BEE SECURE RADAR 2025

CURRENT TRENDS IN YOUNG PEOPLE'S USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES

BEE SECURE

snj Service national de la jeunesse

Cofinancé par l'Union européenne

Table of contents

Introduction

Young people's use of information and communication technology (ICT) remains a subject of growing importance. Digitalisation is intensifying at all levels of society. As digital natives, the younger generations are embracing these tools with remarkable ease, shaping the way they communicate, learn and entertain.

However, this increased use of technology is not without risks. It can expose young people to a range of dangers, including cyberbullying, misinformation, excessive screen time, potentially harmful content (e.g. pornography), and breaches of privacy. Therefore, it's crucial that they learn how to safely navigate the digital world.

It is with this vision in mind that the *Ministry of National Education, Childhood and Youth* (MENJE) launched its multi-annual action plan "sécher.digital" at the start of the 2024-2025 school year. This initiative is built on four key pillars:

- **Promoting a healthy screen-life balance;**
- **Encouraging the responsible use of artificial intelligence in schools;**
- **Strengthening digital skills in schools;**
- **Simplifying administrative processes in the field of education.**

In this context, BEE SECURE plays an essential role in raising young people's awareness of issues related to ICT use. As a government initiative dedicated to promoting the safe and responsible use of technology, BEE SECURE offers educational resources and awareness campaigns to inform young people about good practices for online safety.

The BEE SECURE Radar report looks at current trends in how young people in Luxembourg are using ICT, while also highlighting the associated risks and the importance of adopting preventive measures. This information is crucial in guiding BEE SECURE's awareness-raising and prevention activities, making it possible to identify users' specific needs and adjust protective measures accordingly.

This fourth edition, BEE SECURE Radar 2025, covers the 2023/2024 school year (from 1 September 2023 to 31 August 2024) and presents our results from the perspective of both young people and parents. It also includes data from teacher surveys, requests for advice received by the BEE SECURE Helpline, and content reported as illegal to the BEE SECURE Stopline. Finally, it contains survey results from child respondents who attended the *DigiRallye* event. The chapter on 'public perception' provides an overview of the dominant topics driving public debate related to BEE SECURE topics.

This year's surveys also cover a number of new topics:

- **News and media literacy (in collaboration with the *Zentrum fir politesch Bildung* Foundation, ZpB)**
- **Artificial intelligence (AI)**
- **Smartphones in schools**
- **Importance of different protection measures**
- **Awareness of the *Digital Services Act***

In addition, new questions were asked on a number of subjects already covered in previous BEE SECURE Radar editions in order to explore certain aspects in more depth.[1]

[1] It is important to note that, for the sake of simplicity in this publication, the masculine form has been used as a neutral gender to refer to the entire population.

I. Results of surveys on ICT use in Luxembourg

Methodology

One of BEE SECURE's missions is to monitor how children and young people use ICT. To this end, the *National Youth Service* (SNJ), as coordinator of the government's BEE SECURE initiative, conducts two annual surveys to explore various aspects of ICT use: one targeting young people themselves and the other aimed at parents. The aim is to obtain a comprehensive overview of how children and young people use ICT. It is important to note that the participants in these surveys do not necessarily live in the same household and there is no known relationship among them.

These surveys provide a detailed overview of the use of various technologies, while assessing the risks associated with their use online and the measures put in place to manage them. The main aim of these studies is to assess both the opportunities and the risks associated with ICT, thereby informing and guiding future actions for the safe and beneficial use of digital tools.

The data from the German "KIM" and "JIM" studies[2] are particularly relevant in this respect, providing valuable insights into young people's behaviour and perceptions of ICT. In addition, the questions asked in the SNJ surveys are based on similar international studies and surveys, ensuring a consistent approach in the analysis of the trends observed.

Youth survey: The online youth survey was carried out between early June and mid-July 2024. The survey was distributed via various channels, such as social media and posters in places frequented by young people (e.g. youth centres and CEPAS). A total of 954 children and young people took part in the survey. After a data cleaning process, 916 participants aged 12 to 30 were retained for analysis. Of these, 87 were between 12 and 16, while 829 were between 17 and 30.

The data collected in the survey were weighted by age, meaning that the results were adjusted to reflect more accurately the age distribution of the target population. After this weighting, participants aged 12 to 16 make up 22.6% of the sample, while those aged 17 to 30 make up 77.4%. The average age of participants aged 12 to 16 is now 14.5, which represents an increase of 1.5 years compared to last year. For the 17 to 30 age group, the average age remains unchanged from last year, staying at 23.

It should be noted that the 'n' in the graphs indicates the raw number of respondents to each question. The percentages in the tables, on the other hand, are calculated from weighted data.

Age distribution:
12-16 years : 87 young people
17-21 years : 308 young people
22-25 years : 252 young people
26-30 years : 269 young people

Gender distribution:
- **Male: 211 young people**
- **Female: 683 young people**
- **No indication/other: 22 young people**

[2] The *JIM (Jugend, Internet, Medien)* study has been analysing the media behaviour of young people aged 12 to 19 in Germany every year since 1998. Since 1999, the *KIM (Kinder, Internet, Medien)* study has focused on 6- to 12-year-olds, assessing in particular their intensity of use. Together, these studies provide a representative picture of media use by children and young people and are recognised as international benchmarks in this field.

Parent survey: The survey of parents conducted in collaboration with the *Ilres* institute was launched at the beginning of June 2024, targeting parents of children aged 3 to 16. The aim of the survey was to assess how children and young people use ICT from a parent perspective. A total of 541 parents or legal guardians[3] took part in the survey, 281 of whom had children aged 3 to 11 and 260 of whom had children aged 12 to 16. The data collected was then weighted according to the age of the children.

In this publication, the main results of the two surveys will be presented and compared. It is important to note that the questions asked in each survey may have been different, which means that some results are not directly comparable or are only available for one of the two groups.

For some topics, the results will be supplemented by other data collected by BEE SECURE during the 2023/2024 school year, as well as information from the BEE SECURE Helpline and BEE SECURE Stopline, and an analysis by the Foundation *Zentrum fir politesch Bildung* (ZpB).

[3] The term 'parents' is used in this publication as a substitute for all forms of legal guardian.

Additional data collected by BEE SECURE includes the following information:

Survey during BEE SECURE awareness training courses for children and young people: These training courses are offered to primary and secondary school classes and extracurricular groups in Luxembourg throughout the 2023/2024 school year. More than 21,580 pupils took part in these sessions, of whom 14,894 completed the anonymous survey (9,013 pupils in primary education and 5,881 pupils in secondary education).

Survey of teaching and educational staff: This year, teachers and educators were contacted in a different way: via a push notification during the *EduTrends* conference. In addition, the survey was promoted on social media for the first time. This approach had a positive effect: compared with previous years, when calls for participation were made during in-service training, the number of participants increased considerably, reaching a total of 477. Of these, 70 work in after-school daycare institutions (*maisons relais*) (15%), 15 in youth centres (3%), 191 in primary education (40%), 149 in secondary education (31%) and 52 in other settings (11%).

***DigiRallye* interviews with children:** During the 2023/2024 school year, two editions of the *DigiRallye* were organised. This event is all about the digital world. In all, 112 children aged 8 to 12 took part in the oral survey carried out during these two editions. More specifically, 73 children took part in the first edition, while 39 children took part in the second edition.

Graphs: Due to rounding, the sum of the percentages in the same column may differ slightly from 100%.

Limitations: It is important to bear in mind that the BEE SECURE Radar surveys have certain limitations. Firstly, it should be noted that parents and young people do not necessarily belong to the same household, which can make it difficult to compare points of view. In addition, the questions asked of parents and young people may differ both in terms of wording and response options, making it difficult to directly compare their perspectives.

It is also essential to stress that the results of the BEE SECURE Radar cannot be considered representative of the Luxembourg population as a whole. It is therefore **important to interpret these results with caution** and to regard them as general indications rather than definitive conclusions.

Finally, reaching young people aged 12 to 16 can be a challenge. This age group may be less accessible for surveys, which may influence the diversity and richness of the data collected.

To compensate for the limitations of the surveys, the results are enriched by similar studies conducted abroad, thus providing a more complete picture of the media behaviour of children and young people. However, it is important to note that these data are not directly applicable to the situation in Luxembourg.

One positive point to highlight is that the number of participants aged 17 to 30, a total of 829 young people, is significantly higher than in previous years. This testifies to the effectiveness of the advertising campaign..

It is possible to compare certain results with those of the previous edition (2022/2023), entitled BEE SECURE Radar 2024. Recent results, relating to the year 2023/2024, are referred to as BEE SECURE Radar 2025.

1 CONTACT WITH THE DIGITAL WORLD

1.1 First contact with the digital world

Parents were asked about the age at which their child first came into contact with the digital world.

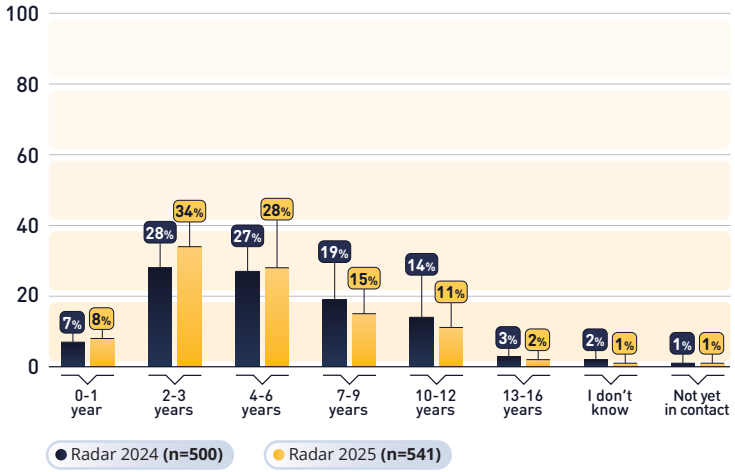


Figure 1. PARENTS - Age at first contact with a device connected to the Internet.

A comparison with the previous year does not reveal any significant differences, but this time 42% of parents report that their child had this **first contact before the age of four**, compared with 35% last year. This slight increase may be insignificant, given that variations of around 5% are common in this type of survey. On the other hand, this small increase could also indicate a slightly growing trend towards ever earlier contact during the pre-school period.

During the *DigiRallye*, children (aged 8 to 12) were asked about their most frequent activities on the Internet.

	8 → 12 ans Children's perspective (n=112)
1	Watch a video **(75 %)**
2	Play a game **(71 %)**
3	Communicate (*Chat*) & Listen to music **(40 %)**
4	
5	Search for information/for school **(37 %)**

Figure 2. CHILDREN – Most frequent activities on the Internet.

The results show that three quarters of them mentioned watching videos, while 71% said they played online games. These two activities clearly stand out as the most popular among the young participants, illustrating the importance of video content and digital games in their daily lives.

In September 2024, the *Ministry of National Education, Childhood, and Youth* launched the "sécher.digital" action plan.

The goal of "sécher.digital" is to promote the responsible use of digital technologies by children and young people. The campaign is based on the 3-6-9-12 rule, developed by French psychiatrist Serge Tisseron, which recommends:

- **No screens before the age of 3**
- **No personal gaming consoles before the age of 6**
- **No unsupervised internet access before the age of 9**
- **No independent internet use before the age of 12**

(https://secher.digital/fr/)

According to the German Bitkom study, 92% of children and teenagers aged 6 and over use the Internet at least occasionally.

(Bitkom Research, 2024)

1.2 First smartphone and tablet

In addition to exploring first contact with the internet, the focus is now on the age at which children obtain their first smartphone and tablet.

The results of the "miniKim" study in Germany (2024) show that around one in ten children aged 2 to 5 have their own smartphone or free access to one. This represents a significant increase to the 4% recorded in 2020. According to education officials, more than a fifth of children (22%) use a smartphone at least once a week. However, 29% use it less frequently and almost half (47%) never use it (Kieninger et al., 2024, p. 34).

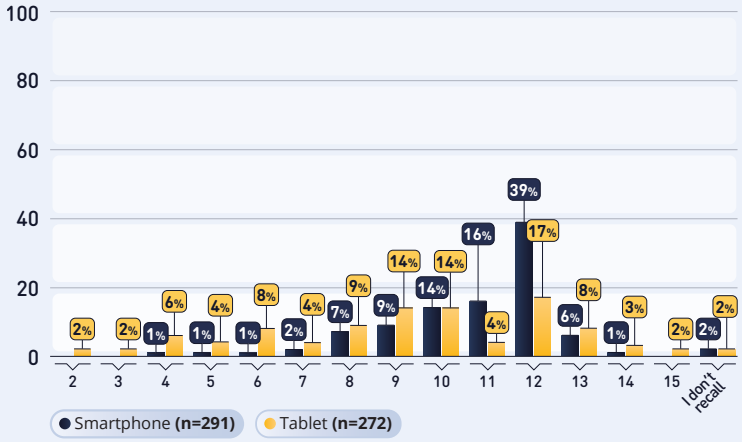


Figure 3. PARENTS - Age at which children obtained their first devices.

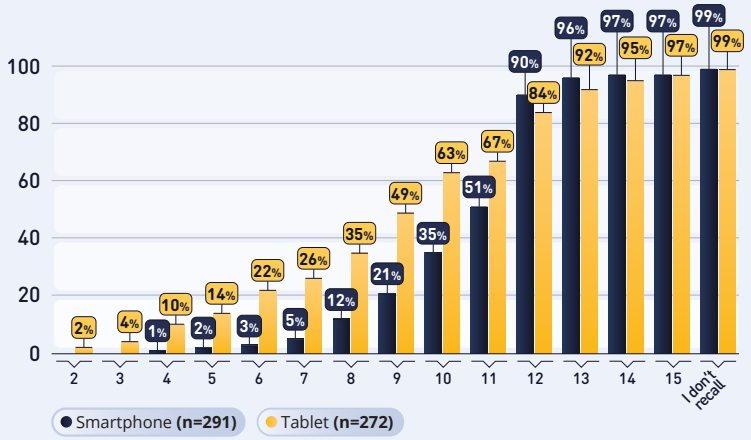


Figure 4. PARENTS - Age at which children obtained their first devices (cumulative representation).

Of the 541 parents surveyed in Luxembourg, 291 (54%) said that their child had a smartphone. This figure is down 6% on the previous year. **90 % of parents said that their child had received a smartphone no later than the age of 12** (BEE SECURE Radar 2024: 84%). The majority of children (39%) receive their first smartphone by the age of 12 (Figure 3), which is similar to previous years. The average age at which children get their first smartphone is 10.76 (n=291 parents).

In addition to smartphones, parents were also asked whether their child owned a tablet and the age at which they were given one. The results show that **half of all children own their own tablet, which they received on average at the age of 9.**

During the *DigiRallye*, the children themselves indicated that they had received their first tablet at the average age of 7. What's more, 67% of children own a personal tablet, while **9 out of 10 children (87%) use a tablet**, whether it's their own or the family's.

In the *DigiRallye* aimed at children aged 8 to 12, the average age at which people obtain their first smartphone was around 9 years old (n=73). This average remains consistant with previous years.

If we include the use of smartphones belonging to the family or other devices, we find that 88.39% of children use a smartphone in one way or another.

1.3 First social media account

Parents were also asked about the age at which their child created their first social media account.

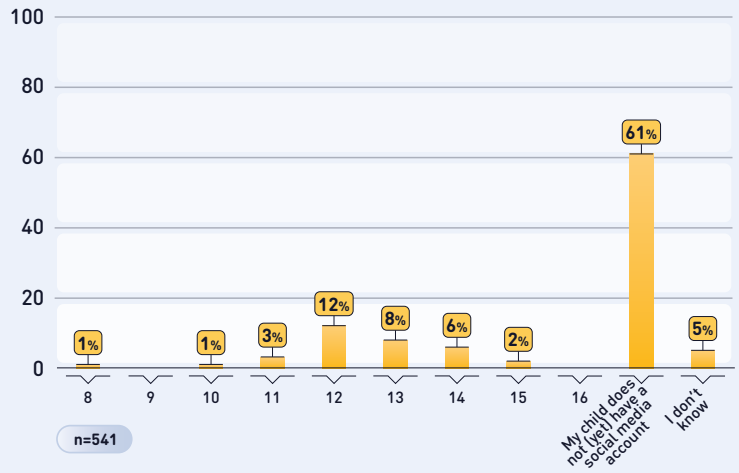
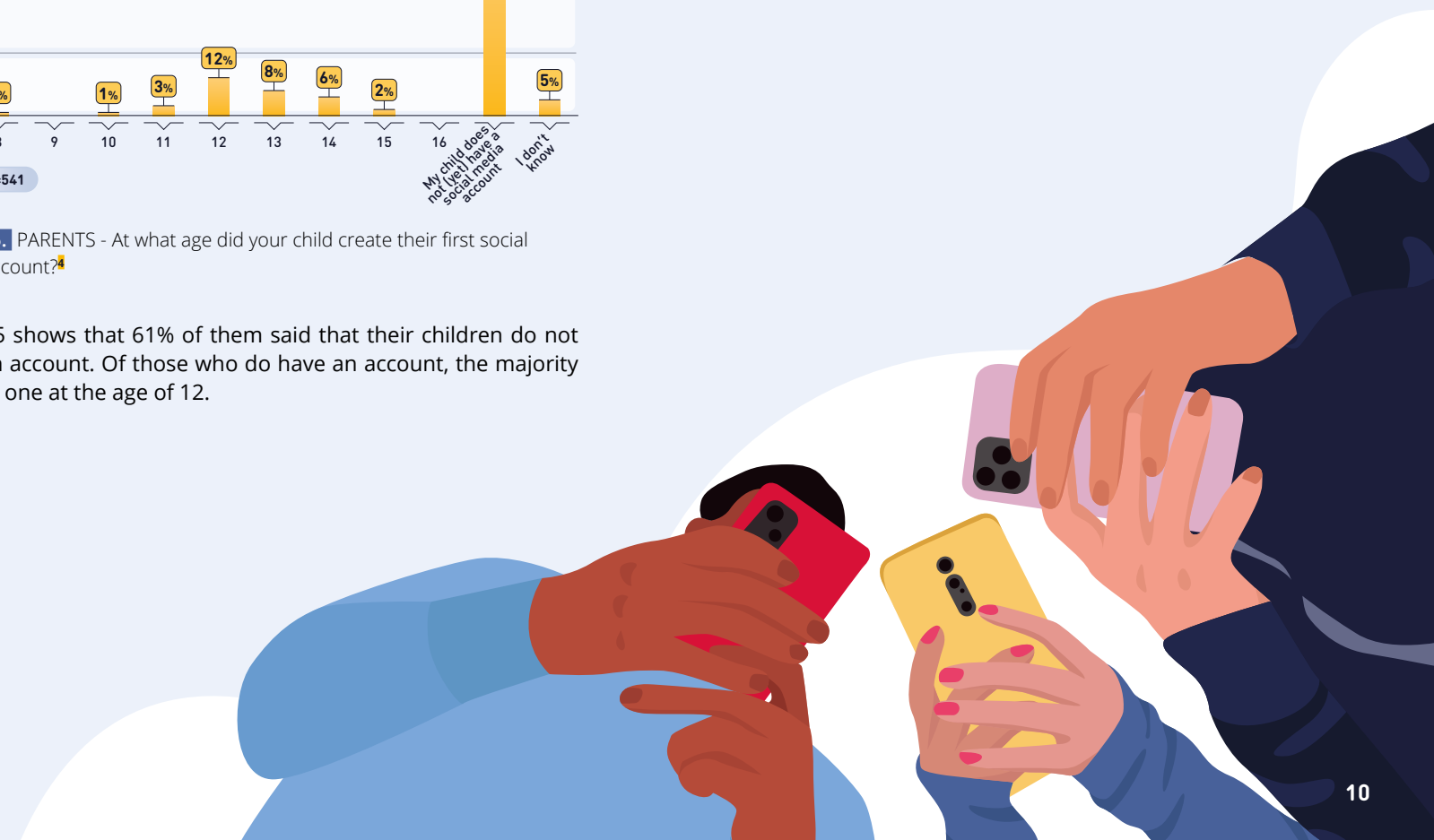


Figure 5. PARENTS - At what age did your child create their first social media account?[4]

Figure 5 shows that 61% of them said that their children do not have an account. Of those who do have an account, the majority created one at the age of 12.

