Internet of Children

A Report on the Monitoring of the Presence of Children and Adolescents on the Internet.

March 2025

Organisers:

Instytut Cyfrowego Obywatelstwa

Polskie Badania Internetu

PKDP

GEMIUS

Authors of the Report: Magdalena Bigaj, Konrad Ciesiołkiewicz, Krzysztof Mikulski, Anna Miotk, Jadwiga Przewłocka, Monika Rosa, Aleksandra Załęska

Data Analysis: Anna Miotk, Jadwiga Przewłocka

Consultation: Izabela Knyżewska, Marcin Niemczyk, Marta Puciłowska-Schielmann

Production Coordination: Marta Kapica

DTP and Graphics Design: Katarzyna Puciłowska

Proofreading and Editing: Agata Mościcka, Aleksandra Nizioł, Anna Stanowska, Mateusz Cygnarowski, Justyna Hofmokl

Cover Photo: Jakub Linowski

Project Organisers:

Instytut Cyfrowego Obywatelstwa

Polskie Badania Internetu

PKDP

GEMIUS

Project partners:

Wydział Dziennikarstwa Informacji i Bibliologii Uniwersytet Warszawski

SEJM RZECZYPOSPOLITEJ POLSKIEJ Komisja do Spraw Dzieci i Młodzieży

Publishers:
State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age
ul. Twarda 18
00-105 Warsaw
ISBN 978-83-970364-1-3

Institute for Digital Citizenship Foundation
ul. Żurawia 2/47
00-503 Warsaw
ISBN 978-83-967278-1-7

Preferred citation: Bigaj, M., Ciesiołkiewicz, K., Mikulski, K., Miotk, A., Przewłocka, J., Rosa, M., Załęska, A. (2025). Internet dzieci. Raport z monitoringu obecności dzieci i młodzieży w internecie. Warszawa: State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age.

TABLE OF CONTENTS

→ Foreword

Magdalena Bigaj

President of the Institute for Digital Citizenship Foundation

From now on, no one can reasonably claim that „children aren't on social media.

What comes to mind when you hear the phrase "children's internet"? What is it like? Where do its young users go, and what do they do?

Children's presence online is an open secret — not just in Poland, but worldwide. Social media and gaming platform owners claim that children don't use their products because their terms of service don't allow it. As a result, they see no need to introduce special standards for protecting children and adolescents.

Meanwhile, parents believe their children don't visit inappropriate sites—some because they are unaware of age restrictions, others because they don't understand their purpose. As a result, they accept their children's digital activities in such spaces or even actively help them bypass the rules.

Businesses and stakeholders seeking to reach children and teenagers as a target audience take advantage of this situation. Effectively excluding young users from platforms and apps not intended for them would mean real financial losses for social media companies and the advertising and marketing industries, as it would significantly reduce their reach. The lack of understanding of what children and teenagers do online — and when — also fuels various myths and misguided solutions. If kids are spending long hours on social media and in games at the expense of sleep, how will banning phones at school solve the problem? Will it ensure that a well—rested child sits in the classroom in the morning, fully focused, rather than suffering from the effects of the constant distraction training they undergo in front of screens after school?

It seems, then, that in the name of self—interest or self—satisfaction of the grownups, we avoid facing one of the greatest challenges of our time — adapting to life in a world of new technologies. This process must include measures to protect those who cannot defend themselves from harm. Moreover, from the perspective of social policy, the state has a duty to shield its citizens from the adverse consequences of economic development.

I would like to thank the co—organisers of this initiative — Polskie Badania Internetu, Gemius, and the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age — as well as our partners: the Parliamentary Committee on Children and Youth and the Faculty of Journalism, Information, and Bibliology at the University of Warsaw. I am especially grateful to Krzysztof Mikulski, President of PBI, who one day shared with me the vision of such an initiative — one that ultimately grew into a collaborative effort involving business, the non—governmental sector, and state institutions.

I believe this publication can serve as a guide for companies and institutions on the path to social responsibility for the children's internet. Whether we realise it or not, this responsibility rests on all of us.

Krzysztof Mikulski

President of Polskie Badania Internetu

What else needs to happen for politicians to start caring more about the youngest citizens and their families rather than political marketing and their poll ratings?

As Polskie Badania Internetu, we have decided to take part in this very valuable initiative because for more than 20 years, we have been setting standards for the research of the internet audience in Poland. This time, we have used our data to give a picture of the web activities of the youngest internet users.

