Internet Safety Risks

to Children and Young People

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List of issues

Photo: Katie Gerrard (Unsplash.com).

Introduction

One important area where children and adolescents may face the risk of abuse is the internet. The important role of the online environment in young people's lives has been emphasised for many years, but during the COVID-19 pandemics, with schools closed for over a year, for many of them the internet became the only area of social activity (see the chapter: *Children and Adolescents' Experiences of COVID-19 Pandemics*). This, in turn, led to parents', teachers' and the general public's increased interest in potential risks related to long-term functioning in the online environment.

Internet safety is a complex and multifaceted problem, as online risks are related to the content available on the internet, dangerous contacts, and interactions within the peer group. The most popular classification was developed for the largest European research project concerning online risks to children, *EU Kids Online* (Livingstone et al., 2011), and later adapted by Polish authors (see Pyżalski, 2012; Włodarczyk, 2013). It is based, on the one hand, on three levels of online interaction (content, contact, and conduct), and on the other hand – on three thematic risk categories: sexual, aggressive, and violating other values (such as health or respect for another person). After ten years of studies the original 3Cs classification was updated to a 4Cs version, by adding the contract dimension that refers to the risks of exploitation (mostly commercial) by institutional actors, such as global corporations (Livingstone & Stoilova, 2021). That was related to how the internet itself had been changing in recent years, becoming increasingly monopolised by a small number of global players, with individual users more and more closely controlled. This fourth dimension has been rarely discussed in Polish literature and, with few exceptions, no exhaustive works are available about the subject.

Table 1. The 4Cs classification of online risks

	Sexual	Aggressive	Other values
Content (the child as a recipient of content)	Pornographic or sexualised content, body oppression	Violent, racist, hateful content	Disinformation, fake news, age-inappropriate content, etc.
Contact (the child as a target of adults' actions)	Grooming, sexual abuse	Harassment, stalking, excessive control	Ideological persuasion, manipulation, etc.
Conduct (the child as a participants in peer-to-peer interactions)	Sexting, sextortion, sexual aggression	Electronic aggression, cyberbullying	Participation in harmful groups online, e.g., self-harming, etc.
Contract (the child as a party to unfair contracts)	Sexual streaming services	Scams, phishing, identity theft, hacking	Gambling, unfair marketing, etc.

Source: Own analysis based on: Livingstone & Stoilova, 2021.

This paper discusses online risks to children and young people that are of particular interest to both practitioners and theorists. Though overlapping with the areas identified in the above mentioned classification, they go beyond it and include:

- exposure to harmful content (pornography, violence, etc.),
- child sexual abuse materials, CSAM[1],
- online grooming,
- sexting (sending sexually explicit photographs or videos),
- peer victimisation online (cyberbullying),
- problematic internet use.

The goal of this article is to present the latest findings on each of these phenomena, especially data that helps to estimate their prevalence (whenever possible, in comparison to international data). The paper cites the latest available research to present up-to-date knowledge on each of the subjects. The discussion of individual risk categories is preceded by a section about general digital device usage among children and adolescents. The last section provides data on parents' attitudes and behaviours related to children's safety online.

How do children and adolescents use the internet?

According to Eurostat, in 2021 92% of Polish households (the European average) had access to the internet (Eurostat, 2022a). Statistics Poland (GUS) data show that among households with children under 15 the level of internet access was even higher and amounted to 99.5%. Thus, the internet can be seen as the most "democratic" medium, available to young people of all social groups and classes. Furthermore, it is high quality internet, as according to the same sources, 99% of households with children uses high-speed broadband internet connections (GUS, 2020).

Public statistics also confirm that young people are the group with the highest internet use intensity (99.2% report to use it regularly) and the best digital skills, relative to older groups (GUS, 2020). In the past ten years the availability of mobile internet (mainly through smartphones) has dramatically increased. According to Eurostat, in 2019 mobile internet usage in Poland in the youngest age group included in the study, was 93% (the EU average was 94%), an increase from 46% in 2012 (Eurostat, 2022b). What emerges from these findings is a picture of young people who, with very few exceptions, have access to the internet both at home and through their mobile devices. According to a 2018 survey conducted among children aged 12–17 (Makaruk et al., 2019), more than 97% of the population used the internet on their smartphones and cell phones (76.5% used it on laptops). Researchers have also identified a subgroup of "purely mobile" users, who only occasionally use fixed-line internet connections (Pyżalski et al., 2019).

For methodological reasons, it is difficult to determine exactly the average time internet users spend online, but the authors of the *Nastolatki 3.0* (Teenagers 3.0) study, the 2020 edition, estimated it was 4 hours 50 minutes daily on weekdays and 6 hours 10 minutes during weekends. Importantly,

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1   Child sexual abuse materials have been identified as a separate category due their particular harmfulness to children, in terms of both exposure to such content and the risk of using children for production of such materials.

a significant growth trend was observed as compared to 2014 (Figure 1). To complete the picture, one in nine teenagers (11.5%) reported they were active online more than 8 hours a day, and one in six (16.9%) used the internet intensely after 10 p.m. (Lange, 2021).

Figure 1. Adolescents' estimated daily time budget for online activity in 2014, 2018, and 2020
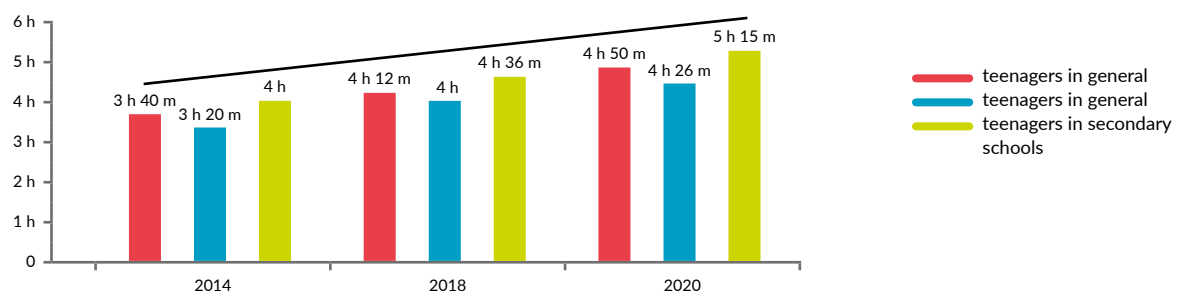
Source: Lange, 2021, p. 11.

When describing young people's screen device usage, we tend to apply the criterion of overall screen time. However, it is worth taking a closer look at specific, popular categories of screen device uses, in terms of both risks and benefits.

1. **Watching videos.** Watching videos online is one of young people's most common activities in the internet. Seventy two percent of adolescents do it every day or almost every day, while 92% do it at least once a week (Makaruk et al., 2019). Eighty eight percent of teenagers point to YouTube as the most popular service used by them online. The videos they watch there include both amateur clips and professional, commercial videos. Materials shared on YouTube by popular content creators (youtubers) enjoy the greatest popularity among children and adolescents.

2. **Social media and messaging apps.** These services are also used by nearly all teenagers. A 2021 study conducted for the ECF found that 96% of adolescents use social sites at least once a day (23% reported to use them *all the time* and 40% said they did it *more than ten times a day*). The most popular site was Facebook (89%), followed by Instagram (68%), TikTok (64%), and Snapchat (51%; FDDS, 2021). We should bear in mind, however, that social media popularity trends are changing quite dynamically. Moreover, despite the age limit set by most services at 13, they are commonly used by younger children, too.

