–
Bosnia and Herzegovina (FBiH)	–	–	–	2 973	4 528	–	–	–
Bosnia and Herzegovina (RS)	–	–	–	2 609	3 132	–	–	–
Bulgaria	–	–	2 666	2 353	2 217	2 922	2 864	2 747
Croatia	–	3 555	2 852	3 008	3 002	2 558	2 772	3 038
Cyprus	–	–	2 142	6 340	4 243	2 098	1 224	152
Czechia	2 946	3 543	3 149	3 901	3 913	2 773	2 778	2 949
Denmark	2 216	1 546	2 504	877 [d]	2 181	1 670	2 487	5 484
Estonia	–	–	2 431	2 372	2 460	2 452	2 520	2 011
Faroes	480	413	582	552	557	511	511	337
Finland	2 160	3 005	3 219	4 988	3 744	4 049	4 541	3 173
France	–	2 266	2 277	2 918	2 572	2 714	2 588	3 376
Georgia	–	–	–	–	–	1 966	3 092	2 618
Germany [c]	–	–	3 869	5 825	3 520	862	1 459	3 362
Greece	–	2 195	1 891	3 060	5 910	3 202	5 988	6 810
Greenland	–	–	502	–	–	–	–	–
Hungary	8 801	2 383	2 647	2 816	3 063	2 647	2 355	2 675
Iceland	3 668	3 457	3 313	3 510	3 333	2 663	2 534	1 679
Ireland	1 839	–	–	2 221	2 207	1 470	1 940	1 880
Isle of Man	–	–	710	740	–	–	–	–
Italy	1 437	4 073	4 818	9 981	4 837	4 059	2 542	4 041
Kosovo	–	–	–	–	2 324	–	1 756	3 050
Latvia	–	2 289	2 816	2 275	2 622	1119 [d]	2 743	3 142
Liechtenstein	–	–	–	–	366	316	–	167
Lithuania	–	–	5 028	2 411	2 476	2 573	2 393	4 885
Malta	–	3 635	3 443	3 668	3 377	3 326	3 043	2 880
Moldova	–	–	–	3 176	2 162	2 586	–	2 552
Monaco	–	–	–	393	401	397	428	427
Montenegro	–	–	–	5 823	3 387	3 844	5 700	5 510
Netherlands	–	2 581	2 070	2 088	2 044	1 684	1 288	1 893
North Macedonia	–	–	–	2 452	–	2 428	2 930	2 826
Norway	3 887	3 753	3 745	3 484	2 927	2 575	4 313	3 471
Poland	4 898	2 328	3 798	2 120	2 472	3 289	2 372	2 939
Portugal	2 032	3 577	2 919	3 141	1 965	3 456	4 365	1 979
Romania	–	2 368	4 330	2 292	2 772	3 500	3 764	8 543
Russia (Moscow district)	–	2 918	1 883	1 973	1 757	–	–	–
Russia (Russian Federation excluding Moscow)	–	–	–	1 966	–	–	–	–
Serbia	–	–	–	6 156	6 084	–	3 529	1 908
Slovakia	2 385	2 437	2 122	2 468	2 009	2 208	2 258	1 359
Slovenia	2 410	2 347	2 758	3 085	3 186	3 484	3 413	3 728
Spain	–	–	–	–	–	–	3 557	5 836
Sweden	3 467	3 271	3 212	3 179	2 569	2 551	2 546	2 535
Switzerland	–	–	2 572	2 499	–	–	–	–
Turkey	–	–	3 909	–	–	–	–	–
Ukraine	6 624	2 778	4 102	2 443	2 210	2 472	2 731	4 451
United Kingdom	7 674	2 583	2 003	2 179	1683 [d]	–	–	–

[a] All countries used a paper-and-pencil questionnaire, except for Austria, Denmark, France, Iceland, the Netherlands and Norway where students answered a web-based questionnaire, and the Faroes (only 3 schools) and Italy, where a mixed administration mode (paper-and-pencil and web-based) was used.
[b] Austria, Czechia, Denmark, Estonia, the Faroe Islands, Finland, France, Germany, Greece, Iceland, Ireland, Latvia, Liechtenstein, Lithuania, Monaco, the Netherlands, Norway, Portugal, Slovakia, Sweden and Ukraine used a web-based questionnaire; Bulgaria, Croatia, Cyprus, Georgia, Hungary, Malta, Moldova, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovenia and Spain used a paper-and-pencil questionnaire; Kosovo and Latvia used a mixed mode.
[c] In 2003, 2007 and 2011 five federal states (Bavaria, Berlin, Brandenburg, Mecklenburg-Western Pomerania and Thuringia). In 2015 and 2019 only Bavaria. In 2024 Bavaria, Baden-Wuerttemberg and Thuringia.
[d] Limited comparability

Trends across 32 countries

In this section, overall trends measured using country-specific means from 32 countries are reported between 1995 and 2019. The 32 countries included were Austria, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, the Faroes, Finland, France, Germany (Bavaria), Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Monaco, Montenegro, the Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Sweden and Ukraine (Figure 10). Trends for 15 key variables are shown in Table 15, and trends by gender are graphically depicted in Figures 11–27.

Figure 10. Countries included in the 32-country average

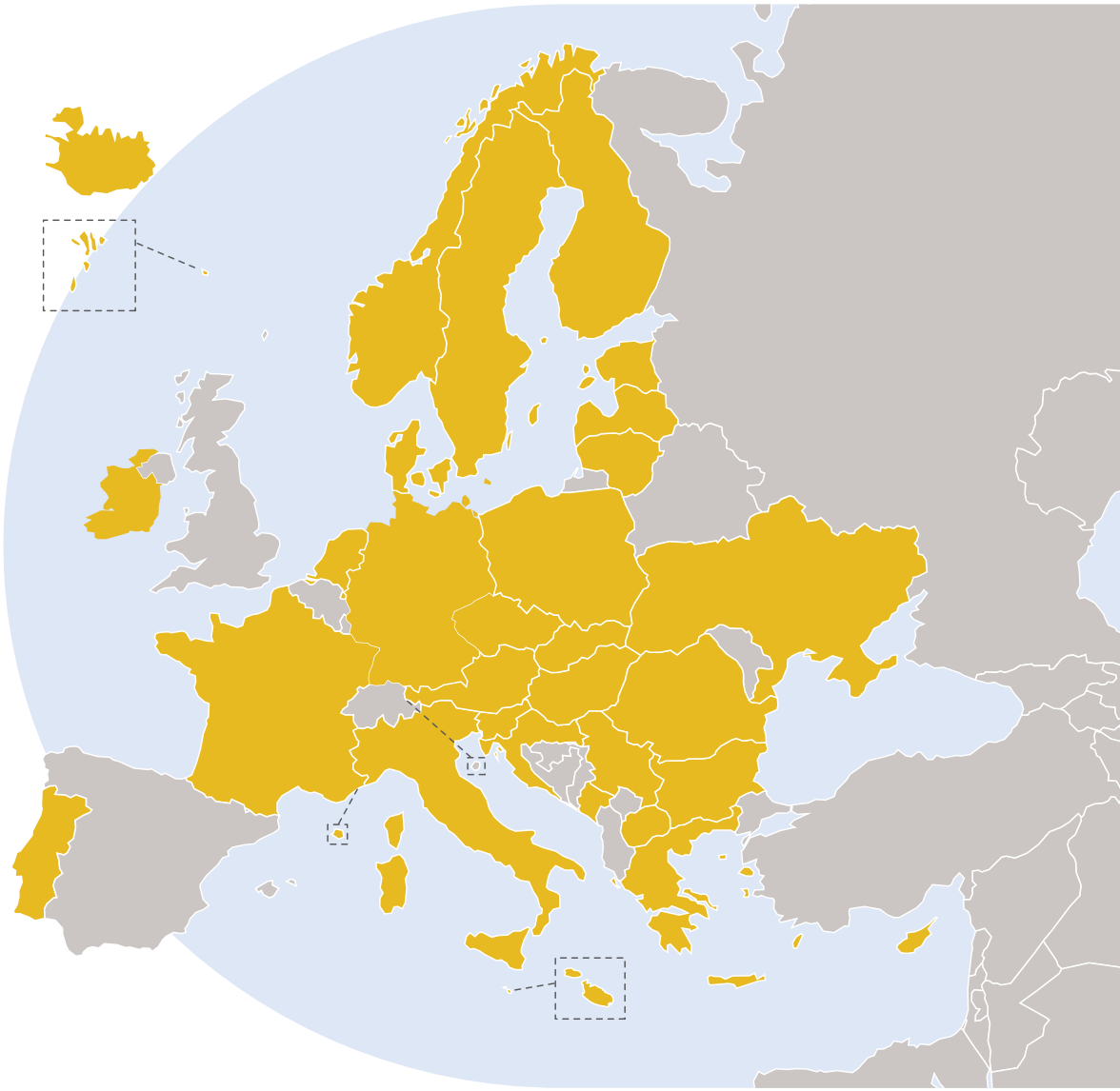


Table 15. ESPAD average for selected indicators based on 32 countries: 1995–2024 (percentage)

Measure	1995	1999	2003	2007	2011	2015	2019 [a]	2019 [a] cigarette and/or e-cigarette	2024 [a]	2024 [a] cigarette and/or e-cigarette
Perceived availability of cannabis	26	30	31	33	32	32	33		27	
Early onset of daily cigarette use	9.8	9.3	10	7.3	7.1	4.2	3.0	4.0	3.6	6.0
Early onset of cannabis use	1.6	2.6	3.5	3.7	3.3	3.2	2.5		2.5	
Lifetime use of cigarettes	68	68	67	60	56	47	42	54	31	48
Current cigarette use	33	36	34	29	30	22	20	27	17	28
Daily cigarette use	20	26	23	19	18	13	10	12	7.9	14
Lifetime alcohol use	88	89	91	89	87	82	80		74	
Current alcohol use	55	58	63	60	58	48	48		43	
Heavy episodic drinking	36	38	41	43	41	36	35		30	
Lifetime illicit drug use	12	18	19	19	20	19	18		14	
Lifetime cannabis use	11	16	18	17	18	17	16		12	
Lifetime use of illicit drugs other than cannabis	3.3	6.3	5.2	7.0	6.3	5.2	5.1		5.0	
Current cannabis use	4.1	6.7	7.0	6.4	7.6	7.2	7.4		4.9	
Lifetime inhalant use	7.4	8.0	9.0	8.8	9.8	7.8	7.7		7.5	
Lifetime use of tranquillisers or sedatives without a doctor's prescription	3.4	4.9	5.5	6.7	6.7	6.3	7.0		8.4	
Last-year gambling						23	22		23	
Last-month gaming							72		80	

[a] Since 2019 in the ESPAD survey, questions about cigarettes smoking specifically exclude electronic cigarettes. Prevalence estimates for 2019 and 2024 are therefore reported separately for cigarette use and cigarette and/or e-cigarette use.

Perceived availability of cannabis

The average percentage of students who said they would find it easy (combined positive responses of 'very easy' and 'fairly easy') to obtain cannabis if they wanted to, after a period of substantial stability (2007 to 2019), decreased to 27 %. Rates among boys were higher than among girls (Figure 11). Overall, perceived availability of cannabis decreased between 2019 and 2024, from 34 % to 29 % among boys and from 31 % to 25 % among girls.

Early onset of substance use

Daily smoking

On average, the rate of early onset of daily cigarette smoking (at the age of 13 or younger) remained relatively stable at around 10 % until 2003, decreasing gradually to 3 % in 2019 (or 4 % if e-cigarettes are included) and settling at 3.6 % in 2024 (or 6 % if e-cigarettes are included). This overall trend indicates a halt in the decline of the rate of the start of daily smoking (Table 15). The gender-specific trends are similar and converging when considering cigarette smoking only (3.6 % both in 2024), whereas when including the use of e-cigarettes the rate was, for the first time, slightly higher among girls than among boys (Figure 12).