Children and young people are a very active group, and in some types of sites (for example, online video as well as games and gaming—related sites) their activity is even above average. Consequently, this medium has an overwhelming influence on them. Sometimes the influence is positive, when the young use the web for education, peer networking or entertainment, but at other times, uncontrolled access to the web by children has disastrous consequences, not only in terms of singular tragedies for individual families, but also for society as a whole. The deliberate actions of those who manage social networking platforms not only give children access to content that is harmful to them, as evidenced for example by the popularity of sites with adult content on the smartphones of the youngest users, but also expose them to hate speech, bullying, attempts at sexual exploitation or solicitation by drug dealers.

Access to this kind of content is easier than ever now. This is due to a lack of education and neglect on our part as parents, but above all to the skilful marketing and lobbying of tech giants among those in power, as well as the entirely incomprehensible abandonment of protecting the safety of the youngest by the entire political class.

Should it be this way? What else needs to happen for politicians to start caring more about the youngest citizens and their families rather than political marketing and their poll ratings? I also hold my hands up on behalf of our own industry — the online advertising sector — which, too, is known to sometimes cynically exploit children's easy access to the internet in its brand campaigns.

My wish is for our data to spark reflection, leading us to finally take real action and to wisely shape, regulate, and enforce policies regarding children's access to websites and apps, so that the youngest users are kept safe and secure online, and can utilise the beneficial aspects of the internet for their education and their social and civic growth.

Criminals and all manner of companies who cynically facilitate the exploitation of children online, hiding behind platitudes and „empty" clauses in the terms and conditions of websites or apps, must feel the inevitability of punishment. The fact that tech giants often have budgets larger than many countries in the world doesn't mean that our government should surrender to them and accept handouts in the form of socially insignificant investments. The state has the authority to regulate even private spaces if it acts for the good of its citizens. What's more, the state has the right to infringe upon and destroy private property when the protection of the health and lives of citizens requires it, and in the case of children, that's precisely what we're talking about.

Parents have the right to demand support from the state in the fight for a safe internet for their children, and state authorities must ensure that safety, just as they are currently trying to provide children with a space free from violence, drug dealers, and paedophiles. Investing in children's safety is an investment in raising the next generations of Poles who trust the state and contribute to the prosperity of our community.

I hope you find this moving and thought—provoking piece worth reading.

Justyna Kotowska

Deputy Chair of the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age

The need for changes in the protection of children on the internet proves to be one of the most pressing issues worldwide.

Cyberspace is now an integral and inseparable part of life, particularly for children. The technological developments of the past decade have created a wealth of new opportunities — unfortunately, also for perpetrators of sexual crimes against children under the age of 15.

Since its inception, the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age has been monitoring sexual crimes against children, including offences perpetrated with the use of new technologies. This is demonstrated in the findings published in the Committee's first and subsequent reports.

A subject which draws particular attention in the present report is the findings of an analysis of children's online activity in the 7—14 age group. These children are at a stage of building their identity, seeking role models, and searching for acceptance and a sense of belonging to a group. Among this group, education and entertainment are not the only major areas of interest. Children also frequently engage with erotic content, which aligns with the findings of NASK's research, indicating that the average age of first exposure to pornography is 9—10 years old. Moreover, 25% of children in this age group watch such materials on a regular basis of once a month. Most children encounter pornography by accident, while some receive such content directly from perpetrators.

The contact of a child with pornographic content bears a major risk of developing improper models and norms that translate into the quality of relationships in adult life.

Currently, instant messaging platforms are a tool for establishing and keeping up relationships. Unfortunately, perpetrators of sexual offenses are well aware of this. Research by WeProtect indicates that a perpetrator who wants to sexually abuse a child doesn't need much time — just a few days is enough. This is because children spend several hours a day online, which means they are accessible not only to their peers but also to those who intend to harm them. It's important to remember that the consequences of experiencing online abuse are the same as those resulting from real—world harm. These include effects such as the risk of post—traumatic stress disorder, depressive disorders, anxiety disorders, and addictions. They can persist throughout a lifetime, which ultimately can be 20 years shorter due to the intensity of the stress experienced.

If we combine this with the fact that children are nowadays deprived of the right to make mistakes — including the right to be forgotten — and of the chance to tell their own story on their own terms, their fundamental human rights being eaten away day by day in the face of colourful, seemingly positive images appearing online, then the need for changes in the protection of children on the internet proves to be one of the most pressing issues worldwide. The internet knows no boundaries, and those operating within it are increasingly adept at shifting them, as new categories of online crimes show.

