

BEE SECURE RADAR 2024

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

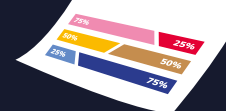


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Introduction



In this day in age, digital technology is omnipresent in the lives of children and young people. It is therefore essential to understand how they are using these tools, what kinds of risks and dangers they may face, and how to prevent possible harm. Children and young people use digital technology in many different ways, whether to communicate with peers, access online content, play video games or share information on social networks. In doing so, they may be exposed to risks such as cyberbullying, inappropriate content, disclosure of personal information and/or excessive media use which e.g. may have a negative impact on physical and/or mental health. To ensure that young people can participate in the digital society in safety and confidence, appropriate measures must be taken. This includes improving media literacy and digital citizenship, while also teaching young people how to use the Internet responsibly and think critically about the content they encounter online. And last but not least, promoting respectful and caring behaviour online.

BEE SECURE is a government initiative to promote safety-oriented and responsible use of information and communication technologies (ICT) amongst the general public, and to particularly empower children, young people and their entourage (parents, teachers, educators and others) through targeted offers. In the frame of this mission, BEE SECURE strives to monitor developments in ICT use and its associated risks. In order to better understand these developments, BEE SECURE conducts regular surveys and compiles this data in the *BEE SECURE Radar* report.

The *BEE SECURE Radar* report aims to provide information on how children and young people use ICT and the trends observed by BEE SECURE in the course of their activities. This data is essential, as it guides BEE SECURE's awareness-raising and prevention activities and also helps to identify the specific needs of target groups so that protection measures can be adapted accordingly.

This third edition of the *BEE SECURE Radar 2024* covers the 2022/2023 school year, the period from 1 September 2022 to 31 August 2023.

The report includes survey results on how children and young people use the Internet and digital media, from the perspective of parents, educators, and young people themselves. It also includes feedback from BEE SECURE training courses and the DigiRallye, data from the BEE SECURE Helpline, and reports of illegal content collected by the BEE SECURE Stoptline. The chapter titled 'Public Perception' provides an overview of the dominant topics in the public debate.

In this edition of the *BEE SECURE Radar*, key issues and themes have been addressed and compared with previous years. Moreover, additional questioning was undertaken to delve deeper into the following topics:

- **Evaluating smartphone usage time**
- **Cyberbullying**
- **Risk management**
- **Cybersecurity**

For the first time, the *Radar* also takes a closer look at the subject of grooming and examines teenage trends in online trading.

It should be noted that, in order to facilitate the reading of this publication, the masculine form has been used as a neutral gender to refer to all individuals.



I. Results of surveys on ICT use in Luxembourg

Methodology and data

One of BEE SECURE's missions is to monitor the ways in which children and young people use ICT. To this end, the National Youth Service (SNJ), coordinator of the BEE SECURE initiative, carried out two online surveys to gain an overview of how children and young people in Luxembourg use ICT and to better assess the associated opportunities and risks. The two surveys included a series of questions on assessing online risks and how to manage them.

Basic data on ICT use, such as those collected annually in Germany as part of the KIM and JIM studies, are also interesting in this regard.¹ The general questions on the use of digital devices included in the SNJ surveys are based on these and other similar international surveys.

In order to obtain information on how children and young people use ICT, the first survey was distributed to young people themselves. The second survey was distributed to parents of children and young people. These two separate surveys provide a comprehensive perspective on the ways in which children and young people use digital technology. It is important to mention that the parents and young people surveyed were not part of the same household, and there was—to our knowledge—no relationship among them.

Youth survey: The SNJ youth survey was launched at the beginning of May 2023. It was disseminated mainly via social networks, and posters were sent to youth centres and psycho-social and educational support centres (CEPAS) in Luxembourg, among other places. A total of 292 children and young people participated in this online survey. After reviewing and cleaning the data, the responses of 286 young people aged 12 to 30 were included in the results presented below. Of these participants, 141 were aged 12 to 16 and 145 were aged 17 to 30.

The survey data were weighted to optimize the sample structure in terms of age distribution. This means that the results have been adjusted to more accurately reflect the age distribution of the youth population in Luxembourg. After weighting, young people aged 12 to 16 represent 22.45% of survey participants, comprising 64 people. Young people aged 17 to 30 represent 77.55% of participants, or 222 people. The average age of the 12- to 16-year-olds surveyed is 13, and that of 17- to 30-year-olds is 23.

It should be noted that the “n” in the graphs in this report represents the unweighted number of people who answered the respective question. The percentages presented in the tables are, however, based on weighted data.



¹ The *Jugend, Internet, Medien (JIM)* study has been examining the media behaviour of young people aged 12 to 19 in Germany every year since 1998. Since 1999, the *Kinder, Internet, Medien (KIM)* study has been examining the media behaviour of 6- to 12-year-olds, particularly in terms of intensity of use. Both the *JIM* and *KIM* studies provide a representative picture of media use by children and young people and are now regarded as an important international reference in this field.

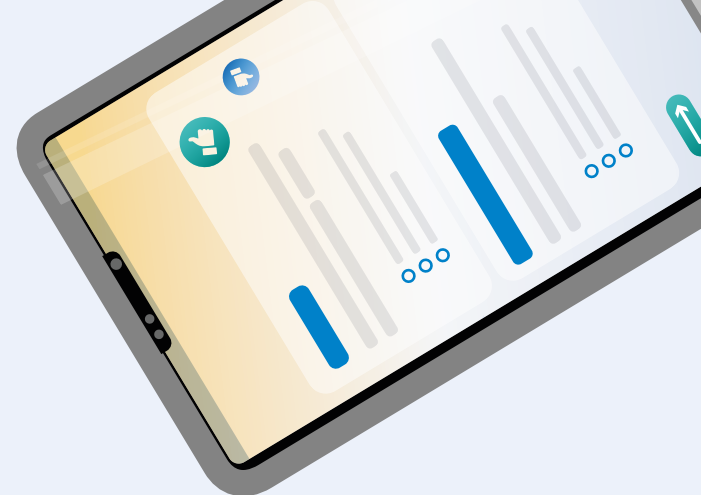


Parent survey: The second survey, conducted by the SNJ in collaboration with the ILRES Institute, was launched in June 2023. It was not aimed at young people themselves, but rather at parents of children aged 3 to 16. The aim of this survey was to evaluate, from a parental perspective, the ways in which children and young people in Luxembourg use ICT.

In total, 500 people (parents or legal guardians of children²) responded to the survey, including 217 parents with children aged 3 to 11 and 283 parents with children aged 12 to 16.³ The data collected was then weighted according to the age of the children.

In the remainder of this publication, the main results of the two surveys are presented and compared. It should be noted that the formulation of the questions in the two surveys may differ, which means that the same results are not always available for both target groups.

For some topics, these results are supplemented by other data collected by BEE SECURE during the 2022/2023 school year, as well as by data from the BEE SECURE Helpline and the BEE SECURE Stoptline, and by an analysis of the *Zenter fir exzessiivt Verhalen a Verhalenssucht* (ZEV - Centre for Excessive Behaviour and Behavioural Addictions).



The additional data collected by BEE SECURE includes the following information:



Questionnaire during BEE SECURE awareness-raising training for children and young people: During training sessions in primary and secondary schools and extracurricular groups in Luxembourg, organised throughout the 2022/2023 school year, more than 20,000 pupils were reached, of whom 13,325 participated in the anonymous survey.



Survey of teaching and educational staff: The additional data also includes the views of teachers and educators on their pupils' use of digital media. As part of in-service training, a total of 123 people took part in the online survey, including 26 educators working in youth centers and/or daycare centers for children, 95 primary school teachers, and two secondary school teachers.⁴



DigiRallye interviews with children: Two editions of the DigiRallye were organised during 2022/2023. As the name suggests, this rally is all about navigating the digital world. A total of 165 children aged 8 to 12 took part in the oral survey conducted during these two editions. In total, 78 children took part in the first DigiRallye and 87 in the second.

² The term “parents” is used throughout this publication as a substitute for all legal guardians.

³ The concrete age breakdown is as follows: 79 parents of children aged 3-5, 44 parents of children aged 6-7, 79 parents of children aged 8-10, 122 parents of children aged 11-13 and 176 parents of children aged 14-16.

⁴ In order to facilitate reading, this publication groups teaching and educational staff under the designation “teacher”.

With regard to the presentation of the data, certain numbers may have been rounded for the sake of readability. As a result, the sum of the responses does not always equal 100%. It is important to note that this does not reflect the accuracy of the data, but rather the way in which it is presented.

There are several limitations to this BEE SECURE *Radar*. For example, the parents and young people who took part in the surveys do not necessarily belong to the same household. In addition, the questionnaires sent out to parents and young people may differ in terms of questions and response options, making it difficult to directly relate the two parties' points of view.

It is also important to note that the results of the BEE SECURE Radar surveys cannot be considered representative of the entire population of Luxembourg. Thus, **one must interpret the results with caution** and consider them as general indications rather than definitive conclusions.

To compensate for these limitations, the results have been supplemented by extracts from similar studies conducted abroad. This provides a more complete picture of the media behaviour of children and young people, taking different perspectives and contexts into account. However, it should be noted that the results of studies conducted abroad cannot be directly applied to the situation in Luxembourg due to cultural, social and legislative differences.

In this edition of the *BEE SECURE Radar*, efforts have been made to include more young people aged 12 to 16. This provides a better representation of this age group and a more accurate understanding of their behaviour and concerns regarding the use of digital media.

Certain results in this report can be compared with those of the previous edition (2021/2022), known as "BEE SECURE Radar 2023". The current results, which correspond to the year 2022/2023, are referred to as "BEE SECURE Radar 2024".



1 CONTACT WITH THE DIGITAL WORLD

1.1 First contact with the digital world

The results of the survey of parents and interviews with children at the DigiRallye provide an indication of trends in early access to the Internet.

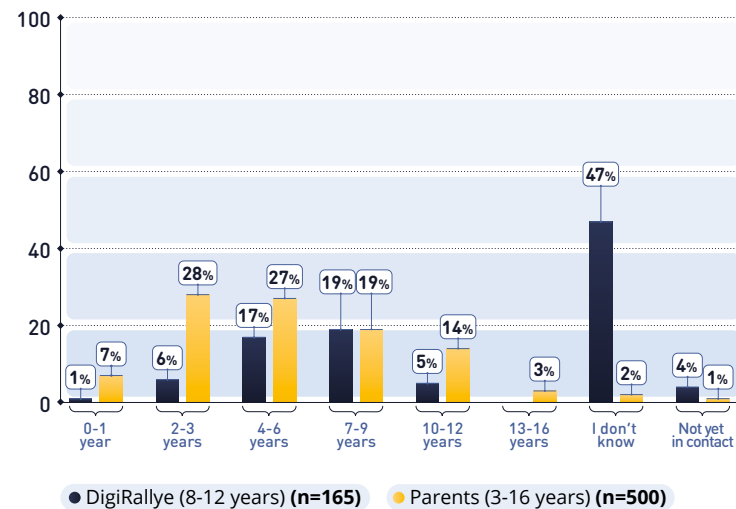


Figure 1. Age of first contact with an internet-connected device.

Parents report that **35% of children** (*Radars 2023*: 40%) have their **first contact** with internet-connected devices **before the age of four**. 81% of children have their first contact with the digital world before the age of 10 (Figure 1). For 7% of children, this first contact was even before the age of one. These results, gathered from parents, confirm that trends in early access to the Internet have not changed significantly from the previous year.

According to the data collected during the DigiRallye, **48% of children still remember the age** at which they had their first contact with a device connected to the Internet. According to their recollection, this first contact **took place at an average age of six and a half**. For half of them, it was before the age of seven. However, contrary to the responses from parents, only 15% of children who remembered the age of their first contact with a device connected to the Internet said that they were under the age of four at the time. 4% of children said that they had never used the Internet before.

These results underline **the importance of raising awareness of safe and responsible Internet use from an early age**.

They also provide information on children's first online activities when they come into contact with an internet-connected device for the first time. According to parents, **their child's first online activities** are primarily **viewing photos** (38%) and **watching videos and films** (27%). Interestingly, 9% of parents said that their child has been tapping on the device's screen or participating in shared video calls since their first contact with the Internet.

In the context of the DigiRallye, children mainly cited **watching videos and playing online games** as their first online activities. This confirms the parents' findings and highlights the appeal of multimedia content and interactive games for children in their first online experience.

1.2 First smartphone

After a general analysis of the age of first contact with internet-connected devices, the age at which children obtain their first smartphone will now be looked at.

The *miniKim* study shows that 4% of children aged two to five in Germany have their own smartphone (Kieninger et al., 2021, p. 6). According to this study, almost one in ten children (7%) had their first experience with a smartphone at the age of one, 37% at the age of two, and a quarter (26%) at the age of three. 14% used a smartphone for the first time at the age of four and only 8% at the age of five. This means that **70% of children had their first contact with a smartphone by the age of three** at the latest (Kieninger et al., 2021, p. 30).

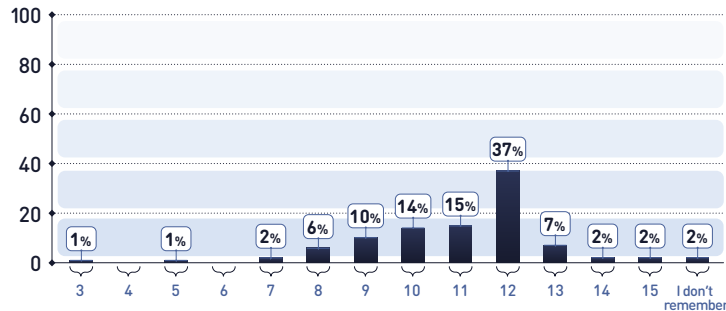


Figure 2. PARENTS - At what age did your child receive their first smartphone ? (n=306)

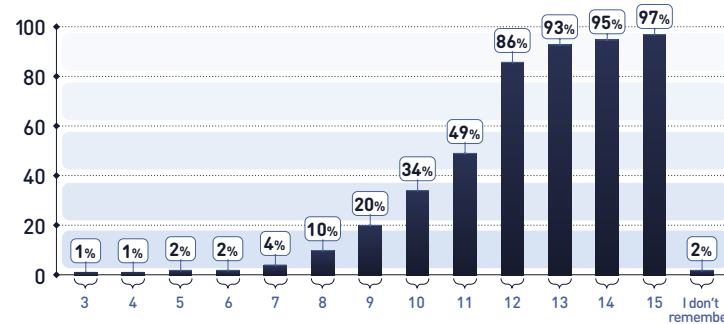


Figure 3. PARENTS - At what age did your child receive their first smartphone ? (cumulative results) (n=306)

Out of the 500 parents surveyed, 306 (61%) said that their child had their own smartphone. Figure 3 shows that **86% of children receive their first smartphone by the age of 12 at the latest** (*Radar 2023*: 84%). The average age for obtaining a smartphone is around 11, which is similar to previous results. The majority of children (37%) obtain their first smartphone at the age of 12 (*Radar 2023*: 30%).

Among parents whose children do not yet own a smartphone, half cite the age of 12 as the expected age for the first smartphone. One parent in ten, however, cites the age of 10 as the expected age for the first smartphone.

i According to responses at the DigiRallye (8- to 12-year-olds), the average age at which children first acquired a smartphone was around 9 years old (n=92). This average is identical to that of the previous year.

1.3 First email address

Nowadays, email addresses are much more than a means of communication. They are often used to register on different websites, social networks, online gaming platforms and many other online applications. The email address has become **a kind of digital passport**, enabling access to a wide range of online services.

However, email addresses are also **a frequent target for cyber-attacks**. Phishing⁵, in particular, is a major cyber security concern (Lella et al., 2023; Bundesamt für Sicherheit in der Informationstechnik, 2023). According to the results of the oral survey carried out during the DigiRallye (8- to 12-year-olds), it was found that many children do not know or understand the precise meaning of the term “email”. Of the 165 children questioned, 36% said they had their own email address.

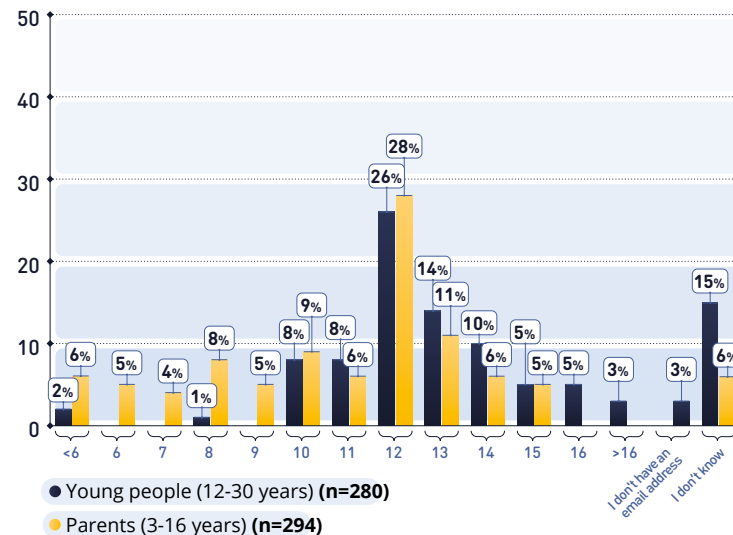


Figure 4. Age at which first email address was acquired.