Cannabis use

On average, the rate of early onset of cannabis use (at age 13 or younger) increased slightly between 1995 and 2007 and slowly decreased thereafter to an average rate of 2.5 % (Table 15). Trends by gender are almost parallel, with the rate among girls being slightly lower than the rate among boys (Figure 13).

Cigarette use

On average, the lifetime prevalence of cigarette use after an early period of stability since 2007 has decreased continuously to 31 % in 2024 (Table 15). The trend, in the combined cigarette and e-cigarette consumption rate, is also decreasing compared to 2019 (the first year in which the value was available for comparison), from 53 % to 47 %.

The gender gap in lifetime cigarette use rates has steadily narrowed until it reversed in 2024 to 33 % of girls versus 30 % of boys, indicating a steeper decrease by the latter (Figure 14). Moreover, if we consider both cigarette and e-cigarette use as a combined variable, although there was an overall decrease between 2019 and 2024, the prevalence rates recorded in 2024 by girls are higher than those of boys (49 % versus 44 %), again with the former decreasing less than the latter.

Similar trends can be observed for current cigarette use and daily cigarette use (Table 15). The rate of current (last-30-day) use decreased by 16 percentage points between 1995 and 2024, from 33 % to 17 % (Table 15 and Figure 15); at the same time the prevalence of daily use fell by 12 percentage points, from 20 % to 7.9 % (Table 15 and Figure 16). For both indicators, if e-cigarette use is also taken into account, the prevalence rate rises to 28 % for current use and 14 % for daily use in 2024 (Table 15). These increases can be attributed to consumption reported by girls, which increased by 6 and 4 percentage points, respectively, compared to 2019, while rates among boys decreased for both indicators.

Alcohol use

The prevalence of lifetime use and the prevalence of current (last 30 days) alcohol use increased until 2003 and then decreased, reaching the lowest level in 2024 (Table 15). No significant gender differences can be observed in lifetime alcohol use between 1995 and 2019 (Figure 17). However, current alcohol use among boys was generally higher than that among girls until 2011, when the gender gap began to narrow, and then disappeared in 2019 (Figure 18). Interestingly, in 2024 girls reported higher rates in both indicators.

The prevalence of heavy episodic consumption peaked in 2007 and has declined since then, reaching its lowest level in 2024 (Table 15). For this trend, too, there has been a narrowing of gender differences over time until a reversal in 2024, with girls outpacing boys in prevalence rates (31 % versus 30 %) (Figure 19).

Illicit drug use

In general, between 1995 and 2003, the lifetime prevalence of illicit drug use increased and then stabilised at 19 % until 2015, when it began to decline, reaching 14 % in 2024. Lifetime prevalence of illicit drug use among girls has always been about 5–6 percentage points lower than among boys, but in 2024 there was only a 2-percentage point difference due to a smaller decrease among girls. (Figure 20). As cannabis is the most widely used illicit drug, the trend for lifetime cannabis use is similar to the overall trend for use of any illicit drug, with rates of the former being only slightly lower across all years (Table 15). The lifetime prevalence rate of cannabis use among boys peaked in 2003, remained stable until 2011, and began to decline thereafter. The lifetime prevalence rate of cannabis use among girls peaked in 2003 and then stabilised, registering a slower decrease than that among boys in 2024 (Figure 21). Current (last 30 days) cannabis use rates peaked in 2011 and then stabilised, with similar gender differences in all years, but a drop between 2019 and 2024 was observed for boys and girls (Table 15 and Figure 22).

Lifetime use of illicit drugs other than cannabis peaked in 2007 (Table 15). After that, the rate declined gradually until 2015 and then stabilised. The same trend is observed among boys and girls, with a gender gap of 1–2 percentage points in all years (Figure 23).

Inhalant use

Lifetime use of inhalants increased steadily until 2011 and then declined, reaching a rate of 7.5 % in 2024 (Table 15). Trends in gender-specific rates over the 1995–2024 period reveal a gradual narrowing

of the gender gap, with a reversal of trends and consequent overshoot in prevalence rates for girls compared to boys in 2024 (Figure 24).

Pharmaceuticals for non-medical use: tranquillisers and sedatives without a doctor's prescription

The trend in lifetime prevalence for non-prescription use of tranquillisers or sedatives was fairly stable, with slight fluctuations, between 1995 and 2019, then increasing in 2024 to 8.4 % (Table 15). The trends for boys and girls are similar, although for this group of substances the prevalence rates were higher among girls than boys in all years (Figure 25).

Last-year gambling

The prevalence of gambling in the last 12 months is available for comparison since 2015. Overall, the trend has remained constant at 23 % even in 2024 (Table 15). Although trends in gambling prevalence are stable for both boys and girls, the prevalence in the last 12 months among boys has consistently been approximately twice that among girls across all survey years (Figure 26).

Last-month gaming

The prevalence rate of gaming among ESPAD adolescents is available for 2019 and 2024. Over the five-year period, the last-30-day prevalence rate increased from 72 % to 80 % (Table 15). Gender-specific data show higher engagement of boys than girls (89 % versus 71 %). However, while rates among boys have remained relatively stable over time, rates among girls have increased by 15 percentage points (Figure 27).

Figure 11. Perceived availability of cannabis by gender; students responding cannabis 'fairly easy' or 'very easy' to obtain: 32-country trend 1995–2024 (percentage)

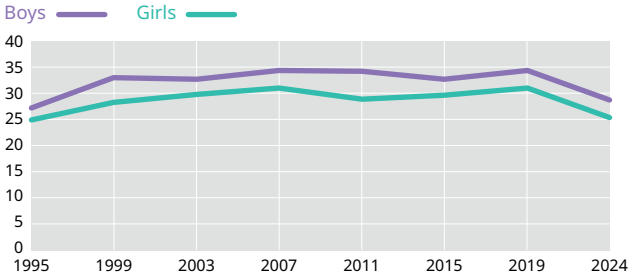
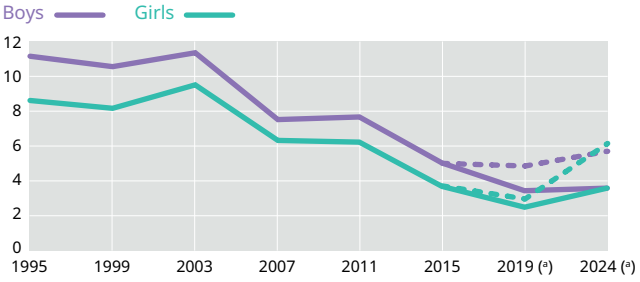


Figure 12. Daily cigarette use at the age of 13 or younger by gender: 32-country trend 1995–2024 (percentage)



(a) Since 2019 in the ESPAD survey questions about cigarettes smoking specifically exclude electronic cigarettes. Prevalence estimates for 2019 and 2024 are therefore reported separately for cigarette use and cigarette and/or e-cigarette use.

Figure 13. Cannabis use at the age of 13 or younger by gender: 32-country trend 1995–2024 (percentage)

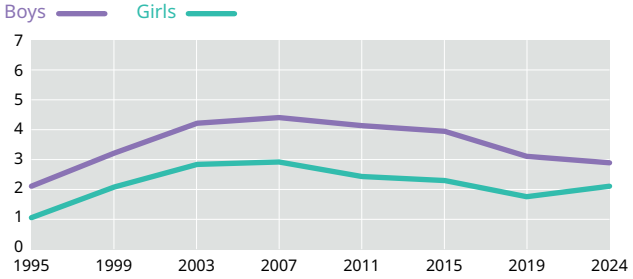
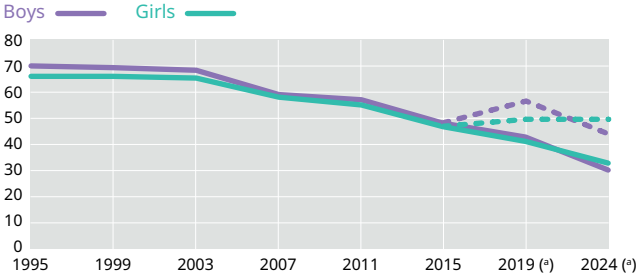
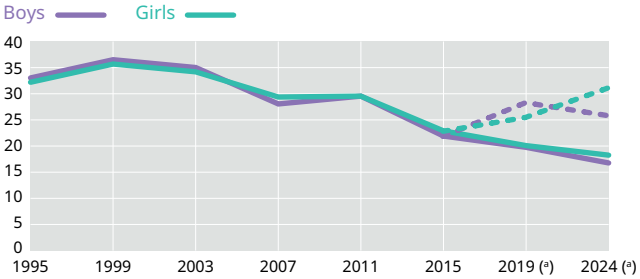


Figure 14. Lifetime use of cigarettes by gender: 32-country trend 1995–2024 (percentage)



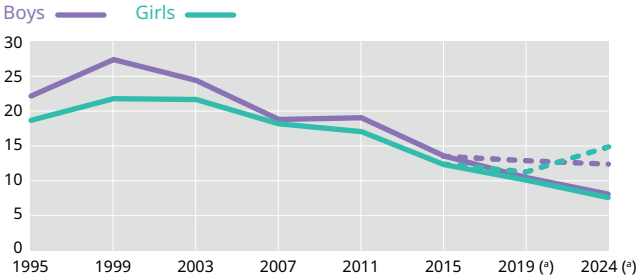
(a) Since 2019 in the ESPAD survey questions about cigarettes smoking specifically exclude electronic cigarettes. Prevalence estimates for 2019 and 2024 are therefore reported separately for cigarette use and cigarette and/or e-cigarette use.

Figure 15. Cigarette use in the last 30 days by gender: 32-country trend 1995–2024 (percentage)



(a) Since 2019 in the ESPAD survey questions about cigarettes smoking specifically exclude electronic cigarettes. Prevalence estimates for 2019 and 2024 are therefore reported separately for cigarette use and cigarette and/or e-cigarette use.

Figure 16. Daily cigarette use by gender: 32-country trend 1995–2024 (percentage)



(a) Since 2019 in the ESPAD survey questions about cigarettes smoking specifically exclude electronic cigarettes. Prevalence estimates for 2019 and 2024 are therefore reported separately for cigarette use and cigarette and/or e-cigarette use.