Each day of its work, PKDP encounters information about children getting hurt on the web. This is the reason why, together with the Institute for Digital Citizenship Foundation and Polskie Badania Internetu and Gemius companies, we are presenting this report with action items. We trust that it will help expand knowledge and awareness, allowing us to be more effective in acting together to protect children on the internet.

Marcin Pery

CEO of Gemius

We aim to initiate a public discussion about the shared responsibility and prospects of ameliorating the situation.

Children's safety in the digital world is of paramount importance, especially given the increasing prevalence of young people's wellbeing problems, including those involving mental health. Unfortunately, it appears that the internet, which should be a place for entertainment and knowledge, is increasingly becoming a trap. Minors fall prey to online violence and are often exposed to adult material. This is the result of, among other things, ineffective age verification mechanisms or a lack of education in digital hygiene. To change this alarming state of affairs, the cooperation of many actors in the media world and beyond is needed — publishers, industry organisations, NGOs and state authorities.

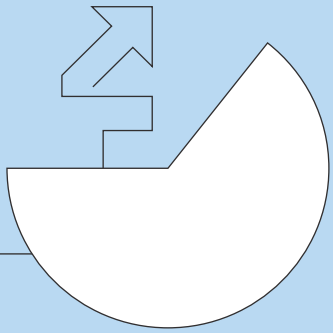
This report is an important step towards change. In it, we draw a picture of the reality at hand, showing that children and adolescents are using the internet in ways that are not safe for them. With this, we want to initiate a public discussion about shared responsibility and prospects for healing the current situation.

This is an important initiative, with the potential to translate into real action. I believe that concern for the safety of young people in the digital world today is not only part of social responsibility, but also the duty of every company in the media and new technologies industry. As active participants in this ecosystem, we have a say in what kind of reality our children will grow up in, and since we do, we are obliged to strive to make 'children's internet' a better, safer place.

I am proud that, thanks to data from the Gemius research panel and the Mediapanel survey, we can present facts about the online behaviour of children and young people and join in this action.

1.

There are No Users, Just People. About the Social Responsibility for the Digital Realm



Magdalena Bigaj

Chairwoman of the Institute for Digital Citizenship Foundation

The biggest mistake this publication could make would be to give the impression that it is aimed at "companies and institutions" or "sectors and environments", and that it is about children and young people on the internet. You will indeed read statistics about the behaviour of the youngest age groups in the digital space later in this report, but these numbers actually reflect on us, the adults. Therefore, this publication is not aimed at some abstract "entities" or an undefined general public, but at every adult who reads these words and actually participates in creating those entities. It is our work and everyday choices in our private and professional lives that shape the reality we live in — including the digital one, so integrated with our lives these days. Of course, only a few of you reading these words are directly responsible for exposing children to toxic content or trauma—inducing algorithms. However, a large group of people — through professional choices concerning, for example, advertising budget allocation or campaign planning, and private choices — such as sharing children's images online or allowing them to bypass access rules — give their tech companies a mandate to avoid taking effective action to protect children in the digital environment, which is an integral part of modern human life. We are concerned to observe that, in response to this challenge, proposals are increasingly being put forward that rely on banning the use of the digital space. Such an approach is particularly convenient for tech platform owners: just introduce effective age verification and leave the rest of the product as it is — full of attention—grabbing solutions, ineffective in blocking destructive content, with a flawed violation reporting system. The path of bans does not lead to improving the digital environment, but to excluding more groups from its parts. It is like introducing entry bans where thefts and assaults take place, instead of fighting crime.

An approach based solely on bans is strongly opposed by the authors of the Tech & Teens report prepared by the Czech organisation "The Interdisciplinary Research Team on Internet and Society" (IRTIS), a member of the EU Kids Online network[1]. The report presents the results of 15 studies from 2020 to 2025, conducted by a team of researchers at Masaryk University. It is clear from these studies that the benefits and burdens of using new technologies are very subjective and depend on many factors, such as age, gender or the individual situation of the child or adolescent in question. What we need in order to prevent negative consequences is not to ban the use of something that is widely available in a child's or teenager's environment, but to strive to make digital space a safe place, and for adults to be able to wisely prepare children and teenagers to navigate it.