3. **Online gaming.** Gaming is one of the most attractive and, consequently, most popular forms of screen device usage among young people. It is true for younger and younger children. Games are available on smartphones, tablets, computers, and game consoles, such as PlayStation or Xbox. Many games are available free of charge, which makes this form of entertainment more accessible. Most popular games can be played online and involve competition or cooperation with other players. According to the previously mentioned 2019 survey, multiplayer games are played every day or almost every day by 29% of teenagers, and at least once a month by 48%. Notably, there are big differences between girls, who play considerably less, and boys, among whom this form of entertainment is much more popular.

# Children's and adolescents' exposure to harmful content

The oldest and best-known risk related to internet use by children and adolescents is their exposure to inappropriate content, which is harmful in that is provokes negative emotions or promotes dangerous behaviours (Polak, 2014). Key examples of such content include pornography and materials that show violence or promote health risk behaviours (e.g., substance use) or self-harming behaviours (e.g., self-injury, suicide, etc.). All these materials may have a negative effect on children's emotional, cognitive, and social development (see Livingstone & Smith, 2014; Valkenburg et al., 2016; Villani, 2001). In particular, exposure to pornographic content may lead to early sexual initiation and higher acceptance of casual sex, and increase the likelihood of other risky sexual behaviours, such as having a high number of sex partners, substance use during sexual activity, or engaging in anal sex. Moreover, intense pornography watching has been found to be related to increased sexual violence (Lim et al., 2016).

In legal terms, presenting pornographic content to a minor under 15 is forbidden by law in Poland (Article 200, section 3 of the Penal Code [PC]). In most cases, however, the legal ban is not enforceable, because many pornographic websites are located outside Poland. In practice, children's access to such content is either unsecured, or the only safeguard applied is the adult content warning. The situation is even worse when it comes to materials presenting brutal violence and other harmful content. Although large platforms, such as YouTube, have rules that oblige them to block such content, in practice the responsibility for marking it rests with users rather than the service.

Research data from various sources makes it clear that children and adolescents in Poland are quite frequently exposed to harmful content. It is difficult to measure the exact prevalence of the problem, for a number of reasons. First, some children and young people participating in surveys may be reluctant or embarrassed to admit they had contact with such materials. Second, different studies use different definitions of harmful content (see Jones et al., 2012; Livingstone et al., 2011).

In 2017, the Empowering Children Foundation, at the request of the Ministry of Health, conducted a survey on a national sample of children and adolescents (*N* = 3,943), titled *Kontakt dzieci i młodzieży z pornografią* (Children's and Adolescents' Exposure to Pornography; Makaruk et al., 2017). It demonstrated that 43% of children and adolescents aged 11–18 had some contact with pornography and sexualised material. Exposure to pornography increased with age: among adolescents aged 15–16, 55% had contact with such material, and in the oldest group (17–18) the percentage was 63%, i.e., nearly two thirds of the population (Figure 2). Additionally, 55% of the oldest adolescents who had contact with pornography, watched it at least once a week (so they could be considered regular users). Furthermore, 22% of all young internet users aged 13–18 watched pornographic materials that involved verbal and physical violence. The figure was similar for girls and boys. Research evidence confirms that viewing pornography may have negative psychosocial consequences and encourage young people to engage in risky sexual behaviours. Individuals who have ever had contact with pornography, are three times more likely to receive nude and semi-nude photos (sexting) and five times more likely to send them. It has been also found that young internet users who access pornography every day, are twice as likely to report early sexual initiation (before the age of 15).

Figure 2. Exposure to pornography and sexualised material in the preceding year by gender and age (11–17 y.o.)
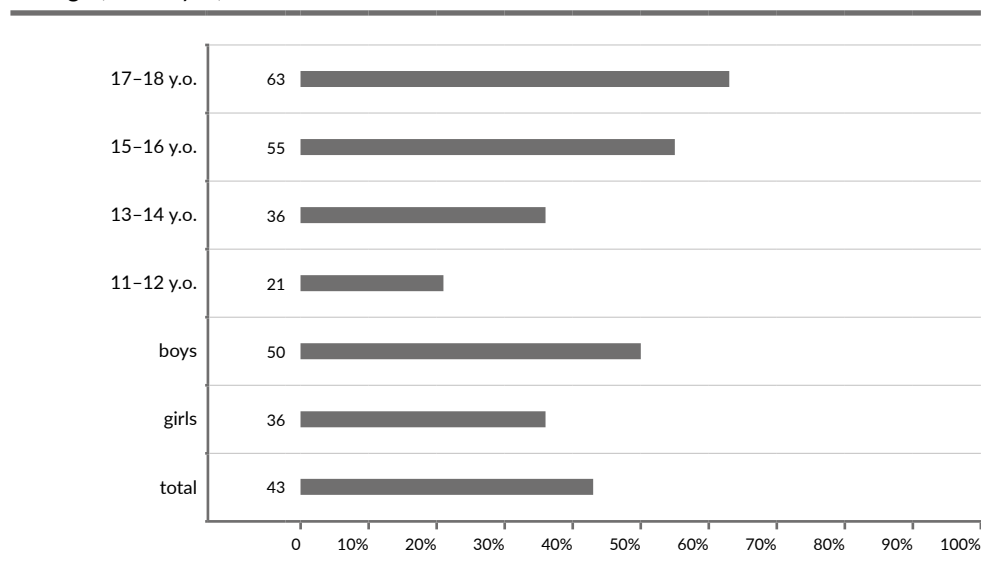
Source: Makaruk et al., 2017, p. 11.

Another survey, conducted by the ECF in 2018 (Makaruk et al., 2019), collected data on self-reported exposure to seven categories of harmful content among children aged 12–17 in the year preceding the study. More than half of the respondents (54.4%) admitted they had contact with such materials. Nearly one third (31.8%) viewed content involving real-life scenes of violence and cruelty. About one fourth (26.1%) had contact with materials about self-injury, pornography (25.2%), and hate speech (23.9%)[2]. These were followed by content promoting eating disorders (19.0%), showing different ways to commit suicide (15.8%), and promoting substance use (8.0%). Importantly, there were huge gender differences. Boys were more likely to encounter pornography, while girls had more contact with the remaining six categories of harmful content. The difference was the largest for self-harming behaviours (self-injury, suicide, and eating disorders).

The *EU Kids Online Polska 2018* survey had a closer look at young people's exposure to hate speech, which involves attributing particularly negative characteristics to some social groups, most often natural ones rather than those people belong to by choice, or inciting to discrimination against those groups (Nijakowski, 2008). Among the adolescent respondents aged 11–17, almost one third (31%) reported to have seen hateful comments online "against specific people or groups, such as Muslims, immigrants, Jews,

> *A stranger is sending out my nude photos to my friends. I sent them to him myself, but now he is blackmailing me and wants more. I'm getting very stressed about it, I can't sleep at night and I feel it's all my fault. I'm afraid to tell my parents about it.*
>
> *16-year-old girl*
> *A quote from phone calls and emails to 116 111 Helpline for Children and Young People*

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2   It is a significantly lower percentage than in the previously cited study (Makaruk et al., 2017), which can be explained by the fact that in this survey the respondents were asked about "pornographic materials" in general, whereas Makaruk, Włodarczyk, & Michalski (2017) described to them in detail what kinds of materials they meant.