⁵ The term phishing refers to a form of online scam designed to deceive the user into revealing private and confidential data, such as information about bank accounts, credit card pin codes or access to various online services (email, webshops, social networks, etc.) (BEE SECURE, n.d.).

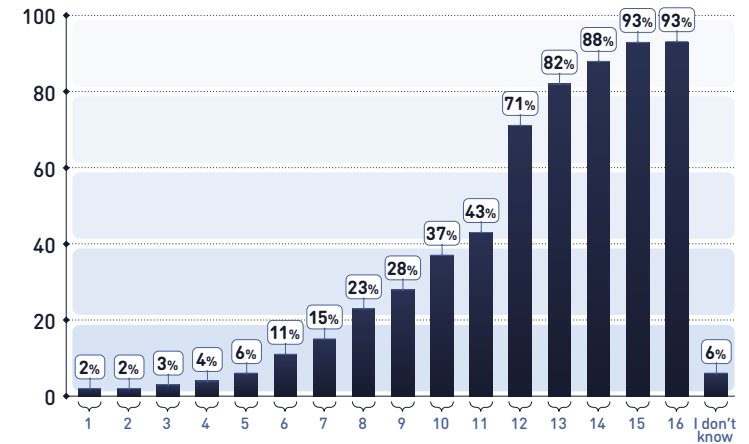


Figure 5. PARENTS - At what age did your child acquire their first personal email address? (cumulative results) (n=294)

According to the information provided by parents, **barely a quarter (23%) of children aged 3 to 11 have their own email address**, whereas 86% of children aged 12 to 16 do. It should be noted that Figures 4 and 5 only represent parents whose children already have an email address (n=294). According to parents, most children (28%) received their first personal email address at the age of 12.

Parents' responses also indicate that, on average, children obtain their **first personal email address** at the age of 10 and a half, and their **first social media account** at the age of 12 and a half.

According to the responses of the young people themselves (aged 12 to 30), only 3% of them do not have a personal email address. Their answers also show that around a quarter (26%) obtained their first email address at the age of 12. However, it appears that only 19% already had an email address at the age of 11.

1.4 Types of digital devices

After specifying the age at which young people first come into contact with the digital world, this chapter offers an overview of the various digital devices they possess, according to their parents. It also includes a comparison between the years 2020/2021 (*Radar 2022*) and 2022/2023 (*Radar 2024*).

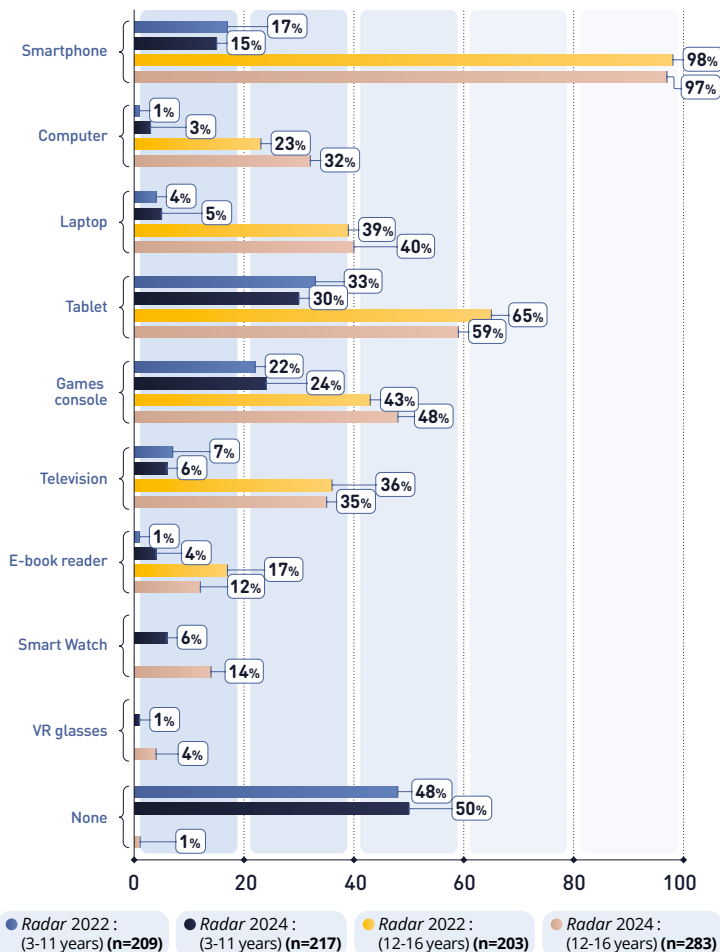


Figure 6. PARENTS : Does your child have their own..?

Overall, trends in digital device ownership have hardly changed over the last two years. According to parents, **almost all 12- to 16-year-olds own a smartphone**. There has been a slight increase in the ownership of game consoles among both 3- to 11- and 12- to 16-year-olds, while there has been a slight decrease in the ownership of tablets.

As for smartwatches, at 14%, there is a slight downward trend among 12- to 16-year-olds compared to the previous year (*Radar 2023*: 21%).⁶



i Global percentage of Internet users aged 16-24 who use a smartphone or basic phone to access the Internet:
 ♂ Men: 95.2%
 ♀ Women: 96%
 (DataReportal, 2023)

i According to the *JIM* study carried out in Germany, wearables such as smartwatches are currently present in one out of every two households in the 12 to 19 age group.
 (Feierabend et al., 2023)

6 Data on smartwatch ownership was not collected as part of *Radar 2022*, nor was data on the ownership of VR glasses.

2 SMARTPHONE ACTIVITIES AND APPLICATIONS

In addition to the age at which children and young people acquire their first smartphone, how they use it and which content they access on it are also of interest.

In this edition of the *Radar*, additional response options were added to the surveys to gather information on the use of music

streaming platforms (such as *Spotify*) and film/series streaming platforms (such as *Netflix*), as well as the use of *MS Teams* as a study tool for school.

	3 → 11 years parent perspective (n=217)	12 → 16 years parent perspective (n=283)	12 → 16 years youth perspective (n=140)	17 → 30 years youth perspective (n=144)	8 → 12 years DigiRallye (n=165)
1	YouTube (47%)	WhatsApp (83%)	YouTube (90%)	WhatsApp (95%)	YouTube (56%)
2	None of these (33%)	YouTube (75%)	WhatsApp (84%)	Instagram (88%)	Gaming app (32%)
3	Streaming platform (23%)	Snapchat (70%)	Snapchat (81%)	YouTube (85%)	Snapchat (27%)
4	Spotify (16%)	TikTok (58%)	MS Teams (65%)	Facebook (77%)	TikTok / WhatsApp (24%)
5	WhatsApp / MS Teams (12%)	Instagram (56%)	Spotify (64%)	Streaming platform (76%)	

i The *KIM* study reveals that alongside *WhatsApp*, which is used by more than three-quarters of children (aged 6 to 13) who use the Internet, other applications are also relevant to a proportion of children, albeit to a different extent. *TikTok* is the most mentioned here, used by half the children, followed by *Snapchat* (35%), *Instagram* (32%) and *Facebook* (27%). *TikTok* shows the biggest increase compared to 2020, followed by *Snapchat*. *Instagram* and *Facebook* use remains almost unchanged. (Feierabend et al., 2021)

Figure 7. Most frequently used applications.

When these new elements are taken into account in the ranking, it appears that *MS Teams* (65%) and *Spotify* (64%) are used slightly more often than *TikTok* (62%) and *Instagram* (61%) by 12- to 16-year-olds.

On the other hand, if omitting the new response options and comparing them to the previous year, it is worth noting that **YouTube has seen a notable increase in popularity** among young people aged 12 to 16, rising from second place the previous year to first place. Among 17- to 30-year-olds, *YouTube* moved up from fifth to third place in terms of popularity. On the other hand, **Instagram fell in popularity** among 12- to 16-year-olds, dropping from first to fifth place. As for *WhatsApp* and *Snapchat*, these two applications have increased in popularity. **The responses from parents and 12- to 16-year-olds were almost identical**, with the exception of first place, which is reversed between *YouTube* and *WhatsApp*.

According to parents, it seems that streaming content (video or audio) is more common among young children than social media.

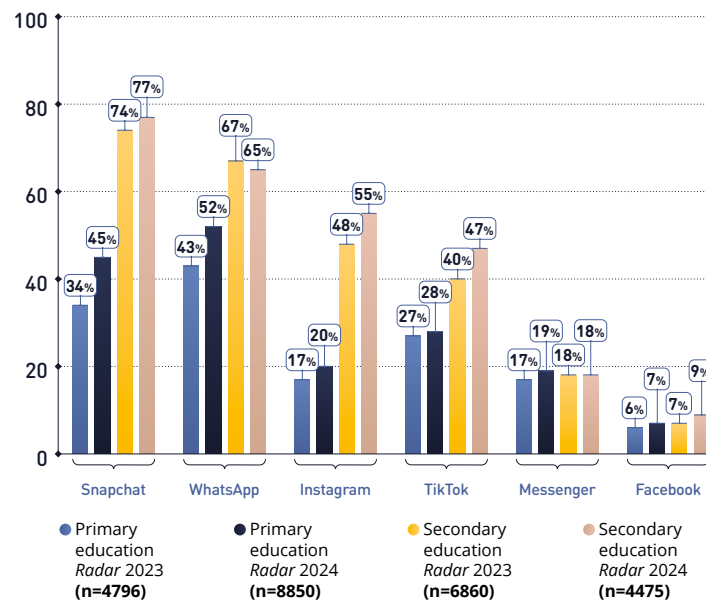


Figure 8. PUPILS - When I want to share photos or videos, I use...

Figure 8 shows that **among primary school pupils, WhatsApp (52%), Snapchat (45%) and TikTok (28%)** are the three most frequently used applications for sharing photos and videos, in the same order as last year. However, *WhatsApp* (+9%) and *Snapchat* (+11%) were cited more often than in the previous year, while the frequency of use of *TikTok* remained relatively stable. By contrast, at the secondary school level, *TikTok* saw a 7% increase from the previous year, and *Instagram* also recorded a 7% increase. Overall, **secondary school students most often use Snapchat (77%), WhatsApp (65%) and Instagram (55%)** to share photos and videos.

i
A survey of 2,163 children and teenagers aged 8 to 18 living in Germany revealed that *WhatsApp* (79.8%), *TikTok* (55.5%) and *Instagram* (51.8%) were the most popular applications in 2021.
(Landesanstalt für Medien NRW, 2022)

3 SCREEN TIME

This chapter summarises the key results concerning the duration of use, frequency of use and activities related to screen use. It also includes results from questions relating to problematic or excessive use, which were also included in the previous year's survey at the recommendation of the ZEV.

Statistics on screen time and usage time depend significantly on how they are requested or measured. Consequently, the results of different studies are often difficult, if not impossible, to compare. Each year, **the JIM study in Germany serves as a primary reference** for the *Radar*, as it provides comparable statistics on the subject, and its results are also easily transposable to Luxembourg. According to the JIM 2023 study, the average time spent online by young people aged 12 to 19 is 224 minutes (3h44min) per day, which represents an increase of 20 minutes from the previous year (Feierabend et al., 2023).

3.1 Smartphone use

For this edition of the *Radar*, specific questions about smartphone use were asked, covering the duration, frequency, and assessment of this use in order to obtain a detailed overview.

3.1.1 Duration of smartphone use

For starters, rather than looking at the total time spent in front of the screen, the focus is placed on the amount of time spent using smartphones **daily during the week**.

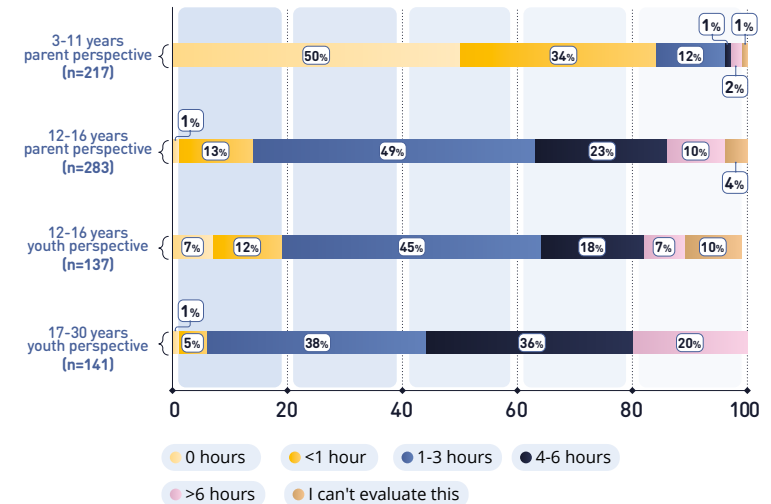


Figure 9. Daily smartphone use during the week.

According to the results of last year's survey (*Radar* 2023), 29% of parents of children aged 3 to 11 indicated that their child used their smartphone for more than an hour a day. However, current data shows that this percentage has fallen to 16% for daily use of an hour or more during the week.

Currently, only 10% of parents of children aged 12 to 16 say that their children use their smartphone for more than six hours a day during the week. Last year, the figure was still 25%. According to parents, the proportion of teenagers using their smartphone for less than an hour a day and those using it for one to three hours a day have both increased compared to the previous year. These proportions rose from 9% to 13% and from 39% to 49% respectively.

The results of different studies are often not directly comparable, particularly when the precise method of measurement is not clearly defined (for example, if it is not specified whether the time of use includes the total period during which the smartphone is used with interruptions, or if it only measures the time spent looking at the screen, etc.).

The proportion of 12- to 16-year-olds who say they use their smartphone for one to three hours a day has risen to nearly half (45%), compared to 15% in the 2023 survey. Compared to the previous year, there has been a 47% drop in the number of teenagers who say they use their smartphone for more than six hours a day (last year 54%, this year 7%).

A similar trend can also be seen among children aged 3 to 11 and young adults aged 17 to 30: **the reported duration of use is generally shorter than last year.** Among 17- to 30-year-olds, 20% say they use their smartphone for more than six hours a day during the week. This percentage is down compared to the previous year when it was 30%.

An analysis of the amount of time spent using their smartphone at weekends shows a 10% increase in the number of 12- to 16-year-olds using their smartphone for four to six hours, reaching a total of 28%. Section 3.2. looks at five types of usage activity and compares them between weekdays and weekends.

3.1.2 Frequency of smartphone use

According to the Forsa survey carried out in Germany for the Safer Internet Day 2023, almost half of the young people questioned (n=500 children aged 10 to 17) said that they found it (rather) difficult not to look at their smartphone, while the other half had no particular difficulties. It is interesting to note that teenagers have more difficulties than children, probably due to their more frequent use of smartphones (klicksafe, 2023).

As part of this survey, young people and their parents were asked how often they actually pick up their smartphone.

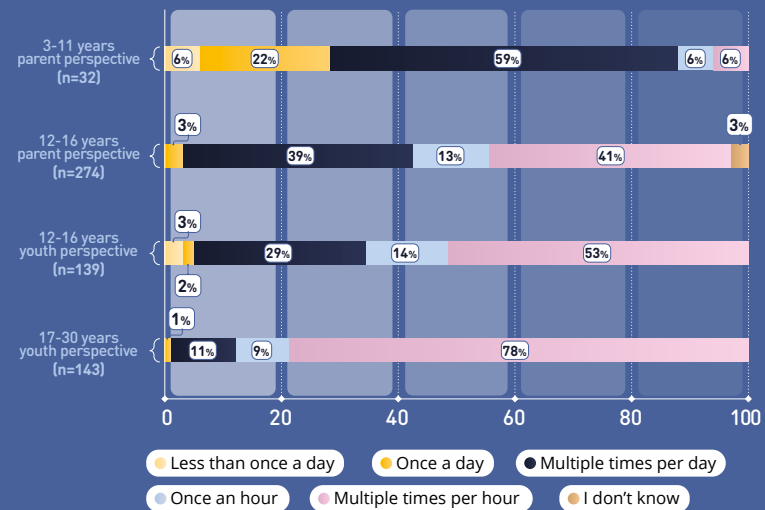


Figure 10. Frequency with which young people pick up their smartphone to check or do something (e.g. to check for updates).

According to the data collected, 87% of 17- to 30-year-olds and 67% of 12- to 16-year-olds say they pick up their smartphone at least once an hour, for example, to check for updates. Parents of 12- to 16-year-olds (54%) generally believe that this frequency is slightly lower.