[4] Children who do not (yet) have an account on a social media - breakdown by age :
- 3-5 years : 96 %
- 6-7 years : 95 %
- 8-10 years : 92 %
- 11-13 years : 55 %
- 14-16 years : 11 %



1.4 Types of digital devices

After asking parents about the age at which their children first came into contact with the digital world, we inquired about the different digital devices they have. These trends highlight the evolution of technological preferences over time.

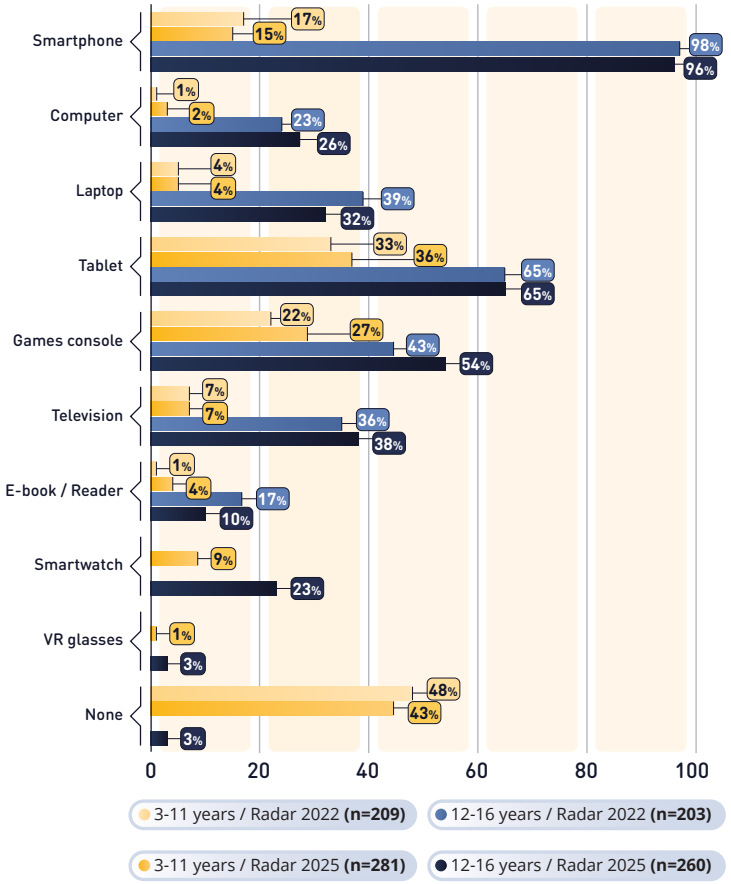
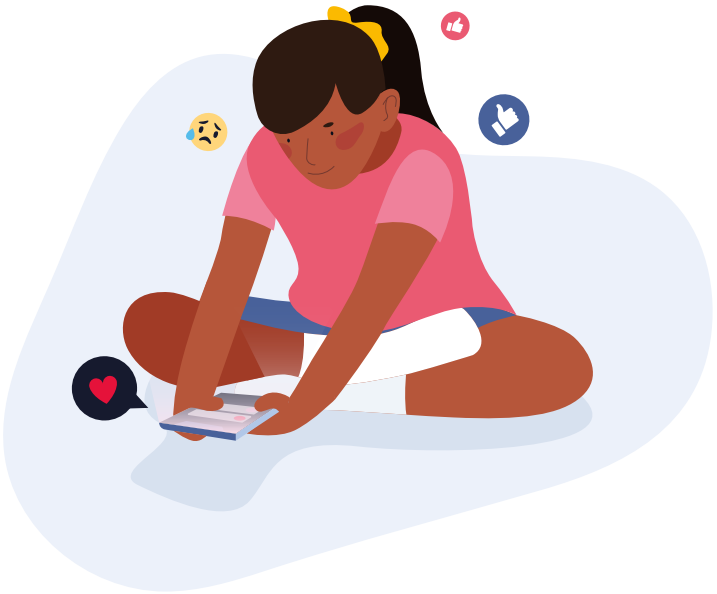


Figure 6. PARENTS - My child has their own...

The results show that, in general, there are no major differences compared to 2022. **Almost all young people aged 12 to 16 own a smartphone**. Data on smart watches and virtual reality goggles was not collected until 2023. However, the evaluation of these devices will certainly be interesting to observe in the future.

There has also been a decline in the ownership of e-books and laptops among young people aged 12 to 16.



According to the German "miniKim" study (2023), 42% of children aged 2 to 5 do not own any of the devices mentioned. A computer or laptop is the most common, at 22%. One child in five already has a 'classic' tablet. In addition, 13% of children have a television, Smart TV or streaming subscription. A further 12% have access to a CD/MP3/cassette player or an iPod. Finally, one child in ten has a telephone or smartphone.

(Kieninger et al., 2024)

2 SMARTPHONE APPLICATIONS

As in previous years, children and teenagers were also asked about the applications they use most frequently on their smartphone.[5]

The six most popular social media among 11- to 17-year-olds in Austria (2024):

1. ***WhatsApp*** ..... **76 %**
2. ***Instagram*** ..... **71 %**
3. ***YouTube*** ..... **70 %**
4. ***TikTok*** ..... **65 %**
5. ***Snapchat*** ..... **61 %**
6. ***Pinterest*** ..... **42 %**

(saferinternet.at, 2024)

According to the German "JIM" study (2023), among 12- to 19-year-olds, *WhatsApp* also ranks first among online services, with 94% using it regularly. *Instagram* remains stable in second place with 62%, followed by *TikTok* (59%) and *Snapchat* (49%), which are slightly up compared to 2022. *Facebook*, on the other hand, is in decline, being used regularly by only 22% of young people.

(Feierabend et al., 2023)

	8 → 12 years children perspective (n=112)	**12 → 16 years** youth perspective (n=84)	**17 → 30 years** youth perspective (n=819)
1	*YouTube* **(81 %)**	*WhatsApp* **(88 %)**	*WhatsApp* **(95 %)**
2	Gaming app **(75 %)**	*YouTube* **(87 %)**	*Instagram* **(94 %)**
3	*Snapchat* **(37 %)**	*Snapchat* **(82 %)**	*YouTube* **(87 %)**
4	*WhatsApp* **(33 %)**	*Instagram* **(81 %)**	Music streaming platform **(84 %)**
5	Video streaming platform **(29 %)**	Music streaming platform **(71 %)**	Video streaming platform **(83 %)**

Figure 7. Most used applications.

[5] Participants were presented with the list of the following applications and asked to mark all those that they use: *Facebook, Instagram, YouTube, Snapchat, TikTok, WhatsApp, BeReal, Roblox, X (Twitter), Messenger, Discord, Twitch*, music streaming platform, *MS Teams*, dating-app, trading application, *Signal*, *Telegram*, video streaming platform, other, none.

For young people aged 12 to 16, *WhatsApp* (88%) is in first place, closely followed by *YouTube* (87%). Last year, the order was reversed, but these two applications still occupied the top two places. On the other hand, *MS Teams*, which was in fourth place last year, didn't make the top 5 this year. *Instagram* (81%), on the other hand, has moved up the rankings compared with the previous year.

In the 17-30 age group, the hierarchy of the top 5 remains the same as last year, with the exception of fourth place, now occupied by music streaming platforms instead of *Facebook*. As with the 12-16 age group, *WhatsApp* (95%) is also the most frequently used smartphone application.

Finally, among the 8-12-year-olds surveyed at the *DigiRallye*, there were few changes from the previous year. *YouTube* (81%), gaming applications (75%) and *Snapchat* (37%) remain the favourite applications for the youngest participants, in the same order.

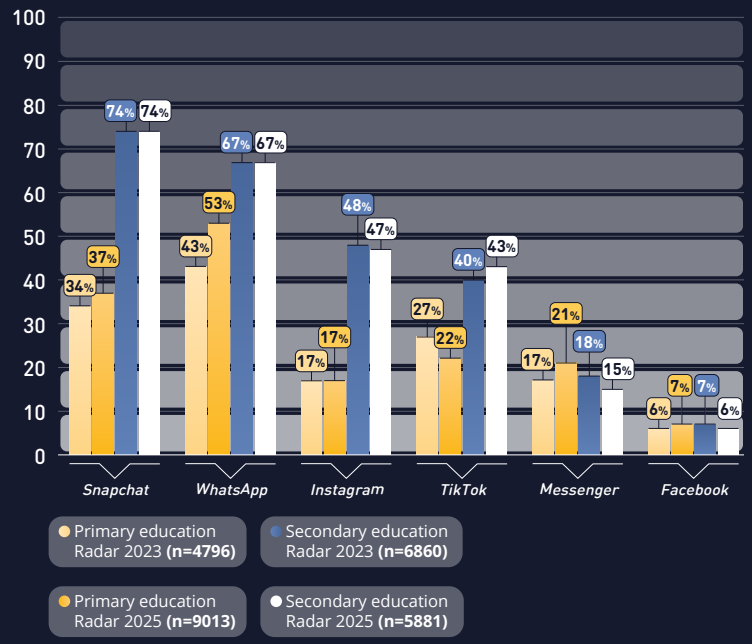


Figure 8. PUPILS - Yes, I use this app (multiple answers possible).

Figure 8 shows that, among **pupils in primary education**, the three most used social media applications are ***WhatsApp (53%), Snapchat (37%) and TikTok (22%)***, in the same order as the previous year. However, it is noted that the use of *WhatsApp* has increased by 10% compared to 2023, while the frequency of use of *TikTok* has remained relatively stable.

Secondary school students mainly use *Snapchat (74%), WhatsApp (67%) and Instagram (47%).*

3 SCREEN TIME

The Internet is an integral part of young people's daily lives and is used in a variety of areas. As part of a survey conducted by STATEC in 2022, participants were asked about the benefits they derive from using the Internet. Among young people aged 16 to 24, as in other age groups, the ability to stay in touch with or increase interaction with family and friends came in at the top. This is followed by improved monitoring of local and international information (STATEC, 2023).

This chapter looks in more detail at the subject of screen time. How much time do children and young people spend on their smartphones? How do they perceive their own use of screen time? What are the main activities they carry out online?

3.1 Monitoring screen time

For the first time in the BEE SECURE Radar survey, respondents were asked whether they were aware of the function on their smartphone that allows them to monitor their average daily screen time.

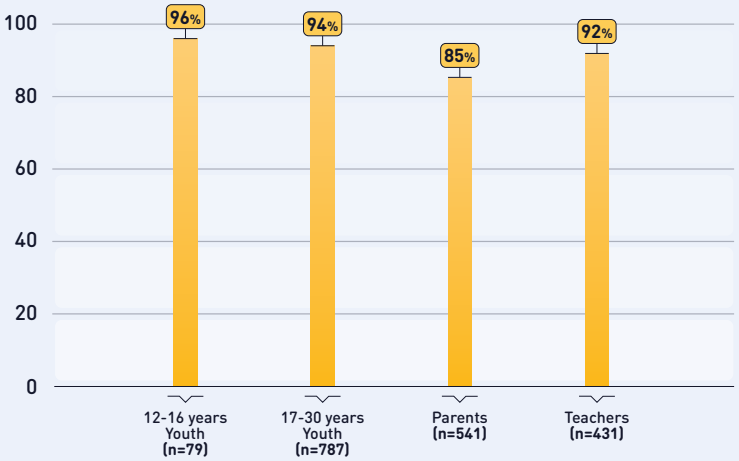


Figure 9. Knowledge of the smartphone function that monitors daily screen time.

Figure 9 shows that most respondents in all target groups know about **the daily screen time monitoring feature**.

Participants who were aware of this function were then asked to indicate their screen time for the previous day, referring to a weekday and not the weekend.

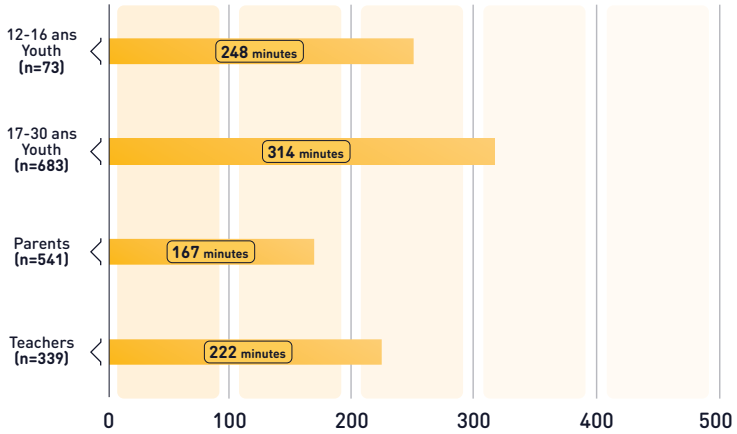


Figure 10. How much screen time did you have yesterday?
If yesterday was a Saturday or Sunday, please indicate your screen time on Friday (in minutes).

Young people aged 17 to 30 reported an average daily screen time of 314 minutes (5h14min), the highest figure among survey participants. In contrast, 12- to 16-year-olds reported an average screen time of 248 minutes (4h08min). In comparison, teachers spend an average of 222 minutes (3h42min) in front of their screens, while parents spend significantly less time, with 167 minutes (2h47min) a day using their smartphone.

3.2 Duration of device use

For this edition of BEE SECURE Radar, participants were once again asked about their use of smartphones and tablets. The questions focused on the duration and frequency of use, as well as the intensity of time spent on these activities. The extent of use over time was also assessed. The aim is to obtain an overall and detailed picture of users' digital behaviours.

In Germany (2023), young people aged between 12 and 19 spend an average of 224 minutes a day online in their free time.

(Feierabend et al., 2023)

According to the *Bitkom* study in Germany (2024), smartphone usage time increases considerably with age. For children aged 6 to 9, the average time spent is still 37 minutes, while for those aged 10 to 12, it is already 107 minutes. Between the ages of 13 and 15, the average time spent on a smartphone climbs to more than two and a half hours (154 minutes) a day. Finally, users aged 16 to 18 say they spend even more than three hours a day (201 minutes) on their smartphone.

(Bitkom Research, 2024)

3.2.1 Duration of device use

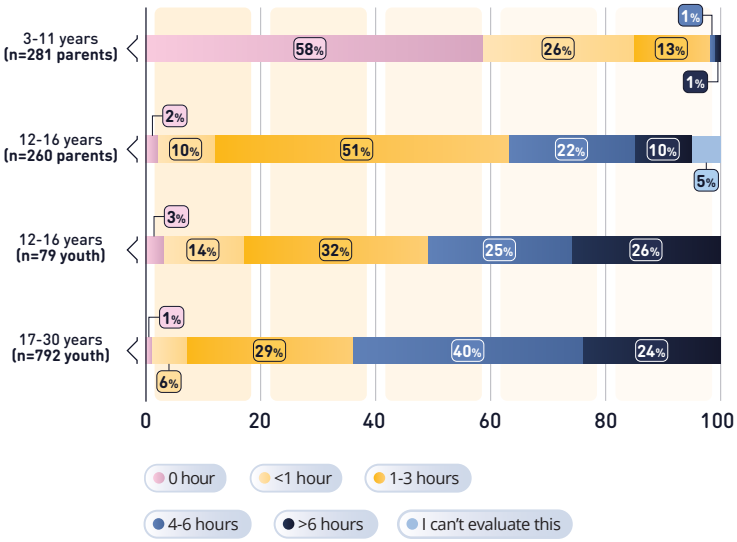


Figure 11. Daily amount of time spent on a **smartphone** during the week.

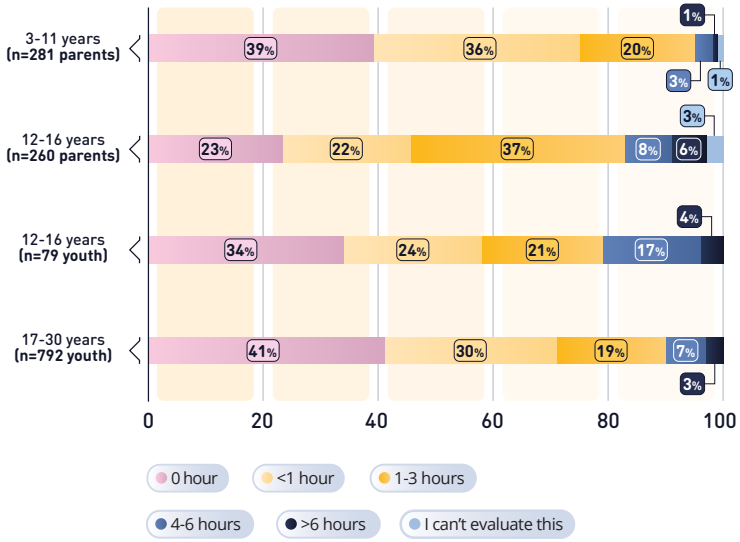


Figure 12. Daily amount of time spent using a **tablet** during the week.

According to parents, 40% of children aged 3 to 11 spend time on a smartphone every day, while around 60% spend time on a tablet. In general, children spend more time on the tablet than on the smartphone.

However, responses were different among parents of 12- to 16-year-olds: these parents responded that their teenager uses a **smartphone** every day, and 32% of them spend at least 4 hours a day on it.

3.2.2 Frequency of smartphone use

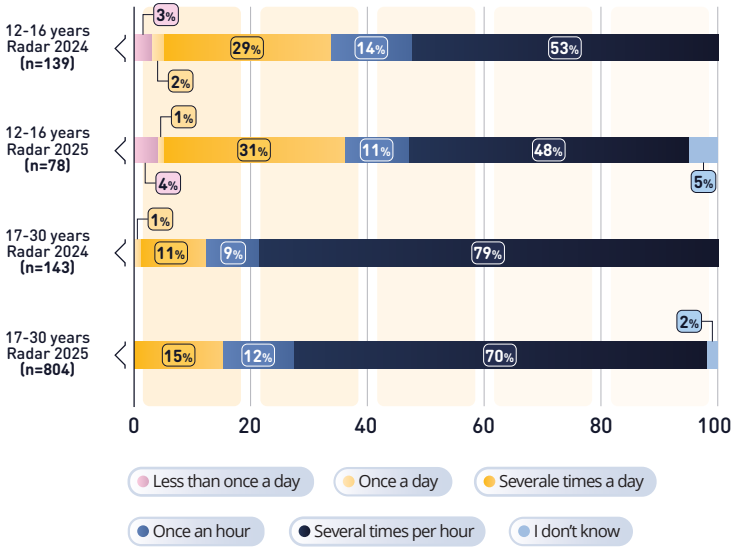


Figure 13. YOUTH - Make an estimate: how often do you pick up your smartphone to watch something or to do something on your smartphone (e.g. to check for updates)?

Around **half of teenagers aged 12 to 16 (48%)** and even 70% of young adults aged 17 to 30 **say they use their smartphone several times an hour**. There are no significant differences from last year.

3.2.3 Evaluation of the frequency of smartphone use

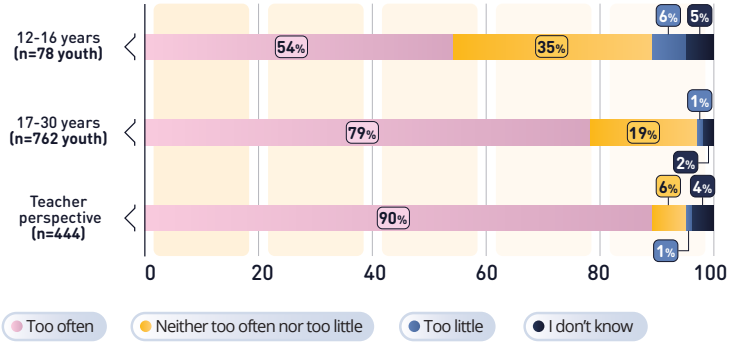


Figure 14. Evaluation of the amount of time that **young people** spend on their smartphones.

According to teachers, teenagers spend too much time on their smartphones. In fact, 90% of teachers feel that teens use their smartphone 'too often', a figure almost identical to the previous year (89%).