Figure 17. Lifetime alcohol use by gender: 32-country trend 1995–2024 (percentage)

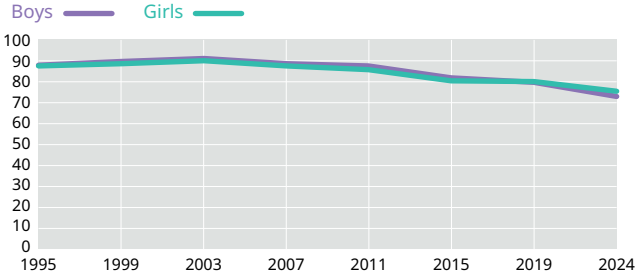


Figure 18. Alcohol use in the last 30 days by gender: 32-country trend 1995–2024 (percentage)

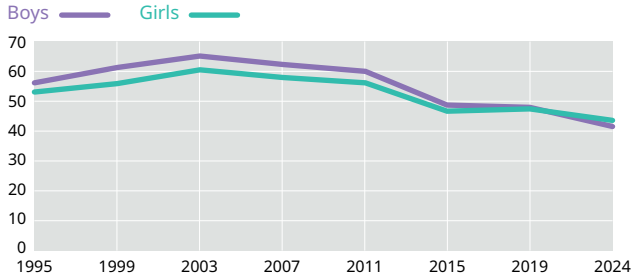
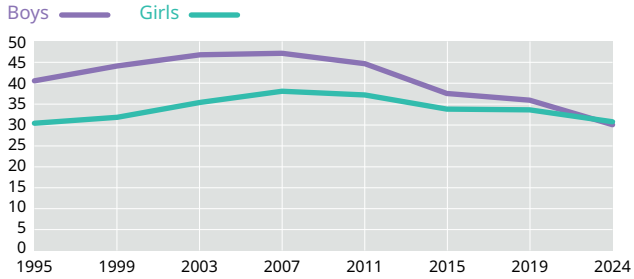
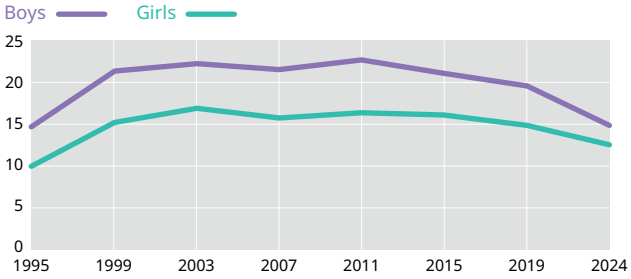


Figure 19. Heavy episodic drinking (five or more drinks on one occasion) (a) during the last 30 days by gender: 32-country trend 1995–2024 (percentage) (b)



(a) National examples are given so that a 'drink' is understood to contain roughly the same amount of pure alcohol as a glass of wine.
(b) In 1995-2003 the question referred to 'five or more drinks in a row' and neither cider nor premixed drinks were included among the examples. A 2006 questionnaire test in eight countries found no significant differences between the two approaches.

Figure 20. Lifetime use of illicit drugs (a) by gender: 32-country trend 1995–2024 (percentage)



(a) Includes cannabis, amphetamine, cocaine, crack, ecstasy, LSD or other hallucinogens, heroin and (since 2007) GHB, methamphetamine (since 2024). Amphetamine was not included in 1995 in Czechia. Crack and LSD or other hallucinogens were not included in 1999 in the Netherlands. Crack was not included in 2015 in Denmark, Estonia, Finland and Sweden and in 2019 in Finland, Latvia and Norway. Methamphetamine and crack were not included in 2024 in Norway. Cannabis was not included in 1995 in Denmark.

Figure 21. Lifetime use of cannabis by gender: 32-country trend 1995–2024 (percentage)

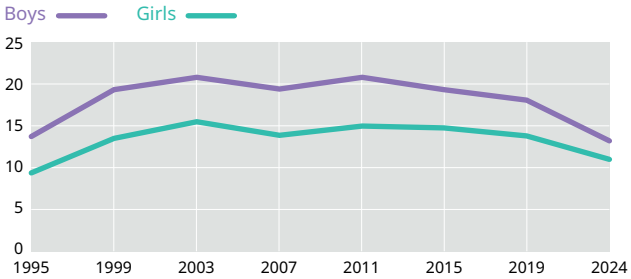


Figure 22. Cannabis use in the last 30 days by gender: 32-country trend 1995–2024 (percentage)

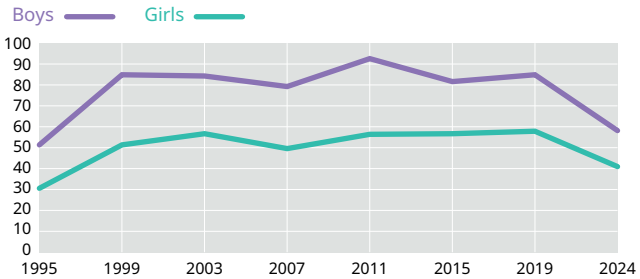
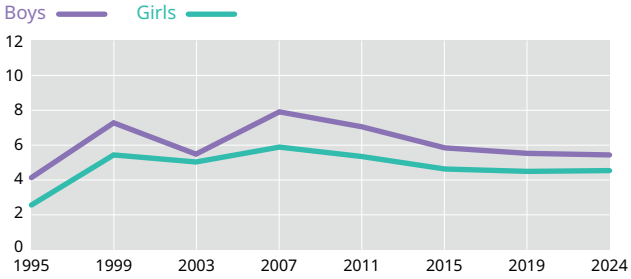
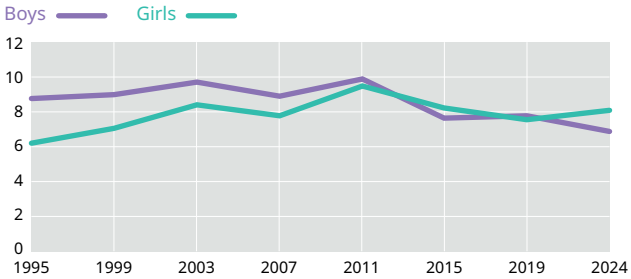


Figure 23. Lifetime use of illicit drugs (a) other than cannabis by gender: 32-country trend 1995–2024 (percentage)



(a) Includes amphetamine, cocaine, crack, ecstasy, LSD or other hallucinogens, heroin and (since 2007) GHB. Amphetamine was not included in 1995 in Czechia. Crack and LSD or other hallucinogens were not included in 1999 in the Netherlands. Crack was not included in 2015 in Denmark, Estonia, Finland and Sweden and in 2019 in Finland, Latvia and Norway.

Figure 24. Lifetime use of inhalants (a) by gender: 32-country trend 1995–2024 (percentage)



(a) Prevalence of students reporting lifetime use of inhalants (general question) and/or nitrous oxide. The question on nitrous oxide was included only in the following countries: Bulgaria, Denmark, Faroes, Finland, France, Georgia, Germany, Hungary, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Norway, Portugal, Romania, Spain and Sweden.

Figure 25. Lifetime use of tranquillisers or sedatives without a doctor's prescription by gender: 32-country trend 1995–2024 (percentage)

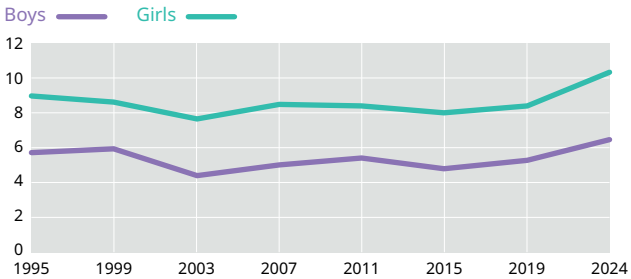


Figure 26. Gambling in the last 12 months by gender: 32-country trend 2015–2024 (percentage)

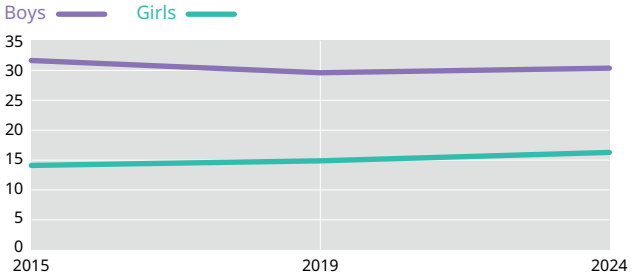
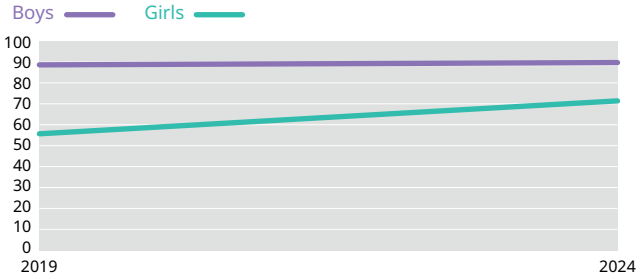


Figure 27. Gaming in the last 30 days (a) by gender: 32-country trend 2019–2024 (percentage)



(a) Prevalence of students reporting gaming activity in the past 30 days, either on a typical school day or on a typical non-school day.

Country-specific trends

Individual country trends for eight key substance use variables for available years between 1995 and 2024 are shown in Figures 28–35 (see Additional Tables 102, 104, 106, 114, 118, 120, 122, 124 for the corresponding values). Trends, illustrated graphically, were estimated using a Chi-squared test aiming to assess which years were responsible for the changes in prevalence. In cases where two consecutive surveys were not available, the test was not performed. The significance level was set at 0.05.

Lifetime cigarette use

Considering only tobacco smoking, a significant decrease was found in 30 countries between 2019 and 2024. The largest decrease was observed in Latvia, with a decrease in prevalence of 28 percentage points, followed by France (25 percentage points), Ukraine, Lithuania, Monaco and Czechia (23–19 percentage points, each) (Figure 28). In Kosovo and Norway there was no change from 2019; in addition, no statistically significant changes were found for Iceland, Hungary and Cyprus.

Considering the prevalence of cigarette and/or e-cigarette use, 26 countries recorded a significant drop between 2019 and 2024, particularly Ukraine and Monaco, both of which countries recorded a decrease of 21 percentage points. However, several significant increases in prevalence rates were also observed, among which Serbia and Greece stand out, with increases 12 and 11 percentage points from 2019, respectively, followed by Sweden (with 6 percentage points), Slovenia and Norway (3 percentage points, both).

Daily cigarette use

Trends in the prevalence of daily cigarette use follow a pattern similar to that observed for lifetime cigarette smoking, showing a significant decrease in 19 countries between 2019 and 2024. France and Latvia showed the largest decrease, with changes of 9 and 8 percentage points, respectively, from the previous survey, followed by Italy and Denmark (both 7 percentage points). Increases in daily cigarette use rates were observed in Kosovo and Greece, while no significant changes were recorded in the remaining countries (Figure 29).

When considering the use of cigarettes and/or e-cigarettes, 13 countries reported no significant change in the prevalence rate since 2019; 7 countries reported a statistically significant decrease in the rate; and 15 reported a statistically significant increase. Among the latter, the largest increase was recorded by Poland, with 11 percentage points, followed by Greece and Serbia (10 percentage points, both) and Kosovo and Slovenia (8 percentage points, both).

Lifetime alcohol use

The prevalence of lifetime alcohol consumption decreased in 27 countries in 2024 (Figure 30). The largest decrease since 2019 was observed in the Faroes (16 percentage points), followed by Monaco and Portugal (13 percentage points, both) and Cyprus and France (12 percentage points, both).

Iceland was the only country where alcohol consumption increased, by 4 percentage points; in the remaining ESPAD countries, no statistically significant changes from 2019 were observed.

Heavy episodic drinking

For episodic heavy drinking in the last 30 days, 27 countries observed a decrease in 2024 compared to 2019, particularly Latvia and the Netherlands, which each recorded a decrease of 15 percentage points (Figure 31). In contrast, significant increases were observed in five ESPAD countries. Among these, Norway and Greece reported the largest changes, with increases of 6 and 5 percentage points, respectively. In Cyprus, North Macedonia and Serbia, the prevalence of episodic heavy drinking over the last 30 days has remained relatively stable.

Lifetime cannabis use

In 2024, the lifetime prevalence of cannabis use decreased significantly in 26 ESPAD countries, approximately twice the number reporting decreases in 2019 (Figure 32). France observed the largest decrease, with 15 percentage points, followed by Spain, Monaco, Georgia and Latvia, with a decrease in lifetime cannabis use rates of between 10 and 13 percentage points each. However, six countries (Greece, Kosovo, Hungary, Ukraine, Iceland and Norway) reported an increase in prevalence, albeit by a smaller amount (between 1 and 3 percentage points). No significant changes were recorded for Cyprus, Montenegro and Malta.