3.1.3 Evaluation of the frequency of smartphone use

Young people and parents were also asked to personally evaluate the amount of time they spend on their smartphone. Again, it is important to remember that the children and parents surveyed did not come from the same household. The time spent by parents on their smartphone and the time spent by young people on their smartphone were assessed from different perspectives.⁸

There is a difference in perception between parents and children when it comes to parents' use of smartphones. More than half of parents say they use their smartphone too often. However, children have a different perception of the situation. Only 29% of children aged 8 to 12 (DigiRallye) and 10% of young people aged 12 to 16 feel that their parents use their smartphone too often.

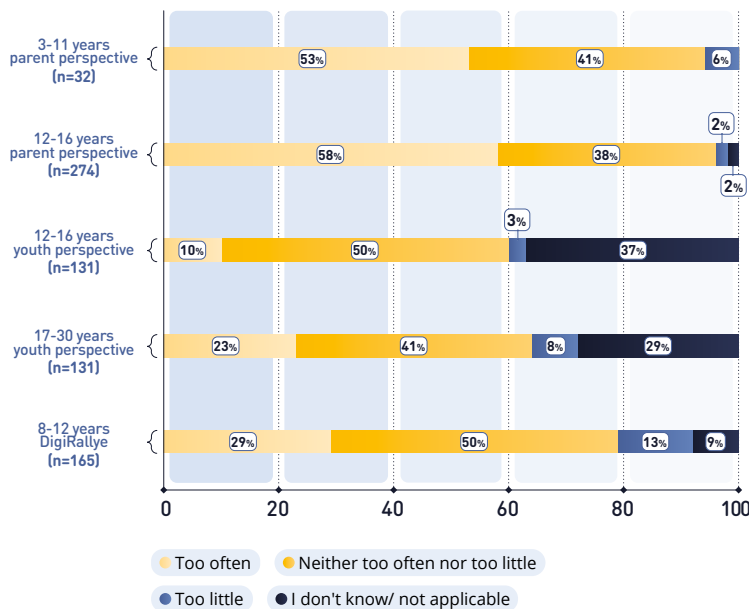


Figure 11. Evaluation of the amount of time that **parents** spend on their smartphone.

What may seem excessive in terms of frequency of use to parents may be considered acceptable by teenagers, who, unlike their parents, grow up in a digital world. ZEV considers another hypothesis to be plausible: *“It is more likely that adults are better able to recognise what is harmful to them, while children may think that adults control their use of screens and only use them when necessary or when they have deliberately chosen to do so. It is also possible that reduced cognitive dissonance⁹ plays a role, where children think that if their parents already find it excessive, then their own use would be even less appropriate.”¹⁰*

i A German study of 1,409 participants showed that 43% of 16- to 29-year-olds (somewhat) agreed with the statement ‘I think that I use my smartphone too often’.
(AdAlliance, 2021)

i According to a survey of 500 children aged 10 to 17, a quarter think that their parents should reduce their use of digital media, while almost three out of five find their parents’ use acceptable. Very few think their parents should use digital media more.
Just over half of the parents surveyed (n=500) say they themselves should limit their use of digital media. Older parents are less inclined to think that action is needed in this area.
(klicksafe, 2023).



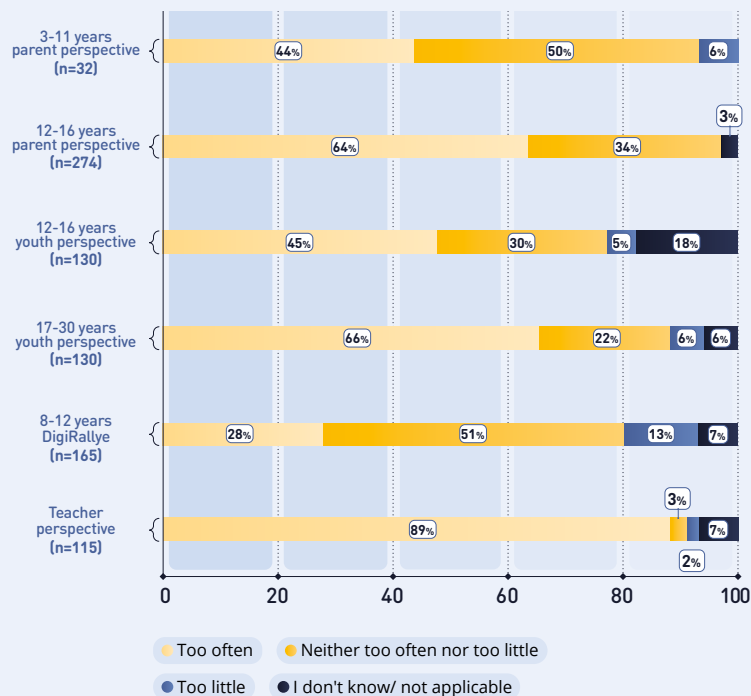


Figure 12. Evaluation of the amount of time that **young people** spend on their smartphone.

As far as young people are concerned, almost half of 12- to 16-year-olds (45%) think they use their smartphone too often. Of these young people, 35% say they spend 4 to 6 hours a day behind the screen. However, a third (39%) say they spend 1 to 3 hours a day.

Among the young people who say they use their smartphone 'neither too often nor too little', the majority say they spend 1 to 3 hours a day on their phone.

It is also interesting to note that nine out of ten primary school teachers believe that children use their smartphone too often.

Commentaire du ZEV :

As in the previous year, it is not clear to what extent the results include active screen time or background use (such as Spotify, etc.). However, it is worrying to note that 25% of 12- to 16-year-olds and 56% of 17- to 30-year-olds use their smartphone for more than four hours a day. This is a high percentage if we consider that these figures do not take into account the time spent in front of a tablet, computer/laptop or television, which is sporadically added to smartphone use. What's more, one in five young people say they spend more than six hours a day on their smartphone, which represents about a third of their daily waking hours.

In addition, 53% of 12- to 16-year-olds and 78% of 17- to 30-year-olds say they use their smartphone several times an hour. This frequent use can fragment their relationship with their immediate physical or social environment and have an impact on their ability to concentrate on activities and be fully present in social relationships. Of course, this risk needs to be considered on a case-by-case basis, as there are situations or times when such behaviour is acceptable.

The marked increase in this type of use in all three age groups highlights the need to promote competent and conscious use of smartphones from the outset. To this end, it is useful to encourage regular use, in particular to counteract an unconscious and rather impulsive mode of use.

According to the *klicksafe* survey, almost half of children think they should spend less time on digital media, while almost as many think it's unnecessary.

By contrast, parents (n=500) have a different perspective on their children: two-thirds of them think their child should use less digital media. Parents are particularly critical of teenagers, with no less than three quarters of them believing that their 14- to 17-year-old child's use of digital media is too high and should be reduced.

(klicksafe, 2023)

Question asked to parents: Do you think you use your smartphone yourself...

Question to children/young people: How would you rate the amount of time your parents/legal guardians spend on their smartphone? I find that my parents'/legal guardians' smartphone use is...

Festinger, L. (2012). *Theorie der Kognitiven Dissonanz*. Huber Verlag Bern, not modified from the 1978 edition, Verlag Hans Huber.

Question asked to parents: Do you think your child uses the smartphone...

Question asked to children/young people: How would you rate the amount of time you spend on your smartphone? I find that my own use of the smartphone...

Question to teachers: Do you think that most children use their smartphone...

3.2 On-screen activities

It is also important to note that the amount of time spent on digital media is not the only factor to take into account. The content that young people encounter and the activities that they engage in when using their smartphones need to be considered as well. For example, one can distinguish between active screen time, such as playing online games, and passive screen time, such as streaming.

Thus, young people were also asked how much time they spend on **5 types of activities**:



being on social media



playing online games



streaming



chatting and communicating



searching for information online

An increase in **online gaming** and **social media** addiction among children and teenagers has been observed in Germany in recent years.¹¹ It is therefore worth taking a closer look at these two types of activities to get an initial idea of how much time children and young people in Luxembourg are spending on them.

¹¹ The results of the *DAK-Gesundheit* and *UKE Hamburg* study highlight a growing concern about video game and social media addiction among children and teenagers in Germany. The percentage of children and teenagers addicted to video games has more than doubled between 2019 and June 2022, rising from 2.7% to 6.3%. Similarly, social media addiction has also doubled, from 3.2% to 6.7%. When looking at intersections, 5.1% of study participants have problematic use of both gaming and social media, while 1.1% also use streaming services problematically (DAK-Gesundheit, 2023).

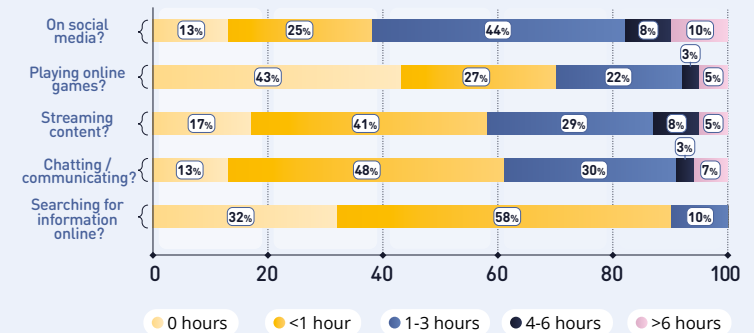


Figure 13. YOUTH (12-16 years) - How much time do you spend per week day... (n=137 young people).

During the week, 87% of **12- to 16-year-olds** spend time on social networks and online communication, while 83% stream, 68% search for information and 57% play online games.

When we compare the proportions of those who spend **an hour or more on a specific activity**, we find that the descending order in terms of relative time spent is as follows: (1) social media (62%), (2) streaming (42%), (3) messaging (40%), (4) online games (30%), and (5) searching for information online (10%). Among teenagers aged 12 to 16, 10% spend more than six hours on social networks, 7% spend more than six hours chatting/communicating, and 5% spend more than six hours streaming or playing online games.

Interestingly, 43% say they never play **online games** during the week, while 27% spend less than an hour doing so each day. At weekends, on the other hand, 10% more children say they play. Only 33% say they did not play at all. The proportion of children who spend four and six hours playing online games increases considerably: 10% at weekends, compared with 3% during the week.

As far as **social media** is concerned, the percentage of users who indicate that they spend one to three hours is lower at weekends at 35%, compared to 44% during the week; while the percentage who spend four to six hours is 19%, 11% more than during the week.

When it comes to **streaming** films, series and videos, the percentages are similar: 29% of the young people questioned say they watch less than an hour at the weekend (41% during the week), while 37% watch one to three hours (29% during the week). The percentage of those who use their device to **search for information online** for one to three hours a day increases by 5% at weekends to 15%, while the percentage with less than one hour's use decreases from 58% on weekdays to 47%. The percentage of 12- to 16-year-olds who say that they do not use their device to search for information at all increases by 5% at weekends to 37%.

In summary, there is a tendency to spend more time on online activities at weekends than during the week, but it should be stressed that this does not apply to all types of activities to the same extent.

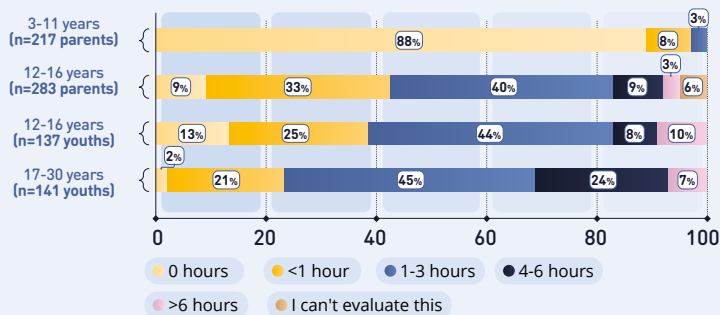


Figure 14. Amount of time spent per day during the week on social media.

When it comes to information on social media, young people's responses are very similar to those of parents of 12- to 16-year-olds.

According to parents of 3- to 11-year-olds, 88% of children do not spend any time on social media during the week (weekend: 92%). For 8% of them (weekends: 5%), their children spend less than an hour a day on social media, while 3% say they spend between one and three hours (weekends: 2%).

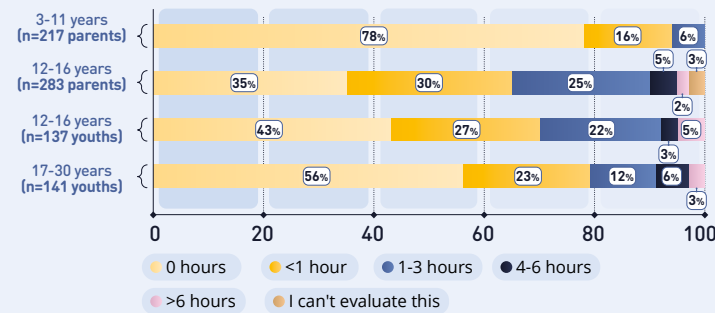


Figure 15. Amount of time spent per day during the week playing online games.

As far as **online gaming** is concerned, parents believe that children aged 3 to 11 spend slightly more time playing games: 16% of children spend less than an hour playing online and twice as much as on social media. At weekends, 11% play for less than an hour, 9% for one to three hours, and 2% for four to six hours.

i In Germany in 2022, on average, social networks were used during the week by:

- Children under 15: 5.8 days per week (n=313), 132 minutes per day respectively (n=296).
- Young people aged 16 and over: 6.5 days per week (n=313), 201 minutes per day respectively (n=296).

(DAK-Gesundheit, 2023)

i In the JIM study (n=1,200 youths aged 12 to 19), 72% reported playing digital games every day or several times a week, 14% indicated a frequency of once a week to once every 14 days, 7% once a month or less frequently, and 8% never play digital games.

(Feierabend et al., 2023)

i The JIM study revealed that in Germany, *Minecraft* (19%), *FIFA* (18%) and *Fortnite* (12%) were the most frequently cited online games in 2022.

(Feierabend et al., 2023)

3.3 Problematic usage

The *Short CIUS*¹² questionnaire is a well-established tool for capturing internet-related disorders (IRD) and detecting early signs/anomalies for such behaviour. However, the tool is not designed to diagnose internet-related disorders exhaustively. Nor is it possible to distinguish between risky, abusive or addictive patterns of use.¹³ Therefore, the following results should be interpreted with caution.

The results of the evaluation show that almost half of the young people in the sample (47%) exceed the threshold for an internet-related disorder. This prevalence is higher among young people aged 17 to 30 (49%) than among those aged 12 to 16 (41%). It is interesting to note that prevalence among 12- to 16-year-olds fell from 63% to 41% compared with the previous year, while it remained virtually unchanged among 17- to 30-year-olds.¹⁴

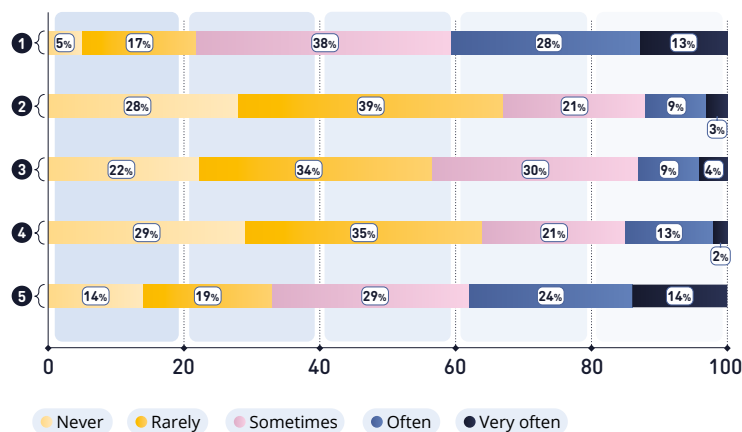


Figure 16. YOUTH (12-30) - Problematic Internet usage - results of Short CIUS.

Generally speaking, the following situations occur (very) often among young people aged 12 to 30:

- ➔ Two out of five young people (41%) find it difficult to stop using the Internet on their own (*Radar 2023: 49%*).
- ➔ Only 12% are (very) often asked by others to use the Internet less (*Radar 2023: 9%*).
- ➔ 13% of young people do not get enough sleep because of their Internet use (*Radar 2023: 21%*). Almost a third of young people sometimes find themselves in this situation (*Radar 2023: 23%*).
- ➔ 15% of young people neglect activities such as hobbies, sport, or daily chores in favour of using the Internet, which can lead to problems later on (*Radar 2023: 20%*).
- ➔ Nearly two out of five young people (38%) use the Internet (very) often when they feel unpleasant emotions (*Radar 2023: 53%*).