Among young adults aged 17 to 30, the proportion who answered 'too often' rose from 66% last year to 79%. A similar trend can also be seen among young people aged 12 to 16: BEE SECURE Radar 2024: 45%, BEE SECURE Radar 2025: 54%.

Daily media usage among children aged 2 to 5 according to the German study "miniKim" (2023):

- Audio speakers (e.g., Toniebox): 38 minutes (a newly added category in 2023, now surpassing book reading)
- Book reading: 37 minutes
- Paid streaming services: 23 minutes
- Radio: 20 minutes
- Free video platforms: 18 minutes
- Traditional television: 15 minutes
- Internet: 13 minutes
- Online offerings from TV channels: 12 minutes
- Digital games: 6 minutes

(Kieninger et al., 2024)

According to the German *Bitkom* study (2024), social media users are generally active every day: 83% of young people aged between 10 and 18 connect to these platforms every day. This percentage rises to 94% among teenagers aged 14 and over. As a result, the duration of use is also significant: on average, children and teenagers aged between 10 and 18 estimate that they spend 95 minutes a day on social media.

(Bitkom Research, 2024)

3.3 Duration by activity

In addition to the amount of time spent using the device, **it is important to analyse the type of content consumed** and **the activities carried out when** young people **are using** their smartphones. This approach will provide a more complete understanding of the impact of screens on young people's lives.

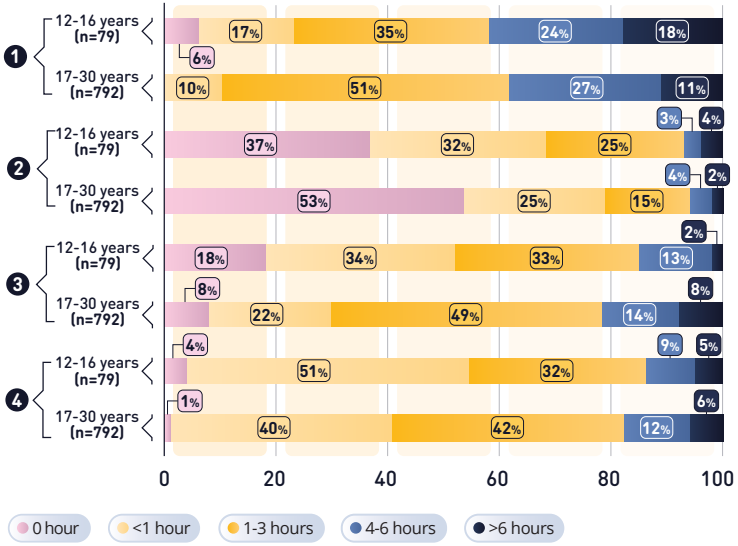


Figure 15. YOUTH - Hours spent per day on weekdays (Monday-Friday) by activity.

Figure 15 shows that 77% of teenagers aged 12 to 16 spend at least one hour per day using social media during the week, while this percentage rises to 89% among young adults aged 17 to 30. In both age groups, around a quarter of young people spend between 4 and 6 hours a day on these platforms. When it comes to chatting and communicating, an important majority of respondents say they use these services on a daily basis: 99% of 17-30-year-olds and 97% of 12-16-year-olds. However, this activity seems to require less time than using social media.

Online gaming is less common among 17-30-year-olds: around half play every day, while the other half do not play at all. In contrast, only 37% of 12-16-year-olds say they don't spend any time playing online games.

Finally, in terms of the popularity of online activities, the use of social media comes in at the top, followed by chat/communication, video streaming and online gaming.

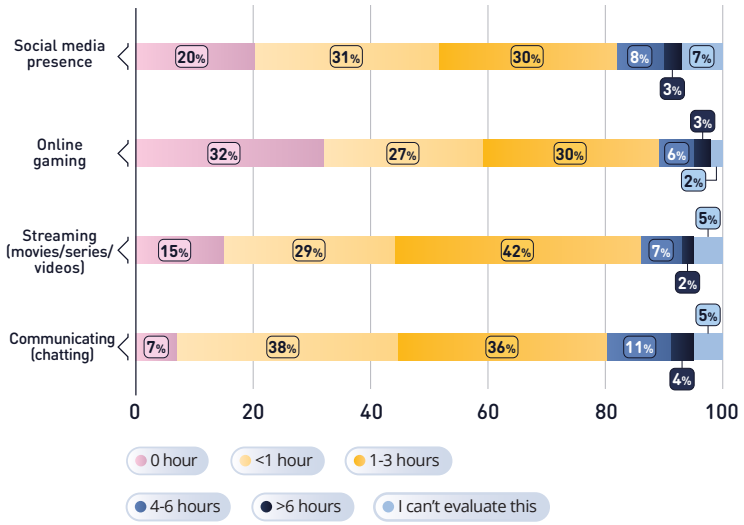


Figure 16. PARENTS (12-16 years) - To your knowledge, how much time does your child spend per day during the week engaging in the following activities?

Parents also gave their estimates of how much time they think their children spend on the activities mentioned.

According to parents, around a third of young people aged 12 to 16 spend less than an hour a day on social media, while another third spend between one and three hours. Around 20% of young people do not spend any time on these platforms.

However, the 12-16-year-olds surveyed estimate they spend much more time online: only 6% say they do not use social media, around a third (35%) say they spend between one and three hours on them, while a quarter (24%) spend between four and six hours, and almost a fifth (18%) admit to spending more than six hours a day on these platforms (figure 15.).

Parents' estimates of the amount of time they spend streaming, communicating, and playing online games (figure 16) are generally fairly similar to those of teenagers (figure 15).

According to the "HBSC" study (2022), 9.1% of participants (aged 11 to 18) are problematic social media users. The prevalence of problematic social media users increased from 5.9% in 2018 to 9.1% in 2022.

(Catunda et al., 2024)

According to the German *Bitkom* study, children and teenagers aged 10 to 18 who use social media spend an average of 95 minutes a day on these platforms.

(Bitkom Research, 2024)

German "miniKim" study (2023, children aged 2 to 5):

Regardless of the device, almost one in five children plays online games regularly, i.e. at least once a week. In addition, 22% of children play less often, while nearly three-fifths, according to the main educational authorities, never play online games.

(Kieninger et al., 2024)

4 ASSESSING AND MANAGING THE RISKS ASSOCIATED WITH THE USE OF ICT

Assessing and managing the risks associated with the use of ICT is essential in our digital world. This chapter looks at different approaches to identifying and mitigating these risks, while emphasising the importance of safe and responsible use of ICT.

Risk typology

The CO:RE typology of risks (*'the 4 Cs '*)[6] highlights the diversity of aspects and the multitude of themes that, according to the assessment of international experts, influence the safe use of ICT by children and young people.

Conceptually, **it is important to differentiate between risk and harm**: 'Risk is the likelihood of harm, whereas harm involves a range of negative consequences for emotional, physical or mental well-being' (Livingstone, 2021). For example, exposure to pornography is a risk for a child, but there is no guarantee that this exposure will result in harm.

The Risk Atlas (*Gefährdungsatlas*) of the the "Federal Review Board for Media Harmful to Minors" (*Bundesprüfstelle* für *jugendgefährdende Medien*) provides a comprehensive analysis and classification of the risks that hinder the peaceful participation of children and adolescents in digital media due to potential harm to their personal or informational integrity, as well as to their development and education as responsible individuals capable of living in society (Brüggen et al., 2022, p. 96). This atlas complements the CO:RE typology by providing a detailed analysis of current and concrete online phenomena.

In addition to the CO:RE risk typology, the BEE SECURE Radar also uses the Risk Atlas classification to assess and analyse the various risks.

[6] *Children Online: Research and Evidence (CO:RE) : The 4 Cs of online risk* (https://core-evidence.eu/posts/4-cs-of-online-risk).

	CONTENT Child engages with or is exposed to potentially harmful content	**CONTACT** Child experiences or is targeted by potentially harmful *adult* contact	**CONDUCT** Child witnesses, participates in or is a victim of potentially harmful *peer* conduct	**CONTRACT** Child is party to or exploited by potentially harmful contract
Aggressive	Violent, gory, graphic, racist, hateful or extremist information and communication	Harassment, stalking, hateful behaviour, unwanted or excessive surveillance	Bullying, hateful or hostile communication or peer activity e.g. trolling, exclusion, shaming	Identity theft, fraud, phishing, scams, hacking, blackmail, security risks
Sexual	Pornography (harmful or illegal), sexualization of culture, oppressive body image norms	Sexual harassment, sexual grooming, sextortion, the generation and sharing of child sexual abuse material	Sexual harassment, non-consensual sexual messaging, adverse sexual pressures	Trafficking for purposes of sexual exploitation, streaming (paid for) child sexual abuse
Values	Mis/disinformation, age-inappropriate marketing or user-generated content	Ideological persuasion or manipulation, radicalisation and extremist recruitment	Potentially harmful user communities e.g. self-harm, anti-vaccine, adverse peer pressures	Gambling, filter bubbles, micro-targeting, dark patterns shaping persuasion or purchase
Cross-cutting	**Privacy violations** (interpersonal, institutional, commercial) **Physical and mental health risks** (e.g. sedentary lifestyle, excessive screen use, isolation, anxiety) **Inequalities and discrimination** (in/exclusion, exploiting vulnerability, algorithmic bias/predictive analytics)			

Figure 17. The CO:RE classification of online risks (The 4 Cs) for children. — Source: Graphic representation based on Livingstone & Stoilova, 2021.

4.1 Online risks of greatest concern[7]

In this chapter, it is important to emphasise that the results presented are based on the participants' responses and do not necessarily represent an objective assessment of the risks. Nevertheless, these results provide an overview of the risks most frequently mentioned by different groups of respondents, ranked from highest to lowest.

	3 → 11 ans Parent perspective (n=281)	12 → 16 ans Parent perspective (n=260)	12 → 16 ans Youth perspective (n=68)	17 → 30 ans Youth perspective (n=711)	Teacher perspective (n=476)
1	Spending too much time online **(41 %)**	Spending too much time online **(47 %)** & Disinformation and fake news **(47 %)**	Cyberbullying **(43 %)**	Disinformation and fake news **(52 %)**	Spending too much time online **(63 %)**
2	Age-inappropriate content **(40 %)**		Images/videos of sexual violence against children (child pornography, CSAM) **(41 %)**	Images/videos of sexual violence against children (child pornography, CSAM) **(42 %)**	Age-inappropriate content **(56 %)**
3	Disinformation and fake news **(33 %)**	Influence exerted by online role models (influencers) **(37 %)**	Sexual content (e.g., pornography, nudes, sextapes) **(32 %)** & Stalking **(32 %)** & Collection of personal data of children **(32 %)**	Spending too much time online **(37 %)** & Cyberbullying **(37 %)**	Influence exerted by online role models (influencers) **(48 %)**
4	Cyberbullying **(31 %)**	Collection of personal data of children **(35 %)**			Cyberbullying **(43 %)**
5	Influence exerted by online role models (influencers) **(30 %)**	Cyberbullying **(32 %)**		Collection of personal data of children **(35 %)**	Disinformation and fake news **(41 %)**

Figure 18. Most concerning online risks.

[7] List of dangers and risks from which respondents could **tick a maximum of 5**: violent or hateful content; sexual content; age-inappropriate content; disinformation and fake news; cyberbullying; stalking; danger from contact with paedophiles (*grooming*); pressure to behave in a certain way ; fear of missing out when not online (*FOMO*); spending too much time online; incitement to harm oneself; pressure to share something intimate; collection of personal data without young person's knowledge; viruses and malware; influence exerted by online role models (e.g. influencers); e-crime.

Excessive time spent online remains constant and is at the top of the list of concerns for parents and teachers, as it has been in previous years .

This time round, cyberbullying appears in the top 5 concerns for all the groups surveyed. It is worth noting that for the first time it is mentioned by parents of children aged 3 to 11 as one of their top five concerns (2022: 13%, 2025: 31%), putting it in fourth place. It is not possible to determine with certainty whether this change is the result of an increase in the number of cases of cyberbullying in this age group or of parents becoming more aware of the problem. Cyberbullying also ranks fourth among teachers and third among young people aged 17 to 30.

Disinformation and fake news have gained in importance, sharing first place for the first time with the issue of excessive use among parents of teenagers aged 12 to 16. Among parents of children aged 3 to 11, misinformation rose from fourth place (25%) in the previous year to third place (33%). Among young people aged 17 to 30, misinformation has remained in first place since 2022, with a rate of 52%.

4.2 Experiences with risks and dangers

In an ever-changing digital environment, it is essential to understand the challenges that young people face online. In order to assess the extent of risky behaviour on the Internet, surveys of parents and young people aim to determine how often they and their peers have been exposed to potentially risky situations. The results provide an overview of current trends and a better understanding of the extent of these risks in Luxembourg.

4.2.1 Cyberbullying

Cyberbullying is a phenomenon in which a child is harassed, ridiculed and intimidated by another child, other children or adults using online technologies. Harassment can be accompanied by psychological violence. Cyberbullying may be intentional or unintentional (Stoilova et al., 2023).

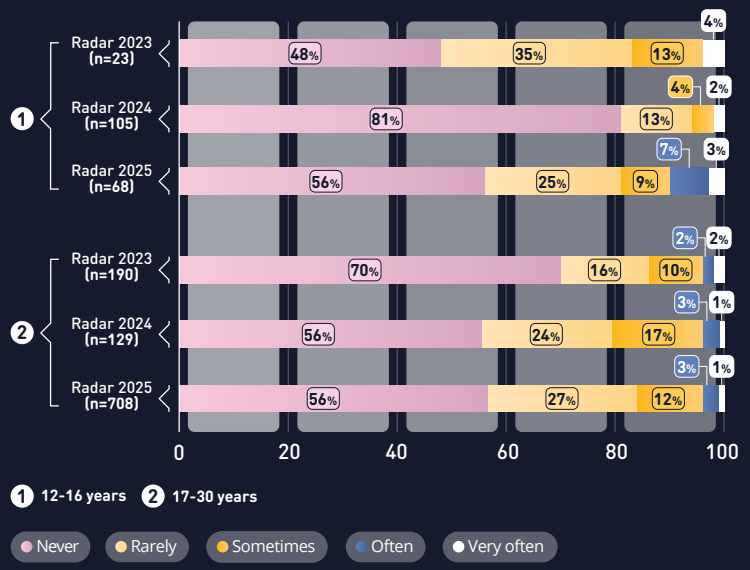


Figure 19. YOUTH - How many times have you been a victim of cyberbullying?

In the "Jugendmedienschutzindex" survey (2022), half of the parents of children aged 9 to 16 expressed (strong) concern about the amount of time their child spends on the Internet.

(Gebel et al., 2022)

In the same study ("Jugendmedienschutzindex"), 40% of parents surveyed said they were (very) concerned about their child being cyberbullied by others.

(Gebel et al., 2022)

As in the previous year, 44% of young people aged 17 to 30 said they had experienced cyberbullying at least once. Among all 17- to 30-year-olds, 4% said they had been victims of cyberbullying in the last 12 months (compared with 9% the previous year).

Among **young people aged 12 to 16**, 44% said they had been victims of cyberbullying at least once. Of these young people, 30% have experienced cyberbullying in the last 12 months. As a result, **13% of all participants in this age group reported having been bullied between June 2023 and June 2024**. The previous year, this percentage was only 6% among respondents.

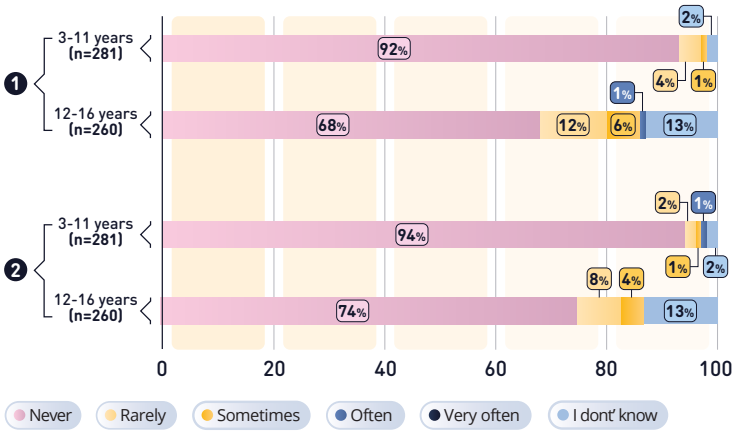


Figure 20. PARENTS - How many times has...

1 **Your child been a victim of cyberbullying?**

2 **Your child been a perpetrator of cyberbullying?**

From the parents' point of view, **around one in five young people (19%) aged 12 to 16 had been a victim of cyberbullying at least once in their lives** (see Figure 20). It is possible that this difference is due to the small number of young people surveyed, as last year the assessments of parents and teenagers themselves were relatively similar.

Just over one parent in ten said they did not know whether their child aged 12 to 16 had ever been a victim of bullying.

The 65 parents whose children had been victims of cyberbullying indicated the platforms on which, to their knowledge, this bullying had taken place: *Snapchat*, *WhatsApp, MS Teams, Messenger, Instagram* and *Facebook* for 12- to 16-year-olds (n=50), and *WhatsApp*, *YouTube*, *Snapchat* and *MS Teams* for 3- to 11-year-olds (n=15).

According to the recent "HBSC" study carried out in 2022, when it comes to cyberbullying, 13.1% of participants aged 11 to 18 said they had been victims of this phenomenon in recent months.

(Catunda et al., 2024)

4.2.2 Pornography

'Pornography' in the online context refers to content without artistic merit that describes or shows sexual acts or naked people in a way that is intended to arouse sexually (Stoilova et al., 2023).

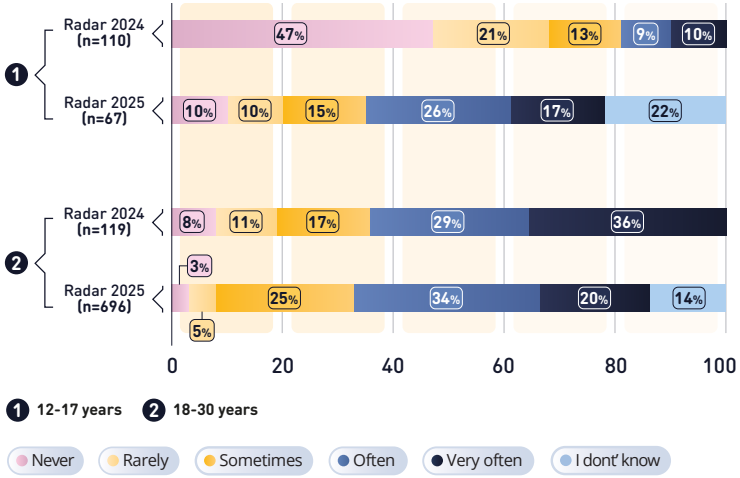


Figure 21. YOUTH - In your opinion, how often do young people your age use platforms that offer pornography?

The responses concerning the frequency of use of pornographic platforms by peers reveal a clear trend in favour of the widely shared opinion that this use occurs at least sometimes (58% of 12- to 17-year- olds and 79% of 18- to 30-year-olds). As these platforms are intended to offer their content only to people aged 18 and over, young people's answers were divided into two categories: those from individuals under 18 and those from individuals aged 18 and over.

Among 12- to 17-years-olds, there is a significant increase in the estimated frequency of use compared to the previous year. However, the number of respondents in this age group remains relatively limited, which may affect the representativeness of the data. Additionally, this year's question (use of pornographic platforms) focuses on a different aspect than last year's (frequency of exposure to pornography), making direct comparisons challenging.

Parents were also questioned on this subject. On the whole, their responses were very similar to those of the previous year regarding the frequency of their children's exposure to pornography. Just under a third (31%) of parents of children aged 12 to 16 believe or are convinced that their child has already seen pornographic content online.

In contrast, among parents of children aged 3 to 11, only 4% believe that their children have been exposed to such content, whereas 89% believe that they have not. Of the latter, 18% answered 'No, I don't think so' and 71% said 'No, I know for sure that this hasn't happened to date'. The remaining 7% did not know.