Current cannabis use

The prevalence of current cannabis use (use in the last 30 days) decreased in two thirds of countries between 2019 and 2024. The trend is most notably observed in France, with a decrease of 9 percentage points, followed by Spain, Georgia and Monaco, each with 8 percentage points (Figure 33). Higher rates compared to the 2019 survey were observed in Ukraine, Greece, Kosovo, Hungary and Iceland, with increases of between 1 and 3 percentage points.

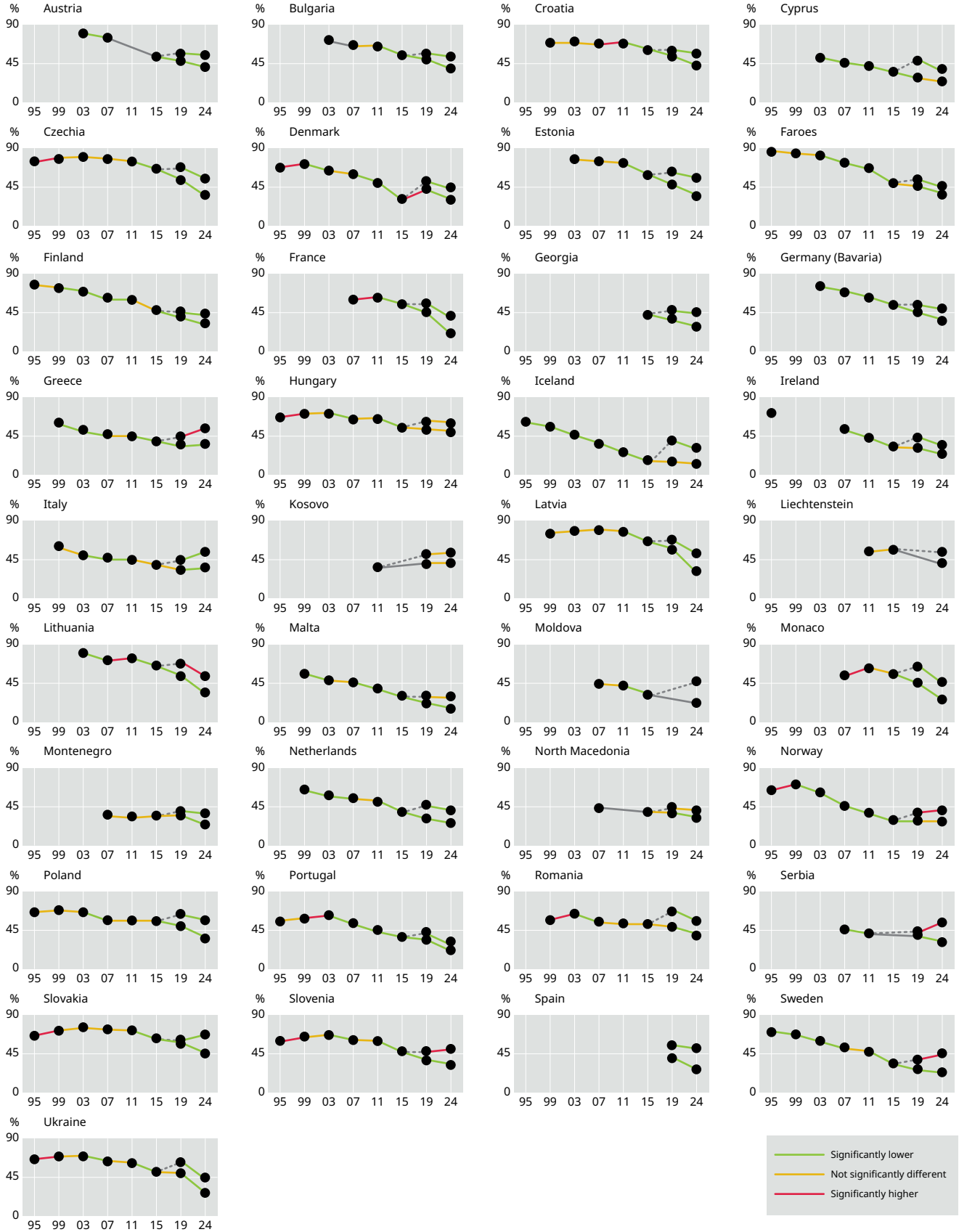
Lifetime use of illicit drugs other than cannabis

In 2024, two-thirds of ESPAD countries registered slight decreases or no significant change compared to the previous survey (Figure 34). However, in 2024, more countries recorded significant increases than did so in 2019. Particularly Iceland and Ukraine, which reported increases of approximately 4–5 percentage points.

Lifetime use of tranquillisers or sedatives without a doctor's prescription

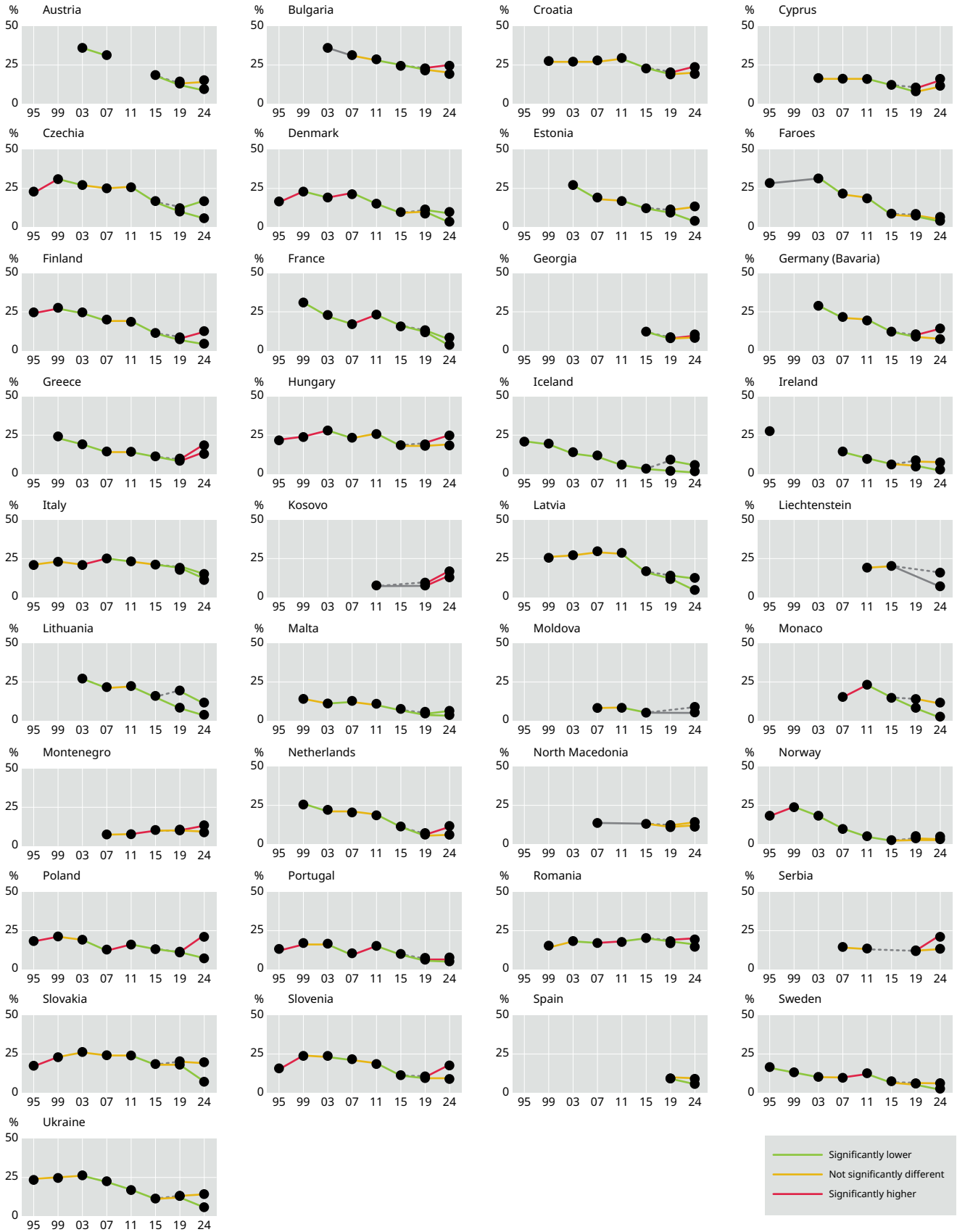
Up to 2019, the prevalence of lifetime use of non-prescribed tranquillisers or sedatives remained generally stable in the majority of ESPAD countries. In 2024, however, an increase in prevalence rates was observed in about 70 % of the countries. Georgia, Germany, Czechia and Norway observed the highest increases (between 6 and 11 percentage points) (Figure 35). Most of the remaining countries showed no significant changes. Significant decreases were reported by Latvia (by 18 percentage points), Finland and Estonia (3 and 4 percentage points, respectively).

Figure 28. Lifetime use of cigarettes by country: 1995–2024 ([a]) (percentage)



([a]) Since 2019 in the ESPAD survey questions about cigarettes smoking specifically exclude electronic cigarettes. Prevalence estimates for 2019 and 2024 are therefore reported separately for cigarette use and cigarette and/or e-cigarette use.

Figure 29. Daily use of cigarettes by country: 1995–2024 ([a]) (percentage)



([a]) In the ESPAD 2019 questionnaire questions about cigarettes smoking specifically exclude electronic cigarettes. Prevalence estimates for 2019 and 2024 are therefore reported separately for cigarette use and cigarette and/or e-cigarette use.

Figure 30. Lifetime use of alcohol by country: 1995–2024 (percentage)