Table 2. Adolescents' (aged 12–17) exposure to harmful content in the preceding 12 months (%)

|	Violence and cruelty	Self-injury	Pornography	Promoting hate speech and discrimination	Promoting eating disorders	Ways to commit suicide	Promoting substance use
Total	31.8	26.1	25.2	23.9	19.0	15.8	8.0
Girls	33.9	35.9	19.8	26.0	29.4	21.6	9.6
Boys	29.2	14.0	31.8	21.4	6.2	8.7	6.0

Source: Makaruk, Włodarczyk, & Skoneczna, 2019.

and Roma" in the preceding 12 months, 29% could not answer the question, and only 40% reported they had no contact with that kind of content. In the same study, 8.7% of the respondents reported to have been victimised themselves by hateful comments related to nationality, language, colour, religion, or appearance (the survey did not ask about sexual orientation, but the respondents could choose "other reasons"; Pyżalski et al., 2019).

Online child sexual abuse materials

Production and distribution of child sexual abuse materials (CSAM) is a global criminal practice prosecuted in most countries in the world. In Poland, it is illegal to produce, record, import, distribute, present, store, access, and possess CSAM (Article 202, sections 3–4 of the Penal Code).

Although child pornography is not clearly defined in the Polish law, the European Union defines it as "any material that visually depicts a child engaged in real or simulated sexually explicit conduct; or any depiction of the sexual organs of a child for primarily sexual purposes" (Directive 2011/93/EU of the European Parliament and of the Council of 13 December 2011). This definition was later acknowledged by the Polish Supreme Court (Supreme Court's Decision of January 15, 2020, No. V KK 655/19).

According to experts in the field, the term "child pornography", commonly used in the public debate, should be replaced with "child sexual abuse materials" (CSAM) – to emphasise that such materials are actually photographs or video recordings of acts of sexual violence against children. There are two key risks related to online child sexual abuse materials – exploiting children in the production of pornographic videos and photographs, and children's exposure to such content.

Figure. 3. Reported and confirmed incidents of CSAM at Dyżurnet.pl between 2017 and 2021
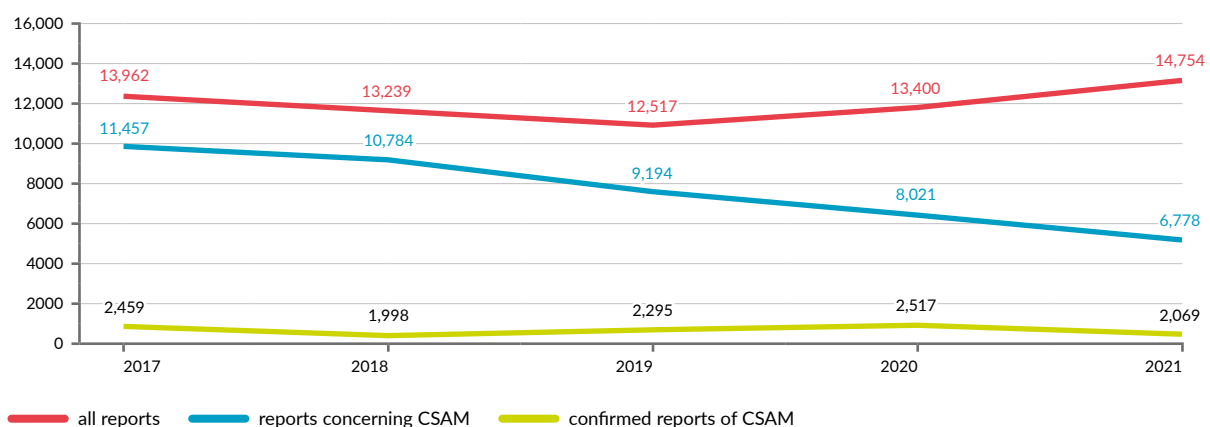
Source: Dyżurnet.pl, 2022a.

In 2015 the Dyżurnet.pl project, carried out by the Scientific and Academic Computer Network, received nearly 15 thousand reports about illegal content from internet users, including 6,778 reports concerning CSAM. Out of this number, 2,069 report were actually confirmed as illegal content. The Dużyrnet.pl contact point has observed relatively stable figures in terms of both reported and confirmed cases of child sexual abuse materials (although the share of this category in the overall number of reports has been declining; Figure 3). In recent years, there have been growing problems with illegal content safeguarded by the use of onion sites or TOR networks (referred to as the *darknet*). When undertaking legal interventions in such cases, the Dyżurnet.pl team always locates the server with illegal content. Most often such servers are located in Russia, the Netherlands, and the US, and hardly ever in Poland (only 2%). When the illegal content is found on Polish servers or involves Polish citizens, the Dyżurnet.pl team reports the incidents to the Cybercrime Bureau of the National Police Headquarters (245 cases in 2021). In other cases, illegal content may be reported to a competent agency within the international INHOPE network, which Dyżurnet.pl belongs to (1,975 incidents), or the team may directly contact the administrators or moderators (281 incidents), or hosting services (51 incidents; Dyżurnet.pl., 2022a).

Police statistics show that the number of pornography-related offences has been increasing year by year. In 2020 the number of crimes detected under Article 202 of the Penal Code (which concerns not only the production and distribution of CSAM, but also the production of pornography involving violence or animals, and sharing pornographic materials with minors or persons who do not want it) was 5,330. It is a lot, but in 2019 the number was even higher, i.e., 13,342. With the additional 3,378 offences detected in 2018, the overall number of offences under Article 202 of PC in 2018–2020 was higher than in the preceding 19 years, i.e., between 1999 and 2017 (KGP, 2022a; Figure 4). In-depth analyses would be needed to explain such a dramatic growth in statistics, but we can presume that it is largely related to increased detectability of those offences. A question also arises whether the 2020 decline could have resulted from law enforcement agencies' impaired functioning during the COVID-19 pandemics.

Figure 4. The numbers of proceedings instigated and offences detected under Article 202 of PC in 2015–2020
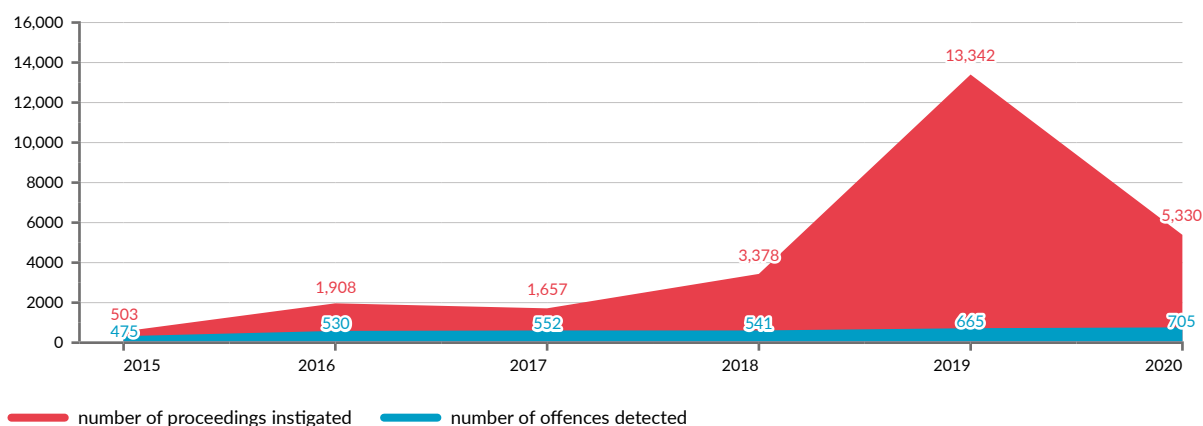
Source: Own analysis, based on: KGP, 2022a.