The Short CIUS showcases the answers to the following questions:

- 1 How often do you find it difficult to stop using the Internet once you've started?
- 2 How often do other people tell you that you should use the Internet less?
- 3 How often do you not get enough sleep because of the Internet?
- 4 How often do you neglect other activities (e.g. hobbies, sports, daily chores, etc.) because you prefer to use the Internet?
- 5 How often do you go online when you're feeling down (e.g. sad)?

i In terms of the problematic aspects identified, a theoretical average shows that these behaviours occur '(very) often' in 24% of young people aged 12 to 30, which represents a slight decrease on the previous year (30%). On the other hand, one in five said that they 'never' display such behaviour (*Radar 2023: 23%*), while 57% of young people said they exhibit it 'rarely' or 'sometimes' (*Radar 2023: 47%*).

It is important to note that these figures must be interpreted with caution in terms of content, but they do provide a good illustration of the situation.

ZEV analysis and comments:

Compared to the previous year, there are fewer extreme values for time spent using the Internet and problematic use, particularly among 12- to 16-year-olds (parents' and young people's perspectives). This may be due to a number of factors, such as a more representative sample, greater awareness among parents and young people, and the effectiveness of prevention and early intervention measures. However, the available data do not allow us to determine with certainty the influence of these factors.

The seemingly more representative breakdown suggests a gradual analysis depending on the scale of the problem. The choice of the recommended cut-off value depends on the importance attached to maximising sensitivity (detecting as many people actually affected as possible) or maximising specificity (minimising 'false positive diagnoses'). Even using conservative threshold values (high specificity), 54.7% of respondents have symptomatic ('at risk') use and 38.6% have problematic use that should be investigated for possible pathological development, suggesting a need for intervention at the individual level or, more broadly, at the societal level.¹⁵

However, it is important to note that the distinction becomes less reliable at the lower end of the cut-off points when more than half the sample exceeds them. There is a 'new normality' of use, which means that, on the whole, duration of use has reached a higher level in society than in previous years or decades. This development has a negative impact on many young people in various dimensions and also makes it more difficult to reliably identify the proportion of people who are already significantly but not yet alarmingly affected.

Overall, these results continue to justify vigilance in the face of future developments and the maintenance of preventive efforts at various levels. The fact that a significant proportion of young people consider their own use behaviour to be 'too often' can be seen as an advantage in reaching them effectively with appropriate measures.

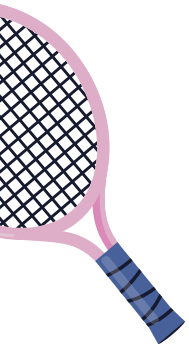


¹² Compulsive internet use scale – Short Form: <https://psycnet.apa.org/doiLanding?doi=10.1037%2F76683-000>

¹³ The *BEE SECURE Radar* is certainly not designed to provide reliable information on the prevalence of problematic or addictive use, and the short questionnaire used (Short CIUS) does not fully reflect the official ICD-11 diagnostic criteria for behavioural addictions. It is, however, considered to be an established instrument for capturing internet-related disorders (IbS) which, in addition to marked Internet addiction, also encompass mild forms of disorder, such as risky patterns of use that are considered a pre-form and only meet certain criteria (Bischof et al., 2016).

¹⁴ It is important to note that these figures do not necessarily represent a complete dependence on the Internet, but rather mild forms of disorder or risky patterns of use. However, these patterns of use can be seen as preliminary signs of a more pronounced disorder. In addition, this may also include ongoing harmful or abusive use associated with negative consequences, but which does not yet meet the criteria for full dependence.

¹⁵ The calculation and analysis were carried out using the scaled cut-off points recommended in the literature for a 5-point scale: a range of 6.11 to 7.14 for symptomatic ('at risk') use, and a range of 8.33 to 10 for problematic use.



3.4 Preferred leisure activities of children and young people

When addressing questions about screen time and online activities, it is important to also consider the non-screen activities that are significant to children and young people. This information can be useful in assessing the overall importance of screen-based activities for children and young people. Young people and parents were asked about children/young people's favourite leisure activities. The responses were analysed to determine whether or not these activities were mainly screen-related.

According to the results of the study, the main free-time activities that young people aged 12 to 16 enjoy are playing **sports**, hanging out with **friends or family**, and **playing video or computer games**. This indicates that despite the ubiquity of smartphones, young people still attach importance to physical activities and encounters.

On the other hand, according to the parents of young people aged 12 to 16, their children's top three activities are social networking or chatting, playing sports and surfing the Internet. This suggests that smartphones are used for online activities such as social networking and surfing the Internet.

Favourite leisure activities of teenagers (aged 12 to 19) in Switzerland according to the James Studie :

Alone: 1) Audiovisual media, 2) Sport, 3) Music

With friends: 1) Sport, 2) Doing something together, 3) Being outdoors and enjoying nature

(Külling et al., 2022)

	3 → 11 years parent perspective (n=217)	12 → 16 years parent perspective (n=283)	12 → 16 years youth perspective (n=141)	17 → 30 years youth perspective (n=145)
1	Playing outside (81 %)	Being on social media/ chatting (42 %)	Doing sports (46 %)	Doing sports (35 %)
2	Playing inside (38 %)	Doing sports (41 %)	Hanging out with friends/ family (11 %)	Other offline (19 %)
3	Doing sports (27 %)	Surfing the Internet (37 %)	Playing video/ computer games (9 %)	Hanging out with friends/ family (15 %)
4	Surfing the Internet (24 %)	Playing video/ computer games (36 %)	Doing manual activities/music /dance (9 %)	Playing video/ computer games (7 %)
5	Watching films/series (23 %)	Watching films/series (29 %)	Other offline (8 %)	Watching films/series (6 %)

Figure 17. Top 5 preferred leisure activities (max. 3 responses permitted).

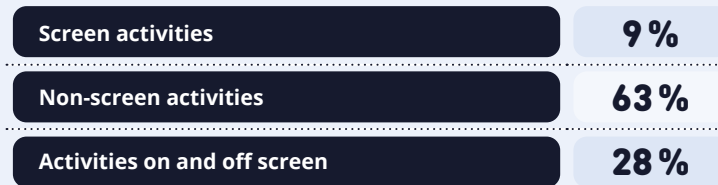


Figure 18. What is your favourite leisure activity? Survey of 165 children, categorised afterwards.

The results of the DigiRallye survey of 8- to 12-year-olds show that over a third (37%) of children consider screen-based activities to be their favourite leisure activity. Interestingly, only one child in ten (9%) mentions screen-based activities as their only favourite leisure activity.

Nearly a quarter of children (28%) mention both online and offline activities as their favourite activities. Finally, the results show that almost two-thirds of children (63%) list offline activities as their favourite. This confirms that **physical activities and socialising with friends and family remain popular choices among children.**

These results suggest that, although online activities may be present in children's leisure time, they do not dominate their preferences. Ultimately, the question also arises as to how often and for how long children/adolescents can actually enjoy their favourite activities on a daily basis. After all, the smartphone is always there, but other activities such as playing sports or hanging out with friends are not always an option.

4 ASSESSING AND MANAGING THE RISKS ASSOCIATED WITH ICT USE

This chapter compares different perspectives on assessing and managing the risks associated with ICT use.

Risk typology

The CO:RE typology of risks ('the 4 Cs')¹⁶ highlights the diversity of aspects and the wide variety of themes that, according to the assessment of international experts, play a role in the safe use of ICT by children and young people.

Conceptually, **it is important to distinguish between risk and harm**: "Risk is the likelihood of harm, while harm involves a range of negative consequences for emotional, physical or bodily well-being" (Livingstone, 2021). For example, exposure to pornography represents a risk for a child, but it is not certain that this exposure will lead to harmful consequences.

The Risk Atlas (*Gefährdungsatlas*) of the Federal Office for the Supervision of Media Harmful to Young People (*Bundesprüfstelle für jugendgefährdende Medien*) provides a comprehensive analysis and classification of the risks that hinder the peaceful participation of children and teenagers in digital media due to possible attacks on their personal or informational integrity, as well as on their development or education as responsible individuals capable of living in society (Brüggen et al., 2022a, p.96). It 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.

¹⁶ 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 <i>adult</i> contact	CONDUCT Child witnesses, participates in or is a victim of potentially harmful <i>peer</i> 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 19. The CO:RE risk classification (*the 4 Cs*) online for children. Source: Graphical representation based on Livingstone & Stoilova, 2021.

4.1 Most concerning online risks

It should be noted that the following results are based on participants' responses and do not necessarily reflect an objective assessment of the risks. However, they can provide an overview of the risks most frequently mentioned by different groups of respondents, from highest to lowest.¹⁷

	3 → 11 years parent perspective (n=217)	12 → 16 years parent perspective (n=283)	12 → 16 years youth perspective (n=124)	17 → 30 years youth perspective (n=129)	teacher perspective (n=117)
1	Spending too much time online (41%)	Spending too much time online (54%)	Sexual content (pornography, CSAM) / Cyberbullying (37%)	Disinformation and fake news (50%)	Age-inappropriate content (67%)
2	Age-inappropriate content (36%)	Disinformation and fake news (42%)		Collection of personal data without your knowledge (42%)	Spending too much time online (58%)
3	Influence of online role models (e.g. influencers) (29%)	Influence of online role models (36%)	Stalking / Spending too much time online (31%)	Spending too much time online (39%)	Influence of online role models (e.g. influencers) (41%)
4	Disinformation and fake news (25%)	Collection of personal data without your knowledge (29%)		E-Crime (37%)	Cyberbullying (37%)
5	Sexual content (24%)	Cyberbullying (28%)	Viruses and malware (30%)	Cyberbullying (35%)	Sexual content/Violent or hateful content/ Disinformation and fake news (35%)

¹⁷ List of dangers and risks, from which respondents could tick a maximum of 5: violent or hateful content; sexual content; content not suitable for your age; disinformation and fake news; cyberbullying; harassment or stalking; danger due to contact with paedophiles (grooming); pressure to behave in a certain way; fear of missing out when not online (FOMO); spending too much time online; inducement to harm yourself; pressure to share something intimate; collection of personal data without your knowledge; e-crime, virus and malware; influence of online role models (e.g. influencers). It should be noted that the 'e-crime' option was not available to parents.

¹⁸ As far as the teachers are concerned (n=117), it should be noted that most were primary school teachers (77%).

Figure 20. Most concerning online risks.¹⁸

Parents' perspective: As in the previous two years, the subject of screen time remains the greatest concern. However, it is interesting to note that since our first survey (*Radar 2022*), the percentage of parents who mention this subject in the top five has fallen.

Whereas in 2022, 74% of parents of teenagers aged 12 to 16 considered this to be one of the top five issues, this dropped to 55% in *Radar 2023* and 54% in this year's *Radar (2024)*, a drop of around 20%. While disinformation still came in second, this year a total of 29% of parents of teenagers aged 12 to 16 mentioned data protection as one of the top five issues, around 10% fewer than in the previous two years (*Radar 2022*: 40%; *Radar 2023*: 38%). As a result, the topic of data protection dropped from third place (*Radar 2022*, *Radar 2023*) to fourth place (*Radar 2024*). Online role models (influencers) took third.

Among parents of 12- to 16-year-olds, cyberbullying is now one of the top five risks mentioned. Similarly, young people now see screen time as one of the top five risks. It is interesting to note that these themes were already at the top of the list the previous year, along with screen time among parents and cyberbullying among 12- to 16-year-olds. This suggests that these topics persist and continue to be a major source of concern for parents and young people.

The results also show certain changes in the concerns of parents of younger children (aged 3 to 11). For example, concern about disinformation and fake news has gained in importance, moving from fifth to fourth place compared to the previous year.

Young people's perspective: Among 12- to 16-year-olds themselves, screen time is now one of the top 5 risks mentioned.

For teenagers and young adults aged 17 to 30, cybercrime and traditional cybersecurity issues are now in the top 5.

Among 17- to 30-year-olds, disinformation and fake news are still considered the greatest risk, as in the previous year.

Teachers' perspective: Among teachers—especially primary school teachers—the most concerning risk is age-inappropriate content. Interestingly, this concern only appears in the top 5 of parents of children aged 3 to 11.

Overall, screen time is a concern shared by all groups of respondents (parents, young people and teachers).

i

According to the study *Jugendliche und Falschinformationen im Internet*, conducted by the *Institut für Jugendkulturforschung und Kulturvermittlung*, social media is the main source of information for young people aged 11 to 17. However, young people consider this information to be not very credible. Only 8% of those surveyed believe that social media is 'very credible'.

Furthermore, 49% of young people are not sure about the truthfulness of information on the Internet. Even for academic purposes, only 64% of young people verify sources of information – and only if the information seems not very credible to them.

(SaferInternet.at, 2023)

4.2 Experiences with risks and dangers

In addition to the most concerning online risks, parents and young people were also asked how often young people and their peers have already been confronted with risky online situations, such as cyberbullying, pornography, sexting, contact with adults who exhibit objectionable behaviour (in the sense of grooming), violent videos and online trading. These responses serve as an approximate indicator of trends and allow us to assess the true scale of these risky behaviours in Luxembourg.

Cyberbullying

Cyberbullying is when a child is harassed, ridiculed and intimidated by another child, other children, or adults through the use of online technologies. Bullying can also include psychological violence. Cyberbullying may be intentional or unintentional (Stoilova et al., 2023).

YOUTH

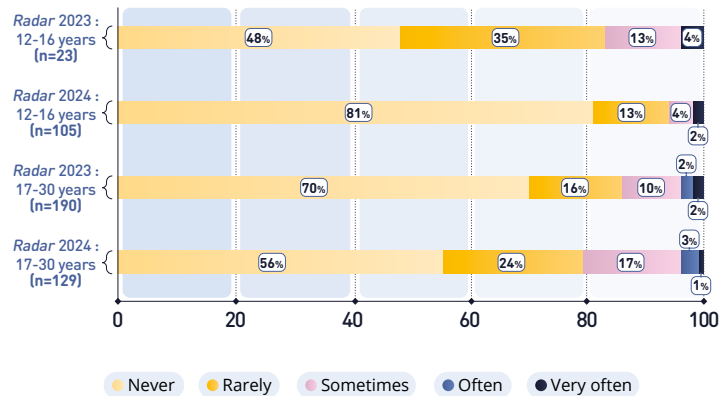


Figure 21. YOUTH - How many times have you been the victim of cyberbullying?

According to the current survey, the percentage of young people aged 12 to 16 who say they have been cyberbullied at least once has fallen from 52% last year to just 19%. It should be noted that the number of participants in this age group was much lower last year (n=23) than in the current survey (n=105), which could have an impact on the results.

However, the percentage of 17- to 30-year-olds who say they have never been a victim of cyberbullying is also lower this year (56%) than last year (70%).

PARENTS

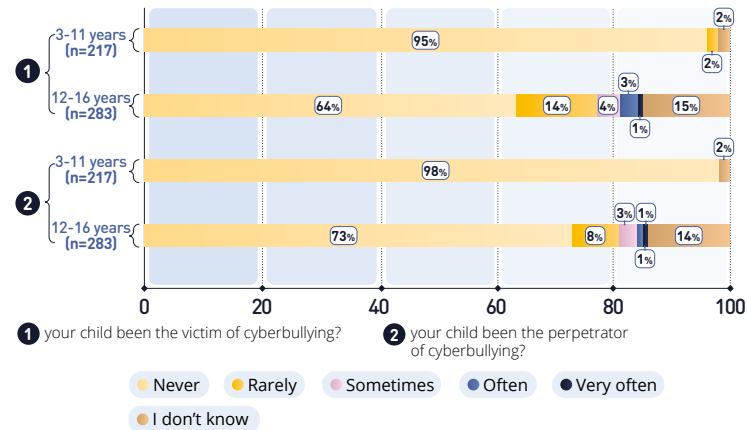


Figure 22. PARENTS - How many times has...

Among parents of 12- to 16-year-olds, 22% said that their child had been a victim of cyberbullying at least once. Moreover, 15% said they were unaware of the situation at the time. According to 13% of parents, their child had been the perpetrator of cyberbullying at least once, and 14% said they did not know.