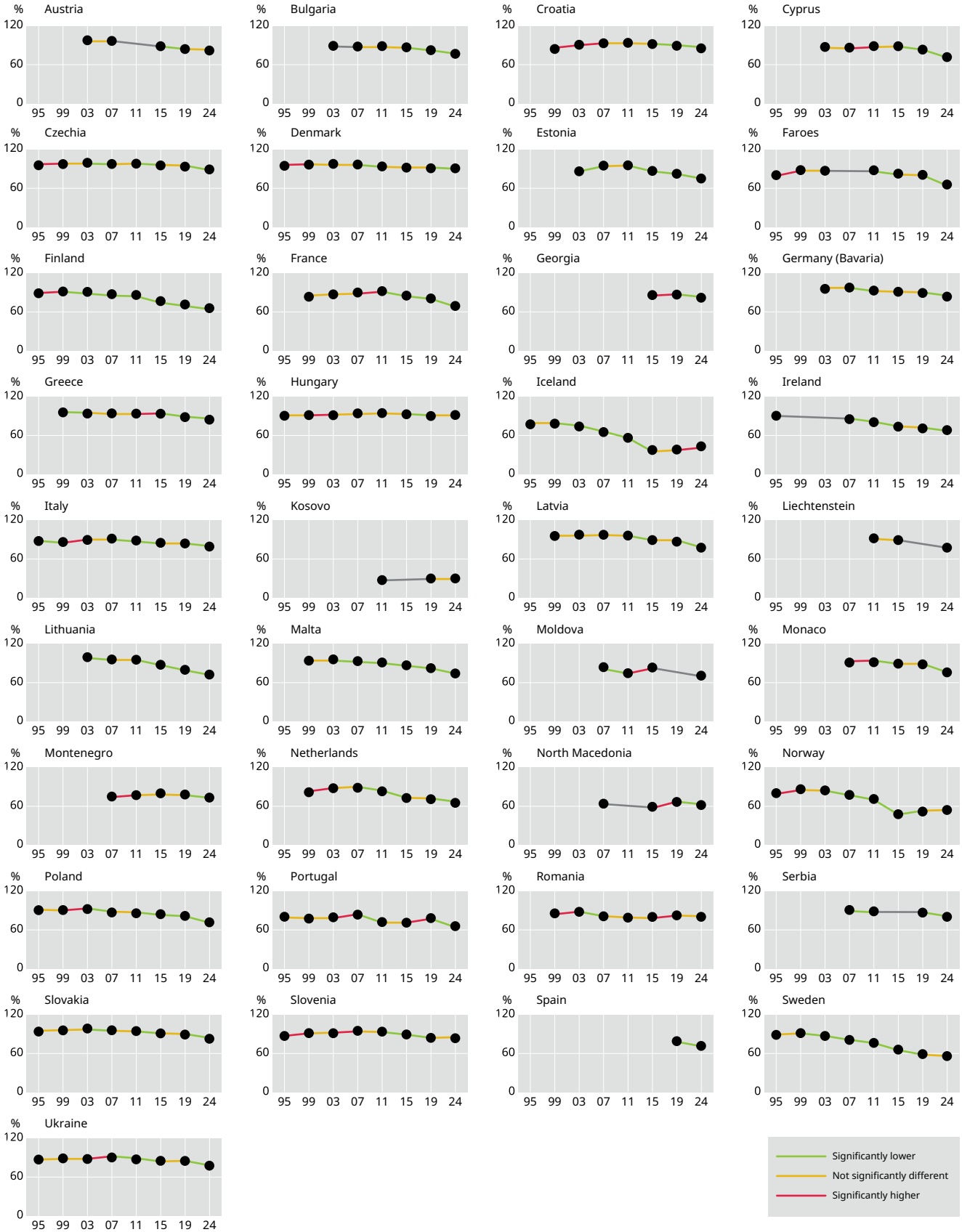
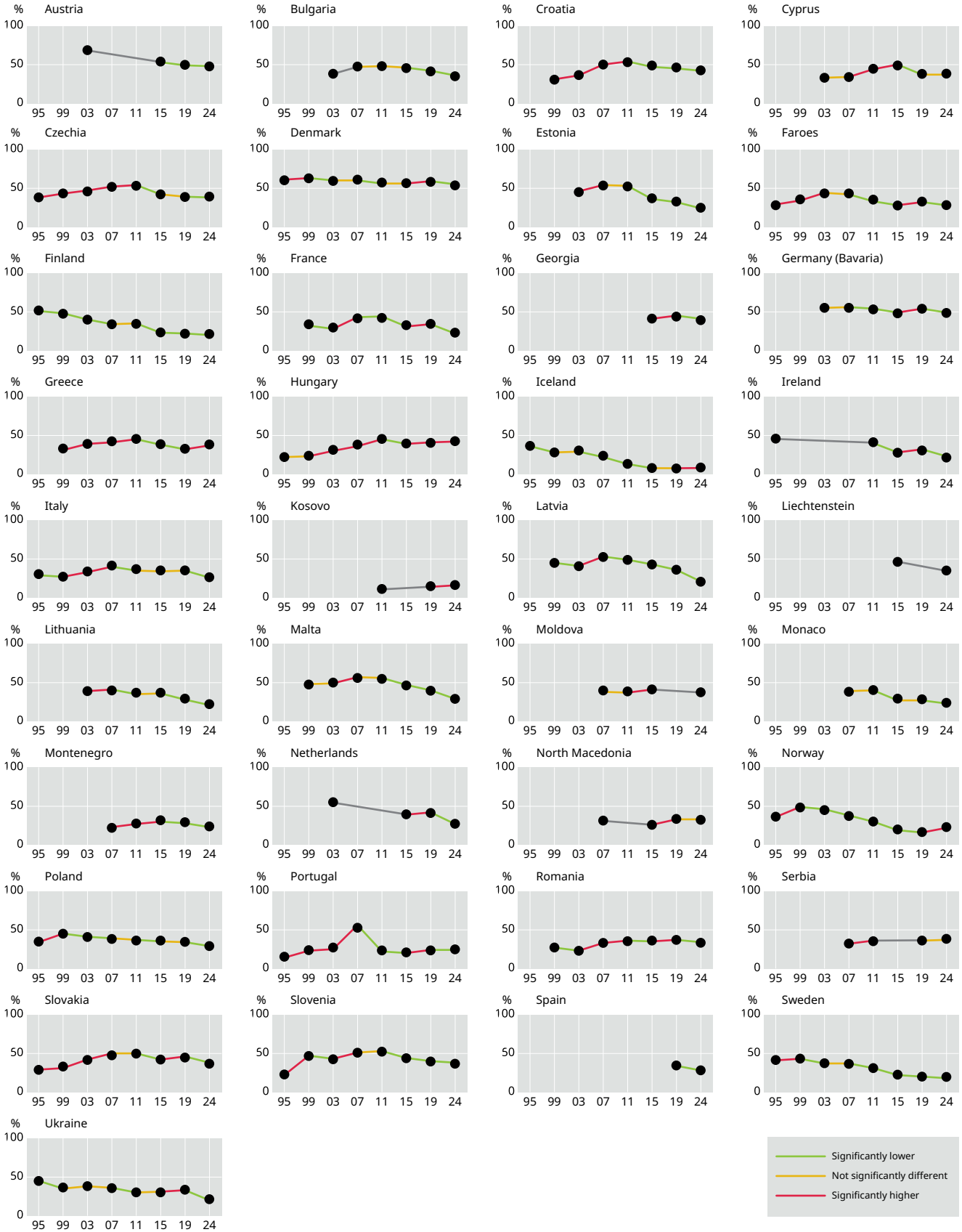


Figure 31. Heavy episodic drinking ([a]) by country: 1995–2024 (percentage) ([b])



([a]) National examples are given so that a 'drink' is understood to contain roughly the same amount of pure alcohol as a glass of wine.
([b]) In 1995-2003 the question referred to 'five or more drinks in a row' and neither cider nor premixed drinks were included among the examples. A 2006 questionnaire test in eight countries found no significant differences between the two approaches.

Figure 32. Lifetime use of cannabis by country: 1995–2024 (percentage)

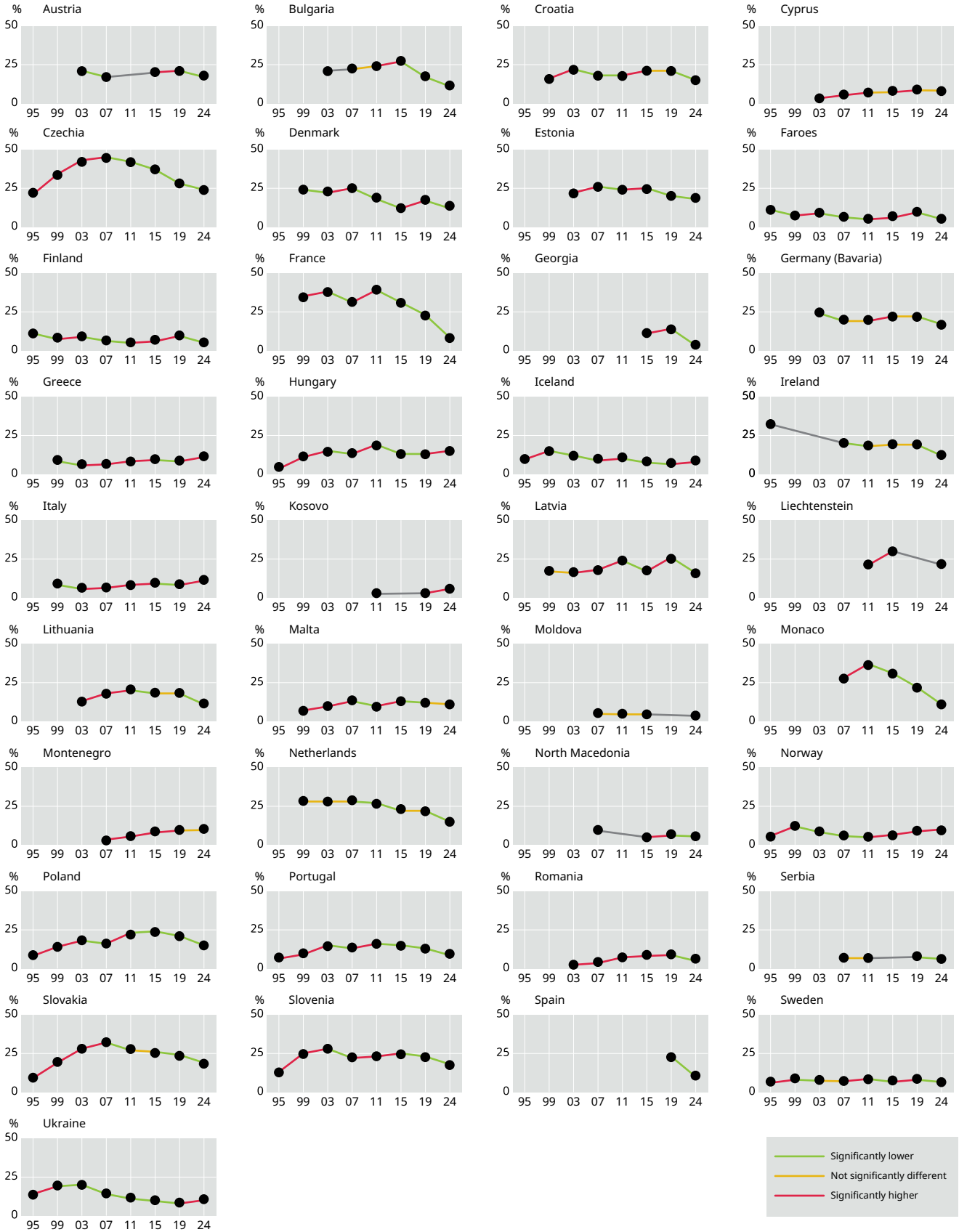


Figure 33. Cannabis use in the last 30 days by country: 1995–2024 (percentage)