Online grooming

Online grooming can be defined as a special kind of an online relationship between an adult and a child, established for the purpose of sexual abuse. It can take many different forms – from forcing a child to watch pornography, to tricking children into sharing their intimate images or forcing them to record such images or videos, to making them engage in physical sexual activity during real-life meetings (Wojtas, 2013).

Online grooming is one of the most serious risks, feared by many parents. According to the Polish Public Opinion Research Center (CBOS, 2018), 43% of parents are concerned about dangerous contacts online, including grooming by paedophiles or inciting prostitution (this is the most frequently mentioned online risk to children). The easiness of online communication and the possibility to make a connection with a child while maintaining his or her illusory sense of security, put almost every child user at risk of such offender behaviours.

Given the sensitivity of the topic and the relatively small scale of the problem, most surveys conducted among young internet users do not ask directly about their grooming experiences. Instead, they focus on children's face-to-face meetings with someone they met online, which illustrates how dangerous grooming can be. In the latest *Nastolatki 3.0* (Teenagers 3.0) survey (Lange,

2021), conducted on a sample of primary (7th grade) and secondary (9th grade) students, almost one sixth of the respondents (14.1%) reported to have met face-to-face with an adult known from the internet (there was a decline in comparison to similar studies in 2014 and 2016). Those who did where asked a follow-up question about whom they told about the meeting. Thirty eight percent told their parents, 25% – their friends, 5% – their siblings, 4% – another adult, and as many as 24% did not tell anyone. This means that about 3.4% of Polish teenagers met face-to-face with adults known from the internet without telling anyone.

More categories of risky behaviours related to meeting strangers online were included in the Polish edition of *EU Kids Online 2018* (conducted on a sample of children and adolescents aged 9–17). The largest proportion of the respondents reported they had looked for new friends online; fewer of them admitted to sending their photos, videos, or personal data to someone they met online (Figure 5). In the same survey, 44% of the participants reported contacts with strangers online, and 52% of them (i.e., 23% of all the respondents) ultimately met the person face-to-face. Among those who had such meetings, 30% found the experience unpleasant. A similar scale of the phenomenon was reported by the parents surveyed by CBOS in 2018: 21% of them knew about their children's face-to-face meetings with someone known from the internet.

Figure 5. Interactions with strangers online (behaviour frequency in the year preceding the survey)
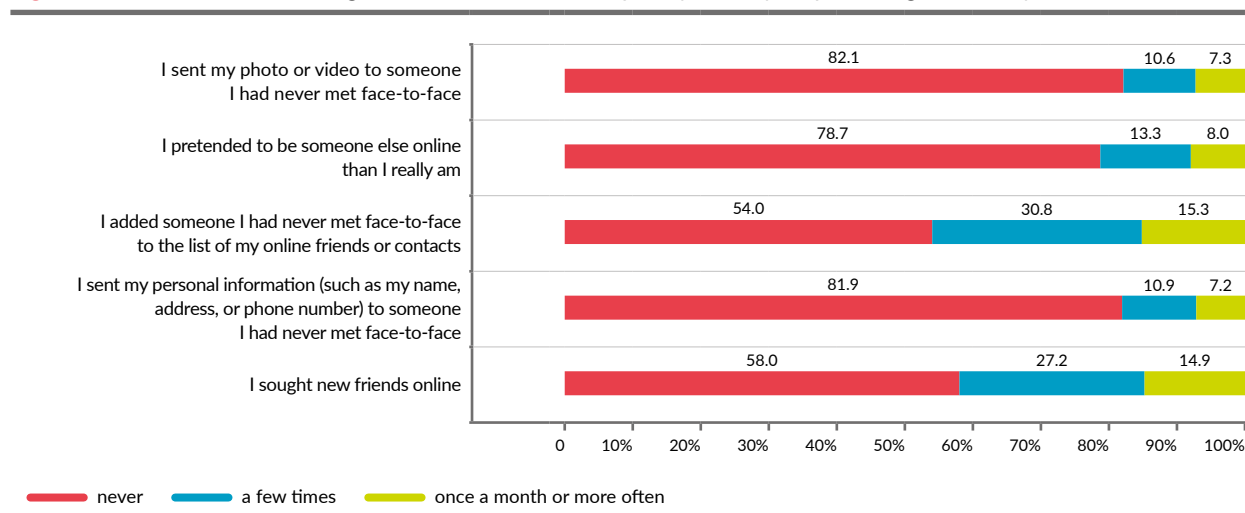
Source: Pyżalski et al., 2019, p. 85.

Although there are relatively few studies addressing directly the subject of online grooming, a question about it was included in the *National Survey of the Prevalence and Determinants of Child Maltreatment*, conducted in 2018 by the Empowering Children Foundation on a representative sample of children and adolescents aged 13–17 (CAPI, *N* = 882). Nine percent of the respondents answered "yes" to the question: "Have you ever made friends on the internet with someone who later tried to persuade you to engage in some sexual activity?", and 5% reported that had happened in the year preceding the survey. The problem was significantly more common among girls than boys (ever: 13% vs 4%; preceding year: 7% vs 3%), and among older adolescents than younger ones. The perpetrator was more likely to be male than female (Włodarczyk et al., 2018). These findings are very valuable, because that was the second edition of the 2013 study, using the same methodology as the first one. It found a significant increase in the prevalence of the problem: in 2013 the experience was reported by 5.1% of the respondents in the lifetime, and by 3.3% in the year preceding the survey (Izdebska & Pilarczyk, 2019). These figures may be under-reported due to the complexity of the problem. Perpetrators of online grooming tend to use sophisticated strategies of manipulation and deception, e.g., they pretend to be recruiters for modelling agencies, the movies, etc., or they simulate a deep friendly or romantic relationship (see Dyżurnet.pl, 2022a). These kinds of contact are not always (and not at every stage) perceived by children as "persuading to engage in sexual activity".

Since the 8th of June 2010, making sexual proposals to children online and using deception to lure them into a face-to-face meeting to abuse them sexually or produce child sexual abuse materials, has been a criminal offence in Poland (Article 200a of PC). After that the number of offences under this Article was gradually increasing to reach 676 in 2017. Between 2018 and 2020 about 500 such offences were detected every year (Figure 6).