Although these resultas are preliminary, they highlight the need to educate children and teenagers on how to contextualise pornography correctly and develop a healthy relationship with such content. This means, in particular, **reinforcing their media skills when it comes to pornography.**

BEE SECURE (2023b) provides a publication on the subject of pornography: https://www.bee-secure.lu/fr/publication/pornographie/

4.2.3 Sexting

For the purposes of this analysis, sexting is defined as '*the sharing of sexually explicit images, videos, or messages through electronic means*' (Madigan et al., 2018).

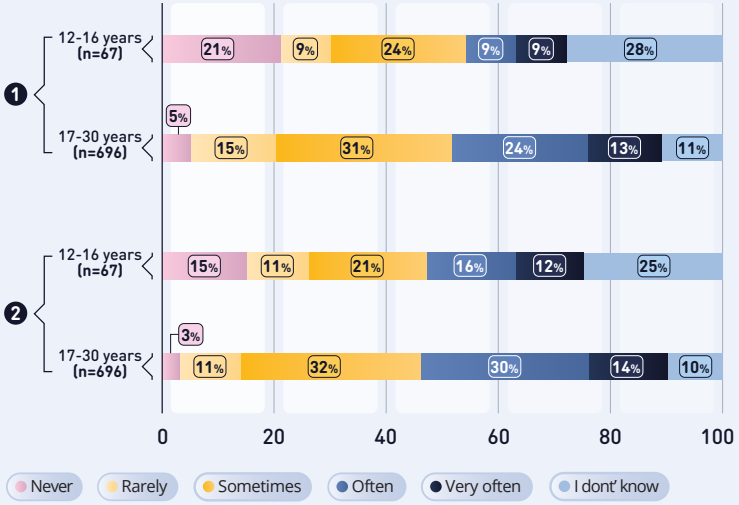


Figure 22. YOUTH - In your opinion, how often do **young people your age**...

1. **Send intimate photos or videos from another person?**
2. **Receive intimate photos or videos of themselves to another person?**

Almost 21% of young people aged 12 to 16 say that their peers 'never' send intimate photos or videos of themselves to others. The previous year, the figure was 43%. Twenty-eight per cent of respondents said they did not know. This response option was not available last year and may influence the results.

In addition, 42% of young people aged 12 to 16 say that their peers at least 'sometimes' send intimate images of themselves, compared with 32% the previous year. Among 17- to 30-year-olds, sending intimate images or photos is a relatively common practice.

When it comes to receiving intimate images, 49% of 12- to 16-year-olds say that this happens at least 'sometimes'. This figure rises to 76% among 17- to 30-year-olds. **Sexting** therefore **appears to be a common practice in Luxembourg**.

4.2.4 Online Trading

Financial spending and investment are popular topics among influencers, who also target a young audience.[8]

The opportunities and incentives for investing money and generating income digitally are widely promoted on the Internet, also targeting young people. In this context, young people were questioned about certain specific methods in order to gain a better understanding of this topical issue and the true extent of certain practices in Luxembourg.

The results indicate that investing money in online trading, peer-to-peer betting, the lottery or gambling does not appear to be a widespread practice. Indeed, with the exception of the 68% of 18-30-year-olds who say they never play the lottery, the majority of respondents (between 75% and 88%) never take part in any of these activities. However, **23% of 18-30-year-olds and 12% of 12-17-year-olds have invested money in online trading at least once.**

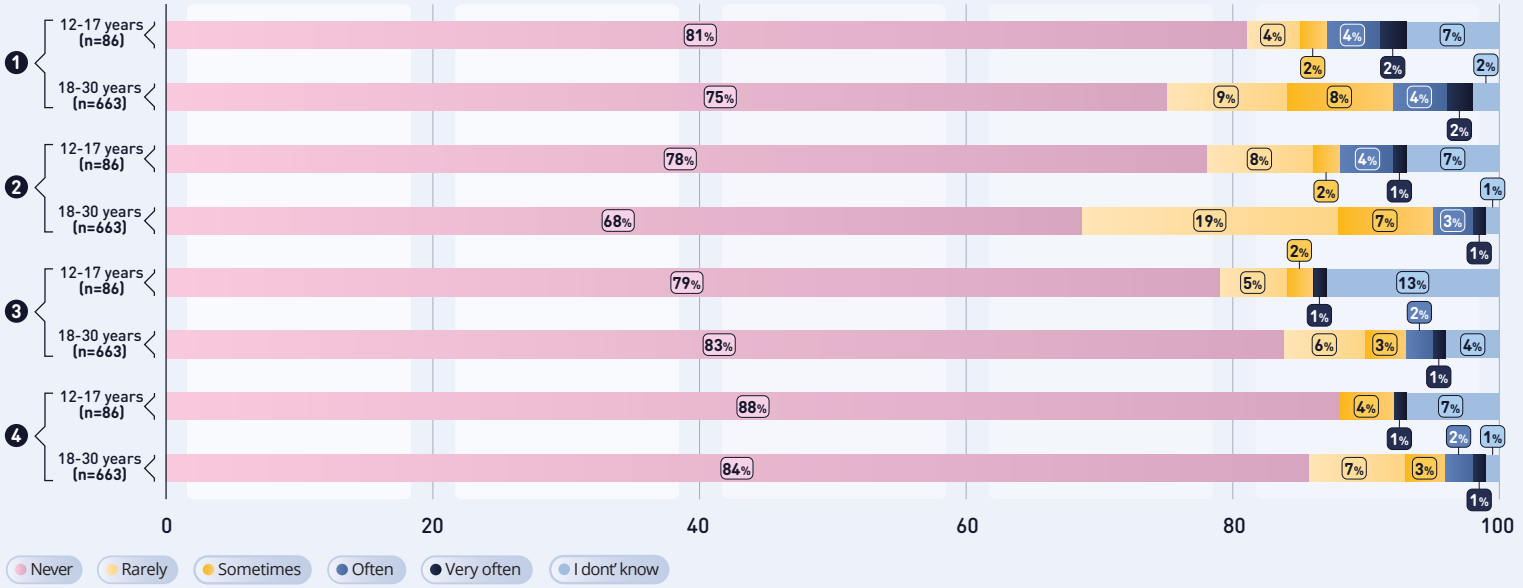


Figure 23. YOUTH - How often do you...?

1 invest money in online platforms/online trading apps (e.g. in crypto/financial market? **2 spend money playing the lottery?**
3 spend money on online betting (e.g. sports betting)? **4 spend money on online gambling (e.g. poker, roulette, casino)?**

[8] BEE SECURE (2023a) has published an article on this subject: https://www.bee-secure.lu/fr/publication/la-tentation-de-largent-facile-le-marketing-multiniveau-co/

4.3 Risk management skills

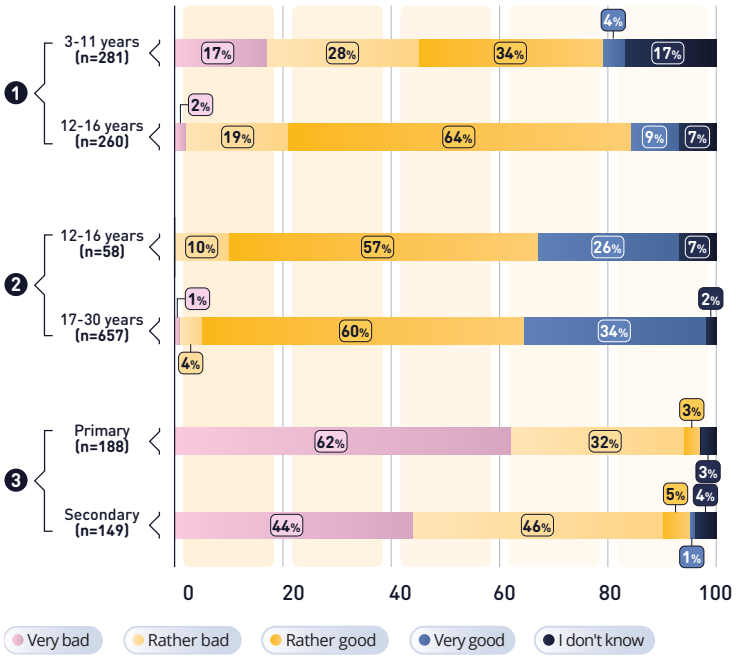


Figure 24. The ability of **children and youth** to manage the dangers and risks associated with Internet use

A total of 73% of parents of children aged 12 to 16 believe that their children have 'fairly good' (64%) to 'very good' (9%) skills for dealing with online dangers and risks. Last year, this proportion was still around 90%.

There is a striking difference between the assessment of teachers and that of young people and parents when it comes to young people's ability to manage the dangers and risks associated with using the Internet. Teachers' assessments are much more negative, and even negative overall, whereas parents' and young people's assessments of their ability are mostly positive. It would certainly be interesting to explore in the future the reasons behind this gap and the factors that influence these perceptions.

And how are their own abilities assessed?

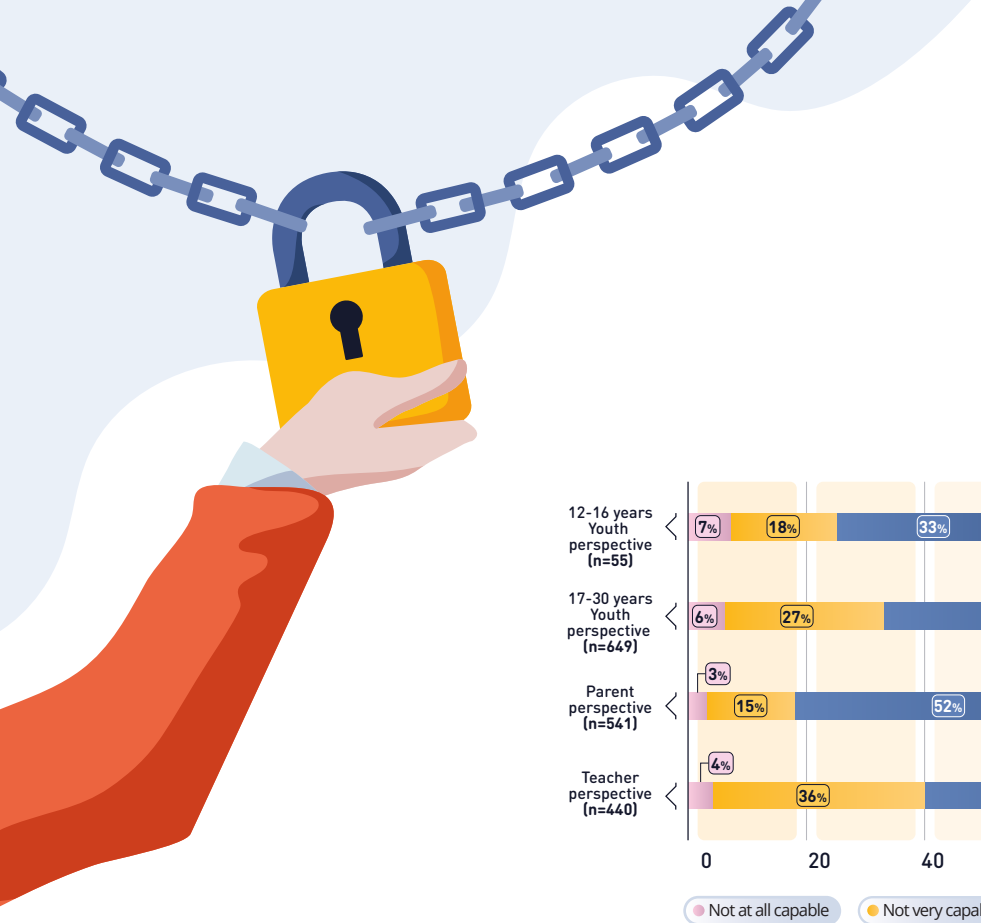
Only around 10% of parents rate their own ability in this area as 'very poor' or 'fairly poor'. Around 20% of primary school teachers and 14% of secondary school teachers consider their own abilities to be 'very poor' or 'fairly poor'.

In order to better differentiate the evaluation of certain skill areas, five additional questions have been formulated for this BEE SECURE Radar.[9]

As part of the "miniKim" study (2023), participating parents were asked to self-assess their knowledge of different media activities. Using a smartphone is the skill they are most proficient in, with almost 94% of respondents declaring themselves to be very proficient or proficient. When it comes to installing and connecting technical devices such as games consoles or smart speakers, 69% of participants claim to have this ability. In addition, two-thirds of educational staff (67%) know how to publish content on social media. Around half of them (51%) are familiar with legal issues such as image rights and data protection, while around 48% are able to solve technical problems on a computer. Finally, 42% of the parents surveyed believe they are able to create their own video.

(Kieninger et al., 2024)

[9] Participants were asked to what extent they felt able to perform the following tasks: change settings (application/ programmes/smartphone); assess the credibility of content (e.g. judge whether information is correct); protect personal data and privacy; assess who to trust online (people, profiles, influencers, etc.); set your own limits when using the Internet.



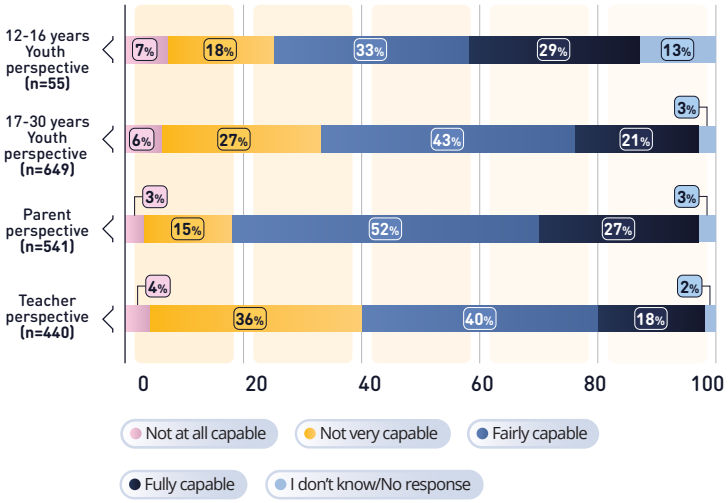


Figure 25. How capable are you at setting your own limits when using the Internet?

More than half of the groups surveyed claim to be '(fairly) capable' of setting their own limits when using the Internet. Parents are the most confident in this respect, with 79% giving a positive assessment of their ability.

When asked how they perceive their children's ability to set their own limits on the Internet, 27% of parents feel that their children are 'not at all capable' (37% for 3- to 11-year-olds and 17% for 12- to 16-year-olds). On the other hand, 36% think their children are 'fairly capable'.

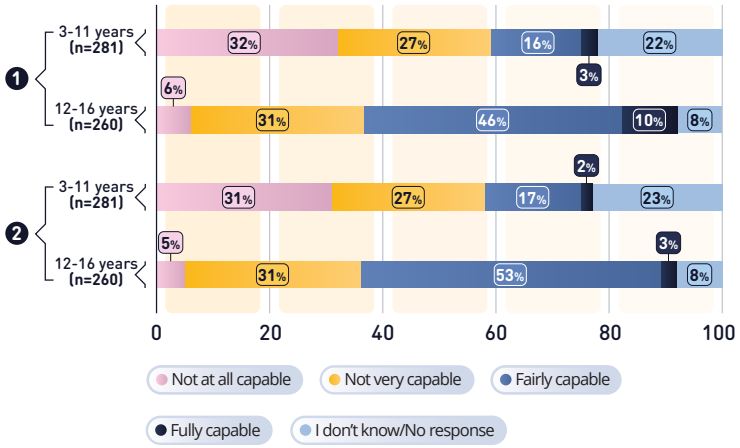


Figure 26. PARENTS - How well do you think your child is able to perform the following tasks?

1 Protecting personal data and privacy

2 Assessing who to trust online

Around half (56%) of parents of children aged 12 to 16 say that their child is 'fairly capable' of protecting their personal data and privacy, compared with 37% who feel that their child is not capable. Parents' assessments are fairly similar when it comes to their children's ability to judge the trustworthiness of people online.

Interestingly, **73% of parents of children aged 12 to 16 rate their children's overall ability to** manage online dangers and risks **as 'fairly good' to 'good'**. However, **this assessment is less positive when it comes to specific skills**: assessing the credibility of content (50%), protecting personal data and privacy (56%), assessing who to trust online (56%) or setting their own limits when using the Internet (37%). Conversely, the ability to 'change settings (applications/programmes/on smartphone/etc.)' is rated positively by 79% of parents. This nuanced analysis of parental perceptions highlights the importance of actively reinforcing children's online safety skills.

The main scepticism linked to the self-assessment of digital skills among the 14 to 24 age group in Germany (2022) concerns their ability to ensure adequate protection of their personal data on the Internet. In fact, half of young people in this age group (52%) say they are very or fairly confident in this respect, while the other half (48%) express uncertainty when it comes to protecting their data online.

(Vodafone Stiftung Deutschland, 2023)

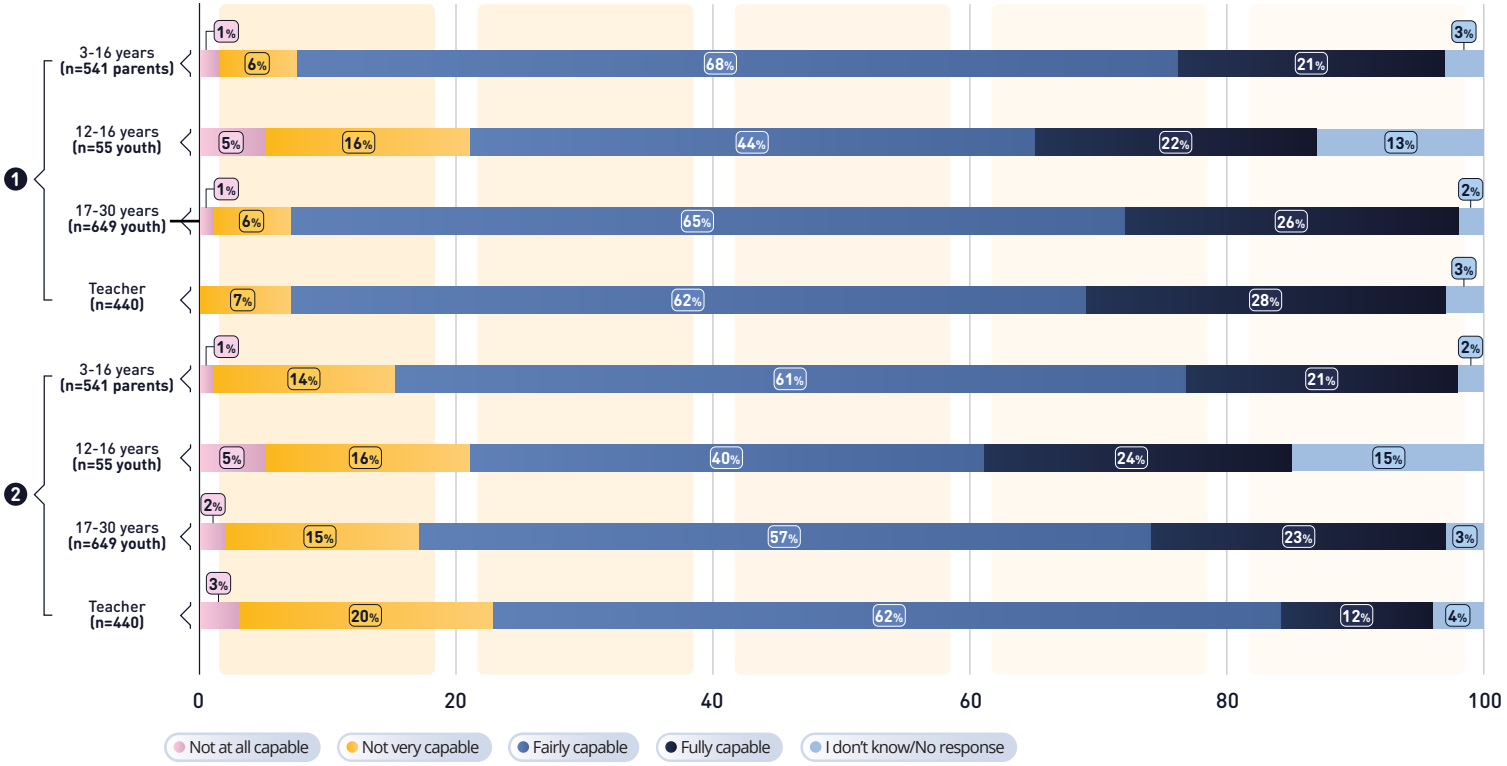


Figure 27. It is now time to assess your skills in using digital media. To what extent **are you able** to perform the following tasks?