On the other hand, only 2% of parents of children aged between 3 and 11 said that their child had ever been a victim of cyberbullying.

i According to the *Jugendmedienschutzindex*, 40% of parents surveyed (n=805) were (very) concerned that their child might be cyberbullied by other people, whereas 18% were concerned that their child might be the one doing the bullying. (Brüggen et al., 2022b)

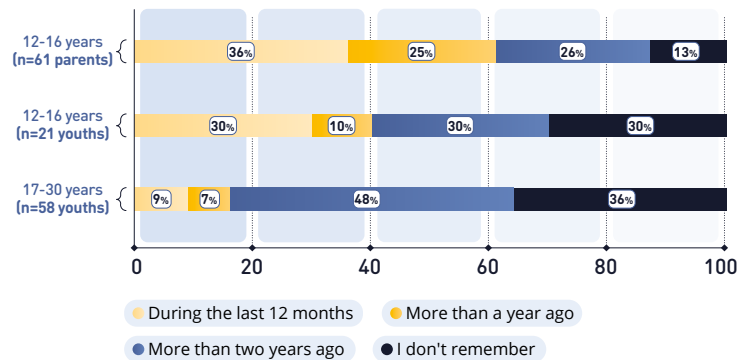
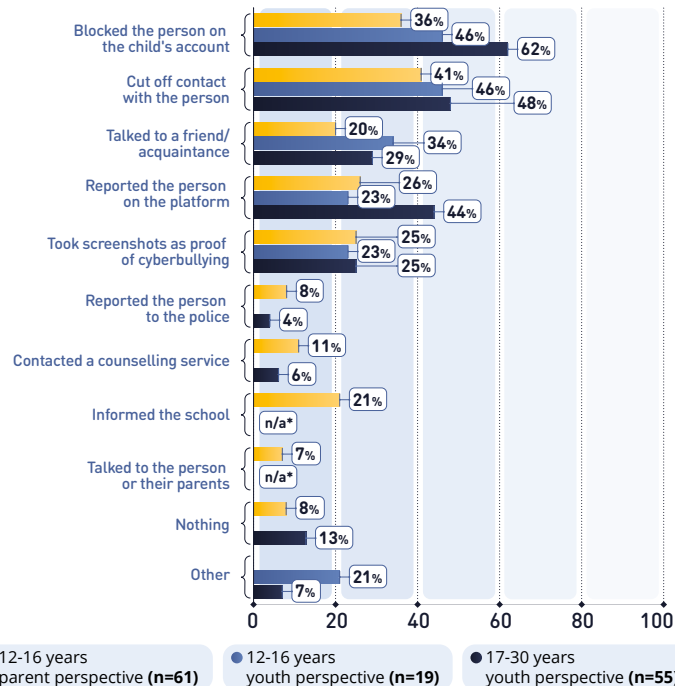


Figure 23. When was the first time that the young was a victim of cyberbullying?

Based on data collected from young people aged 12 to 16 who had experienced cyberbullying before (n=21), it was found that 30% had experienced cyberbullying between June 2022 and June 2023. Among young adults aged 17 to 30, 9% reported having been cyberbullied during this period as well.



* n/a = not applicable. The youths did not have the option of choosing this response.

Figure 24. Actions taken when child experienced cyberbullying.

In this survey, participants were not only asked about when the online bullying occurred but also about the action they took afterwards.

The results show that **almost three out of five young people say they blocked the 'bully'** (46% of 12- to 16-year-olds and 62% of 17- to 30-year-olds). In contrast, only 36% of parents said they had blocked the perpetrators of cyberbullying on their child's account.

Among the 19 teenagers aged 12 to 16 concerned, the three most common ways of dealing with cyberbullying were blocking the person, breaking off contact and talking to a friend. **None of the teenagers reported that they had contacted a counselling service or made a complaint to the police.** However, 11% of parents of 12- to 16-year-olds and 6% of 17- to 30-year-olds said they had turned to a counselling service.

Pornography

“Pornography” refers to online content without artistic merit that describes or shows sexual acts or nudity in a way that is intended to sexually arouse (Stoilova et al., 2023).

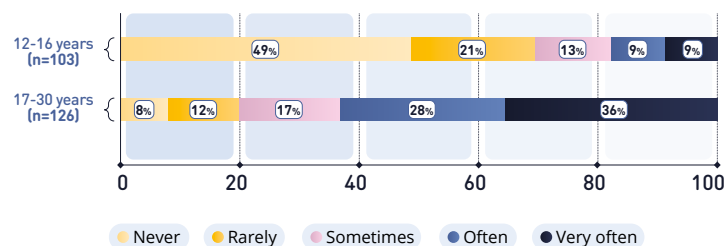


Figure 25. YOUTH - How often do you think that young people your age come into contact with pornographic content?

According to estimates from **12- to 16-year-olds, almost a third (31%) of teenagers in this age group are at least “sometimes” exposed to pornographic content.** According to 17-to 30-year-olds, 81% of their peers are at least “sometimes” exposed to such content, and more than a third (36%) are exposed “very often”.

Parents were also questioned on this subject. A third of parents of children aged 12 to 16 assume or are certain that their child had already been exposed to pornographic content online. This demonstrates no significant change from the previous year, when the percentage was 38%. Among parents of children aged 3 to 11, only 3% believe that their child had already been exposed to pornographic content, while 90% believe that this was not the case (19% answered the question with “No, I don’t think so”, while 71% answered “No, I know for sure that this has not yet happened”). The remaining parents (7%) said they didn’t know.

The responses from 12- to 16-year-olds correspond to representative statistics in Germany: according to a representative survey on minors’ experiences with sexting and pornography in Germany, a third of 11- to 17-year-olds (35%) have seen a pornographic film. The same study regards these results as troubling, as minors’ exposure to pornographic content often occurs involuntarily and can potentially influence their own sexuality and sexting behaviour (Landesanstalt für Medien NRW, 2023).

These findings highlight the need for children and teenagers to learn how to correctly contextualise pornography and develop a healthy relationship with it; in other words, they need to **develop the media skills to handle online pornography.**

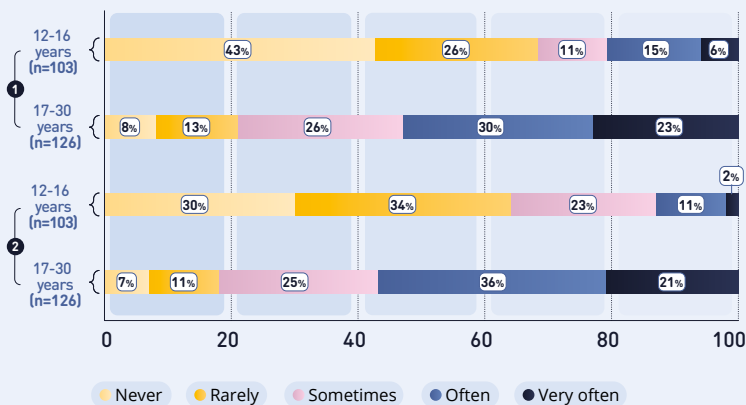
The survey confirms that children and adolescents come into contact with pornography and sexting from a young age. Most of the respondents watched their first pornographic film between the ages of 12 and 14. There is little difference between girls and boys in this regard. A quarter of the minors surveyed who have already watched pornographic films report being exposed to or involuntarily receiving pornographic content.
(Landesanstalt für Medien NRW, 2023)

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).

In Luxembourg, children and young people have earlier access to intimate or sexualised content, such as texts, photos and videos, via digital media than previous generations.

According to a representative survey conducted in 2023 on minors’ experiences with sexting and pornography in Germany, one in five people aged 11 to 17 (21%) have engaged in sexting (Landesanstalt für Medien NRW, 2023).



- 1 send intimate photos or videos of themselves to someone else?
- 2 receive intimate photos or videos of someone else?

Figure 26. YOUTH - How often do you think that young people your age...

Almost a third (32%) of young people aged 12 to 16 report that their peers at least “sometimes” send intimate photos or videos of themselves to other people. In addition, 36% say that their peers also “sometimes” receive intimate content from other people. In total, 43% of 12- to 16-year-olds believe that their peers never send intimate content about themselves, while 30% believe that their peers never receive intimate content from other people.

It would therefore appear that, according to the perception of 12- to 16-year-olds, their peers receive intimate content more frequently than they send it themselves.

This trend is even more widespread among 17- to 30-year-olds, where four out of five (79%) say that peers their own age send intimate content at least “sometimes”. Last year, the figure was 75%.

Grooming

Grooming is a practice whereby an adult attempts to establish, anonymously or under a false identity, a relationship of trust with a minor over a prolonged period (weeks or months), with a desire to ultimately persuade the minor to engage in acts of a sexual nature (online and offline). Grooming forms one of the basic risks of contact with adults (see 4C’s, Chapter 4).

According to a representative empirical study carried out in Germany in 2022, there has been a marked increase in cases of cyber-grooming compared to the previous year. A quarter of children and teenagers (24%) said that they had been asked out on an online date by an adult. Boys and girls report being affected to the same extent. More than a third (36%) of those who have experienced cyber-grooming said that the adult first pretended to be a young person their age and later turned out to be an adult (Landesanstalt für Medien NRW, 2022).

i According to a German survey, 37% of respondents who have engaged in sexting report sending sexting messages without obtaining prior consent from the person involved. These results highlight significant differences between genders and age groups. Nearly two-thirds of boys aged 11 to 13 surveyed (65%) claim to have done so, while only 11% of girls aged 14 to 17 do the same. (Landesanstalt für Medien NRW, 2023)

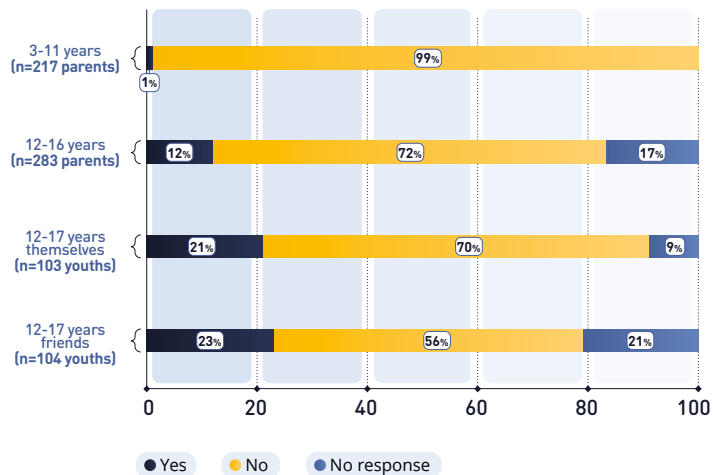


Figure 27. Encounter with an adult person online.

As part of the surveys, young people were asked if they had ever met an adult online. 21% of minors (aged 12-17) answered yes. In order to find out whether the adult had behaved inappropriately, we asked these 21% (n=21) what happened after the encounter. 14 respondents indicated that the adult had acted appropriately and had not overstepped any boundaries, while seven respondents indicated abusive behaviour (the adult sent nude photos of themselves or the adult wanted to make an appointment to be alone with the young person).

Due to the small number of people surveyed, it is not possible to draw reliable conclusions about grooming from these responses. However, the representative results from Germany, which are based on direct surveys of children aged 8 to 17, show an explicit **need for more information on the practice of child grooming**—even if the subject is shameful and perceived as unpleasant.



Violent videos

Violence is listed as one of the potentially harmful types of content in the CO:RE risk classification. As in the previous year, young people were asked about their exposure to violent videos. The survey did not specify what was meant by a “violent video”. Violent content can encompass anything the respondent understands it to mean, such as the war in Ukraine, acts of violence between young people, or the subject of violent videos in the press.

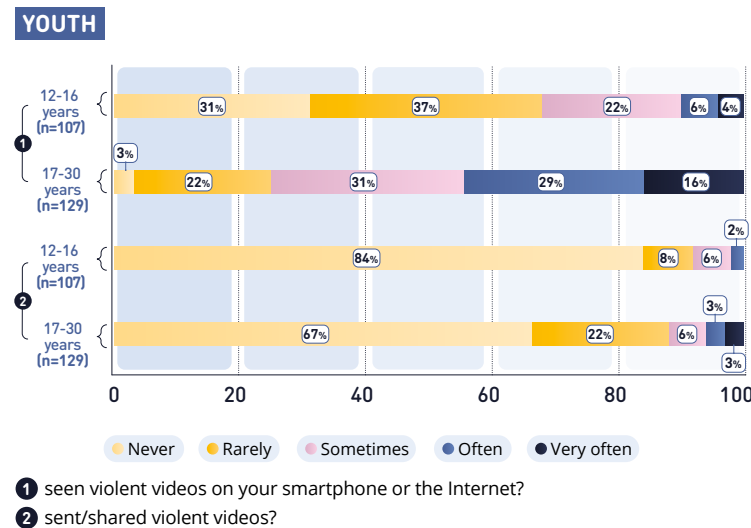


Figure 28. YOUTH - How many times have you...

i
Global percentage of Internet users aged 16-24 who own some form of cryptocurrency:
♂ Male: 12.2%
♀ Female: 6.2%
(DataReportal, 2023)

Overall, among teenagers aged 12 to 16, the data indicates a drop in the viewing of violent videos on smartphones or online compared to the previous year. 31% per cent of respondents said that they never watch violent videos, compared to just 13% last year (it should be noted that the number of participants was very low at the time, at n=22).

However, the situation is different for young adults in the **17 to 30 age group. Nearly half of the participants (45%) say they “often” or “very often” watch violent videos.** This is significantly higher than the previous year, when the response was only 24%.

In the present context, it is difficult to explain this difference without speculating. However, when we consider the content that was circulating online intensively during and before the survey period, we note that the war in Ukraine, as well as the issue of youth violence, was receiving a great deal of media attention. If anything, this could be a factor that influenced the overall responses.

Online Trading

A new theme in this year's *Radar* is online trading among young people. Online trading involves buying and selling financial products over the Internet. Traders use an online trading platform to carry out their transactions.

Through various surveys, the aim was to find out whether this emerging social phenomenon is also a trend among young people.

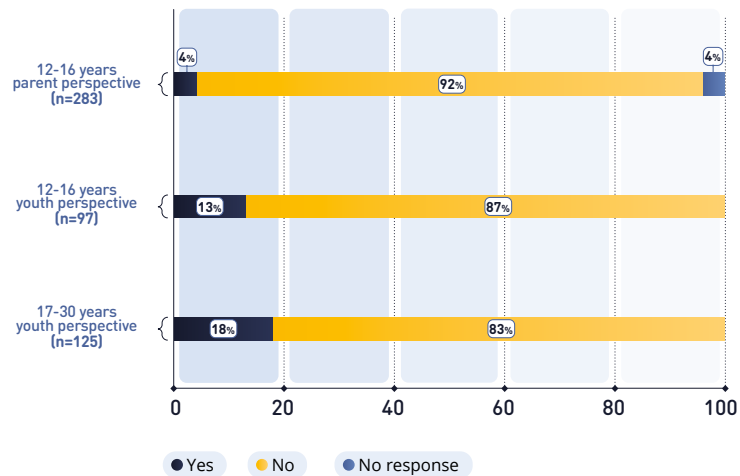


Figure 29. Have you or your child ever invested money on online trading platforms or applications?

Nearly one in five 17- to 30-year-olds say they have invested money in online trading platforms or apps, whereas only 13% of 12- to 16-year-olds have ever done so.

The young people were also asked which applications they generally use. According to their own responses, only **5% of 12- to 16-year-olds use online trading applications and 6% of 17- to 30-year-olds.**

However, it is important to note that these trends may change over time and that awareness and education about the risks associated with these practices are essential to, for example, prevent financial damage to young investors.

4.3 Risk management skills

After analysing the various risks associated with digital technology use, both children and parents assessed their own capacities, as well as those of the other party, to deal with the risks and dangers associated with ICT use. Teachers and educators were also asked to give their views on the subject.

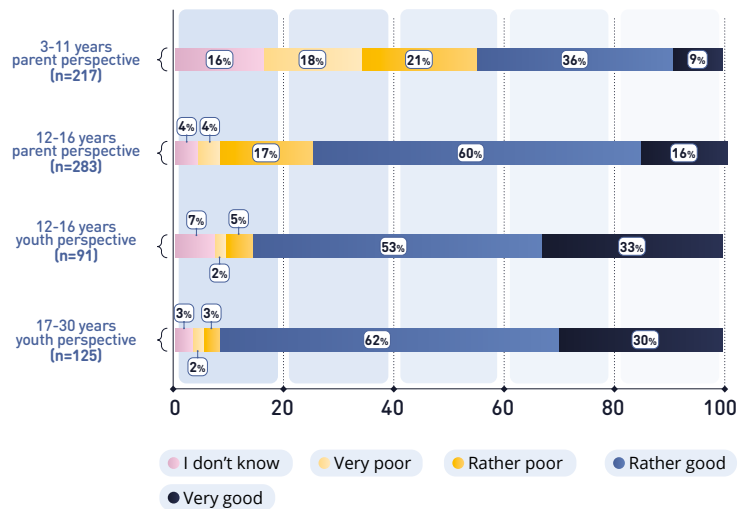


Figure 30. The ability of children and young people to manage the dangers and risks associated with Internet use.

The parents' assessments of their children's ability to manage the risks and dangers associated with ICT use are similar to those of the previous year in both age groups.

Among 12- to 16-year-olds, 86% consider their own skills to be 'rather good' or 'very good' (*Radar 2023*: 70%). This opinion is shared by 92% of 17- to 30-year-olds (*Radar 2023*: 90%).

Overall, then, the results are quite similar to those from last year. In general, we notice that parents assess their children's skills to be better as they grow older.