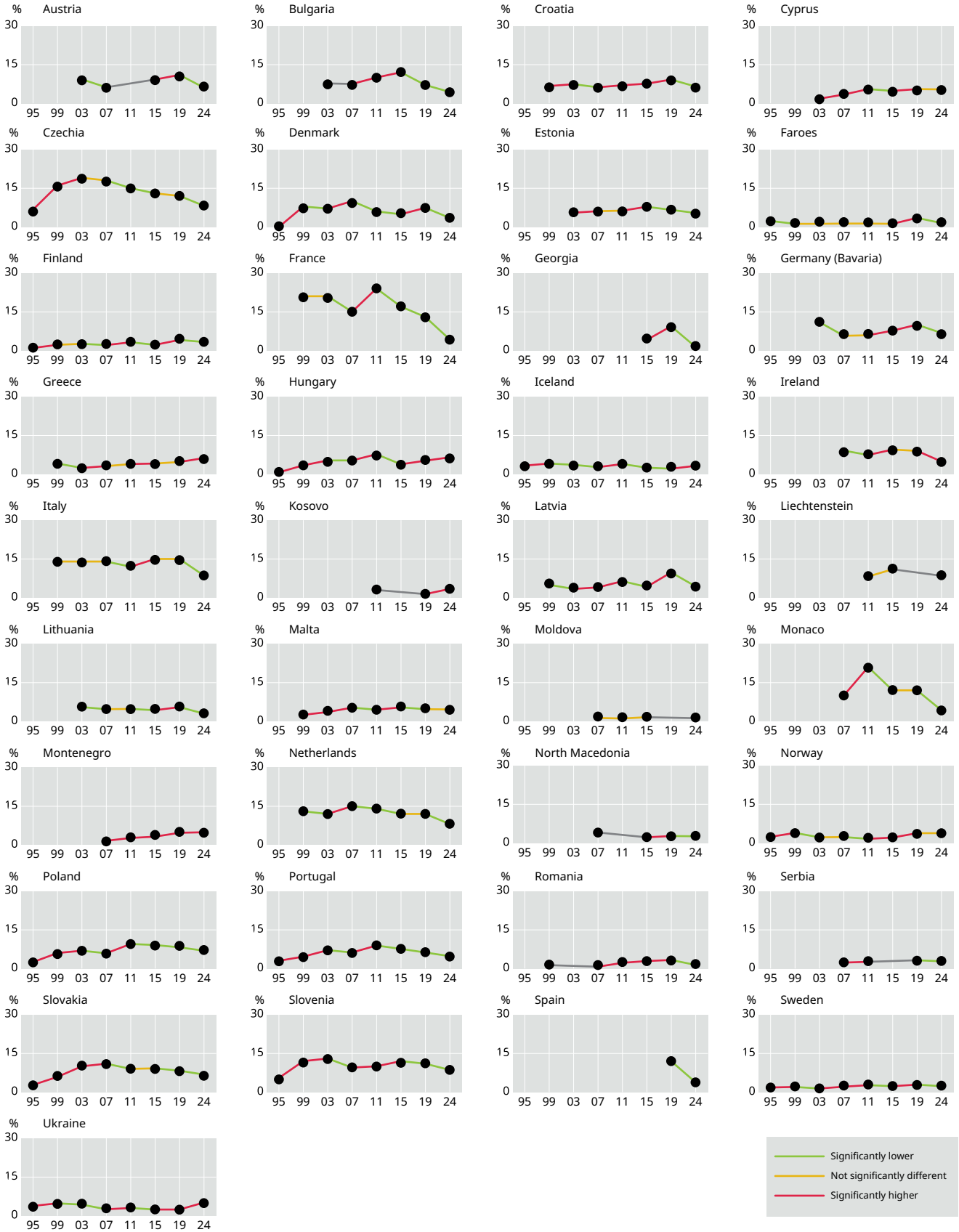
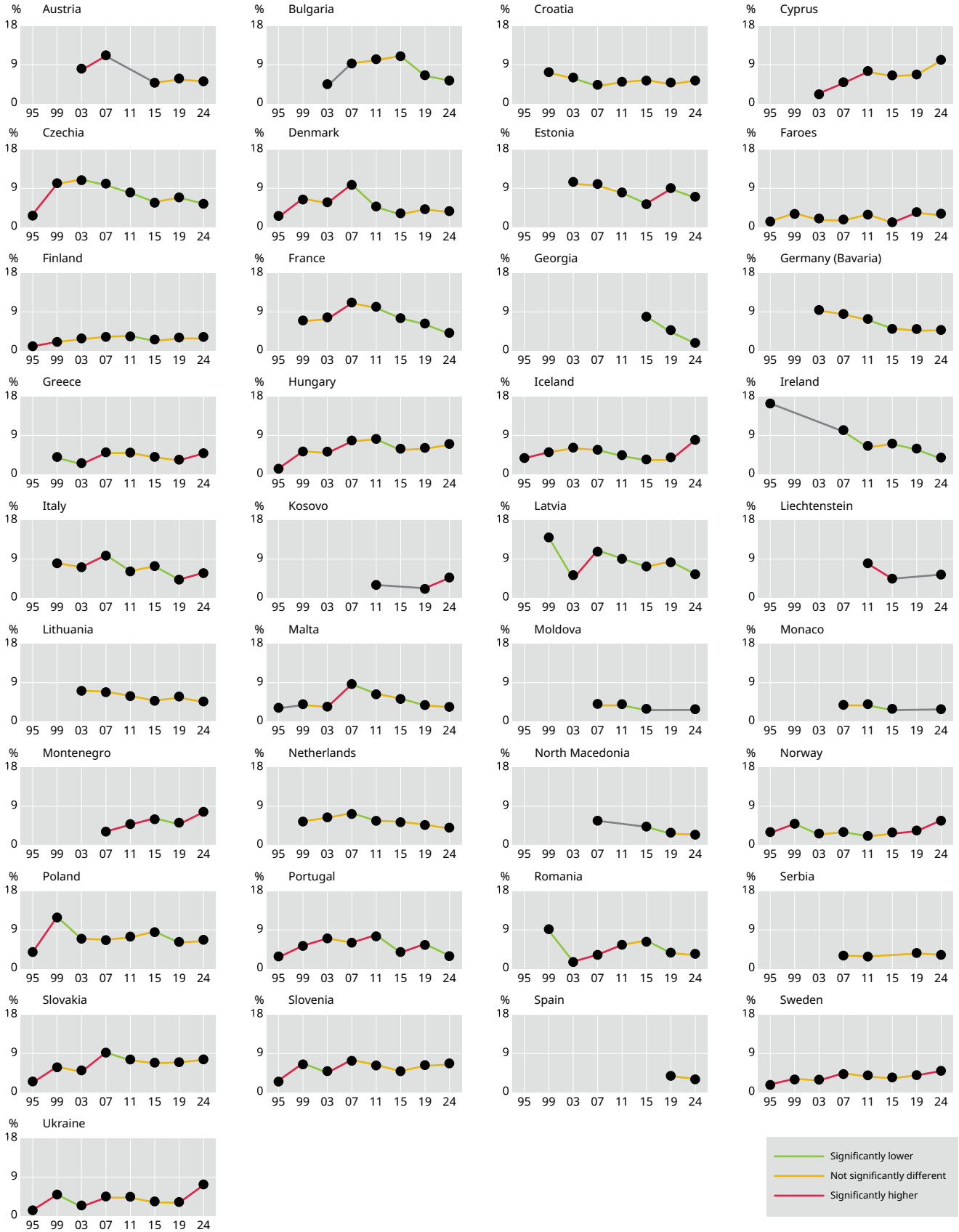
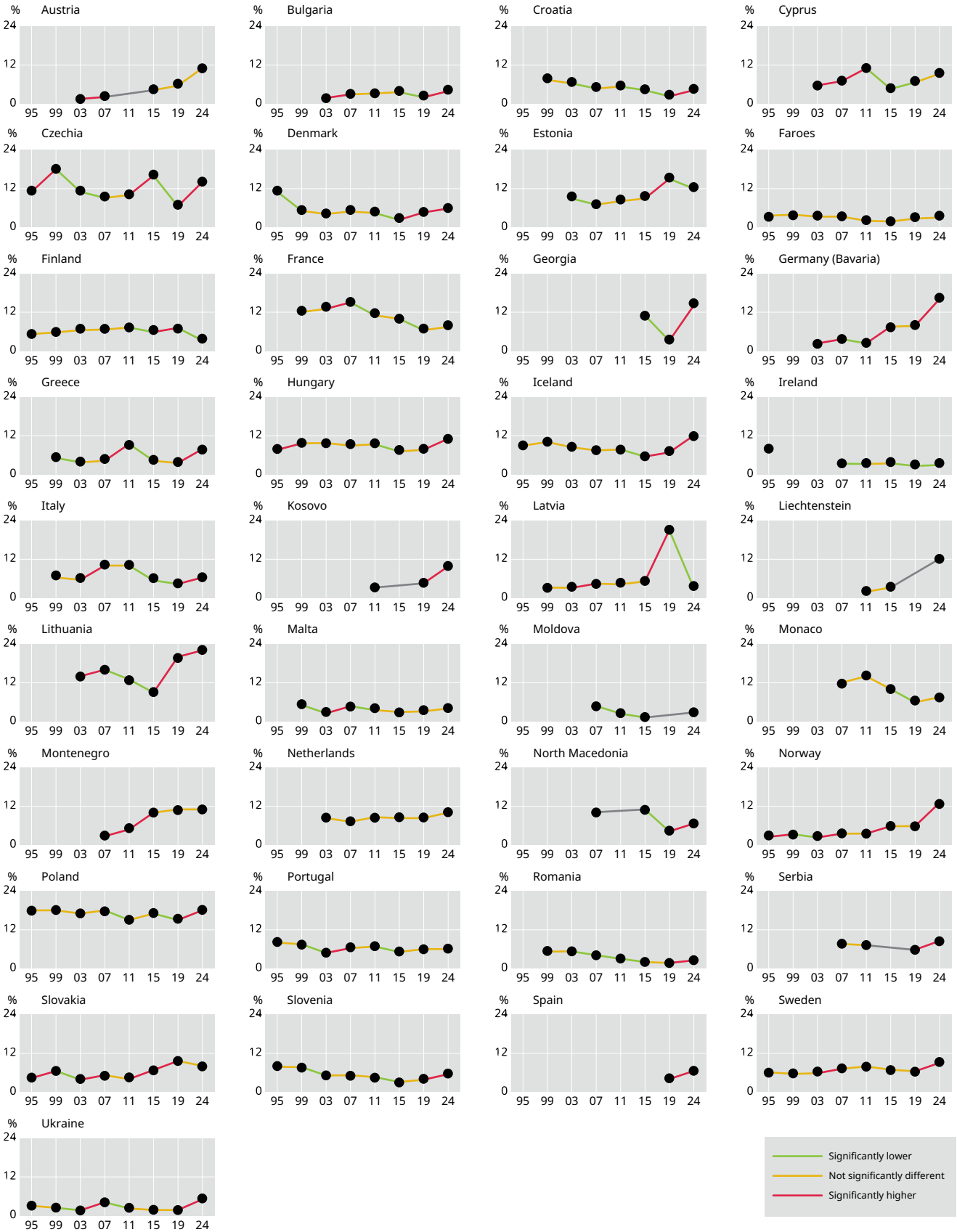


Figure 34. Lifetime use of illicit drugs other than cannabis ([a]) by country: 1995–2024 (percentage)



([a]) Includes amphetamine, cocaine, crack, ecstasy, LSD or other hallucinogens, heroin, (since 2003) GHB, (since 2015) methamphetamine. Amphetamine not included 1995 in Czechia. Crack and LSD or other hallucinogens not included 1999 in the Netherlands. Crack not included 2015 in Denmark, Estonia, Finland and Sweden and 2019 in Finland, Latvia and Norway.

Figure 35. Lifetime use of tranquillisers or sedatives without a doctor's prescription by country: 1995–2024 (percentage)



Limitations

Although the ESPAD survey is based on a well-established common methodology, there are some limitations that may weaken the validity of the estimates. First, this data collection marked a significant transition for many ESPAD countries, as they moved towards the online administration of the ESPAD questionnaire. Only 14 countries (Bulgaria, Croatia, Cyprus, Georgia, Hungary, Malta, Moldova, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovenia and Spain) continued to use the traditional paper-and-pencil method due to their specific national context. In addition, Kosovo and Latvia opted for a mixed-mode administration combining paper-based and web-based approaches. Still, recent studies have not found any difference in the quality of data collected online compared to traditional methods, suggesting that both ways are comparable in terms of reliability (Colasante et al., 2019; Otsuka et al., 2023). Another limitation is due to the data collection in the Netherlands taking place in autumn 2023, six months earlier than in most other countries, with the result that Dutch students were on average six months younger than students in other countries. However, the target population was redefined to obtain an average age in line with that of the other participating countries that collected data in spring.

It should be noted that, compared with previous data collections, student representativeness in Cyprus was substantially lower in 2024 due to technical difficulties, resulting in a smaller sample size (152 students). As in other countries with limited samples, prevalence rates and gender differences should therefore be interpreted with caution.

Furthermore, in Germany and Denmark, class or school participation was particularly low, at 14 % and 17 % respectively, well below the ESPAD average of around 80 %. However, low participation rates do not necessarily lead to biased estimates, unless the behaviour in question is unevenly distributed across schools and classes.

Although the average representativeness of students is very high (84 %), there has been a decrease compared to 2019 (96 %), with Moldova (52 %) and Romania (55 %) recording the lowest rates. However, it should be noted that, despite lower values in some areas, overall coverage is still extensive and allows for meaningful analysis.