1 **Assess the credibility of the content** **2** **Protecting personal data and privacy**

All respondents were also asked about these five skills in relation to their personal situation. The ability to protect one's own data or privacy is a skill that 15% to 23% of participants (all categories combined) feel they have (rather) little mastery of.

Assessing the credibility of information is a particularly difficult skill for young people aged 12 to 16: 21% of them say they don't really feel able to do it. In contrast, this percentage is only 7% for the other three groups of respondents.

4.4 Parental rules and measures

To better understand how parents manage their children's screen time, they were asked about the rules they've set for Internet use and the methods they use to monitor their children's online activity at home.

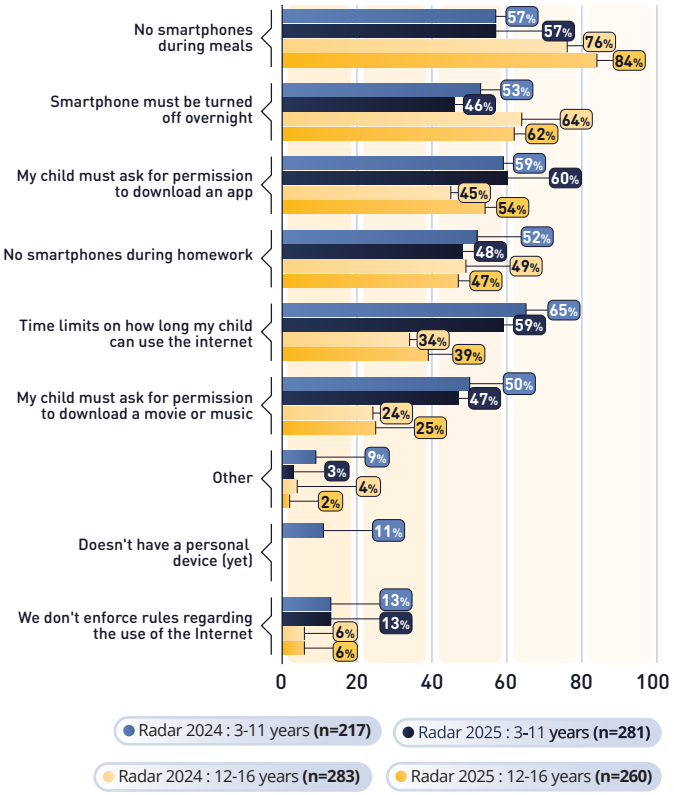


Figure 28. PARENTS - Which of the following rules apply to your home regarding your child's use of the Internet? Please indicate all that apply.

There was no significant change from the previous year. Only the rules not to use a smartphone during meals and to ask permission before downloading an application seem to be applied more often by parents of children aged 12 to 16 than in the previous year.

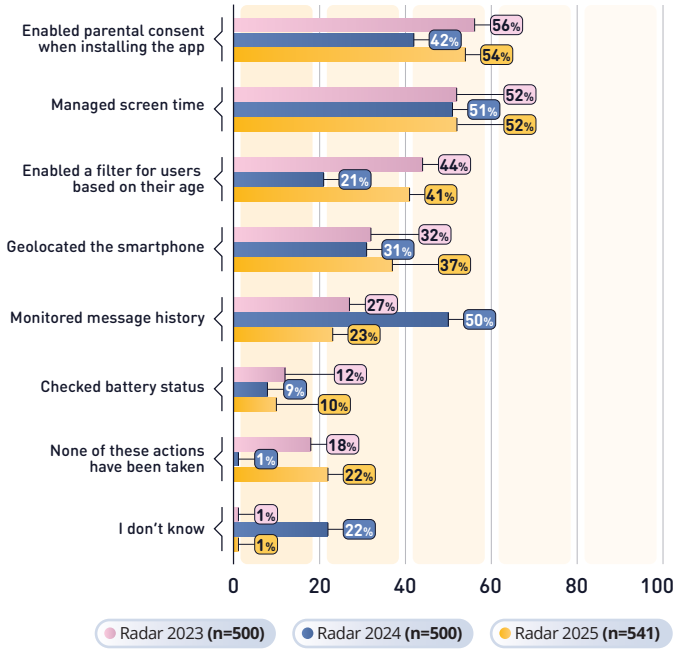


Figure 29. PARENTS - What actions have you already taken to monitor your child's activity?

When it comes to the practical steps taken by parents to monitor their children's online activity, there has been no significant change from previous years. Around half of parents continue to use parental control functions and monitor screen time.

In the *DigiRallye* (2024, 8- to 12-year-olds), 79% of children said there were rules at home about using smartphones and the internet. In 18% of cases, there were no rules and the remaining 3% did not know or were not concerned (because, for example, they did not own a smartphone).

There is still a large knowledge gap among key educational leaders regarding youth protection and associated filtering programmes. This is reflected in the approval rates of respondents to different statements on the subject of technical protection for young people: almost half of the educational staff surveyed (48%) are not aware of filtering programmes, 35% do not know where to find out more about them, and 66% believe that no programme is necessary as children should not use the Internet alone. A third (29%) would trust a filtering programme and let their children surf the Internet unsupervised.

(Kieninger et al., 2024)

4.5 Smartphones at school

In education, the question of the impact of smartphones on concentration and distractions in the classroom has become crucial. According to the "PISA 2022" study, the smartphone plays an important role in the school context (OECD, 2023). To explore this issue, teachers and students were questioned on the subject. First, an open question was used to identify the main factors of distraction in the classroom. Then, a specific question was asked to assess the frequency with which the smartphone contributes to these distractions (see Figure 30).

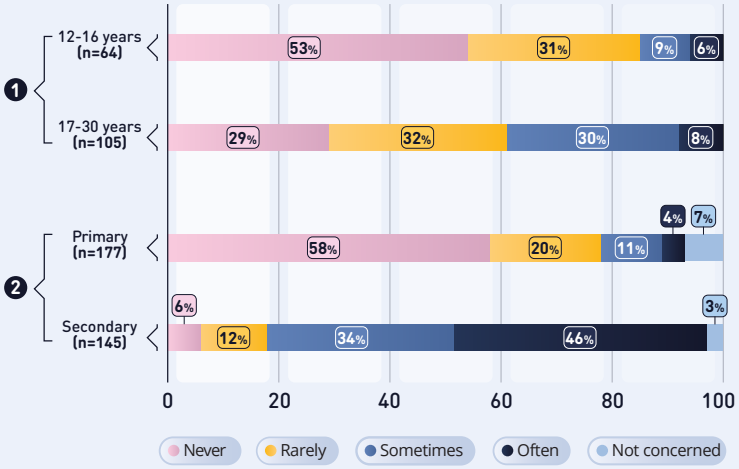


Figure 30. How often are distractions in the classroom due to the smartphone?

❶ Youth perspective ❷ Teacher perspective

Figure 30 shows a marked difference between primary and secondary teachers regarding the impact of the smartphone on classroom distraction. Indeed, **46% of secondary school teachers said that the smartphone was often a source of distraction**, while only 6% felt that it never was. Conversely, more than half of primary school teachers (58%) say that the smartphone is never a distraction and only 4% say that it often causes distractions.

Moreover, young people—both those aged 12 to 16 and those aged 17 to 30—perceive smartphone-related distraction to be far less important than secondary school teachers think.

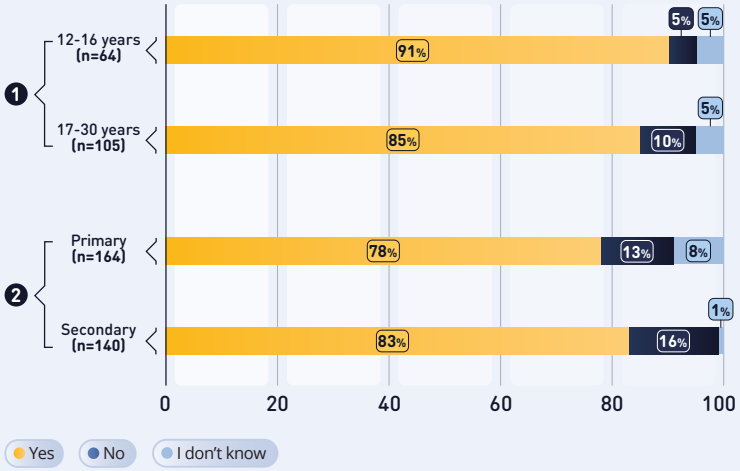


Figure 31. Are there any rules in your school when it comes to smartphone use?

❶ Youth perspective ❷ Teacher perspective

As part of the *MENJE* action plan "sécher.digital" (see p. 4), specific measures regarding smartphone use in schools will come into effect in 2025.

(https://men.public.lu/fr/actualites/communiques-conference-presse/2024/09/12-rentree-2024-2025.html)

As shown by the BEE SECURE Radar results, some of these measures – such as the use of "phone boxes" or "phone hotels" during lessons – are already partially implemented in certain schools.

TEACHERS: Main sources of distraction for pupils in lessons (*Open question, TOP 3*)

Primary education (n=122) :
1. **Decreased ability to concentrate for a long time / Other thoughts**
2. **Other students**
3. **Noise (outside, in the room, etc.)**

Secondary education (n=131) :
1. **Smartphone**
2. **Social media (*TikTok, Snapchat, Instagram...*)**
3. **Tablet/iPad**

When it comes to rules on the use of smartphones at school, the responses show less divergence. Some 80-90% of respondents said that there were rules on smartphone use at their school.

As figure 32 shows, the rule most frequently mentioned by teachers is the requirement to store smartphones during lessons.

	Primary education (n=118 enseignants)	Secondary education (n=110 enseignants)
1	Pupils must deposit smartphones in a designated location (e.g. smartphone lockers, smartphone pockets, basket, bag...) **(28,8 %)** & Smartphone must be off / in airplane mode **(28,8 %)**	Pupils must deposit smartphones in a designated location (e.g. smartphone lockers, smartphone pockets, basket, bag...) **(66,4 %)**
2		Smartphone may not be used during school hours (only during breaks) **(10,9 %)**
3	Pupils are forbidden to use smartphone on school grounds **(20,3 %)**	Smartphone must be off / in airplane mode **(9,1 %)**
4	Pupils must store smartphones themselves (e.g. in backpack, in school bag...) **(15,3 %)**	Pupils must store smartphones themselves (e.g. in backpack, in school bag...) **(8,2 %)**
5	Pupils are forbidden to bring smartphone to school **(14,4 %)**	Confiscation of smartphone - Parents must pick them up from teacher/municipality/principal/management **(5,5 %)**

Figure 32. TEACHERS – Which rules have been applied? Which measures have been taken?

MENJE **is actively committed to its "Screen-Life Balance" campaign, which is part of its "sécher.digital" action plan, launched in the 2024/2025 school year. The goal is to ensure that all children, young people, and their surroundings – whether at home or at school – adopt a healthy, balanced, and safe approach to Smartphone use and the digital world.**

As part of this Initiative, specific measures will come into effect in schools in 2025. As the results of this survey show, some of these measures – such as the use of "phone boxes" or "phone hotels" during lessons – are already widely implemented in schools.

5 ARTIFICIAL INTELLIGENCE (AI)

In this chapter, attitudes towards artificial intelligence (AI) will be examined, looking at whether it is perceived primarily as an opportunity or a risk. This question is crucial in the current context, where AI is playing an increasingly important role in various aspects of our daily and professional lives.[10] People's perceptions of this technology can influence its adoption, development and integration into society.

The subject of AI came up in BEE SECURE Radar surveys for the first time this year.[11]

Firstly, young people as well as parents and teachers were asked about their level of familiarity with the subject of AI.

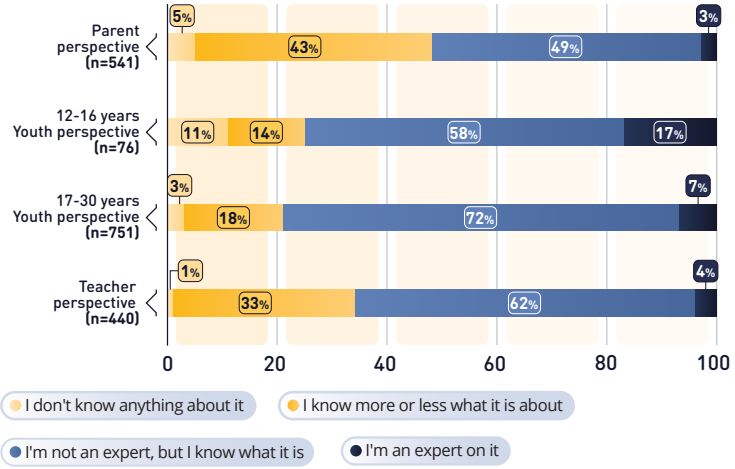


Figure 33. How familiar are you with the topic of artificial intelligence (AI)? Please select the answer that best reflects your position.

A large majority of the various target groups say that they are not experts in the field of artificial intelligence, but that they are nevertheless able to explain what it is. **Nearly one in five young people aged 12 to 16 even consider themselves to be an expert in the field**. However, 11% of this age group admit that they don't know what it is at all.

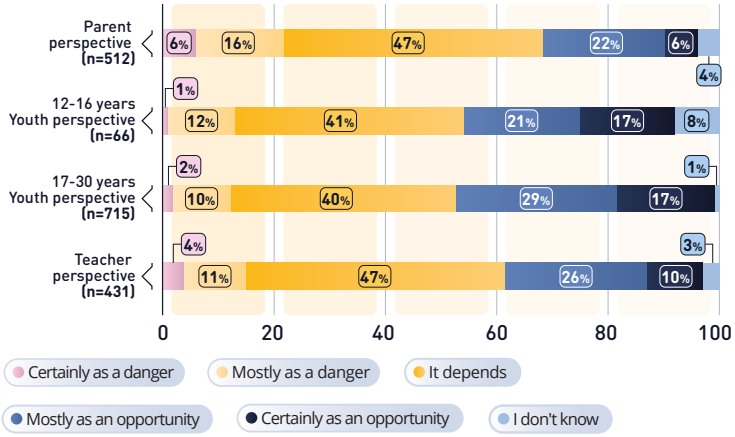


Figure 34. How do you view AI for **you personally**?

Figure 34 shows that, for themselves, **more people see AI as an opportunity than as a danger**. This is true for all the groups surveyed.

Among 12- to 16-year-olds, around three times as many see AI as an opportunity (38%) rather than as a danger (13%). Among 17- to 30-year-olds, 46% see it as an opportunity, compared with 12% who see it as a danger. Among teachers, 36% see AI as an opportunity and 15% as a danger. Finally, between 40% and 47% of participants chose the answer 'it depends'.

At 73%, almost three quarters of 14- to 29- year-olds in Germany (2023) say they have already heard of AI chatbots such as ChatGPT. Among this same age group, 33% say they have already used these chatbots.

(Beisch & Koch, 2023)

[10] More information on the subject of AI can be found in the article 'Artificial intelligence - Opportunities and risks for children and young people'. https://www.bee-secure.lu/fr/publication/intelligence-artificielle/

[11] The questions relating to artificial intelligence (Chapter 5 of this publication) are largely based on the '*Kompass: Künstliche Intelligenz und Kompetenz 2023. Einstellungen, Handeln und Kompetenzentwicklung im Kontext von KI*' (Cousseran et al., 2023) (Cousseran et al., 2023) (https://zenodo.org/records/10058588).

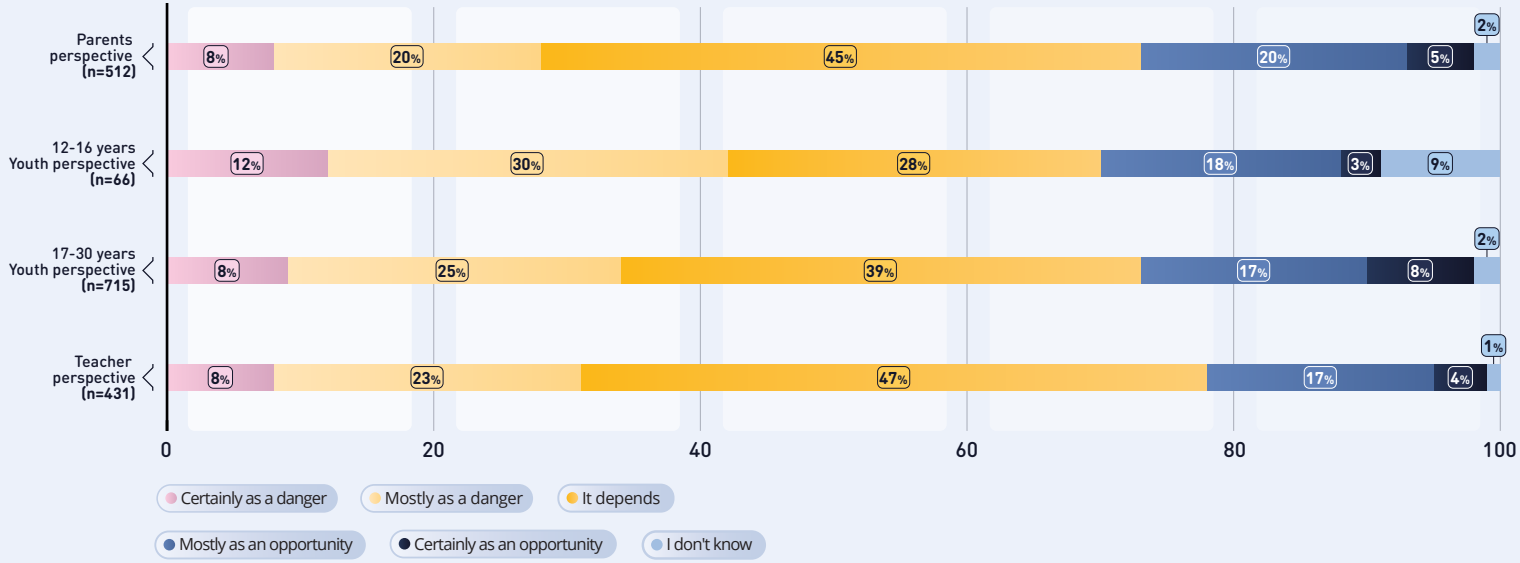


Figure 35. How do you view AI for **society as a whole**?

Figure 35 shows that for all the groups surveyed, the proportion of those who perceive AI as a danger exceeds that of those who see it as an opportunity. In general, respondents tend to assess AI as ambivalent for society. Comparing the categorical responses ('opportunity' and 'danger'), it appears that the percentage of people categorising AI as a threat is higher for all the groups surveyed. Between a third and just under half of participants said that 'it depends'.

Figures 34 and 35 show a clear trend in the evaluation of AI, comparing personal perception with that of society. In all the groups surveyed, individuals see AI as an opportunity for themselves more often than as a danger, in contrast to their view of its impact on society as a whole. **Around half of young people and just under half of teachers see AI as an opportunity for themselves, whereas they see the impact on society as more negative**. However, among parents, the proportion who see AI as an opportunity is almost identical in both cases (personal and societal).

These results highlight the importance of a nuanced discussion of the opportunities and dangers of AI. It is essential to distinguish between the personal and societal levels. In addition, it is crucial to take multiple perspectives into account, such as those of young people, parents and teachers.

The results are similar to those of Cousseran and colleagues (2023), who carried out evaluations of AI as part of a representative survey in Germany. The findings of this study, along with those of the BEE SECURE Radar, highlight the ambivalence of attitudes towards AI: it is perceived as both an opportunity and a risk.