Figure 6. The numbers of proceedings instigated and offences detected under Article 200 of PC in 2015–2020
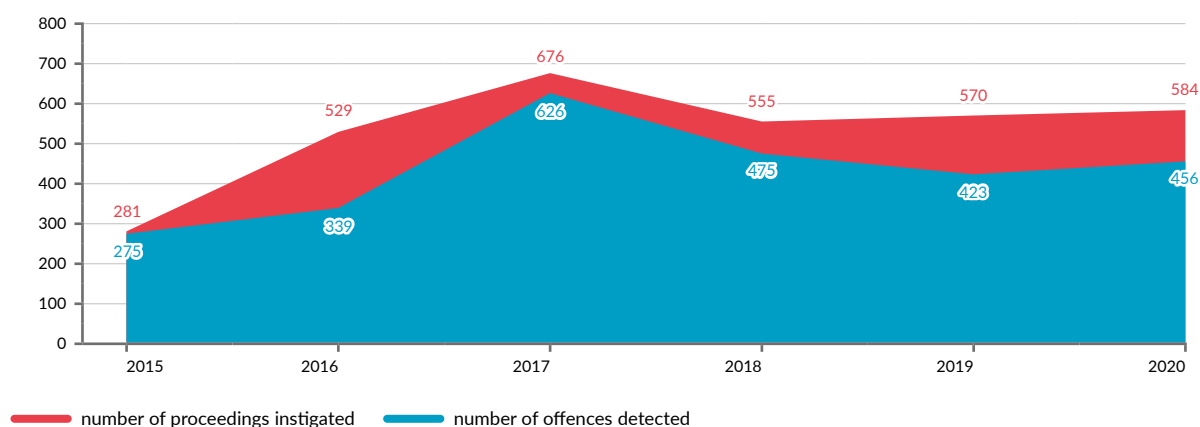
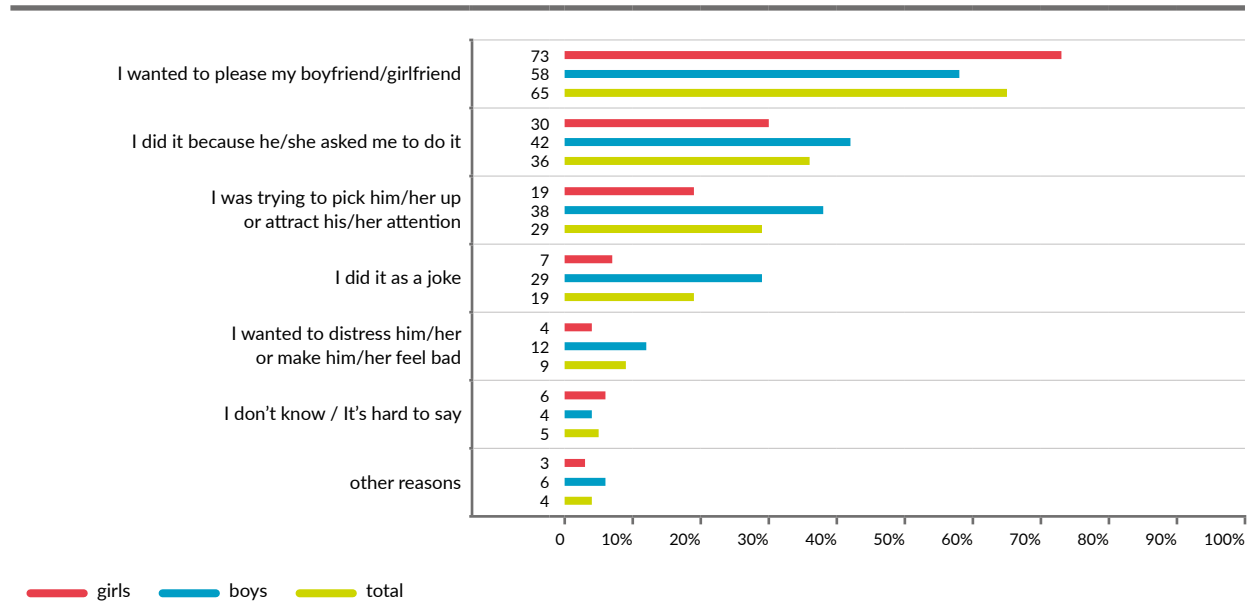Source: Own analysis, based on: KGP, 2022b.

Sexting

Sexting can be defined as sending or publishing intimate images or videos via the internet or mobile phones. Such materials can be sent as a love proof in relationships or to arouse a boy's or girls' romantic interest in the sender. Although sexting is often consensual, it may sometimes be a part of sexual violence or grooming. Moreover, intimate images or videos may be obtained by use of deception or pressure.

Regardless of our evaluation of specific manifestations of this phenomenon, sexting is always a risky behaviour, because once sent, a photo or a video can never be fully controlled. Such materials can be forwarded, stolen, or used to blackmail or discredit the person featuring in them (Wojtasik, 2014). In English-speaking countries there is a new colloquial term, *revenge porn*, which refers to intimate or sexually explicit images or videos posted on the internet, typically by a former partner, as a form of revenge or punishment. For children and adolescents, the risk is significantly higher. Apart from being discredited or losing their reputation, sexting materials can also be used as child pornography. Although it is a legally complex issue, young people recording themselves in intimate situations, are, in a way, producing materials that may be classified as child pornography or *self-generated sexual content* (Dyżurnet.pl, 2022b; Katana, 2020).

The most recent data on the prevalence of sexting comes from the latest edition of the previously mentioned *Nastolatki 3.0* (Teenagers 3.0) survey (Lange, 2021), conducted among students of primary (7th grade) and secondary (9th grade) schools. When asked about the experience of receiving "nude or semi-nude photos", 8.3% of the respondents answered "yes", and 2.2% of the adolescents admitted they had sent such materials. These figures are much lower than those found in the 2014 edition of the same study (25.6% and 4.4%, respectively) (Lange & Osiecki, 2014). Even higher figures (42% and 13%) were obtained by the ECF survey conducted in 2017 on a sample of young people aged 14–18, which asked about the reasons for sending such images. The most common reason reported by them was a wish to please their boyfriend or girlfriend (65% of those sending such materials), followed by responding to the other person's request (36%), a form of "pickup" (29%), a joke (19%), or wanting to distress the recipient or make them feel bad (9%). This demonstrates that sexting is a multifaceted phenomenon, not limited to existing romantic relationships (Makaruk et al., 2017). The latest edition of *EU Kids Online* (mentioned earlier in this chapter), conducted in 2018, also asked about sexting and found slightly lower figures: 15% of the respondents received sexting materials, and 5% reported to have sent them (Pyżalski et al., 2019). However, that survey was conducted on a younger sample (11–17 y.o.) and used questions that could be unclear to young respondents[3]. What can explain such large discrepancies in the prevalence of sexting? Certainly, factors playing a significant role include the respondents' age (sexting is more common among older adolescents) and question wording. We should also bear in mind that it is a sensitive topic, so the way the survey is conducted may also be important. Notably, the study that found the highest rate of sexting (Makaruk et al., 2017), used a method that ensured maximum privacy and anonymity to the respondents, by providing them with electronic tablets and asking them to complete the questionnaire on their own, whereas the remaining studies used the auditorium questionnaire method.

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3   The Polish version of the question was: "Have you ever received any sex-related messages?" Some adolescents, especially younger ones, may not have interpreted nude photos as "sex-related messages".