This is a difficult truth to accept because it requires reckoning with our legacy of the last three decades of new technology development, which is constantly accelerating. Although at the beginning of the 21st century the internet promised us a democratisation of communication and access to information, at the end of the first quarter of the century we are waking up in a world monopolised by Big Tech, full of disinformation, fighting for our data and attention, in which access to knowledge is increasingly difficult and which entails difficulties in critical thinking[2]. However, technology products cannot be boycotted like FMCG or automotive products. Therefore, we are faced with the task of ensuring that human rights, including children's rights, are respected in the digital space as they are outside it.

In *The Age of Surveillance Capitalism*, Shoshana Zuboff[3] argues that corporations, especially those in the technology sector, use the users' personal data for generating profits. It is exactly the big data of billions of people that has turned the biggest tech companies into technooligarchs, dictating the terms to their customers today — not only the individual ones who use their services and applications, but also the business ones, convinced only a decade ago that they were equal partners in their relationship with Big Tech. The best example of this is the current plight of professional media publishers, whose content

1 The Interdisciplinary Research Team on Internet and Society (IRTIS) (10 February 2025), *How Do Digital Technologies Affect Adolescents? Insights from 15 Studies on the Impact of Digital Technology on Well—Being* https://tiny.pl/gj2r_yw3 (accessed: 14.02.2025).

2 L. Hao—Ping (Hank) et al. (2024), *The Impact of Generative AI on Critical Thinking: Self—Reported Reductions in Cognitive Effort and Confidence Effects From a Survey of Knowledge Workers* https://tiny.pl/y7rx3c—y (accessed: 13.02.2025).

3 Zuboff, Shoshana (2019). *The Age of Surveillance Capitalism.* New York: Public Affairs

is presented by Meta or Google in a way that deprives them of a significant proportion of their revenue. From a geopolitical perspective, it is perfectly clear that there is a global clash between two perspectives: a technocentric one, in which technological progress is paramount, and a techno—humanist one, in which progress is subordinated to the good of humanity. In this multitude of challenges posed by new technologies, however, we must not forget the youngest groups using the digital world: children and adolescents. The Convention on the Rights of the Child guarantees every child the right to a safe living environment. This begs the question: have we created a safe living and development environment for the younger generations as we created digital spaces?

There are no users, just people.

The standard for measuring the popularity of digital products and services is, among other things, the number of users. Undoubtedly, this is a relevant and necessary indicator in the broader media, advertising and new technology industry. However, when we want to talk about solutions benefiting society, a change of perspective is required, which can best be expressed by paraphrasing the words of Janusz Korczak: There are no users, just people. As you can read later in the report, as many as one—third of children in Poland use TikTok, even though, according to the regulations, this should not happen. Who do we have in front of our eyes when we see the figure of 760,000? "Real users" or simply children — absolutely unprepared for contact with this kind of product and the content available in it? Rejecting the technocentric perspective and adopting an attitude of digital personalism, which — as I wrote in 2022 on Wiez.pl[4] — puts the human being at the centre of the development of technology, is necessary for understanding the consequences of the status quo described further in this report.

The empowerment of human beings in the digital space makes it necessary to shift the discourse on technological development from thinking in terms of a tool and statistics, which is characterised by competition for reach, towards an ideological reflection that leads to the social responsibility of technology companies. Adopting a personalist perspective requires us to ask the question about the real impact of specific digital products and services on the well—being of society. As their consumers, we have every right to expect that the goods and services provided to us are safe for our physical, mental and social health. These demands might be seen as a utopian vision, but they are not. By way of analogy, a decade ago, the clothing sector did not foresee the rise of environmental awareness among consumers, expressed in a preference for environmentally friendly packaging, checking the product composition and condemnation of exploitative practices in countries of low economic status. In the past, the introduction of legal regulations for mandatory information on product composition seemed revolutionary. The application of relevant legislation, however, did not lead to the demise of the food or cosmetics industry, but contributed to raising standards of consumer health protection. Thanks to decades of public education, exerting pressure and changes in the law, we have access to better products today.