Finally, in some countries, exclusions occurred due to administrative, political or logistical constraints: Cyprus (limited to government-controlled areas); Finland (Åland Islands excluded); France (overseas territories not included); Georgia (territories of Abkhazia and South Ossetia excluded); Germany (data collected only from the federal states of Baden-Württemberg, Bavaria and Thuringia); Kosovo (about 4 % of the target population enrolled in schools in Northern Kosovo and/or functioning under the parallel structures of the Ministry of Education of Serbia within Serbian municipalities was excluded); Moldova (Transnistria region excluded); and Ukraine (regions not under government control at the time of the survey, including Donetsk and Luhansk oblasts, the Autonomous Republic of Crimea, and parts of Zaporizhzhia, Kherson and Mykolaiv oblasts, were not included). In these cases, the estimates represent only the population of the region in which the survey was conducted.

Discussion and conclusions

Discussion and conclusions

The results from 2024 ESPAD data collection wave represents a critical turning point in the epidemiological understanding of adolescent substance use and risk behaviours in Europe. Conducted across 37 countries and involving over 110 000 students aged 15 to 16, the findings from this wave highlight not only a decline in the prevalence and early onset of traditional psychoactive substances, such as alcohol, tobacco and cannabis, but also signal a broader transformation in the nature, vectors and social framing of adolescent risks. The downward trend in the use of these substances is mirrored by the rise of technologically mediated risk behaviours, including novel nicotine delivery systems, increasingly pervasive social media use and gaming, as well as the growing use of pharmaceuticals for recreational or self-medicating purposes. These emerging vulnerabilities appear particularly pronounced among girls, narrowing, if not even reversing, historically gendered patterns in substance use.

The evidence emerging from the 2024 data should not be interpreted as isolated findings but rather in the context of a longitudinal continuum extending back to 1995. When examined within this historical perspective, the 2024 results reveal both enduring patterns and structural discontinuities that may be challenging to address within prevention approaches structured around single issues. The structural changes highlighted by ESPAD instead point to the value of systemic approaches to prevention, aimed at well-being promotion and capable of integrating early detection, cultural adaptation and long-term resilience-building strategies.

This perspective invites renewed reflection on the future of adolescent public health in Europe, embracing the complexity of youth behaviour across psychosocial, technological and environmental dimensions.

A decline in cannabis use: a European trend with notable exceptions

Long-term ESPAD trends indicate a marked and cross-national decline in the use of cannabis among European adolescents. This trend, clearly observable in nearly all western and northern European countries, is reflected in a significant decrease in both lifetime and current prevalence rates, as well as in reduced perceptions of ease of access.

Despite this overall reduction, significant geographic disparities persist. In several eastern European and Balkan countries, prevalence rates for cannabis and other illicit drugs have remained stable or shown slight increases. In contrast, Nordic countries continue to report lower levels of both use and early onset. These patterns point towards the pivotal role of socio-educational environments in shaping adolescent substance use (Loy et al., 2021).

Equally noteworthy is the evolving gender dynamic in substance use. The gender gap is narrowing rapidly, with girls now reporting similar, and in some cases higher, rates of consumption compared to boys. This trend reflects a broader cultural shift in gender norms related to substance use, indicating that risk behaviours are no longer predominantly associated with males.

Cannabis remains the most commonly used illicit drug among European adolescents, but the broader drugs landscape includes a range of other

substances. Approximately 5 % of students report lifetime use of ecstasy, amphetamines or hallucinogens, with prevalence rates generally higher among males.

Alongside the observed downward trends, the 2024 ESPAD wave also reveals increases in certain areas, particularly in the non-medical use of pharmaceuticals (e.g. tranquillisers and sedatives) and inhalants, most notably among girls. These developments, together with the stability or slight rise in the use of new psychoactive substances in some countries, might indicate a reconfiguration of adolescent risk behaviours towards substances which are probably perceived as more accessible or less stigmatised. This highlights the pressing need for prevention strategies that are both up to date and sensitive to gender and socio-cultural factors.

These findings are consistent with longitudinal trends reported by the Monitoring the Future survey in the United States (Miech et al., 2024), which similarly indicate a decline in cannabis use among US adolescents, alongside growing recognition of the role of social media and post-pandemic dynamics in reshaping risk behaviours.

The observed decline in cannabis use may not necessarily indicate a broader reduction in overall risk exposure or the effect of the different cannabis regulatory frameworks in each country (Benedetti et al., 2021). Instead, it might suggest a shift in the risk landscape, in which traditional substances are gradually being replaced by alternative patterns of substance use and risk behaviours.

Nicotine use: transition and technological appeal

The exponential increase in the spread and use of electronic nicotine delivery systems (ENDS) is one of the defining features of the evolving adolescent risk landscape. According to the 2024 ESPAD data, 44 % of European students have used e-cigarettes at least once, marking a significant increase from 2019. Prevalence is highest in central-eastern and southern Europe, in particular Lithuania, Slovakia, Romania and Italy, where lifetime use rates among 15- to 16-year-old students exceed 50 %. Despite the positive long-term declining trends in cigarette use, the sharp rise in the use of e-cigarettes is a cause for concern, with lifetime prevalence of e-cigarette use now exceeding that of cigarettes in many countries.

A notable gender gap reversal is observed compared to previously established patterns of adolescent tobacco use, where boys historically reported higher rates than girls. Recent studies have documented this reversal (Cosma et al., 2022), and 2024 ESPAD data confirm this shift, particularly when considering the use of cigarettes and/or e-cigarettes. This change has been linked to the appeal of flavoured products, targeted marketing strategies and the widespread perception of reduced harm (Cerrai et al., 2022; Lovato et al., 2011), as well as to national-level gender inequality indicators, which may influence both health behaviours and market targeting strategies (Cosma et al., 2022).

This phenomenon should not be interpreted as a straightforward substitution of traditional smoking, but rather as a behavioural extension embedded within a logic of nicotine use and technological normalisation (Voigt, 2015), with electronic devices contributing to the social acceptability of nicotine consumption habits. The combined use of cigarettes and/or e-cigarettes provides a clear picture of the current landscape. When considering both products together, lifetime nicotine use prevalence increases from 32 % to 47 %, and current use from 18 % to 28 %. Daily use of cigarettes and/or e-cigarettes also reaches significant levels, reported by 14 % of ESPAD students on average, with peaks of 25 % in some countries. This highlights how focusing on a single product underestimates the actual scale of nicotine consumption among adolescents.

Geographically, e-cigarette use is more prevalent in countries with less restrictive regulations and higher exposure to advertising (Cerrai et al., 2022; Czoli et al., 2022). In contrast, targeted policies and integrated school-based interventions have likely helped limit the phenomenon in countries such as Iceland and Norway. Recent studies indicate that exposure to digital and outdoor advertising is a significant predictor of early initiation (Luu et al., 2023; Polanska et al., 2022).

In 2024, the perceived ease of access to e-cigarettes surpassed that of traditional cigarettes. Furthermore, risk perception surrounding e-cigarette use seems to remain low. A substantial portion of adolescents seem to consider e-cigarettes less harmful than traditional cigarettes (East et al., 2018; El-Amin et al., 2022; Wezyk-Caba et al., 2022). This informational gap may lower the threshold for initial engagement in nicotine use.

Contrary to early assumptions that these products might serve as less harmful alternatives facilitating smoking cessation, accumulating evidence reveals that they often increase initiation rates, dual use and sustained nicotine exposure (Barrington-Trimis and Leventhal, 2018; O'Brien et al., 2021). This technological diversification of nicotine delivery vectors complicates traditional public health approaches focused solely on combustible tobacco control, calling for comprehensive policies that address the broader nicotine ecosystem.

Non-medical pharmaceuticals use: the possible interplay between recreational use and self-management of psychosocial distress

The non-prescribed use of pharmaceuticals, particularly sedatives, tranquillisers and painkillers, among European adolescents represents an emerging dynamic within the broader landscape of youth fragility. One in seven students reports lifetime use of at least one psychoactive medication without medical prescription, with prevalence rates twice as high among girls compared to boys. In certain central and eastern European countries, such as Lithuania, Poland, Slovakia and Georgia, these figures exceed 25 %, outlining an alarming scenario.

Unlike other substance use behaviours that are often driven by experimentation or transgression, evidence suggests that the non-prescribed use of pharmaceuticals may also stem from individual strategies aimed at regulating stress, anxiety and sleep disturbances (Baroni et al., 2023; Drazdowski et al., 2020). These behaviours often emerge in perceived dysfunctional or high-pressure environments, particularly within school and family settings. In many cases, medications are consumed without adult mediation, obtained directly from household medicine cabinets or shared among peers, suggesting the existence of unsupervised access and administration channels and possible gaps in the development of non-pharmacological coping competencies (Chadi et al., 2024).

The geographic variability observed in the data may be determined by different health, regulatory and family contexts, which influence both access to pharmaceuticals and the perceptions in their use.

The non-medical use of pharmaceuticals is significantly more frequent among girls and may be indicative of gender-specific ways of expressing and managing some possible psychological distress. This trend underlines the need to develop gender-sensitive prevention programmes that integrate mental well-being, affective education and efforts to reduce the informal availability of pharmaceuticals.

In summary, the non-medical use of pharmaceuticals could be a useful indicator to identify situations of systemic fragility. Addressing this issue requires a broad reflection among all possible stakeholders regarding educational strategies for both adolescents and parents, through a greater integration between schools, families and community-based mental health services.

Digitalisation of risk: gaming, social media and gambling

The daily integration of digital technologies into adolescents' lives has profoundly transformed the environment in which they grow and develop. Data from ESPAD 2024 indicate that an increasing proportion of students engage in prolonged gaming and social media use.

Gaming is an extremely widespread activity among European adolescents, with very high participation on both school and non-school days, and a significant proportion reporting screen time of more than 6 hours per day, especially among boys. However, in some countries, the gender gap is

reduced or even absent, suggesting an evolution in patterns of involvement. The index of perceived risk linked to gaming indicates the presence of a sizeable proportion of students who identify themselves as problematic users, confirming how this activity, although largely normalised, may represent a grey area between leisure and risk behaviours.

Social media use is also prevalent among ESPAD students. However, in contrast to gaming, girls are more likely than boys to report perceived problematic use. Self-perceived risk associated with social media is present in almost half of the sample, with higher values in central and northern European countries. Although gender differences are on average less marked than in gaming, the consistency with which girls report higher rates suggests greater exposure or sensitivity to relational, emotional and identity dynamics mediated by digital platforms, possibly impacting sleep, concentration and self-esteem (Boniel-Nissim et al., 2023). Again, everyday use can be intertwined with signs of perceived distress, delineating a field of intervention that should include both technical literacy and affective education.

Despite legal restrictions prohibiting gambling among minors, the 2024 data confirm a significant and stable prevalence of the activity among students in almost all countries participating in the ESPAD survey, with about a quarter of the sample reporting gambling engagement in the past year. This shows how youth gambling is an issue that is anything but marginal, which largely develops despite formal bans, and with the possible mediation of significant adults. Participation varies by gambling type and land-based or online modes, with a significantly higher prevalence among boys than girls — a difference that remains constant over time and is particularly pronounced for the online mode. Among those who gamble, a non-negligible proportion show signs of problematic or excessive behaviour, again with higher rates among boys. Two key considerations are critical for prevention in this context. While not all gambling activities carry the same level of risk, underscoring the need for differentiation when assessing problematic behaviour (Lombardi et al., 2024), online gambling significantly increases the likelihood of problem gambling, regardless of the specific activity involved (Allami et al., 2021; King et al., 2020), thereby necessitating systemic measures to prevent underage access to online platforms.