Figure 7. Reasons for sending nude images and videos by adolescents aged 15–18

I wanted to please my boyfriend/girlfriend — girls 73, boys 58, total 65

I did it because he/she asked me to do it — girls 30, boys 42, total 36

I was trying to pick him/her up or attract his/her attention — girls 19, boys 38, total 29

I did it as a joke — girls 7, boys 29, total 19

I wanted to distress him/her or make him/her feel bad — girls 4, boys 12, total 9

I don't know / It's hard to say — girls 6, boys 4, total 5

other reasons — girls 3, boys 6, total 4

Legend: girls, boys, total

Source: Makaruk et al., 2017, p. 24.

Cyberbullying

Publishing intimate images of a person without his or her knowledge and consent, or blackmailing the person by threatening to publish such materials, may be a form of cyberbullying (online peer victimisation). It can be a serious problem for adolescents, which, however, gets less public attention than, for instance, children's access to pornography. Although cyberbullying is typically discussed in relation to extreme cases (e.g., teenagers who were unable to deal with online bullying and attempted suicide), it is disturbingly common and, although usually it does not lead to such tragic consequences, it has a powerful negative effect on many young people's psychological wellbeing.

This phenomenon is so complex that it is difficult to clearly define it or determine its scope. Although the English term *cyberbullying* is commonly used in Poland, there are other terms, too, such as *cyberprzemoc* (cyberviolence), i.e., violence by use of information and communication technologies (the internet and mobile phones). Pyżalski (2012), who has researched the problem extensively, follows some international authors and identifies *electronic aggression* – single acts of violence online, and *cyberbullying* – intentional, persistent behaviours perpetrated against victims who are unable to defend themselves.

Victims of cyberbullying may experience serious mental health consequences. They are more likely to develop depression, abuse drugs or alcohol, receive poor grades at school, and have suicidal thoughts or attempt suicide (UNICEF, 2018). Other consequences of cyberbullying include social anxiety, low self-esteem, and psychosomatic symptoms (eating or sleep problems; Pyżalski, 2014).

The Polish law does not provide a specific definition of cyberbullying or peer victimisation online, but its different forms are regarded as criminal or civil offenses. These include: insult (Article 216 of PC), defamation (Article 212 of PC), hacking (articles 267 & 268a of PC), threats (Articles

190 & 191 of PC), harassment (Article 190a of PC), and violation of a child's image rights (Articles 23 & 24 of the Civil Code).

There are huge discrepancies between the results of studies into cyberbullying. The prevalence of the problem depends largely on what forms of violence were included in the survey and whether it asked about one-time or persistent bullying. The *Nastolatki 3.0* (Teenagers 3.0) study of 2020 found that almost one third of the respondents (29.7%) experienced name calling or insults online, one fifth (22.8%) were humiliated or ridiculed, one ninth (11%) experienced online impersonation, and one tenth (10.5%) were blackmailed. Nearly as many (10.2%) respondents reported that someone had posted defamatory material about them on the internet (Figure 9). In another recent study, conducted in 2020 among primary school students (grades 4 to 8; $N = 500$), even higher figures were obtained – almost one third of the respondents (32.8%) experienced offensive comments or online hate, and 36% received offensive messages (Poszwa & Myślińska, 2020).

Figure 8. Cyberbullying: Experiences of Polish adolescents
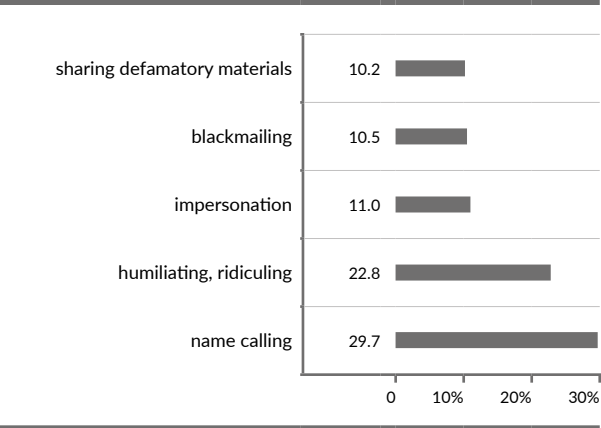

Source: Lange, 2021.

International research projects were also carried out to measure online peer victimisation in comparative perspective. The *EU Kids Online* survey of 2018 found the cyberbullying victimisation and perpetration rates in Poland at 40% and 38%, respectively. With those

extremely high figures, Poland took the infamous first place among the 16 European countries participating in the survey, and was much above the average (amounting to 14% and 23%, respectively; Smahel et al., 2020). Since the 2013/2014 edition, the topic of cyberbullying has been also addressed in the international WHO survey, *Health Behaviour in School-aged Children* (HBSC), which already included questions about physical forms of peer victimisation. The most recent edition, conducted in 2018 (HBSC, 2020), measured the percentages of girls and boys aged 11, 13, and 15, who experienced cyberbullying (defined as sending offensive comments or posting offensive content about a person) at least 2–3 times a month. In other words, it measured repeated, persistent cyberbullying. In Poland, such experiences were reported by 17% of 11-year-olds, 19% of 13-year-olds, and 20% of 15-year-olds. Comparing to other countries, those figures were relatively high, particularly for the 15-year-old population, where Poland ranked third among the 44 participating countries. It should be emphasised that the most recent editions of both studies: *EU Kids Online* and HBSC, showed a significant increase in the prevalence of cyberbullying in Poland. As these are highly reliable, meticulously conducted research projects using stable methods, their findings strongly suggest that the problem of cyberbullying in Poland has been increasing.

> *Someone writes untrue things about me on the internet. The whole school has access to it and people believe it. I'm scared to go to school.*
>
> *15-year-old girl*
> *A quote from phone calls and emails*
> *to 116 111 Helpline for Children*
> *and Young People*

Figure 9. The proportion of 15-year-olds who experienced cyberbullying in selected countries in 2017–2018 (%)
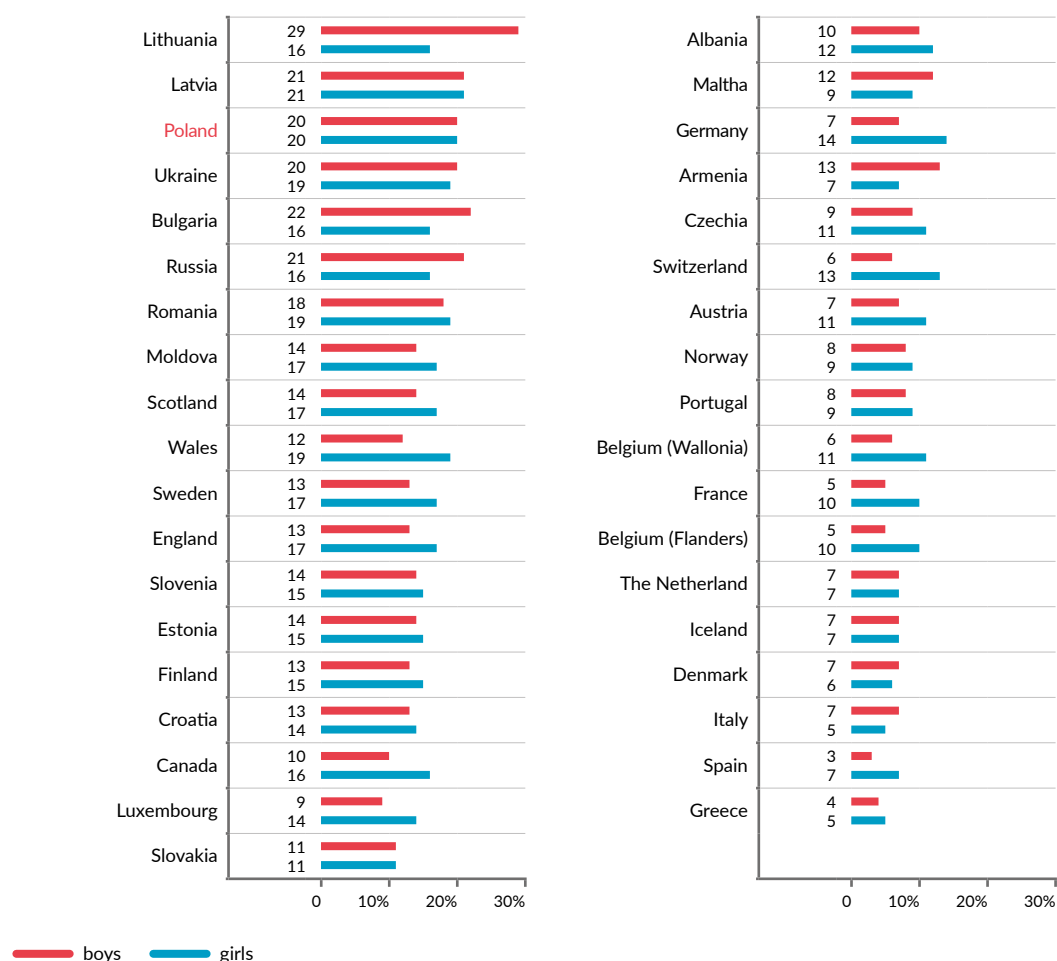
Source: HBSC, 2020.