In the way of the social responsibility of the digital world, therefore, it is above all our individual attitude towards it and our awareness of our rights, including the rights of the child. In her latest book *Doppelganger*, Naomi Klein, a Canadian intellectual and professor at the University of British Columbia, writes: "Trustworthy information should be seriously demanded of social platforms, and it should

4 M. Bigaj. *Czas na cyfrowy personalizm prosto — Więź.pl* (7 October 2022), https://wiez.pl/2022/10/07/czas—na—cyfrowy—personalizm/ (accessed: 13.02.2025).

be considered a basic human right."[5]. Following Klein's thinking, we have the right to demand a digital space that is safe for us and our children. The internet is a common good, just like a city where every square metre of land has its owner, but the same law is in force to protect us and our children nonetheless. We are all responsible for this space. At an individual level, each of us is responsible for how she or he and those dependent on them, such as children, use digital space. At a societal level, we need responsible creators and contributors of new technologies, and at a systemic level, we need politicians who understand that their role is to take care of citizens in every dimension, including the digital one. While the concept of the internet as a common good is not new, it can provoke resistance in a world dominated by Big Tech. Naomi Klein, citing Ben Tarnoff and his book *Internet for the People*, points out that history has already shown more than once that "inequitable property relations have changed and can be changed again (....) many technologies, from the internet itself to GPS and location tracking, which are the building blocks of today's Big Tech giants, have been developed with public money, in the public sector."[6]. The rights we are entitled to are in both physical and digital spaces. And in both these spaces, it is necessary to give special protection to the youngest part of society: children and young people.

Where do children on the web come from?

Big Tech people are well aware that children use their gaming and social networking platforms. This is evidenced, for example, by documents presented by US prosecutors in the trial against Meta, showing that the company is able to effectively verify the age of users for its own purposes, based on the data it collects about them. The problem, however, is not only the tacit approval of the owners of social networking and gaming sites for bypassing the regulations on the age of use of their products (in Poland this limit is 13 years), but also the lack of effective action by the owners to protect minors using such platforms from contact with content hazardous to their health or life. It is the negligence of the owners of these sites that makes social media and games, which, while they may bring certain benefits at the right age, still are high—risk products today. They cause a range of real, rather than virtual, consequences for children and adolescents, which Konrad Ciesiołkiewicz, a member of the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age, writes about in the next chapter.

The presence of children and younger teenagers in those parts of the digital space that are unsafe for them is also linked to adults' low awareness of digital hygiene, i.e. health—protective behaviour related to the use of information and communication technologies[7]. A digital hygiene approach is not about depriving children and adolescents of opportunities to interact with new technologies, but about offering them ones that are safe and age—appropriate, in parallel with teaching them healthy digital habits. The data presented further in the report, showing how a huge group of children and younger teenagers use instant messaging and platforms not allowed for their age, shows that educating adults is one of the main challenges in protecting minors online. This applies not only to parents, who should also provide care to their children in the digital space, but also to teachers and principals — it is often in schools that the idea comes up of setting up instant messaging groups for classes that are ineligible by age to use such products.

5 Klein, N. *Doppelganger*, Warszawskie Wydawnictwo Literackie MUZA S.A., Warsaw 2024, 108, translated from Polish.

6 Ibid., 109.

7 M. Bigaj (red.), M. Woynarowska (red.), K. Ciesiołkiewicz, M. Klimowicz, M. Panczyk, *Higiena cyfrowa dorosłych użytkowniczek i użytkowników internetu w Polsce*, Wydawnictwo Newsline, Warsaw 2023, 10.

Facts and myths

The subject of children's online safety and the impact of technological products on their wellbeing is coming up more and more in the public debate, unfortunately, to a large extent, on the occasion of information about phenomena such as trash streaming or content encouraging behaviours risky for health. Reports of regrettable incidents on social media and in games create fear and result in slogans such as 'ban phones in school' igniting public opinion. More and more people expect politicians to act in favour of children's rights online, more social organisations are becoming active in the cause of digital hygiene, and thousands of schools are engaging in educational programmes for online safety. However, in the search for effective solutions to adapt to a world that will be increasingly dominated by new technologies, we must act on solid data and dispel myths. Otherwise, we will be designing solutions that focus on the symptoms instead of the cause. This is where this publication is groundbreaking — it provides irrefutable data, as it is based on Mediapanel (formerly Megapanel PBI/Gemius), a standard for measuring the popularity of websites and applications on the Polish internet that has been in place for 20 years.

The data presented in this report no longer allow claiming that children are not present on social media. The chapters authored by Anna Miotk, PhD (PBI, UW), Aleksandra Załęska (Gemius) and Jadwiga Przewłocka (Gemius) provide sufficient arguments for state institutions to immediately demand that owners of social media platforms urgently introduce child and youth protection standards in their products.