It is increasingly clear that these behaviours cannot be interpreted in isolation. Adolescents' growing proficiency with social media and online technologies has been linked to increased exposure to online gambling opportunities (Griffiths and Parke, 2010). Furthermore, the integration of new digital tools has significantly transformed the video game landscape. A substantial proportion of contemporary video games now feature simulated gambling elements, such as loot boxes and skins gambling, which are again associated with an elevated risk of problematic behaviour (Hing et al., 2022; King et al., 2020).

Problem gaming, compulsive use of social media and online gambling often co-occur and are associated with other risks, such as substance use, sleep disorders and academic difficulties, with recent studies emphasising the interdependence between digital addictions and emotional or neurocognitive vulnerabilities (Chang and Lee, 2024).

Overall, the digitalisation of adolescents' lives has not only introduced new opportunities and information channels but also multiplied the possibilities for early exposure to subtle but pervasive forms of addiction. The implications for public health are substantial and will require evidence-based responses that take into account issues such as the regulatory oversight of platforms, critical digital literacy, alongside emotional and relational competencies in school, community and family settings.

Alcohol: new consumption patterns and regional gaps

The 2024 ESPAD results confirm that alcohol remains the most widely used psychoactive substance among European adolescents, with lifetime use still relatively high, albeit declining.

While alcohol use remains widespread, data indicate gradual changes in the patterns and social dynamics of consumption. These include a shift in the age of initiation, frequency and intensity of

drinking episodes, and a partial inversion of traditional gender patterns, with girls in several countries now reporting similar or higher prevalence rates than boys, particularly regarding lifetime use and heavy episodic drinking.

In most European countries, the declining trend in adolescent alcohol use, observed over the past two decades, appears to continue. However, this reduction is far from uniform (Arnold et al., 2022). Nordic countries, particularly Iceland, Norway and Finland, display markedly lower levels of heavy episodic drinking, likely supported by multisectoral prevention strategies and stringent regulations on access and alcohol marketing (Raitasalo et al., 2021). Conversely, in some southern and central-eastern European countries, consumption remains high or shows signs of renewed growth.

One of the most striking developments in alcohol consumption among adolescents concerns emerging gender dynamics. While historically boys exhibited higher prevalence rates for heavy episodic drinking, recent ESPAD data show instances of gender gap reversal in some countries. In particular, girls now match or exceed boys in binge drinking and early initiation in several national contexts, most notably in Latvia, Lithuania and Malta. In these countries, female students report higher rates of lifetime alcohol use, early drinking or binge drinking compared to their male peers. Such patterns suggest evolving social norms around alcohol use among adolescent girls, reflecting broader cultural shifts in the meanings and functions attributed to drinking behaviour.

Several studies confirm the trend toward behavioural convergence between sexes during adolescence and early adulthood, often correlated with the erosion of social norms that previously discouraged female alcohol consumption (Raninen et al., 2024; World Health Organization, 2024b). Complementary ESPAD data reinforce this picture: a substantial number of adolescents report having consumed alcohol by age 13, and many of those who drink report repeated episodes of intoxication within the past month. Early alcohol use was reported by one third of ESPAD students, on average, with the highest values in Georgia (64 %) and Moldova (over 49 %), while the prevalence of early drunkenness, although lower (around 8 %), follows similar trends, with peaks in Georgia and Bulgaria.

Perceived availability also remains a key factor: three out of four students report that obtaining alcohol is 'easy' or 'very easy' for them. Cross-national comparisons suggest that regulatory and cultural frameworks play a substantial role in shaping adolescent alcohol use patterns. In several European contexts, where age-related alcohol laws are less strictly enforced and familial provision of alcohol is relatively common, adolescents may perceive drinking as socially acceptable or minimally restricted. In contrast, in the United States, where legal restrictions are more stringent and cultural norms less permissive, adolescent alcohol use appears comparatively lower (Miech et al., 2024).

In conclusion, alcohol continues to play a central role in adolescent life experiences. Despite the encouraging signs of positive change indicated by trends from 1995 to 2024, the persistence of relatively high levels of consumption and episodes of binge drinking suggests the need to maintain and strengthen prevention strategies, moving beyond informational campaigns on harm and toward the integration of comprehensive, culturally sensitive and gender-responsive prevention approaches.

Mental well-being: a neglected determinant

In the post-pandemic context and amid ongoing geopolitical instability, adolescent mental health has been systematically addressed for the first time within ESPAD.

The inclusion of the WHO-5, an internationally validated instrument also adopted in large-scale surveys such as the Health Behaviour in School-aged Children (HBSC), marks a significant methodological advance in the comparable evaluation of subjective psychological well-being among youth. Adolescent mental health in Europe now emerges as a critical dimension for understanding risk behaviours. Although this information was collected for the first time in 2024, the findings clearly highlight a scenario demanding focused attention.

Overall, nearly 40 % of students fall below the critical threshold of good mental well-being. Furthermore, marked cross-country differences emerge and pronounced gender disparities are evident, depicting a scenario where girls consistently report lower levels of well-being, particularly in southern and eastern Europe, confirming evidence on younger ages (Cosma et al., 2023).

The highest well-being scores are reported in Nordic countries such as the Faroes, Iceland and Denmark. The lowest are observed in Ukraine, where adolescents have faced traumatic conditions since 2022 due to the full-scale Russian invasion, as well as in central and eastern European countries, including Hungary, Poland and Czechia.

Gender differences are stark: on average, 70 % of boys report good mental well-being, compared to only 49 % of girls. In countries such as Italy, Poland and Sweden, this gap exceeds 30 percentage points, indicating a pronounced vulnerability among adolescent girls. At the same time, the disparity may also reflect under-reported distress among boys, who may be less likely to acknowledge or express emotional difficulties (Cosma et al., 2025).

As this is the first survey wave to assess this indicator, it is not yet possible to evaluate trends over time. However, existing literature consistently reports a decline in adolescent psychological well-being following the COVID-19 pandemic (Kauhanen et al., 2023). Emerging evidence suggests that the deterioration observed during the pandemic exceeded what would have been expected based on pre-pandemic trajectories. Notably, adolescent girls appear to have experienced a sharper decline in mental health than boys, potentially due to the greater impact of disrupted social connections and prolonged isolation (Cosma et al., 2025).

A key message that can be drawn from these first results is that the promotion of young people's psychological well-being cannot be seen as the sole responsibility of mental health professionals; it requires integrated, multidisciplinary approaches to expand intervention options, mitigate long-term risks, and reduce healthcare costs (Colizzi et al., 2020). Moreover, mental well-being is no longer a contextual variable but a core determinant around which prevention and health promotion strategies can be designed. Achieving this demands collaboration among schools, families and health services to foster environments where adolescents can build emotional competence, resilience and the ability to cope with everyday pressures without resorting to compensatory behaviours.

Prevention: mapping adolescent engagement across Europe

Another key dimension introduced in ESPAD 2024 is the mapping of prevention activities. Based on the collected information, more than half of the students reported having participated in at least one awareness or training prevention intervention in the two years prior to the survey. However, participation rates vary significantly between countries, with girls being more likely to report involvement than boys.

While most students report exposure to at least one prevention activity, the content, quality and format of these interventions seem to vary widely by country. The most common formats remain informational or awareness-raising events, with a predominant focus on alcohol and tobacco and, less frequently, on non-substance-related risk behaviours. These activities are particularly prevalent in eastern Europe and often serve as introductory measures in the absence of more structured interventions.

Girls are more likely to report having attended programmes addressing alcohol, tobacco and other drugs, while boys tend to more frequently report participation in sessions focusing on gambling, gaming or problematic internet use. This thematic segmentation may reflect gendered differences in perceived relevance and motivational framing, as well as in how prevention messages are communicated.

More limited, however, is the dissemination of interactive training interventions centred on the development of socio-emotional skills, media literacy and emotional regulation. These approaches, recognised to be among the most effective (Cuijpers, 2002; Juhasz et al., 2024), promote personal empowerment and foster a

culture of health grounded in self-awareness and self-regulation.

Regarding gender, girls consistently report higher involvement across the three main areas of training investigated: social skills, media literacy and personal development. This trend may be shaped by greater female responsiveness to educational stimuli, but also by distinct perceptions of risk and socially constructed gender expectations (Klingemann and Gmel, 2001). In some countries, such as Finland and Poland, gender disparities in participation reach significant levels, underscoring the need for inclusive, differentiated strategies.

The inclusion of prevention-related questions in ESPAD 2024 constitutes a significant methodological advancement. Although participation is self-reported by students, the collected information allows for a broader assessment not only of the scope of implemented activities but also of structural weaknesses, such as the fragmentation between information and education, between episodic initiatives and more structured programmes, and between generalist approaches and those more tailored to the acquisition of competences.

While still open to improvement, the data gathered by ESPAD for the first time adds valuable insight to the expanding evidence base used by prevention researchers and practitioners to guide the development and implementation of effective strategies and policies for adolescent risk behaviours.

Conclusions

The results of the 2024 ESPAD survey describe a generation in profound transition. While the continued decline in the use of established substances is welcome, it is clear that this does not necessarily correspond to a reduction in risk.

Indeed, the intertwining of psychoactive substance use and digital risk behaviours represents a new and complex challenge for public health.

The 2024 ESPAD cycle raises a number of new challenges to policy and practice, pointing to at least three key strategic priorities. First is the expansion of evidence-based prevention approaches, including the development of new strategies to address the complex spectrum of young people's risk behaviours. In this context, the ongoing work of the EUDA with partner countries to roll out the implementation of the European Union Prevention Curriculum (EUPC) — a training programme designed to support evidence-informed decision-making in the planning of prevention interventions for young people — combined with the Xchange registry of evaluated prevention programmes, appears particularly promising.

A second priority concerns the development of age-sensitive digital market regulations aimed at reducing early exposure to potential risks among young generations, alongside sustained investments in healthcare and welfare systems to mitigate possible regional disparities.

Finally, the results highlight the need for a focus on young people's mental health and well-being more broadly. Particular attention is warranted by the emergence of new risk clusters among adolescent girls, which highlights the need for a gender-sensitive reframing of health promotion strategies.

The 2024 ESPAD findings may require a qualitative leap in the capacity of contemporary institutions, both to read and interpret complex and dynamic changes in the lives of the young cohorts described here, as well as to develop agile, multisectoral interventions that foster trust among adolescents. Only through such a systemic perspective can risk be transformed into resilience, and environments be created that support the development of healthier and self-aware youth.

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Each country was represented in the project by a principal investigator (PI or ESPAD associate researcher), and these PIs/associate researchers are contributing authors of this report (see the title page), together with the ESPAD national team members who have contributed to the drafting. The main people from the national research teams in the 37 countries participating in the 2024 data collection are listed below. This is followed by a list of funding agencies and supportive organisations.

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Cyprus
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Czechia
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Denmark
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Estonia
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Faroes
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Latvia
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Lithuania
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ESPAD

About this report

This publication summarises the key findings from the 8th round of the European School Survey Project on Alcohol and Other Drugs (ESPAD), which was conducted among 113 882 students aged 15- to 16-year-old, across 37 European countries in 2024. This edition marks 30 years of monitoring adolescent risky behaviours across Europe and introduces a new focus on mental well-being and prevention activities, recognising the growing importance of these factors in shaping adolescent health outcomes.

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About ESPAD

The European School Survey Project on Alcohol and Other Drugs (ESPAD) is a collaborative effort of independent research teams in more than 40 European countries and the largest cross-national research project on adolescent substance use in the world. The overall aim of the project is to repeatedly collect comparable data on substance use among 15- to 16-year-old students in as many European countries as possible. The EUDA is a key partner in the ESPAD project. The ESPAD study is coordinated by the Institute of Clinical Physiology of the Italian National Research Council.

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