Problematic internet use

Another issue related to internet use by children and adolescents involves its problematic use. The fact that children use the medium more frequently and intensively than their parents' generation (though the differences have been narrowing in recent years), causes many concerns about the harmfulness of internet abuse.

It is difficult to define internet abuse or addiction, since researchers studying the problem are not in agreement about its nature. It is usually explored within the broader framework of behavioural addictions (compulsion to engage in rewarding behaviour), even though both

the detailed psychological characteristics of the problem and the terminology used to describe it, have been a subject of debate. For example, many researchers avoid the term *addiction*, as they believe it should be reserved for chemical substances. For that reason, the present report will use a more general category of problematic internet use (PIU), a term considered to be more neutral and less stigmatizing, which is particularly important for young people, whose problems are often temporary (Poprawa, 2012).

The difficulty in defining PIU makes it difficult to measure. Unlike with other online risks, it is not enough to ask whether certain situations have taken place or not. The criterion of time spent online is also insufficient. Usually, it

is necessary to use a special psychological scale that includes numerous questions about different symptoms of internet abuse, such as neglecting one's academic or family obligations, withdrawal symptoms, spending more time online than intended, recurring thoughts about the internet, etc. (see Makaruk & Wójcik, 2013; Rowicka, 2018).

One of the larger research projects concerning this issue, the 2012 European EU NET ADB survey, used an adapted version of Young's (2016) *Internet Addiction Test* (IAT), in which respondents answer a large number of questions about their use of the internet, and may obtain from 0 to 100 points. Respondents with scores ≥70 points were classified as manifesting symptoms of abuse, whereas those with 40–69 points were considered a risk group. In Poland the study was conducted on a representative sample of junior secondary school students (9th grade; $N = 1,978$). The results placed Poland in the middle of the ranking, close to the European average: 1.3% of the students showed symptoms of internet addiction, and 12% were in the risk group. The addiction rate was slightly higher among boys than among girls, but the difference was not significant (Makaruk & Wójcik, 2013).

Similar methodology (the same scale and criteria) was used in a repeated study, conducted in 2018 for the Fund for Solving Gambling Problems (Makaruk et al., 2019) on a representative sample of 1,017 students aged 12–17. This time signs of addiction were found in 0.5% of the respondents, while 11.4% were in the risk group. It should be noted here that the sample included younger adolescents, too, and PIU is more common among older youth (Figure 10).

Figure 10. Normative and problematic internet use among adolescents aged 12–17, by gender and age
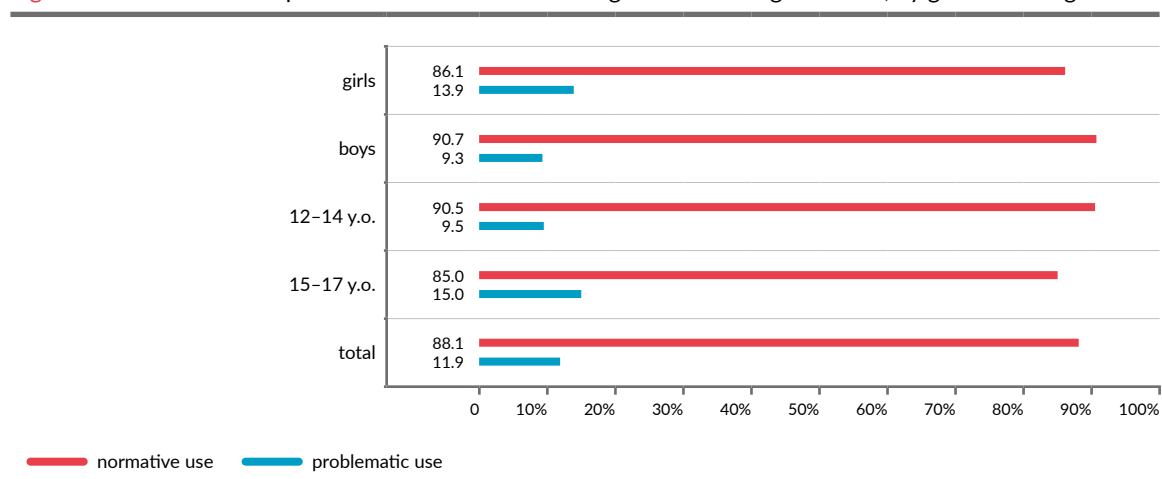
Source: Makaruk et al., 2019, p. 31.

Problematic internet use was also addressed by the *Nastolatki 3.0* (Teenagers 3.0) study, conducted in 2020 on a sample of 1,733 children of

school age (Lange, 2021). The survey used the E-SAPS18 scale and found high PIU measures for one third of Polish adolescents, and very high measures for 3.2%. Moderate increases were found as compared to 2018. Interestingly, as much as 64% of the adolescents agreed with the statement: "I think I should use my smartphone less"; half of them admitted they sometimes used screen devices longer than they intended; and 32% agreed with the sentence: "My life would be empty without my smartphone".

The Polish edition of *EU Kids Online 2018* (Pyżalski et al., 2019) found the following daily signs of PIU in children and adolescents aged 11–17:

- 7.0% – using the internet when they do not need to,
- 6.4% – feeling bored when they have no access to the internet,
- 4.4% – neglecting their friends and family,
- 3.4% – admitting that the amount of time they spend online may be a problem,
- 3.1% – making unsuccessful attempts to reduce time spent online,
- 1.8% – skipping meals or not getting enough sleep in order to spend more time online,
- 1.4% – conflicts with family or friends over the amount of time spent online.