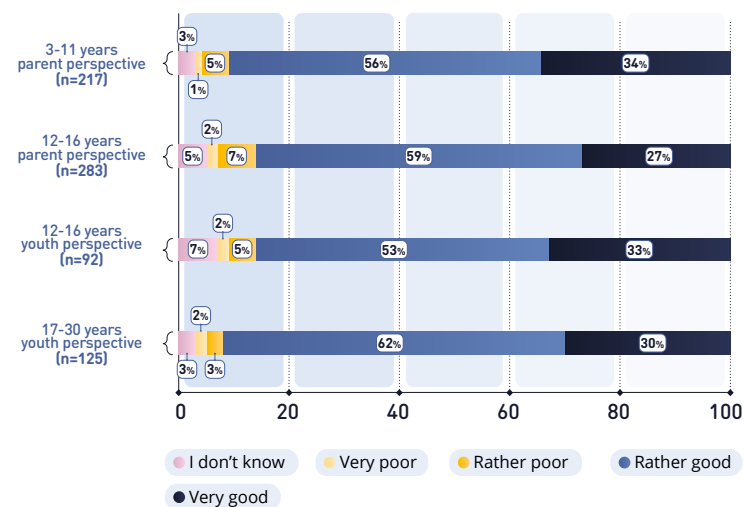


Figure 31. Parents' ability to manage the dangers and risks associated with Internet use.

The percentage of respondents who felt that the parents' abilities were at least 'rather good' was similar across all groups, ranging from 86% of young people and parents aged 12 to 16 to 92% of those aged 17 to 30.

Evaluation of education professionals (teachers and educators) - cycle 1-4

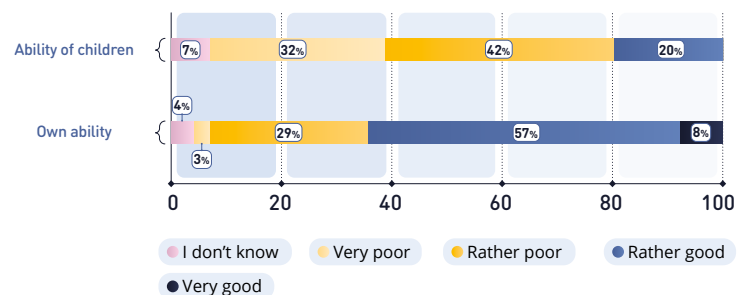


Figure 32. TEACHERS - Ability to manage the dangers and risks related to Internet use (n=115).

Teachers were also asked about their perception of children's ability to manage the dangers and risks associated with using the Internet (cycle 1-4, which corresponds to an age range of around 4 to 12 years). **It is interesting to note that educational staff rated children's abilities much less positively than parents.** Nearly three-quarters of educational staff (74%) considered children's abilities to be 'rather poor' or 'very poor', while only 39% of parents of children aged 3 to 11 shared this opinion. While 9% of parents rated their children's abilities as 'very good' and 36% as 'rather good', only 20% of education professionals rated children's abilities as 'rather good' and none as 'very good'.

It is also interesting to note that teachers had a less positive perception of their own ability to use the Internet than parents and young people. Only 8% of them considered their own skills to be 'very good', which is three to four times less than in the other groups of participants. 29% considered their own skills to be 'rather poor'.

4.4 Parental rules and measures

In order to obtain more information on how parents manage their screen time, we asked them about the rules they set for Internet use and the measures they take to monitor their children's online activity at home.

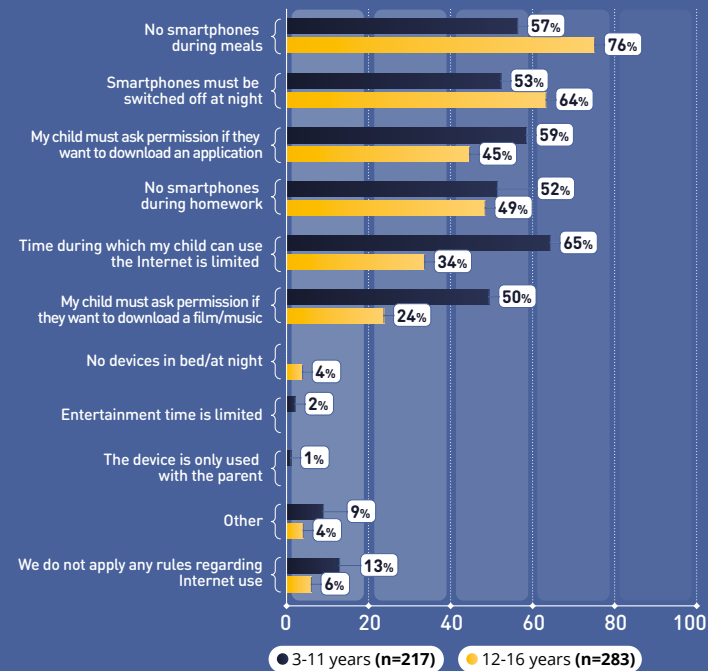


Figure 33. PARENTS - Which of the following rules apply in your home regarding your child's use of the Internet?

Analysis of the data reveals that there have been minimal changes in the application of rules relating to Internet use at home compared with the previous year. Specifically, limiting screen time fell slightly among parents with older children, from 41% the previous year to 34%. On the other hand, among parents with children aged 3 to 11, this limitation increased slightly, from 59% to 65%.

13% of parents with children aged 3 to 11 and 6% of parents with children aged 12 to 16 say that they did not apply any specific rules at home.

However, it is important to note that 75% of the children questioned at the DigiRallye say that there were rules at home, while 19% say that there were none. The remaining 6% of children are either unaware of the existence of any rules or are not concerned, for example, because they do not have a smartphone or Internet access at home.

Firstly, it was noted that, as in the previous year, around half the parents of children aged 12 to 16 use smartphone geolocation tools to monitor their child's movements. This suggests continuity in the use of this surveillance measure.

It is also noted that checking message histories became much more widespread compared to the previous year. While only 33% of parents of 12- to 16-year-olds used this measure in *Radar* 2023, 48% say they use it in the current survey. This represents a significant increase, from one-third to one-half of parents.

In the use of age-based filtering programmes, a drop of more than half compared to the previous year was observed. The percentage of parents using these programmes fell from 44% to 21% for all parents of children aged 3 to 16. This drop may indicate a change in parental control strategies, with a preference for other surveillance measures.

¹⁹ Participants were given a choice of 13 items, from which they had to tick all the protective measures that suited them. List of possible response options: carry my smartphone (or devices) with me at all times; cover my webcam when I'm not using it; secure my smartphone by setting up a pin code/facial recognition/fingerprint; make regular updates to applications and devices; make regular back-ups (in the cloud or on a hard drive); check the permissions and privacy settings of applications and devices; try (as far as possible) to use secure Wi-Fi networks; use a VPN program; check emails containing links and attachments before opening them; use a password generator; use an anti-virus product; use 2-factor authentication for online accounts; make sure you use secure connections (https: //).

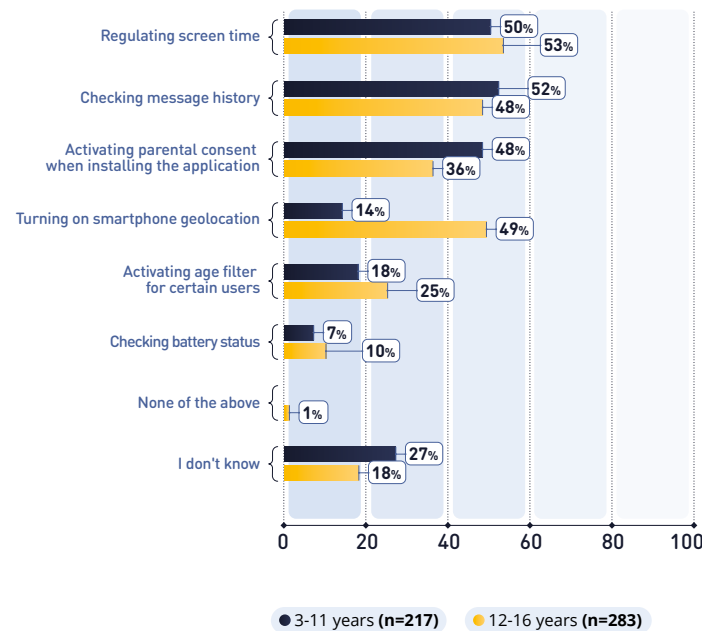


Figure 34. PARENTS - What steps have you taken to monitor your child's activity?

4.5 Measures to protect personal data and content

In addition to the general household rules and measures regarding the use of digital technology, participants were also asked about the concrete measures they take to protect their personal data and content.¹⁹

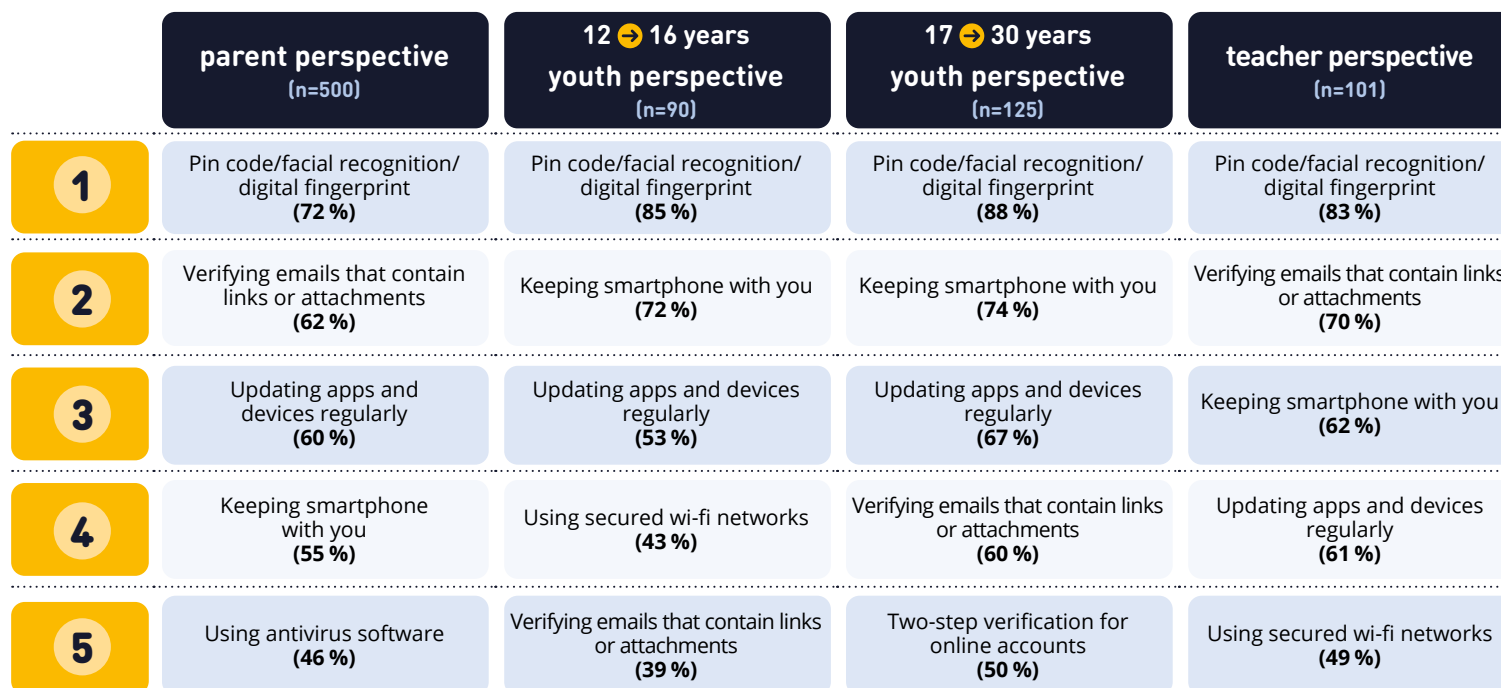


Figure 35. What do you do on a daily basis to protect your personal data and content on the Internet and on your devices?

However, one difference lies in the fact that almost half of parents said that they use an anti-virus programme (5th place), while this practice is less common among young people. In addition, young people aged 12 to 16 verify emails containing links and attachments less frequently than adults.

Within each target group, the most frequently mentioned security measure was using a pin code, facial recognition, or a digital fingerprint. This is seen as an effective way to protect personal data and restrict unauthorised access to devices and online accounts.

Among 12- to 16-year-olds, the use of a VPN programme and antivirus software was the least common, with only 14% using either one. Similarly, covering the webcam when not in use was also uncommon (17%). Only around a fifth of young people said that they use two-factor authentication or a password generator, 22% in each case.

Interestingly, almost twice as many (50%) of those aged 17 to 30 said that they use two-factor authentication, while only 13% use a password generator. This was the only measure mentioned less frequently by 17- to 30-year-olds than by 12- to 16-year-olds. All the other measures were mentioned equally frequently, or even more frequently.

Among parents, the use of VPN (18%), covering the webcam when not in use (19%), and the use of a password generator (26%) occupied the last three places in terms of use.

These results underline the importance that respondents attach to securing their personal data and protecting their privacy online. They reveal interesting trends in the effective application of specific protection measures, all of which are strongly recommended. There is still significant potential for improvement among all parties surveyed when it comes to implementing essential security measures.



5 EXPERIENCES ONLINE

5.1 Desired changes in the digital world

During the survey, the young people were given the opportunity to express, in a free comment field, the changes they would like to

see in the digital world. Here are some of the suggestions made by young people (n=126) :

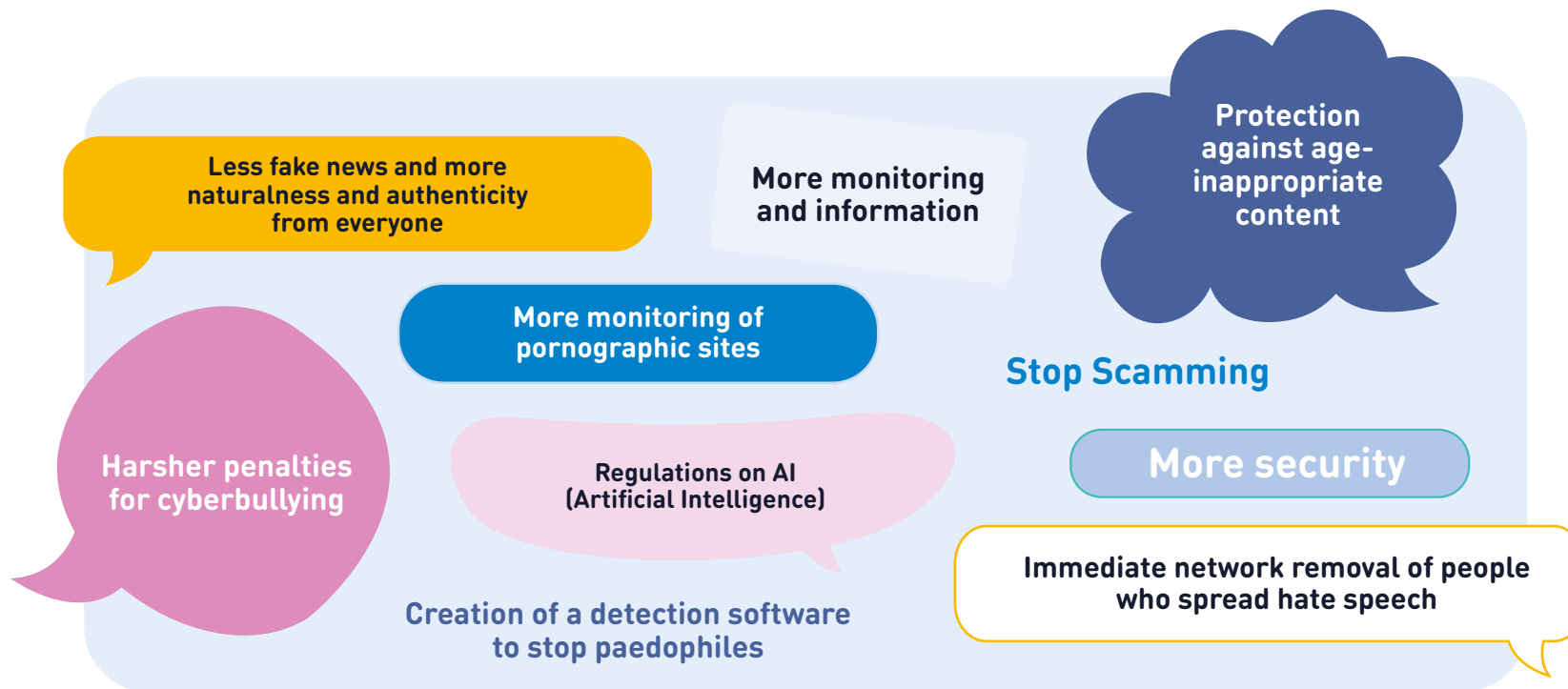


Figure 36. If you could change one thing in the digital world to make it better, what would you change?