6 NEWS AND MEDIA EDUCATION—AN ANALYSIS BY THE *ZENTRUM FIR POLITESCH BILDUNG* FOUNDATION (ZPB)

In some of the surveys, we posed various questions to parents and young people in order to better understand their interest in news media, their use of the various information channels, their perception of news credibility, and their methods of verifying sources.

The ZpB Foundation, which has been involved in media education for many years, has analysed these results and commented on them in Chapter 6 below, providing valuable insight into behaviour and attitudes towards information in our digital world. The focus was not just on young people, but on adults as well.

It is important to specify that the data is not representative of the Luxembourg population; nevertheless, it aims to provide an overview of the subject of media literacy.

6.1 Young people's interest in Luxembourg/ world news

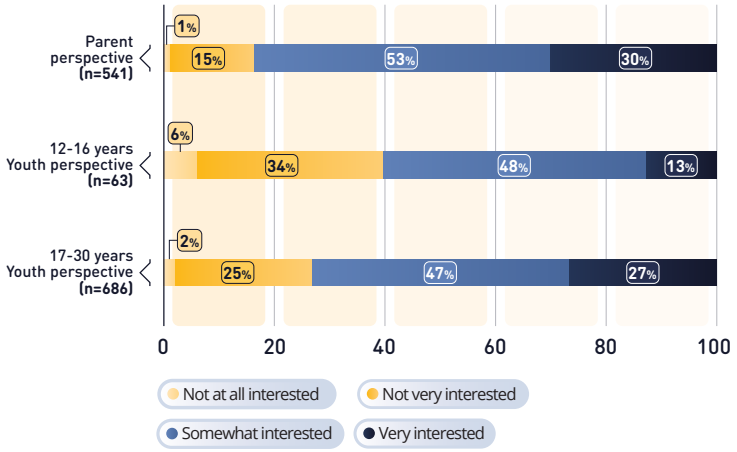


Figure 36. To what extent are you generally interested in Luxembourg/ world news?

A large majority of the parents questioned expressed an interest in Luxembourg and world news. In fact, 30% said they were very interested, while 53% expressed at least some interest. A similar survey of young people produced similar results: 27% of 17- to 30-year-olds said they were very interested, and 47% expressed a moderate level of interest. Among 12- to 16-year-olds, 13% said they were also interested, and almost half of them were at least moderately interested.

Regarding the media landscape in Germany in general, 43% of adult internet users in Germany in 2023 believe that most news can generally be trusted (2022: 50%).

(Behre et al., 2023)

6.2 Use of information channels

In addition to interest in news, questions were also asked about the daily use of various channels to stay up to date on current affairs.[12]

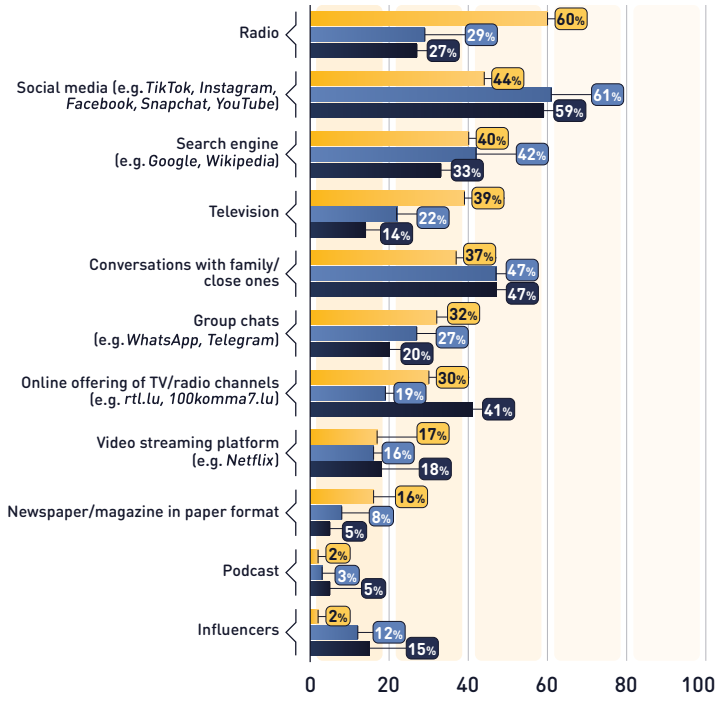


Figure 37. Daily use of information channels to stay informed about Luxembourg and world news.

However, there are notable differences in the choice of information sources. Sixty per cent of parents say they listen to the radio every day for news, while television, social media, search engines and conversations with family and friends each account for around 40%. In the 17-30 age group, on the other hand, social media predominate at around 60%, followed by conversations with family and friends at 47%. Online TV and radio channels and search engines follow at 41% and 33% respectively.

It seems that the Internet and its many offerings are the main source of information for young people. Interestingly, podcasts play a marginal role for both parents and young people. Among parents, 76% 'never' get their information from influencers, while 20% 'rarely' do. However, a third of young people consult them 'every day' or 'every week'. What's more, over 50% of parents get their information regularly ('every day', 32%) or sometimes ('every week', 19%) from discussion groups, whereas this figure is much lower among young people.

[12] This question is based on the *JIMplus* 2022 study (https://www.lfk.de/fileadmin/PDFs/Publikationen/Studien/JIMplus-2022/JIMplus-2022.pdf).

6.3 Digital media skills

The answers to the questions on one's own ability to assess the credibility of content and one's own data protection skills are particularly revealing.

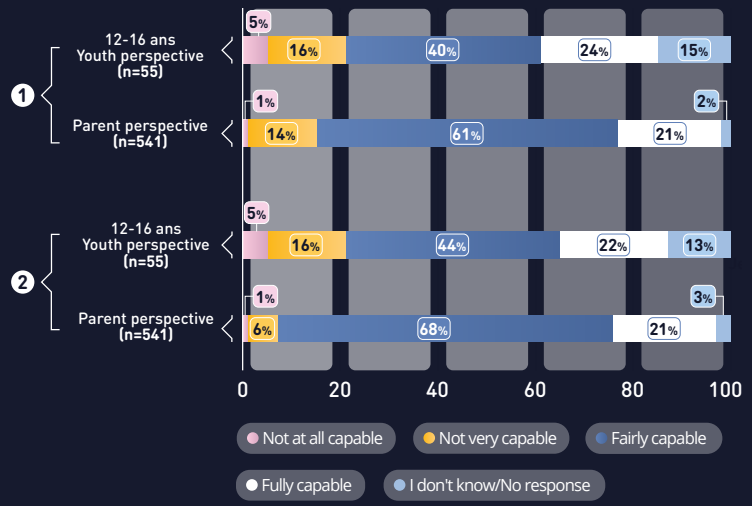


Figure 38. Now it's time to assess your skills in using digital media. How well are **you** able to perform the following tasks?

1. **Protecting personal data and privacy**
2. **Assess the credibility of content (e.g. judge whether a piece of information is correct)**

Figure 38 shows that 21% of parents perceive themselves as very competent and 61% as fairly competent when it comes to data protection. This self-assessment seems credible when it comes to securing their devices, bank accounts and passwords. Nevertheless, these high figures raise questions about parents' awareness of the digital footprints they leave behind. There is often a lack of awareness of the data collected daily by search engines, fitness or running applications, and social media, which are used to establish digital profiles.

Around 90% of parents feel they are able to assess the credibility of online content either very well (21%) or fairly well (68%). However, given the increasing proliferation of misinformation and conspiracy theories, particularly in times of technologically advanced "deepfakes"[13], this assessment seems rather optimistic. Teenagers aged 12 to 16 take a much more cautious approach in this respect. Over a third of them expressed no self-assessment or felt they had little or no ability to assess the credibility of online content.

[13] 'Deepfakes' are false information disseminated in videos showing people who are not in fact the authors of this content. These videos are freely assembled by other internet users (BEE SECURE, 2018).

6.4 Credibility of information

The question of the criteria used to assess the veracity of information reveals a mixed picture. It is encouraging to note that several verification methods seem to be applied in parallel. Cross-checking between different media or sources is as common as using well-established, often local, media. The contribution of professional journalists and the editorial filter they provide are widely appreciated. The reputation of a media outlet, and the perception of its 'neutrality', are key elements in establishing trust.

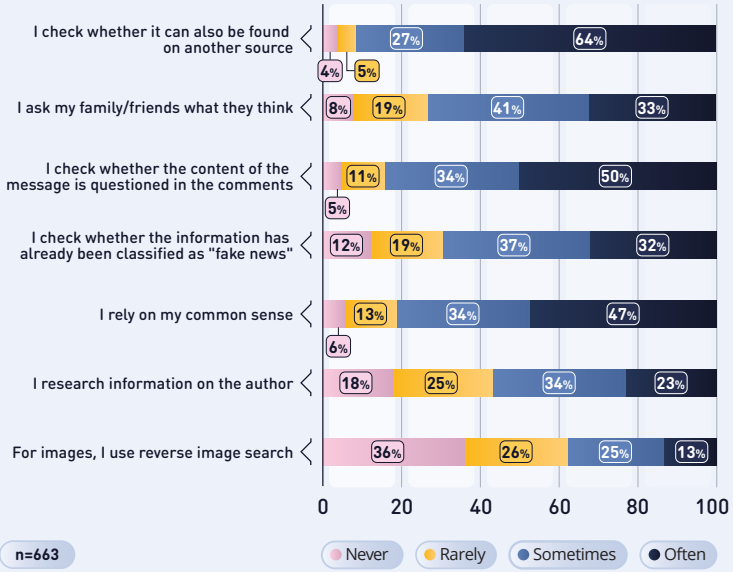


Figure 39. YOUTH (17-30 years old) - If you aren't sure whether a message or information is true, how do you verify it?

90% of 17- to 30-year-olds and 88% of parents say they often or sometimes check whether another source also covers the same information. More than half of respondents, particularly 17- to 30-year-olds, often or sometimes use fact-checking sites. On the other hand, reverse image search[14] is not generally carried out. Nearly three quarters of young people and just over 60% of parents assess the veracity of news by talking to those around them. Many participants also stressed the importance of the presentation of a website and the care taken in disseminating information. However, in a context where such qualities can be rapidly generated by artificial intelligence, this criterion should be approached with caution.

It is worrying to note that the assessment of the veracity of information is often based on other sources. Over 80% of 17- to 30-year-olds and 75% of parents consult user comments under articles to get an idea of the content. However, these comments are often undifferentiated and polarising, even on reputable news sites, which makes this practice problematic.

What's more, 66% of 12- to 16-year-olds, 81% of 17- to 30-year-olds, and even 94% of parents often or sometimes rely on their 'common sense' to distinguish fact from fiction. While relying on your own knowledge and 'common sense', in addition to checking facts and examining sources, is essential, over-reliance on this personal assessment can be risky. This is particularly relevant given the constant technical improvement of deepfake images and videos, and the various influences that shape our perception of 'common sense'.

[14] Reverse image search makes it possible to find the origin of a specific image or other similar images by uploading it to a search engine, for example.

6.5 Conclusions of the ZpB Foundation

According to the ZpB Foundation, what do these results mean for media education and beyond?

- It is important to raise people's awareness of data protection issues, particularly with regard to the information divulged during everyday use of digital platforms. This data can be used to create highly personalised profiles and distribute targeted messages. The more personalised the profiles, the more our identity as individuals is exposed, further jeopardising our fundamental right to privacy.
- Because many people obtain information through social media and discussion groups, it is essential to make them aware of the existence and effects of filter bubbles. This is all the more worrying given that almost half of young people turn to their friends and other people around them for information, which can deepen these filter bubbles even further.
- Given the importance attached to comments, the public must be made more aware of the fact that minority opinions often receive disproportionate attention and resonance on social media, adding to the effects of polarisation.
- In a context where it is becoming easier and easier to generate seemingly reliable, high-quality content with artificial intelligence, the public must be made more aware of the importance of professional journalism and editorial filters. Media education programmes should teach users how to recognize professional journalists who respect ethical standards and promote them as reliable sources.
- Fact-checking initiatives need to be strengthened, and the dissemination of their results needs to be improved.
- Greater emphasis should be placed on imparting knowledge about current societal issues, so that the news can connect with these issues.
- Face-to-face conversations are crucial. It is important to create spaces for discussing current affairs with young people in an educational context.
- People need to realize that all of us, whether young or old, have habits that make us vulnerable to false information.
- Parents' highly optimistic self-assessment of their ability to assess the credibility of online content may be perceived as a lack of awareness of fake news and filter bubbles. It could also reflect an over-reliance on their own 'common sense'. Given that adults play a major role in the spread of fake news, a variety of media education initiatives should also be aimed at them.

7 AWARENESS OF THE *DIGITAL SERVICES ACT (DSA)*

Since the end of 2022, new regulations, in particular the *Digital Services Act* (DSA) and the *Digital Markets Act* (DMA), have been introduced to complete the legal and regulatory framework aimed at protecting children and teenagers online. These regulations, applicable in Luxembourg and throughout the EU, have two main objectives: to create a safer digital space to protect the fundamental rights of users of digital services and to ensure a level playing field to stimulate innovation and competitiveness in the European and global marketplace.[15]

The DSA includes, among other things, targeted measures to protect children and young people on the Internet, including, for example, the systematic identification and reduction of risks to children. In addition, providers of digital platforms are required to set up complaints and reporting systems that are also suitable for young people. The protection of privacy and data, as well as the provision of clear and comprehensible information for children (such as general terms and conditions written in a simple manner), are also essential, as is the prohibition of "manipulative designs" ("dark patterns").[16]

Parents and young people were asked if they had ever heard of the *Digital Services Act*. It is important for parents, teachers, education professionals and especially young people to be aware that the protection of children and young people is enshrined in law. The question of awareness of the DSA provides an initial indication of the level of knowledge on this subject.

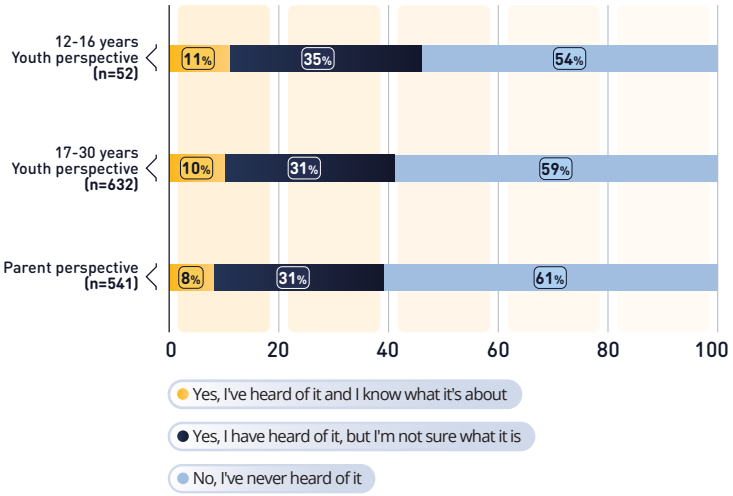


Figure 40. Have you ever heard of the *Digital Services Act*?

The results reveal that, across all the groups surveyed, between 54% and 61% have never heard of the *Digital Services Act*. Around a third (between 31% and 35%) have heard of it, but do not know exactly what it is, while around a tenth (between 8% and 11%) have heard of it and know what it is.

Overview of all measures:

https://op.europa.eu/en/publication-detail/-/publication/f3556a65-88ea-11ee-99ba-01aa75ed71a1

(European Union, 2023)

[15] https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package

[16] BEE SECURE (2022) has published a fact sheet titled 'Dark patterns, a risk?' (https://www.bee-secure.lu/fr/publication/dark-patterns-un-risque/).

One of the topics covered by the DSA is age verification. Platforms are explicitly required to set up systems for verifying the age of users.[17] This means that content that is inappropriate for under-18s can only be accessed once the user's age has been confirmed.

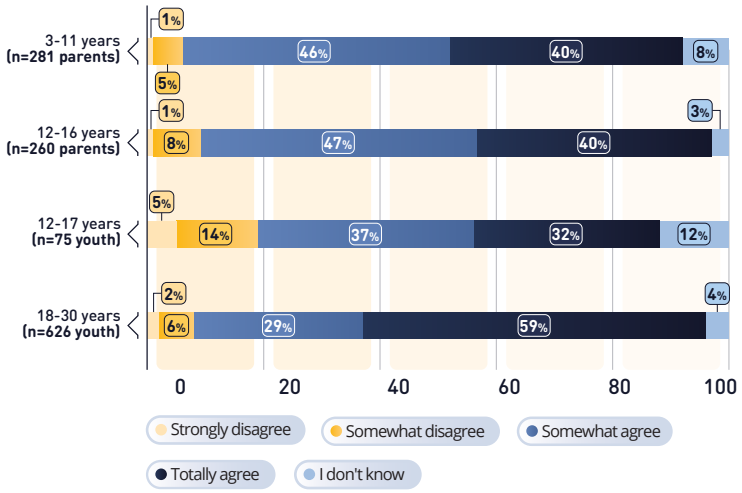


Figure 41. Content that is not suitable for children under the age of 18 should only be accessible with age verification.

Figure 41 shows the different perspectives on age verification on the Internet. Among parents and over-18s, there is a **broad consensus that access to content that is inappropriate for under-18s should be subject to age verification**. Even among teenagers aged 12 to 17, the majority agree (37%) or strongly agree (32%) with this proposal.

During a consultation conducted in October 2024 with nine young people aged 14 to 20, some initial skepticism was noted regarding the topic of the DSA. However, after delving deeper into their research on the subject, the young participants provided very positive feedback. They particularly appreciated that the DSA recognizes young people as important individuals worthy of protection in the digital world. A production by BEE SECURE, presented in the form of a «Late-Night Show,» illustrates these findings. https://www.youtube.com/watch?v=7j5Qk3DSCgw

(BEE SECURE, 2024)

[17] Art. 28septies of the amended law on electronic media (https://legilux.public.lu/eli/etat/leg/loi/1991/07/27/n1/consolide/20240805).

8 EXPERIENCES ONLINE

8.1 Desired changes in the digital world

At the end of the survey, young people were given the opportunity to express the changes they would like to see in the digital world in order to improve it.

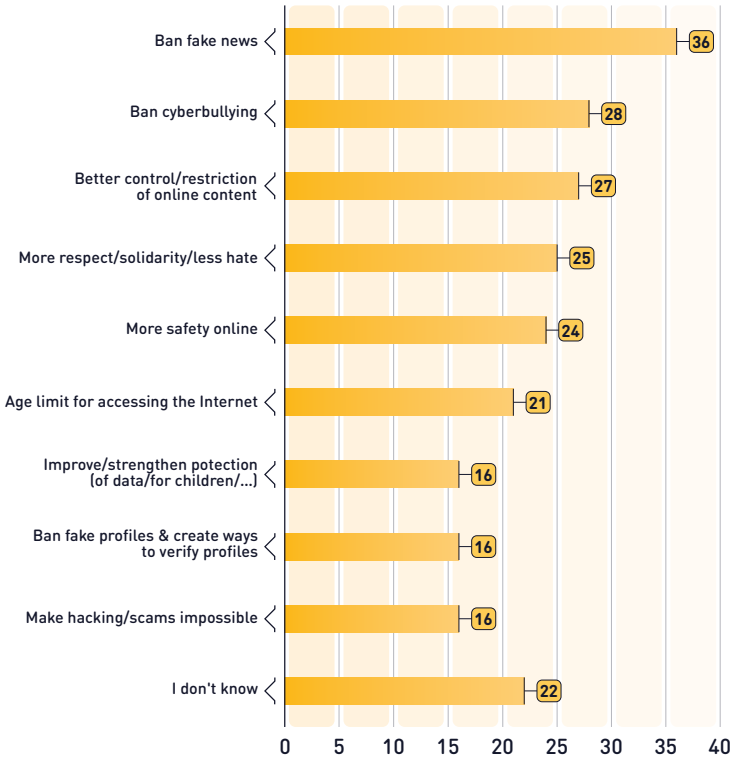


Figure 42. YOUTH (12 - 30 years) - If you could change one thing in the digital world to make it better, what would you change? (*TOP 10*)

Figure 42 shows the young people's free responses, which were analysed in depth and subsequently grouped into relevant categories. **The elimination of disinformation or fake news and cyberbullying** are the two changes most frequently mentioned, corresponding to the first two places in the principal concerns of 12- to 16-year-olds and 17- to 30-year-olds. In addition, greater regulation of content and a call for more respect and solidarity, while reducing online hate, are also frequently expressed in their wishes.