Keeping children and adolescents safe online: Parents' opinions and attitudes

As much as 80% of parents who have children aged 6–18 are worried about the risks their children may face online. Interestingly, the figure increased from 58% in 2008 to 74% in 2015. Thus, we may conclude that the growth of the internet and the general increase in digital skills that occurred in that period, did not ease parents' worries, but rather made them aware of numerous risks. Parents are mostly afraid of dangerous contacts online (grooming; 54%) and their children's exposure to harmful contact (37%), but they are also concerned about fraud and data theft (25%), online hate and harassment (14%), and internet addiction (8%; CBOS, 2018).
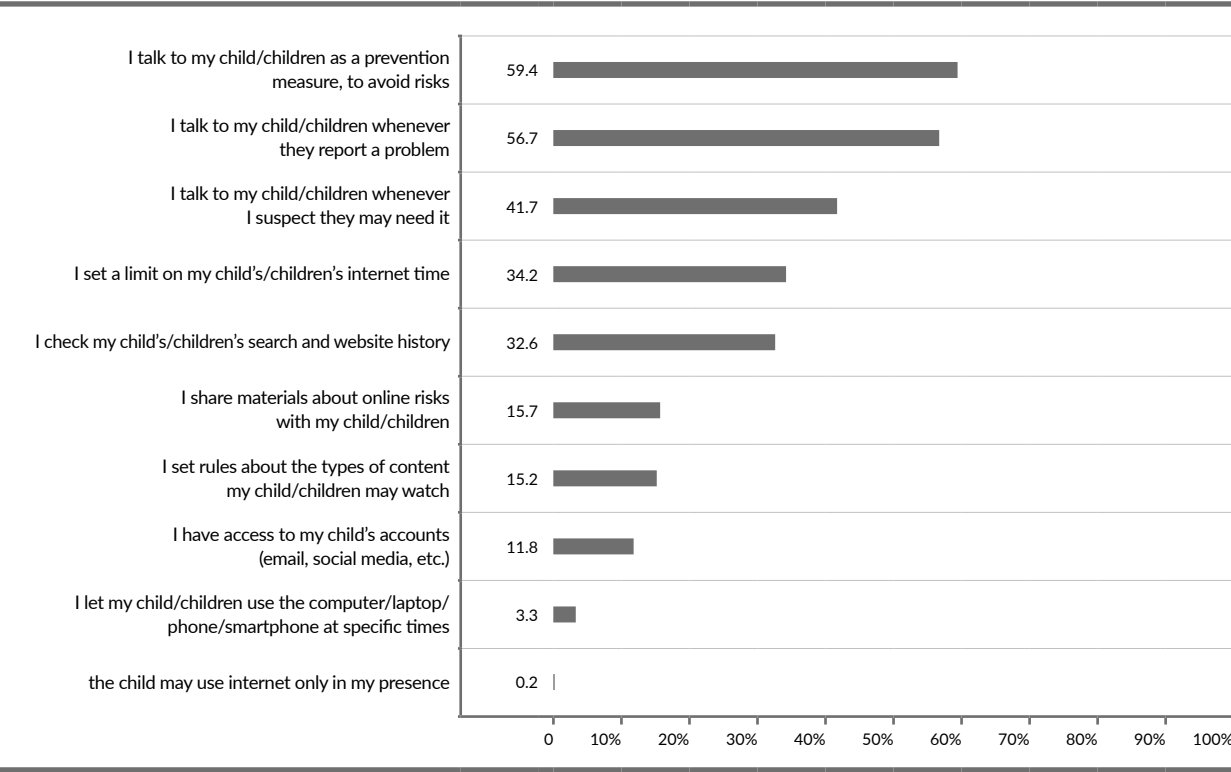
What can parents do to protect their children from risks? They can adopt a technological approach, i.e., use parental control tools, and/or an educational approach, i.e. talk to their children and establish house internet rules. Contrary to what might be expected, determining how frequently caregivers use each of these approaches is not easy due to participants' tendency to provide sociably desirable responses.

In the 2020 *Nastolatki 3.0* (Teenagers 3.0) study (Lange, 2021), in the section addressed to parents, the respondents were asked about their use of filters and parental control software. Parental use of such tools was reported by 26.8% of the parents and only 8.7% of the adolescents (another 22.3% of the young people answered "It's hard to say"). In a 2017 survey by the Office of Electronic Communication, 34.3% of the respondents reported to have used such tools. The available evidence suggests that the majority of parents do not use them. We should bear in mind, however, that these tools are effective mainly with younger children.

When it comes to educational measures, parents are most likely to report to talk to their children as a prevention measure (59.4%) and in response to problems (56.7%). About one third of parents (34.2%) report they have set limits on their children's internet time, and 32.6% admit they check their children's search and website history (which, by the way, is controversial in light of children's right to privacy). Only 15.2% of the respondents have developed rules with their children, to determine what kind of content they may watch (Figure 12). Disturbingly, 30.5% of the parents reported they did not use any rules or regulations (and, consequently, did not have any conversations with their children about the topic). Similarly, 39.9% of the children report there are no internet rules in their families (Lange, 2021). These findings are consistent with the results of the 2018 survey, in which only 53% of the adolescents aged 12–17 reported there were any internet rules adopted in their homes. One fourth of the young people (25.5%) reported their parents had never talked to them about internet safety, and 23.5% said their parents had never asked them about what they did online or what websites they visited (Makaruk et al., 2019).

Figure 11. Internet safety strategies applied by parents

Strategy	%
I talk to my child/children as a prevention measure, to avoid risks	59.4
I talk to my child/children whenever they report a problem	56.7
I talk to my child/children whenever I suspect they may need it	41.7
I set a limit on my child's/children's internet time	34.2
I check my child's/children's search and website history	32.6
I share materials about online risks with my child/children	15.7
I set rules about the types of content my child/children may watch	15.2
I have access to my child's accounts (email, social media, etc.)	11.8
I let my child/children use the computer/laptop/phone/smartphone at specific times	3.3
the child may use internet only in my presence	0.2

Source: Lange, 2021, p. 106.

Summary

Children and adolescents have such widespread and easy access to the internet today, that there are hardly any young people not using it. During the COVID-19 pandemics the internet became the main, if not the only area of social activity, which makes it even more important to protect children and adolescents from online risks. These risks involve dangerous content that may be found online, dangerous contacts children can make there, and risky behaviours they may engage in.

This chapter reviewed the latest research findings concerning the problem. Analyses show that exposure to harmful content, especially pornography, is one of the most common online risks to children and adolescents. What is particularly alarming, is the presence of pornographic materials involving children (child sexual abuse materials) on the internet, a problem that has remained constant (at best) in recent years. Moreover, available evidence reveals a growing problem of online grooming. Another disturbing phenomenon is children's and adolescents' tendency to meet face-to-face with someone they met online. Cyberbullying is also a common problem. Repeated international studies show that it is growing over time in Poland and is higher than in most European countries. Problematic internet use is an issue that affects directly a tiny percentage of internet users, but poses a serious threat to their social functioning.

Finally, evidence shows that many parents do not have sufficient knowledge about online risks to children and fail to take any educational measures in this area. All that leads to the conclusion that the internet remains a potentially dangerous space for children and adolescents. Educational and prevention efforts need to address all the different areas of online dangers in order to minimise the risk related to children's activity on the internet.

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