These proposals highlight young people's concerns about safety, regulation, and user protection in the digital environment. It is essential to take these suggestions into account in order to

promote a digital world that is safer and more adapted to the needs of users, especially young people.

5.2 Negative experiences online

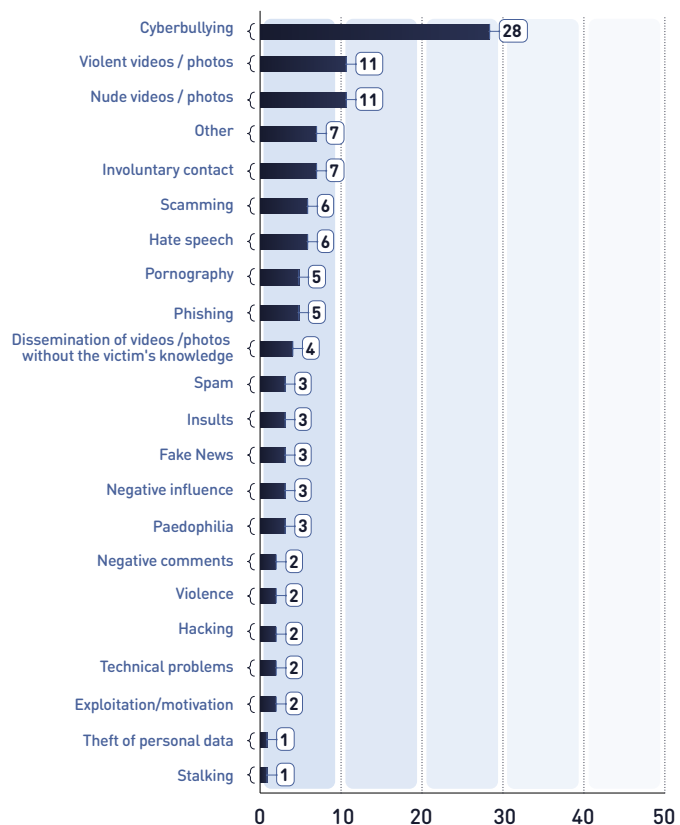


Figure 37. YOUTH (12-30) - What is the most negative experience you have had on the Internet? (n=107)



The three most frequently mentioned negative online experiences were identical to those mentioned the previous year. Of these, cyberbullying is by far the most frequently cited negative experience. This finding underlines the persistence of this worrying phenomenon and highlights the need to take action to combat cyberbullying and protect individuals online.

5.3 Positive experiences online

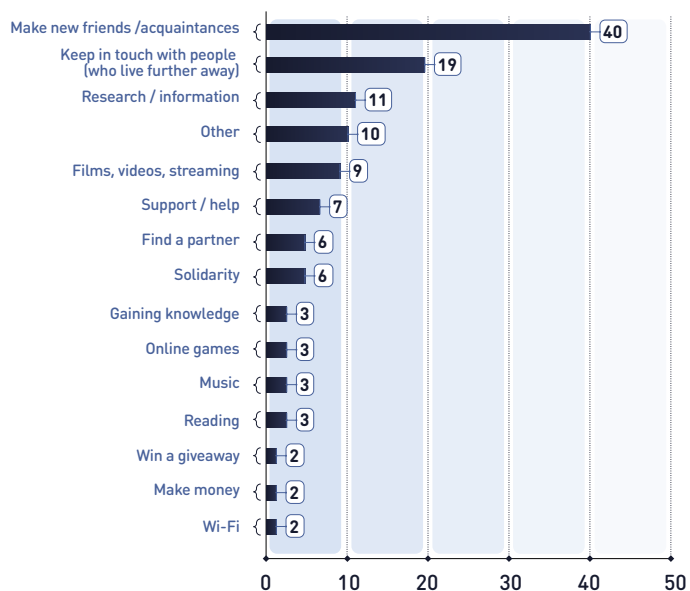


Figure 38. YOUTH (12-30) - What is the most positive experience you've had on the Internet? (n=117)

Make new friends /acquaintances



As in the two previous years, young people claimed that their most positive experiences online were linked to making new friends/acquaintances. Keeping in touch with people who live far away moved up from fifth to second place compared to the previous year.

II. BEE SECURE Helpline

The BEE SECURE Helpline — hereinafter referred to as the Helpline — offers free, anonymous, confidential telephone assistance to callers of all ages. It is run by the counselling service KJT. The Helpline provides information, advice, and personalised assistance on matters related to online safety and the responsible use of digital media, including cyberbullying, social networking, data protection rights, technical security, and many other topics. The Helpline can be contacted via telephone or in writing via an online contact form.

As of July 2023, the notoriety of the BEE SECURE Helpline in Luxembourg was 40 % (2022: 33 %).²⁰

Helpline data has been used for this publication with a focus on the following areas:

- **Young callers**, i.e. callers aged 25 and younger, calling in their own interest
- **Third-party callers** with questions involving children and young people aged 25 and younger

²⁰ Source: Ilres, representative survey commissioned by BEE SECURE in July 2023.

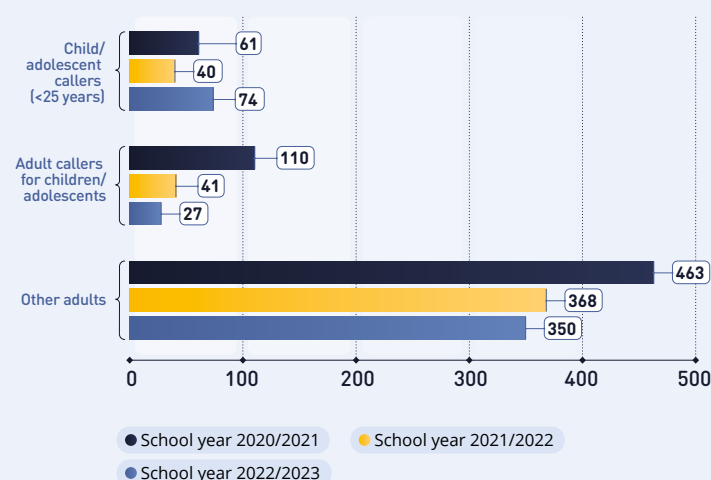


Figure 39. Calls to the BEE SECURE Helpline.

During the school period from 1 September 2022 to 31 August 2023, the Helpline recorded a total of 451 calls, which is only two more than in 2022.

The majority of calls were from adults calling either for themselves or on behalf of children/adolescents. 74 callers were under the age of 25 and called for personal reasons, an increase of 85% from the previous year.

The number of third-party calls concerning children and young people up to the age of 25 fell from 41 to 27 cases, representing a decrease of 34%. In the majority of cases (63%), parents contacted the Helpline seeking advice.

Generally speaking, children and young people rarely contact the Helpline themselves.

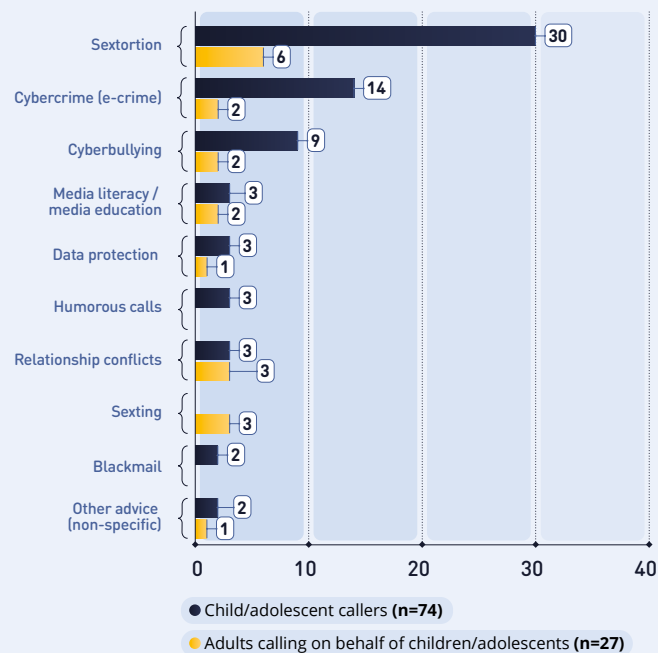


Figure 40. Main topics of calls related to children and young people.

Of the 101 calls received on topics concerning children and young people, sextortion was the most frequently raised issue, both by young people themselves (41%) and by adults (22%). The upward trend in this issue has also been observed in other countries, although there is no clear explanation as to why.

Other issues raised by callers were cybercrime (including fraud, hacking, and phishing) and cyberbullying.²¹

Last year, adult callers were primarily concerned about cybercrime and cyberbullying. Calls from young people focused on cybercrime and security settings.

The classification of topics is based on the European standard applied by Insafe (a European network of awareness centres and helplines).²² The Insafe network regularly publishes updated statistics highlighting trends in the kinds of requests that the Helpline in Luxembourg and more than 40 other European countries receive.

Other data on Helpline advice requests are regularly published in the BEE SECURE annual report and the KJT annual report.



i In its 2023 status report, the German Bundesamt für Sicherheit in der Informationstechnik (BSI) notes the increasing professionalisation of cybercrime. In addition, the BSI estimates that identity theft, sextortion and phishing are among the top three cybercrime threats to society. (Bundesamt für Sicherheit in der Informationstechnik, 2023)

²¹ In figure 40, only the topics that were addressed at least three times are mentioned. Other topics included security settings/filtering software, illegal content reported to the Stopleveline, psychological issues, contact requests, threats of violence, information about BEE SECURE, discrimination/hate speech, events/trainings, parental conflicts, and potentially harmful content.

²² European helplines trends monitoring: <https://www.betterInternetforkids.eu/practice/helplines/statistics>.

III. BEE SECURE Stopline

The BEE SECURE Stopline allows citizens the opportunity to anonymously and confidentially report potentially illegal content that they encounter on the Internet via the website stopline.bee-secure.lu. These reports are grouped into three main categories: (1) Child Sexual Abuse Material (CSAM), (2) discrimination, racism, revisionism, hate speech and (3) terrorism. The service is operated by KJT, which is a member of the INHOPE network. Reports are processed in collaboration with relevant authorities and partners at national and international levels.

In 2023, national awareness of the BEE SECURE Stopline in Luxembourg was 19% (2022: 17%).²³

Child Sexual Abuse Material (CSAM)

CSAM is the abbreviation for Child Sexual Abuse Material. During the school period from 1 September 2022 to 31 August 2023, the BEE SECURE Stopline has received 9,519 URLs reported as containing content related to child sexual abuse. Of these, 3,966 were received via an international system called ICCAM, used by partner services of the INHOPE network (International Association of Internet Hotlines), and 5,553 were received via the BEE SECURE Stopline's online platform. Compared to the previous year, when there were a total of 2,333 reports, **the current figure represents a fourfold increase in the number of CSAM reports.**

Similarly high trends can be observed internationally, and there is currently no clear explanation as to why.

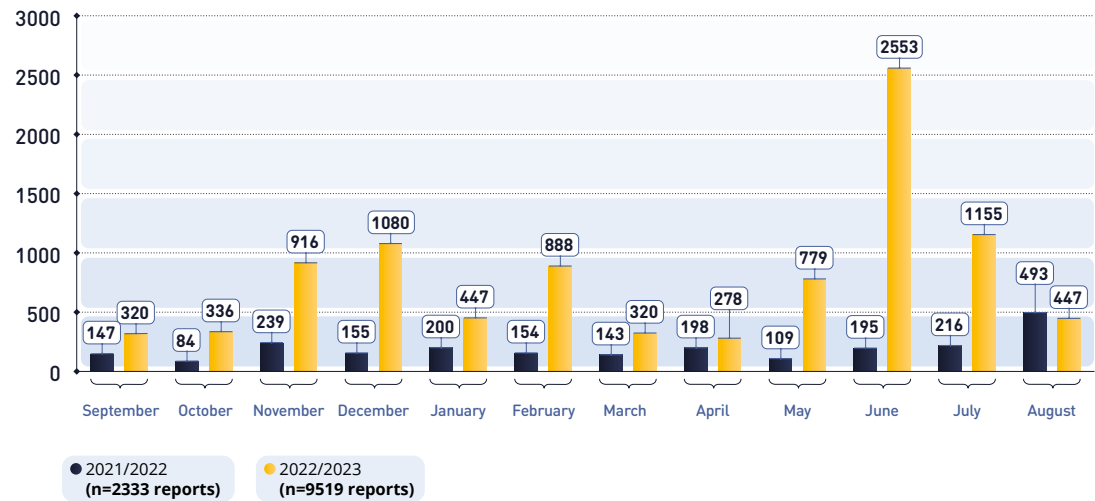
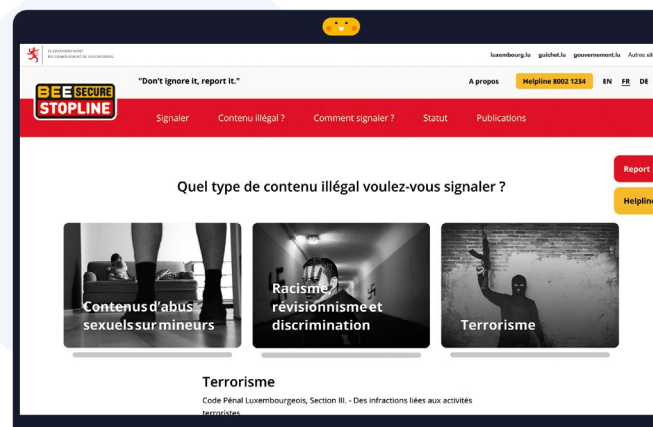


Figure 41. CSAM - Reports.



²³ Source: Ilres, representative survey commissioned by BEE SECURE in July 2023.

Out of the 9,519 URLs received in the CSAM category, 3,266 were forwarded to the police, which represents approximately 34% of the total. In 77 cases (about 0.8%), the content was a duplicate of an already known URL.

In 3,283 cases, the reported content could not be accessed as it had already been removed by the Internet Service Provider (ISP). In the case of 2,028 URLs, no content could be detected because they could not be found. Finally, 205 URLs were classified as out-of-scope, either because they did not fall within the remit of the BEE SECURE Stopline, or because they were test reports.

Unlike 2021/2022, when the majority of reports were received in August, 2022/2023 saw the highest traffic in June, with a total of 2,553 URLs received in a single month. It should be noted that this number is almost equal to the annual volume of previous years. This remarkable increase in June is mainly due to the URLs received through the international ICCAM system, used by partner services of the INHOPE network, which account for 2,034 URLs. Meanwhile, reports received via the national online platform (stopline.bee-secure.lu) remained constant at an average to high level, with a total of 519 URLs.

These trends in CSAM reports cannot be definitively explained, as there are a wide variety of possible influencing factors.

Racism

Between 1 September 2022 and 31 August 2023, the BEE SECURE Stopline received 232 URLs reported as containing racist content, of which 138 were forwarded to the police.

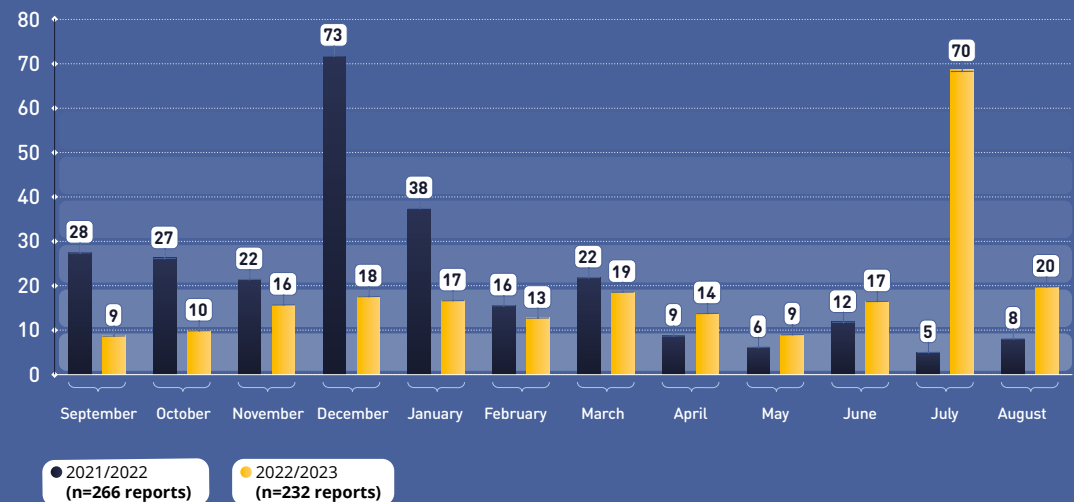


Figure 42. Racism - Reports.