8.2 Negative experiences online

The Internet is an essential space for young people, offering opportunities for learning and socialising, but it can also expose them to negative experiences. The following chart looks at the top ten online problems faced by young people aged 12 to 30, highlighting the need for awareness and appropriate protection.

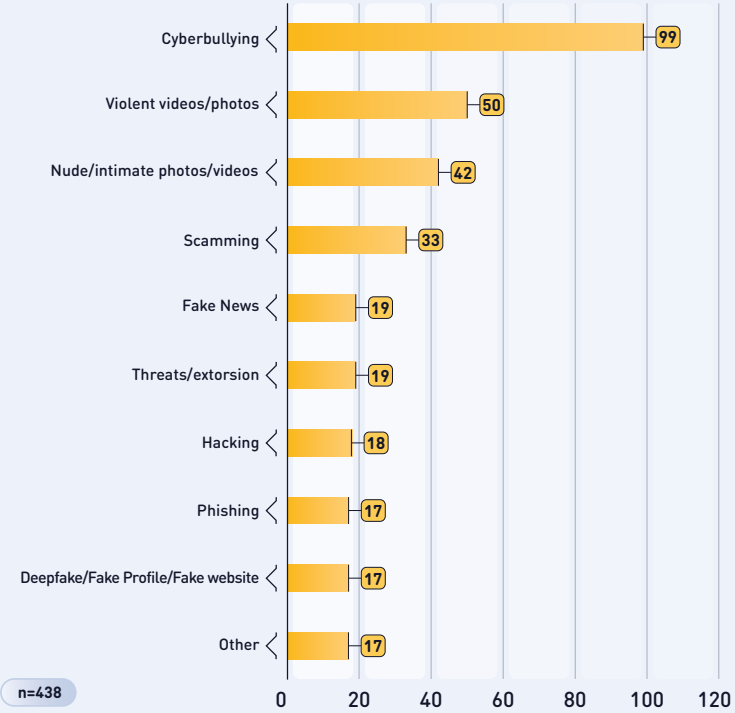


Figure 43. YOUTH (12-30 years) - What is the most negative experience you have had on the Internet? (*TOP 10*)

The three most frequently reported negative online experiences remain unchanged from previous years, with **cyberbullying topping** the list. This continuity highlights the continuing scale of this problem and underlines the importance of initiatives to inform about and combat cyberbullying and to ensure the safety of users on the Internet.

Other negative experiences, apart from the top ten, include situations such as unsolicited contact, the dissemination of hate speech, negative comments, pornography, insults, the sharing of photos or videos of victims, racism and other similar issues.

8.3 Positive experiences online

In addition to their negative experiences, young people were also asked about their positive experiences on the Internet.

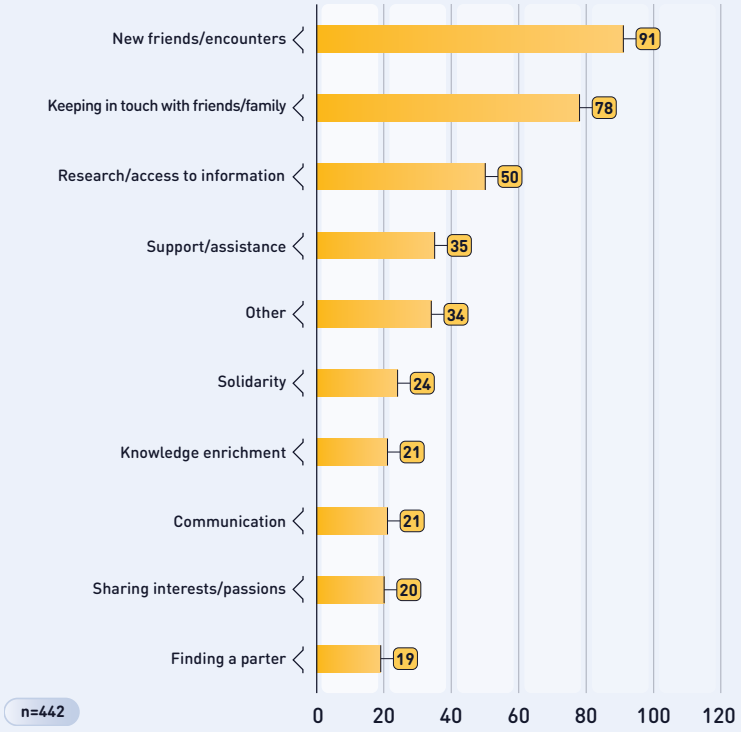


Figure 44. YOUTH (12-30 years) - What is the most positive experience you have had on the Internet? (*TOP 10*)

Meeting new people or making friends, as well as keeping in touch with loved ones, are—as in the previous year—the online experiences most frequently cited as positive. Access to information comes in third. In addition to the topics in the top 10, other experiences reported include compliments/likes, films/videos/streaming, inspiration, online shopping and other related areas. The responses **underscore the benefits and importance of human interaction, which can also take place over the internet**.

II. BEE SECURE Helpline

The BEE SECURE Helpline offers a free, anonymous and confidential telephone helpline, accessible to all citizens, whatever their age. It is run by the KJT, the SNJ's partner in the BEE SECURE initiative. The BEE SECURE Helpline provides information, advice and one-to-one support on online safety and the responsible use of digital media, covering topics such as computer security, cyberbullying, social networking, data protection rights, technical security and much more. The BEE SECURE Helpline can be contacted by telephone or in writing via an online contact form.

In July 2024, awareness of the BEE SECURE Helpline in Luxembourg was 36% (2023: 40%).

The focus of the data published by the BEE SECURE Helpline is as follows:

- **young callers**, i.e. callers under the age of 25 who are calling for their own benefit;
- **adults** calling on behalf of children and young people under 25.

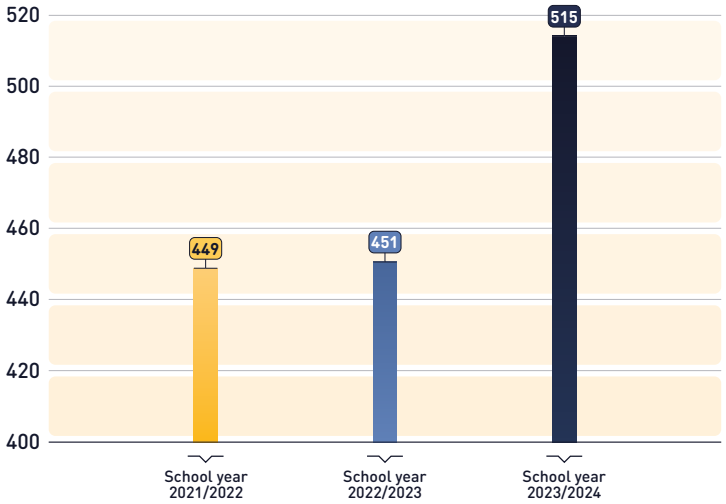


Figure 45. Total BEE SECURE Helpline calls.

In the school year from 1 September 2023 to 31 August 2024, the BEE SECURE Helpline recorded a total of 515 calls. Compared to the 2022/2023 school year, this represents an increase of 64 calls (14.2%). The majority of calls were from adults calling either for themselves or for children or young people. Of the callers, 43 were under the age of 25 and called for personal reasons, a decrease of approximately 41.9% on the previous year.

BEE SECURE HELPLINE CONSULTATION Tel: 8002 1234

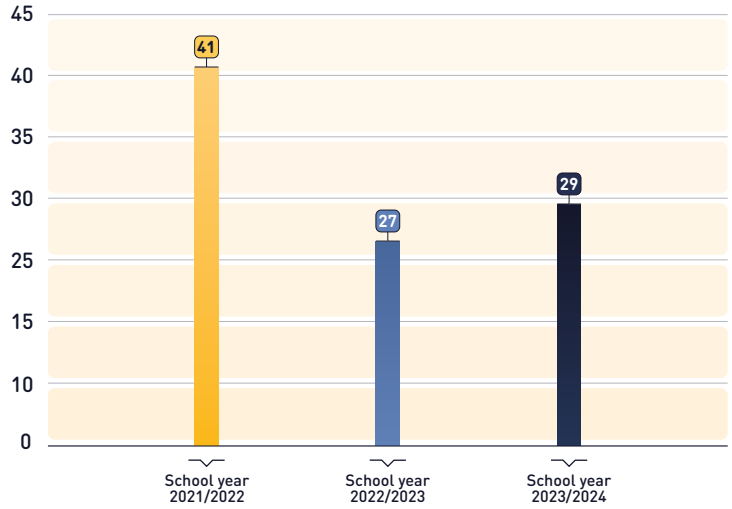


Figure 46. Adults calling on behalf of children/adolescents.

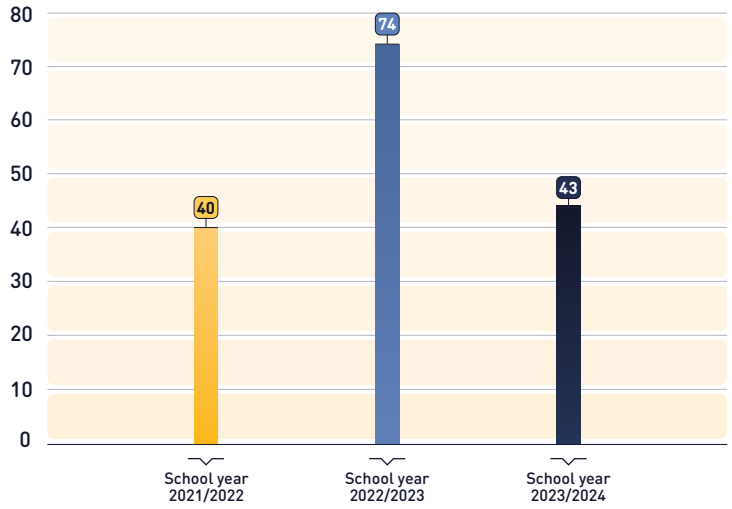


Figure 47. Children/adolescent callers (<25 years).

The number of adult callers on behalf of children and young people up to the age of 25 remained relatively stable, increasing slightly from 27 to 29 calls in 2023/2024. Unlike the previous school year 2022/2023, when over 60% of third-party callers were parents, the school year 2023/2024 showed a balanced distribution among the different types of callers. Thus, 45% of calls came from parents or family members, while 45% were made by professionals. The remaining 10% were calls from peers.

In the case of children and young people under the age of 25, children and teenagers (43 calls) used the BEE SECURE Helpline more often than parents (13 calls).

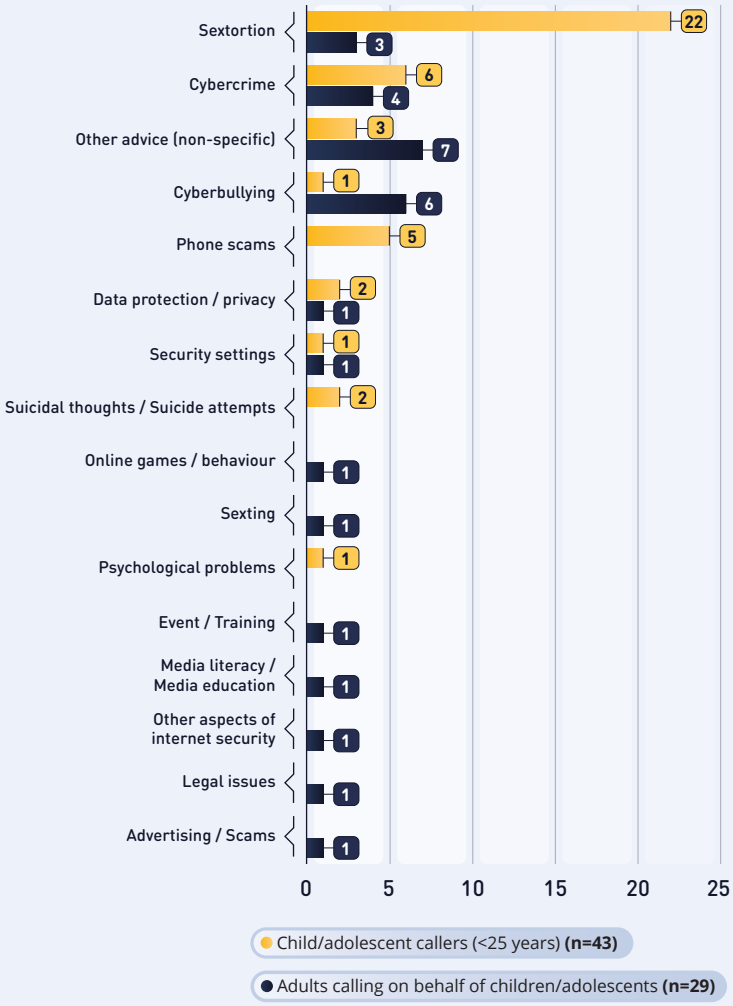


Figure 48. Main topics of calls related to children and young people.

Of the 72 calls received on topics related to children and young people, sextortion was the subject most often mentioned. It was mainly young people (88%) who sought advice on this subject. The upward trend in this topic was observed in other countries as well, although no precise explanation has been given.

Other topics raised by callers included cybercrime (including fraud, hacking and phishing) and cyberbullying. In the previous year, the majority of calls from adults focused on cybercrime and cyberbullying, while those from young people mainly concerned cybercrime and security settings.

The classification of topics is based on the European standard applied by *Insafe*, the European network of awareness centres and helplines. The *Insafe* network regularly publishes updated statistics highlighting trends in requests for advice made to the BEE SECURE Helpline in Luxembourg and more than 40 other European countries.

Other data concerning requests for advice from the BEE SECURE Helpline are also published regularly in the BEE SECURE annual report and in the *KJT* annual report.

III. BEE SECURE Stopline

The BEE SECURE Stopline offers users the opportunity to anonymously and confidentially report potentially illegal content encountered on the Internet via the stopline.bee-secure.lu website. These reports fall into three main categories: depictions of sexual abuse of minors ("Child Sexual Abuse Material / CSAM"), discrimination, racism, revisionism, hate speech and terrorism. After verification, potentially illegal content is forwarded to the relevant national and international authorities.

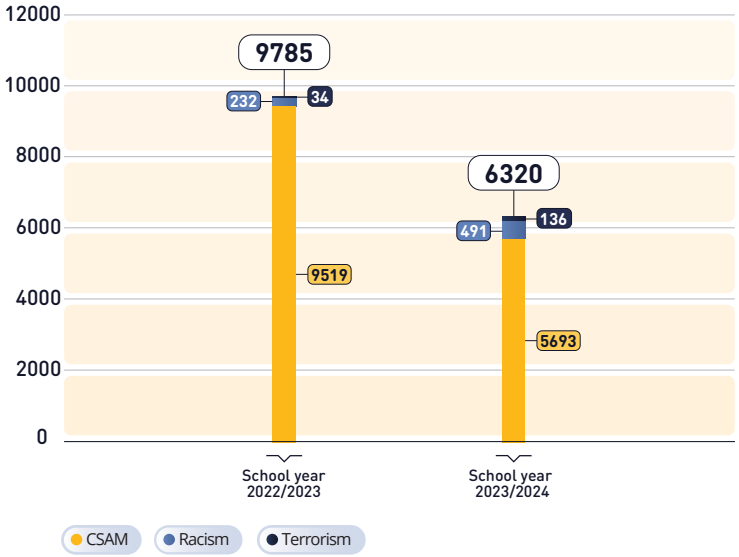


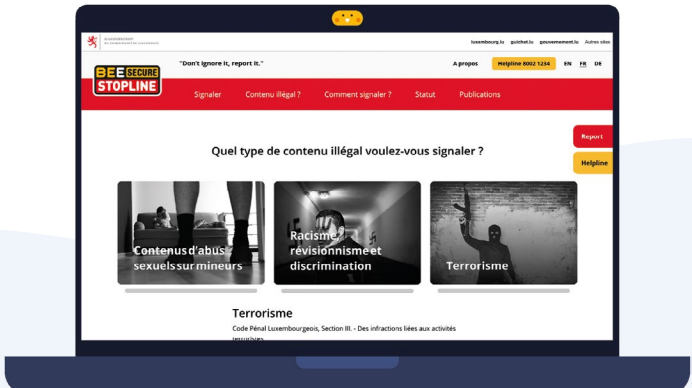
Figure 49. BEE SECURE STOPLINE - Total alerts.

In 2023/2024, a total of 6,320 reports were received by the BEE SECURE Stopline, a decrease on the previous school year. There has been an increase in the areas of racism and terrorism, while there has been a decrease in the area of "CSAM". Generally speaking, figures on "CSAM" are volatile, and trends can vary from month to month.

National awareness of the BEE SECURE Stopline in Luxembourg was 19% in 2024, the same as in the previous year.

CSAM

"CSAM" stands for "Child Sexual Abuse Material". In the school year from 1 September 2023 to 31 August 2024, a total of 5,693 reports were recorded. Of these, 45.2% were submitted via an international database called *ICCAM* (*INHOPE* network: *International Association of Internet Hotlines*), while 54.8% of reports were made via the BEE SECURE Stopline.



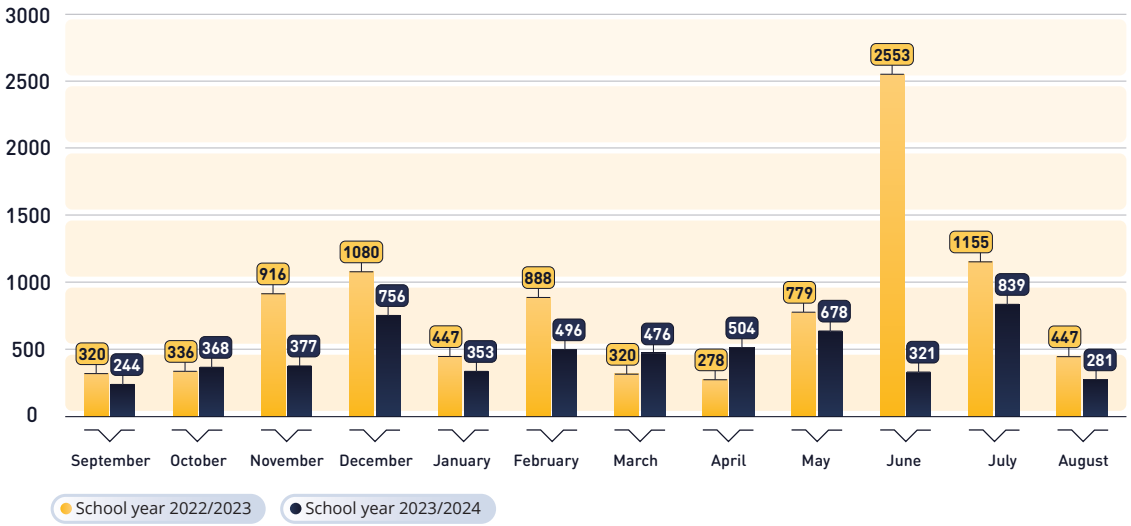


Figure 50. CSAM - Alerts.

Compared with the previous year, which saw a significant increase, the number of "CSAM" reports in 2023/2024 fell by 3,826 cases (40.2%). As part of the rigorous classification and processing of the reports received, the BEE SECURE Stopline experts identified 1,600 of them as potentially illegal, representing around 28.1% of the total. In 222 cases (3.9%), the content reported was deemed dubious but legally acceptable. Ten reports (0.2%) were duplicates of URLs already known.

In 2,590 cases (45.5%), the reports could not be analysed because the content concerned had already been withdrawn by the Internet Service Provider (ISP) for reasons of illegality. For 1,050 (18.4%) other URLs, no content could be located due to their inaccessibility. Lastly, 178 (3.1%) reports were classified as being outside the scope of competence because they did not fall within the area of action of the BEE SECURE Stopline.

Unlike the 2022/2023 period, when the majority of reports were received in June (2,553), the 2023/2024 annual period recorded the majority of reports in July, with a total of 839 reports.