This represents a decrease of 14% compared to the previous year. This decrease can largely be attributed to the relatively stabilised situation since the end of the pandemic and generally less turbulent events in Luxembourg in 2023.

The reports received by the BEE SECURE Stopline were related to topics such as racism, discrimination based on sexual orientation, hate speech against the government and political parties, religion, xenophobia, gender issues and other similar subjects. The peak in the number of reports was reached in July 2023 with a total of 70 URLs received. Of these, 35 were forwarded to the police, while the majority of the other reports were duplicates of already known cases. It is important to note that in July 2023, reports mainly concerned hate speech and discrimination against LGBTQIA+ people.



Terrorism

Between 1 September 2022 and 31 August 2023, the BEE SECURE Stopline received 34 URLs reported as containing terrorism-related content.

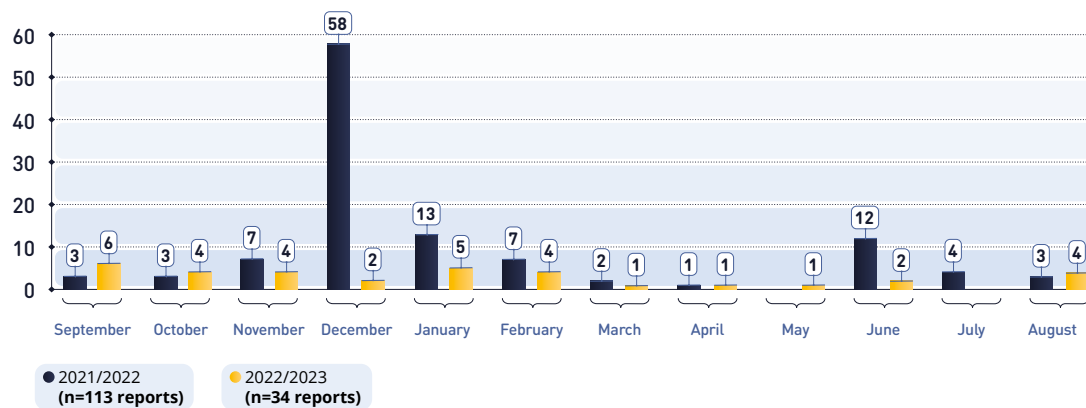


Figure 43. Terrorism - Reports.

Of these, 19 (approximately 56%) were forwarded to the relevant authorities. Overall, the number of terrorism reports decreased by around 70% compared to the previous year. The decrease can be attributed to the significant reduction in protests against health crisis measures in 2022/2023 compared to the previous year.

The reports received were mainly focused on content that glorifies, threatens or incites hatred, violence, murder and/or other criminal acts directed against certain groups of people, religious communities or political or government representatives.

IV. Public perception

Unlike in previous years, BEE SECURE was not asked to answer any parliamentary questions during the 2022/2023 academic year.

During the same academic year, BEE SECURE received 54 requests from the media on the subject of internet-related challenges. Generally speaking, the main themes were as follows:



Cybersecurity
(19)



Screen time/
privacy **(5)**



Disinformation,
cyberbullying, data
protection/privacy **(3)**



Hate speech **(2)**

Similar to the previous year, when enquiries about phishing, data leaks and scams were common, press enquiries about cybersecurity were the most frequent in the 2022/2023 academic year. On the other hand, there were fewer enquiries regarding hate speech than in the previous year.

V. Conclusions

As previously mentioned in the introduction, it is important to remember that the data presented in this document should be interpreted with caution, taking into account the different contexts in which it was collected. This data should be regarded 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, but they do indicate certain trends in relation to three age groups (3-11, 12-16 and 17-30). The surveys reflect the perspectives of children, young people, parents and educational professionals.

Subject to these reservations, the main trends in ICT use and experience and in 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 35% of children, their first contact with devices connected to the Internet, and therefore with the digital world, occurs before the age of 4. By the age of 10, 81% have had contact with the Internet. Their child's **first online activity** is mainly viewing photos (38%), as well as videos and films (27%).

According to the information provided by parents, the average age at which children receive **their first personal smartphone** in 2023 is around 11 years old, the same as in the previous two years. 86% have their first smartphone by the age of 12 (*Radar 2022*: 79%; *Radar 2023*: 84%).

According to parents, children acquire their **first personal email address** at the average age of 10 and a half and their **first social media account** at the average age of 12 and a half. The results of

the oral survey show that many children do not fully understand the meaning of the term 'email'. Of the 165 children interviewed, 36% said they have their own email address.

Most popular social media

According to the survey of 13,325 pupils aged 8 to 18, the most popular applications for sharing photos/videos in this broad age group are *Snapchat*, *WhatsApp* and *Instagram* (Primary education: *WhatsApp* (52%), *Snapchat* (45%) and *TikTok* (28%); Secondary education: *Snapchat* (77%), *WhatsApp* (65%) and *Instagram* (55%)). These results are similar to those of the previous year.

Most-concerning online risks

The adults surveyed, namely parents, teachers and young adults aged 17 to 30, are most concerned about the following issues: screen time, disinformation, age-inappropriate content, data protection, online role models (e.g., influencers), cyberbullying and cybercrime. This year, for the first time, the perspective of educational professionals has also been taken into account.

Among teenagers aged 12 to 16, cyberbullying and sexual content are the main concerns; and this year, for the first time, screen time is also mentioned as one of the top five risk concerns in this age group.

Favourite leisure activities

In the *Radar 2024* surveys, children and teenagers were asked about their favourite leisure activities. The results show that the most common favourite activities among 12- to 16-year-olds are sport (46%), hanging out with friends/family (11%), and video/computer games (9%). Among 8- to 12-year-olds, the majority (63%) mentioned screen-free activities. One child in ten exclusively mentions a screen activity as their favourite activity.

Screen time

This year, screen time was the only subject mentioned as a concern by all groups surveyed, and it ranked among the top five concerns. Compared to last year, the amount of smartphone screen time reported tended to be less, and this was reflected in all the groups surveyed. Around **half of the parents surveyed** say that they **use their smartphones too often themselves**. Only 29% of children aged 8 to 12 (DigiRallye) and 10% of young people aged 12 to 16 felt that their parents use their smartphones too much. As far as young people are concerned, **almost half of the 12- to 16-year-olds (45%)** surveyed said that they **use their smartphone too often themselves**. In addition, 87% of 17- to 30-year-olds and 67% of 12- to 16-year-olds said they pick up their smartphone at least once an hour, for example to check for updates.

Problematic Internet use

As in the previous year, the *Zentrum für excessivt Verhalen a Verhalenssucht (ZEV)* examined specific questions related to problematic Internet use. The results show that, overall, there are fewer extreme cases than in the previous year, both in terms of hours of use and problematic use. According to the survey, 54.7%

of respondents exhibit 'risky' use and 38.6% problematic use. These results underline the need to remain vigilant in the face of changing circumstances and to maintain prevention efforts at various levels. The fact that a substantial percentage of young people already believe that they use their smartphone 'too often' can be seen as an advantage when it comes to reaching them with appropriate measures.

From social media to video games: How much time is spent on each activity?

In this survey, young people were asked how much time they spend on five specific types of online activities. By comparing the percentages of those who spend an hour or more on a specific activity, the relative time spent by 12- to 16-year-olds in descending order is as follows: (1) social media (62%), (2) streaming (42%), (3) messaging (40%), (4) online games (30%) and (5) searching for information online (10%). Interestingly, 43% of them declare that they never play online games during the week, while 27% say that they spend less than an hour a day gaming. There is a tendency to spend more time on these online activities at weekends than during the week, but it should be stressed that this does not apply to the same extent to all types of activities.

Online trading among young people

In addition, specific questions were asked about online trading to get an initial idea of the number of teenagers in Luxembourg who invest money in online trading platforms. Nearly one in five young people aged 17 to 30 say they have already invested money using online trading platforms or applications, while the responses were much lower among teenagers aged 12 to 16.





Cyberbullying

Around one in five 12- to 16-year-olds say that they have been a victim of cyberbullying. This figure corresponds to the figure reported by the parents of 12- to 16-year-olds. **30% of 12- to 16-year-olds concerned were victims of cyberbullying between June 2022 and June 2023**, which is 6% of all the people surveyed. Among young adults aged 17- to 30-year-old, 9% said that they had been cyberbullied during this period. However, 45% of 17- to 30-year-olds declare that they had experienced cyberbullying at least once.

Among the 19 teenagers aged 12 to 16 concerned, the most common ways of dealing with cyberbullying are blocking the 'perpetrator', breaking off contact, and talking to a friend.

In conversations with the BEE SECURE Helpline, cyberbullying is the third most common issue raised by children and teenagers.

Pornography

According to estimates from 12- to 16-year-olds, almost a third (31%) of teenagers in their age group are at least 'sometimes' exposed to pornographic content. In the 17 to 30 age group, 81% claim that their peers are at least 'sometimes' exposed to such content, and more than a third (36%) said 'very often'.

The answers given by 12- to 16-year-olds are in line with representative data from Germany (Landesanstalt für Medien NRW, 2023).

Sexting

Almost a third (32%) of young people aged 12 to 16 report that their peers at least 'sometimes' send intimate photos or videos of themselves to other people. The responses from young people aged 12 to 16 are in line with representative data from a study carried out in Germany in 2023 on minors' experiences with sexting and pornography. The study found that one in five 11- to 17-year-olds (21%) had engaged in sexting before (Landesanstalt für Medien NRW, 2023).

Grooming

Among the 12- to 17-year-olds surveyed, 21% say that they had met an adult online before. Around two-thirds of them (14) had been confronted with inappropriate behaviour on the part of the adult that could be classified as grooming. However, given that these survey results are unreliable due to the small sample size, it's preferable to refer to a representative study conducted **in Germany**, which shows **an increase in grooming, particularly among 8- to 12-year-olds**, between 2021 and 2022. According to this study, almost a quarter of all children and teenagers (24%) have been approached online by adults for a date. It appears that the results of the *Radar* survey, despite the small number of respondents, are quite similar to the results obtained in Germany, suggesting comparable trends in Luxembourg.

Sextortion

Of the 101 calls received on issues related to children and young people, sextortion was the most frequently raised issue **on the BEE SECURE Helpline**, both by young people themselves (41%) and by adults (22%). The upward trend on this matter has also been observed in other countries.

Cybersecurity

Cybersecurity continues to be a topic of interest on the BEE SECURE Helpline, in press enquiries, and in surveys on the cybersecurity measures applied in everyday life. As far as teenagers and young adults are concerned, cybercrime (e-crime) and traditional cybersecurity issues are now among the top 5 concerns. Of the 101 calls related to children and young people received on the BEE SECURE Helpline, **cybercrime** (particularly fraud, hacking and phishing) was the second most frequently cited issue by young people themselves (in the previous year, this subject came in first, but at the same level in terms of total number of responses).

Concrete measures are recommended to ensure basic protection of personal data and content. The survey reveals **trends as to which protection practices** are already widespread and which are not. Among the young people, parents, and teachers surveyed, four out of five protection measures (setting a PIN code, facial recognition or fingerprint, keeping your smartphone with you at all times, regular updates, checking emails containing links and attachments) were mentioned by all groups.

Overall, across all age groups, **there is significant potential for improvement** in the application of almost all the recommended protection measures, for example with regard to the use of VPN programmes and a password generator, which are still not very

widespread. It will be interesting to observe developments in this area over the next few years.

These results and the requests mentioned underline the importance of raising awareness of cyber security at all ages. BEE SECURE's *Keep Your Space Safe* campaign, which runs through the 2023/2024 academic year, aims to support this objective.

Risk management

With regard to risks in general, one should bear in mind that 'risk' is not always synonymous with 'harm'. An important factor in avoiding harm is having good risk recognition as well as skills for handling risks well (risk management).

The results of the self-assessments of children's and teenagers' ability to manage risks are fairly similar to those obtained last year, from both parents and young people themselves. Around nine out of ten parents consider their skills to be 'rather good' to 'very good'.

Children and parents had similar assessments of parents' risk management skills: over 85% of each group surveyed declare that parents have '(very) good' skills.

New to the surveys this year was the perspective of teachers, who believe that the risk management skills of children in cycles 1 to 4 are relatively low.

Furthermore, 29% of the teachers surveyed consider their own risk management skills to be 'rather poor' (only 8% responded 'very good').

Outlook

Being aware of trends in how children and young people use digital technology is very important as this awareness allows us to better assess and understand **the reality that young people in Luxembourg face**. Thus, surveys and trend analysis will be developed and refined in the future.

This ongoing development is all the more important given that **our technologies are constantly evolving**. If we look, for example, at developments in the field of AI (Artificial Intelligence), the ongoing discussions about a possible evolution of the Internet into a 'metaverse'²⁴, or the increasing connectivity of objects (Internet of Things) in recent years, the importance of awareness-raising and education becomes all the more clear. If we want to ensure that children and young people are well-equipped to apply these technologies to their lives in a healthy way, we have to take these technological developments into account. **The use of a fundamental and sustainable risk classification** such as CO:RE's '4 Cs' classification **is useful in this respect**.

The diversity of risks and issues shows that there is a broad social responsibility to enable, support and (co-)organise positive growth in the use of ICT in a digitalised society. Shame-laden topics such as **pornography, sexting, and grooming** also need to be addressed without prejudice, as do **various forms of violence and hatred** (such as cyberbullying), **data protection, disinformation** and basic knowledge of **cybersecurity in everyday life**.

Young people need to be educated to become well-informed and responsible individuals. Therefore, **the area of education carries a particular responsibility** in this regard, as do parents and guardians, who serve as important role models in ICT use. Keeping children safe in the digital world is not just about the ability to protect oneself and others, but also about the way in which the digital world is fundamentally designed.

Ultimately, industry—and **providers of digital platforms and services** in particular—also has a responsibility to protect the children and young people who use their products and to improve online well-being by offering a safe and age-appropriate digital environment that **respects the best interests of children**.²⁵

Since 22 November 2022, the European Union's **Digital Services Act (DSA)**²⁶ has been in force throughout Europe, uniformly governing the activities of digital service providers within the Union. The DSA will primarily come into effect on 17 February 2024. **The DSA aims to strengthen the rights of all users**, particularly children. It specifically addresses the responsibility that digital service providers have towards minors and aims to improve these providers' protection of children online. This act specifically applies to the major platforms that are very popular with children and young people in Luxembourg.

Moreover, **the importance and necessity of regulation** focused on user protection is clearly highlighted in the young people's responses to the question of what changes would they like to see in the digital world (see section 5.1.).

²⁴ McIntosh et al (2023) define the term 'metaverse' as follows: «There is not always a consensus on what is considered the 'metaverse' and what is not. The term is still very young and evolving. A basic definition would describe it as the «Internet in 3D». The use of virtual reality (VR) or augmented reality (AR) can often give the impression that the user's body 'enters' the Internet". For a better understanding of this term and the associated concepts, please refer to the following publication: <https://learning.nspcc.org.uk/media/3333/child-safeguardingimmersive-technologies-keyconcepts.pdf>.

²⁵ European Commission (2022): A European strategy for a better Internet for kids (BIK+) (<https://digital-strategy.ec.europa.eu/en/policies/strategy-better-internet-kids>).

²⁶ <https://op.europa.eu/en/publication-detail/-/publication/f3556a65-88ea-11ee-99ba-01aa75ed71a1/language-en/format-PDF/source-296978213> (European Commission, 2023).

In addition to the important role of regulations, **continued awareness-raising and education remain essential** to fostering the healthy growth of children and young people in our increasingly digitalised society. Children and parents need to be supported in their concerns and questions—especially in cases where problems or harm have already occurred. It is important to **offer competent services and support** for children, young people and parents, as well as for educators, teachers and other professionals involved in the education, guidance, support and/or welfare of children and young people.

If we want children and young people to be able to participate in the digital world in confidence and security, we need the **cooperation of all actors involved**. For this reason, an *advisory board*²⁷ has been established. Finally, the aim of this report is to inform all stakeholders, make them aware of the many risks associated with ICT use, and encourage them to (continue to) devote themselves to corresponding topics.



²⁷ For more information on the members of the advisory board, please consult the BEE SECURE activity report: <https://www.bee-secure.lu/fr/publication/rapport-dactivite/>

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ACKNOWLEDGMENTS

We would like to express our **sincere gratitude** to all those who took part in our surveys. Their contribution is invaluable to BEE SECURE, as it provides us with valuable information on young people's use of ICT. This data, together with the trends observed by BEE SECURE in the course of its activities, are essential in orienting BEE SECURE's awareness-raising and prevention actions.



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Éditeur : Service national de la jeunesse (SNJ)

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l'Union européenne

BEE SECURE Radar - 01.2024
ISBN : 978-2-919828-23-4
Electronic resource

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