Racism

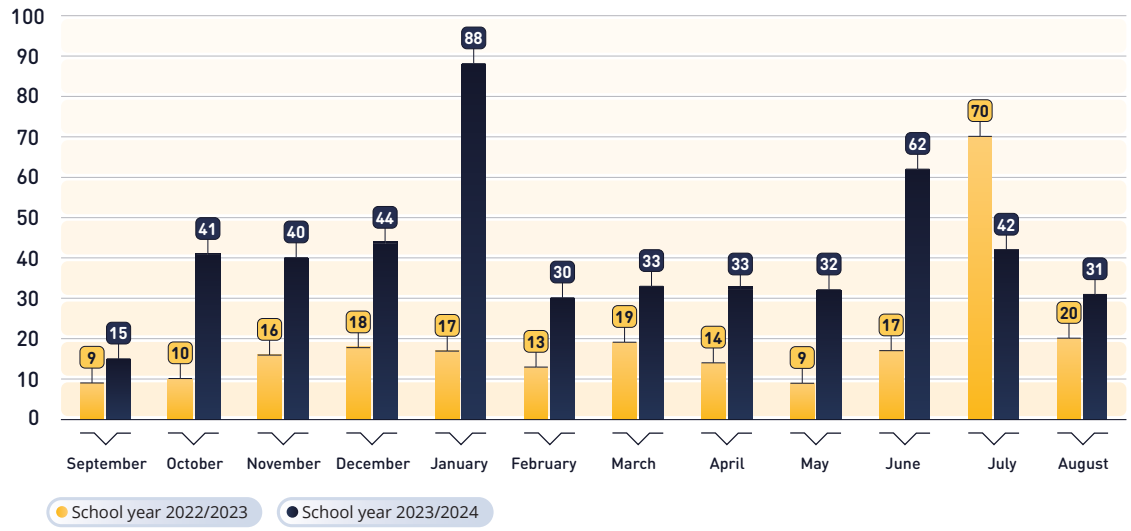


Figure 51. Racism - Alerts.

In 2023/2024, a total of 491 reports concerning racist content were recorded. **Compared to the previous period, this represents a doubling**. Of these reports, 292 were deemed potentially illegal (2022/2023: 138). The peak number of reports was reached in January 2024 (88 cases) and June (62 cases). This increase is particularly attributable to the rise in reports relating to the Israeli-Palestinian conflict. Generally speaking, the reports received concerned themes such as racism, discrimination, hate speech against the government and political parties, religion, xenophobia, gender issues and other similar subjects.

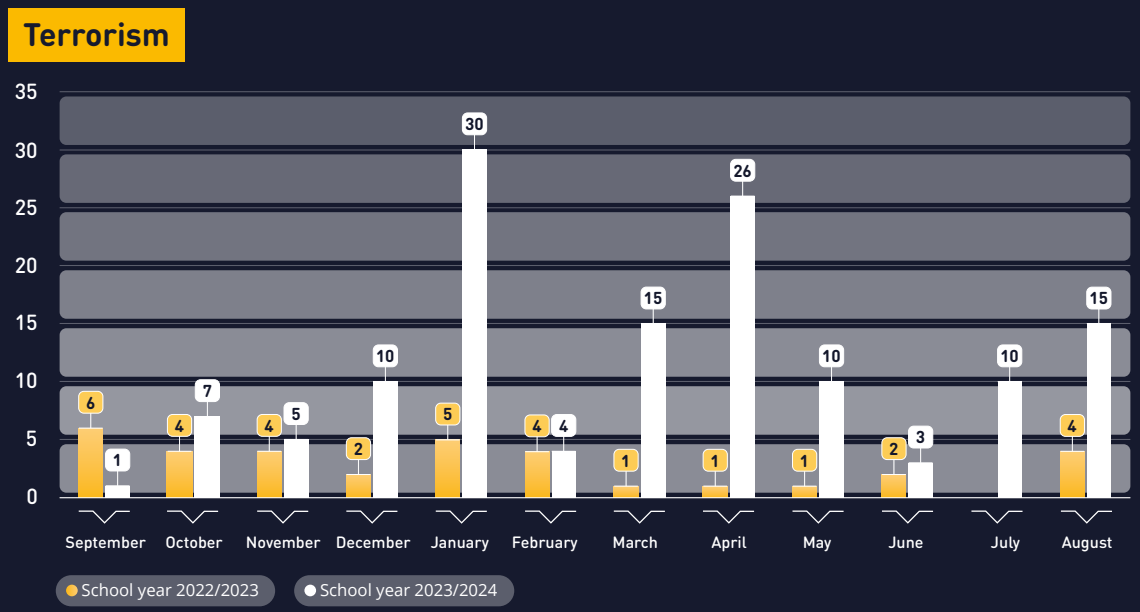


Figure 52. Terrorism - Alerts.

In 2023/2024, the BEE SECURE Stopline recorded a total of 832 reports relating to terrorist content. In comparison, the previous year saw only 34 reports in this area. This significant increase is mainly due to the exceptional months of May and July 2024, during which nearly 700 reports concerning violent content linked to Satanism, sects and cults were received and passed on to the competent international authorities. If we consider these reports as outliers, as they clearly did not fall under national jurisdiction, it is possible to make a more relevant comparison of these figures with the previous school year.

In fact, if these cases are excluded, the number of reports for the 2023/2024 annual period amounts to 136, which represents a fourfold increase on the previous year.

In terms of categorisation, it should be noted that of the 136 adjusted reports, 96 were deemed potentially illegal and forwarded to the Luxembourg police (2022/2023: 19).

Thematically, the content reported focused mainly on material glorifying, threatening or inciting violence, hatred, murder and/or other criminal acts directed against specific groups of people, religious communities or political and government representatives.

IV. Public perception

During the 2023/2024 school year, BEE SECURE contributed to the development of responses to a parliamentary question. This question concerned the subject of cyberbullying (QP 849).

During the same school year, BEE SECURE received 58 requests from media organisations on the subject of Internet-related challenges. Generally speaking, the priority themes were as follows:

- Cybersecurity, confidentiality of personal data **(16)**
- Screen time, cyberbullying and children's well-being on the Internet **(13)**
- BEE SECURE's offer (events, activities, training) **(9)**
- Dissemination of malicious content (hate speech, disinformation) **(7)**
- Sextortion, pornography, child sexual abuse material (CSAM) **(6)**
- Social media **(4)**
- Artificial intelligence **(3)**

In line with previous years, press enquiries about scams, phishing and data leaks remain at the forefront in the 2023/2024 school year. The second most requested topic is screen time and children's wellbeing online. Finally, although BEE SECURE noted a downward trend in press enquiries relating to hate speech last year, these enquiries have increased significantly this year.

V. Summary

As stated earlier in the introduction, it is essential to bear in mind that the data presented in this report should be interpreted with caution, taking into account the various contexts in which it was collected. The data should be seen as a snapshot based on feedback from various BEE SECURE activities for the purposes of this report.

The survey results are not representative of Luxembourg as a whole, but they do indicate some trends for different age groups of children and young people.

The surveys reflect the perspectives of children, young people, parents and education professionals. With these caveats in mind, the main trends in the use and experience of ICT and online risk management can be summarised as follows:

First contact with the digital world at an early age

According to parents, contact with the digital world begins early: for 42% of children, their **first contact** with devices connected to the Internet, and therefore with the digital world, occurs **before the age of four**. By the age of 10, 85% of them have already had contact with the Internet.

According to data provided by parents, the average age at which children obtain their **first personal smartphone** in 2024 is around 11, which is identical to the three previous years. Ninety per cent of children own their first smartphone before the age of 12 (BEE SECURE Radar 2022: 79%; BEE SECURE Radar 2023: 84%; BEE SECURE Radar 2024: 86%).

If children acquire an **account on social media platforms**, they do so on average at the age of 12. However, 61% of parents say that their child does not yet have an account on these platforms.

The most popular social media platforms

According to the survey of more than 14,000 pupils aged 8 to 18, the most popular applications are *Snapchat*, *WhatsApp* and *Instagram*. (Primary education: *WhatsApp* (53%), *Snapchat* (37%) and *TikTok* (22%); Secondary education: *Snapchat* (74%), *WhatsApp* (67%) and *Instagram* (47%)). These results are similar to those of the previous year.

Screen time

- Almost all respondents in all target groups are aware of the function on the smartphone that displays screen time.
- Many respondents find it difficult to set limits on their smartphone use. Between 50% and 70% of young people surveyed said they picked up their smartphone several times an hour.
- **The majority of respondents**, both in terms of their own use and their perception of young people, **believe that young people use their smartphone too often** (54% of 12-16-year-olds, 79% of 17-30-year-olds and 90% of teachers). Among parents and teachers, concern about excessive use rank as the top priority.

Online risks of greatest concern

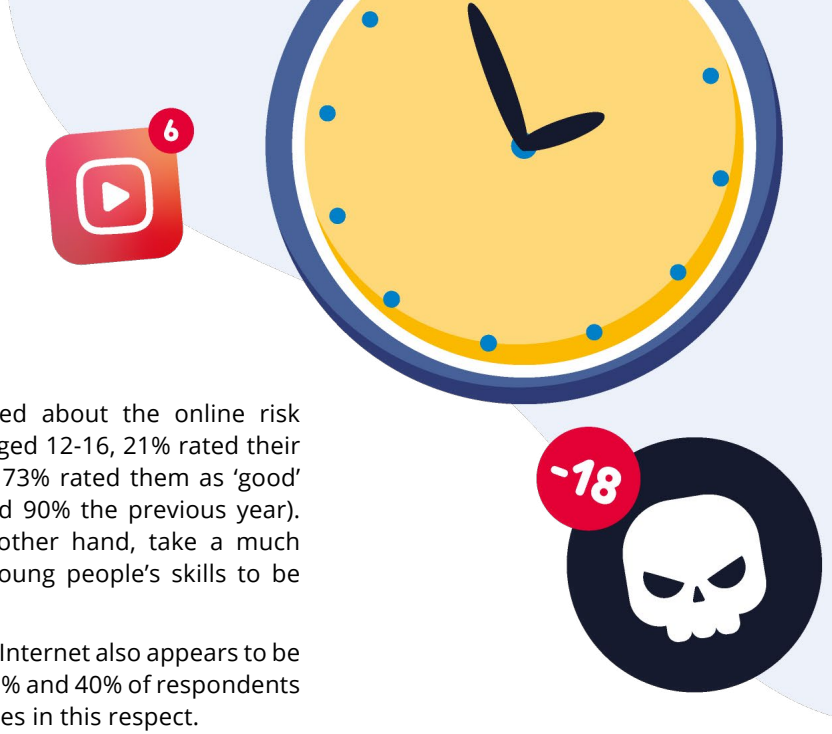
The adults surveyed—parents, teachers and young adults aged 17 to 30—expressed the greatest concerns about the following issues: screen time, disinformation, age-inappropriate content, data protection, online role models (such as influencers), cyberbullying and cybercrime. For young people aged 12 to 16, cyberbullying and sexual content are the main concerns.

Cyberbullying

- Forty-four per cent of young people aged 12 to 16 say they have been victims of cyberbullying. This figure does not correspond to the figure reported by parents in this age group, which is 19%. Of the young people concerned, **30% said they had been victims of cyberbullying between June 2023 and June 2024, which represents 10% of all young people in this age group surveyed**.
- Among young adults aged 17 to 30, 4% said they had been cyberstalked during the same period (compared with 9% the previous year). However, as in the previous year, 44% of young people aged 17 to 30 said they had experienced cyberbullying at least once.
- During calls to the BEE SECURE Helpline, cyberbullying among children and teenagers was the second most common topic raised by adult callers.

Pornography

Responses concerning the frequency of use of pornographic platforms by peers reveal a clear trend in favour of the widely held view that such use occurs at least ‘sometimes’ (58% of 12- to 17-year-olds and 79% of 18- to 30-year-olds). Almost a third (31%) of parents of children aged 12 to 16 believe or are convinced that their child has already seen pornographic content online.



Sexting

Forty-two per cent of young people aged 12 to 16 report that their peers at least 'sometimes' send intimate photos or videos of themselves to other people. Among 17- to 30-year-olds, 76% say that their peers at least 'sometimes' receive intimate content. Sexting therefore seems to be a common practice in Luxembourg.

Online Trading

Specific questions were asked about various practices aimed at making money online, such as online trading. With the exception of the 68% of 18- to 30-year-olds who say they never play the lottery, the majority of respondents (around 80% to 88%) never take part in such activities. However, 23% of 18-30-year-olds and 12% of 12-17-year-olds have invested money in online trading at least once. Similar trends were observed for other forms of investment or gambling, such as sports betting.

Sextortion

As in the previous year, of the 72 calls received by the BEE SECURE Helpline concerning issues related to children and adolescents, sextortion was the topic most often mentioned by the young people themselves. Twenty-five calls were received on this subject, roughly 35% of all calls, a similar percentage to the previous year. This high trend was also observed in other countries.

Risk management

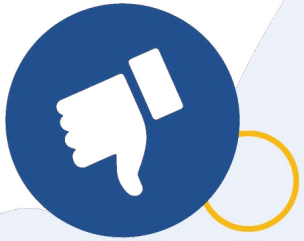
In general, when parents were asked about the online risk management skills of their children aged 12-16, 21% rated their skills as 'rather poor' to 'poor', while 73% rated them as 'good' to 'very good' (compared with around 90% the previous year). Secondary school teachers, on the other hand, take a much more negative view: 90% consider young people's skills to be 'fairly poor' to 'poor'.

The ability to set limits when using the Internet also appears to be the least widespread, with between 18% and 40% of respondents in all groups surveyed having difficulties in this respect.

On the other hand, between 15% and 23% of all respondent groups have difficulty protecting their personal data and privacy, or feel they are unable to do so.

It is interesting to note that a 'fairly good' to 'good' rating is given more frequently for general questions on capabilities than on the more specific questions. For example, only around half of parents (56%) feel that their children aged 12-16 are capable of protecting their privacy online or judging who they can trust online.

At home, 94% of parents of teenagers aged 12 to 16 apply rules regarding Internet use. The most common rule, at 84%, is not having a smartphone during mealtimes. Around half of parents use parental control functions and regulate screen time.



Smartphones in schools

According to teachers, smartphones are a major distraction for secondary school pupils. However, this is not the case for pupils in primary education: the majority of teachers (58%) say that smartphones never cause distraction, and only 4% say that they often distract pupils.

On the other hand, young people, both those aged 12 to 16 and those aged 17 to 30, have a perception that differs considerably from that of secondary school teachers, as they consider smartphone-related distraction to be much less significant.

Between 80% and 90% of respondents (teachers and young people) say that there are rules about the use of smartphones in their schools. Among the responses from teachers, rules on keeping smartphones during lessons were the most frequently mentioned.

Artificial intelligence (AI)

There are ambivalent perceptions of AI. It is seen as an opportunity, a danger and a combination of the two. For themselves, the majority of people perceive AI as an opportunity rather than a danger. In contrast to the assessment of AI on a personal level, the assessment for society as a whole tends to lean more towards danger.

The survey results show that between 89% and 99% of participants claim to have at least some knowledge of the subject. Between 3% (parents) and 17% (young people aged 12 to 16) consider themselves to be experts on the subject.

News and media education Analysis by the ZpB Foundation

The ZpB Foundation has analysed the responses concerning sources of information and how to check their credibility. On the basis of this analysis, it has f**ormulated proposals on key topics for media education**. These topics should be aimed at both young people and adults (see Chapter 6 for conclusions).

VI. Perspectives

It is important to adapt the digital world in order to better protect children and young people. The Ministry of Education, Childhood and Youth is actively committed to its "Screen-Life Balance" campaign, which is part of its "sécher.digital" action plan, launched in the 2024/2025 school year. Its goal is to ensure that all children, young people, and their surroundings – both at home and at school – adopt a healthy, balanced, and safe approach to smartphone use and the digital world. [18]

Children and young people need a safer environment in which to participate in digital life without worry. It is also essential to **strengthen the skills of children and those around them** to ensure the safe use of digital tools. These two aspects are part of the European strategy for a better Internet for kids, which is also being implemented at national level (European Commission, 2022).

In this context, **BEE SECURE, as a *Safer Internet Centre* (SIC),** plays a key role through its awareness-raising activities, its information and individual advice services (BEE SECURE Helpline) and its platform for reporting certain illegal content (BEE SECURE Stopline).

Legislation and regulations aimed at protecting children in the digital world are also important. A comprehensive body of legislation is relevant in this respect (European Commission, 2024).

In particular, it is worth highlighting **the *Digital Services Act* (DSA)** as a European Union regulation, as it notably targets the protection of minors in the digital environment and **requires concrete measures**. For example, with regard to concern number one, excessive usage, the DSA could have a positive impact when implemented. The ban on 'dark patterns'[19] and the requirement for providers to publish annual reports on the risks and measures taken to better protect children could help to prevent digital services from being manipulatively designed to cause high usage times in the future.

In the light of the results of the survey on the use of smartphones in schools and excessive use/exploitation time, **the measures mentioned certainly meet** a pressing societal need. It is therefore all the more crucial to publicise them in their entirety.

It should not be forgotten that, in addition to questions about duration and frequency, 'why' and 'what' questions are also essential. From maintaining friendships and relationships to discovering new things and exploring the world, enjoying entertainment, banking online, submitting petitions or following bus timetables in real time, **the digital world offers many positive and useful aspects to everyday life, as well as enabling societal participation**.

Learn More About *Digital Services Act* : https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package

[18] For more information: https://secher.digital/fr/

[19] 'Dark patterns' means as much as 'manipulative design'. A detailed explanation can be found in the thematic contribution 'Dark Patterns, a risk?'. https://www.bee-secure.lu/fr/publication/dark-patterns-un-risque/

Unfortunately, it is also clear that crime is taking place on the Internet as well, as the BEE SECURE Stopline and BEE SECURE Helpline reports show. **Fundamental protection against cybercrime** and the development of corresponding skills are becoming increasingly crucial for society as a whole. Offers such as the 'Code Hunters – Escape Game' activity'[20], offered by BEE SECURE in collaboration with *Base1 Makerspace*[21], are part of this approach. Ultimately, with developments linked to artificial intelligence, it is necessary to develop new solutions to ensure technical protection, for example against "deepfakes", as well as a good level of understanding of what AI really is. **AI opens the way to new forms of crime, while also offering innovative solutions for dealing with them**. This ambivalence is also reflected in investigations into AI and its impact on both personal and societal levels. *The EU Artificial Intelligence Act*[22]) is an important regulation aimed at addressing the risks associated with AI while exploiting its opportunities. The national action plan "sécher.digital" aims to promote the responsible use of AI in schools.

Concerns about **children and young people being exposed to age-inappropriate content** were also repeatedly expressed across all groups surveyed, particularly in relation to sexual, violent or pornographic content. The survey results reveal a broad consensus that content not suitable for minors should only be accessible with **age verification**. This requirement is one of the safeguards set out in the *Digital Services Act*.

As the ZpB Foundation points out, media literacy is more essential than ever, not only for young people, but also for adults. At the end of the day, all stakeholders, as well as us as individuals, are called upon to help ensure that everyone can make the most of the opportunities offered by the digital world. This can involve, for example, critically questioning the practices that seem to have become established in our daily lives: 'Do I really have to respond immediately?', 'Do I have to use this application or are there alternatives?', 'What happens if my smartphone is on silent for a while?' or 'How can I help my grandfather make his smartphone more secure?'.

Action days such as the annual Safer Internet Day (SID) demonstrate the widespread interest in finding and sharing answers to these and many other questions. This report aims to enrich and stimulate discussions in Luxembourg and beyond—in keeping with the SID motto, **'Together for a better internet'**.

[20] For more information: https://www.bee-secure.lu/fr/escape-game/

[21] The *Base 1 Makerspace* is a creative, multidisciplinary space open to young people (students or not) aged between 8 and 30 who are interested in using new media creatively to create their own projects: https://base1.lu/makerspace/.

[22] https://artificialintelligenceact.eu/.

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For more information, visit **bee-secure.lu**

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