The data presented by Jadwiga Przewłocka on time spent online clearly shows that if we want to take care of the well—being of children and adolescents, it is not enough to ban phone use at school, as children's and adolescents' internet consumption occurs mostly outside school. An article published by a team of researchers from the University of Birmingham reports that, based on a study of 1,227 pupils in 30 schools, it was found that in schools where a phone ban was introduced, pupils' academic performance, mental wellbeing, classroom behaviour and sleep were no better compared to pupils in schools without such a ban[8]. As Dr Victoria Goodyear, head of the study, said for BBC.com: "the results of the research do not argue for rolling back the ban on smartphones in schools, but they do show that bans alone are not enough to counter the detrimental effects of pupils' excessive use of phones and social media"[9]. The data presented in this report also shows that banning phones alone will not make children and young people stop experiencing online violence, suffering from concentration problems and giving up on sleep in favour of scrolling. This can be remedied, first and foremost, by social education of all age groups on digital hygiene — a solution that requires patience, but which has the potential for long—lasting results, assuming that those provided with education are made aware of the impact of screen devices and the internet on their wellbeing and functioning. The young generation's critical view of new technologies is confirmed, for example, by a recent report by the US organisation Common Sense, which found that young people are placing less and less trust in Big Tech[10].

The perpetuation of the myth that children are absent from the web and — by extension — the tacit acceptance of child and adolescent abuse does not pay off for the market either. Millions of children and younger adolescents use social media and instant messaging platforms just because they provided a false date of birth when creating an account. This may mean that **reports on the reach of advertising activities carried out on social, gaming, and instant messaging platforms have been presenting false user age data for years. This results in real financial losses for advertisers**, as there is every indication that in many cases, campaigns that theoretically reached adult users could just as well have been displayed to children and young people hiding under 'adult' accounts. It is therefore in the best interests of the advertising industry

8 Goodyear, Victoria A. et al. *School phone policies and their association with mental wellbeing, phone use, and social media use (SMART Schools): a cross—sectional observational study.* The Lancet Regional Health — Europe, Volume 0, Issue 0, 101211.

9 Evans, A. *Mobile ban in schools not improving grades or behaviour, study suggests* https://tiny.pl/9tpwst30 (accessed: 14.02.2025)

10 Calvin, A., Lenhart, A., Hasse, A., Mann, S., and Robb, M.B. *Teens, trust, and technology in the age of AI: Navigating trust in online content.* CA: Common Sense Media, San Francisco 2025.

and the economy in general to put pressure on social media platform owners to address the issue of user age.

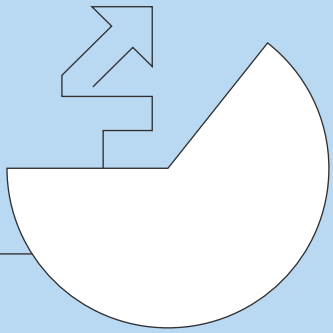
However, if we were dealing today with digital products and services designed and used in an ethical manner, age limits would be a secondary topic. Therefore, data on children's online presence places a special responsibility on each of us adults who use the internet for personal and professional purposes. It is in front of our screens that we make choices such as whether to allow a child to install a certain app or profile in a game, but also which products and services we use ourselves, whether to report irregularities we witness online, and in the case of those of us who use social and gaming platforms for business: when planning advertising or promotional activities, do we make it a requirement for advertising professionals to protect children and young people? Conclusions from the data presented in this study and recommendations for specific actions can be found in the final chapter prepared by Konrad Ciesiołkiewicz (PKDP) and Krzysztof Mikulski, head of Polskie Badania Internetu and initiator of this campaign. However, in order to conclude this introduction with an individual perspective, with which I began it, I would like to express my gratitude to all people of good will from the new technology, advertising and media sectors who show support for initiatives such as ours. The growing sensitivity to child abuse on the internet is sparking the need for action in many people. Our report confirms how much remains to be done, but it is worth remembering that we can often act most effectively in the environment in which we already operate. Therefore, I encourage you to be bold in taking initiatives in your environment or workplace to keep your children safe online, for which the recommendations at the end of the report can provide valuable guidance. Practising digital personalism and promoting ethical action is an opportunity to feel the sense of purpose in your work that comes from doing socially necessary things.

Magdalena Bigaj

Magdalena Bigaj — the founder and Chairwoman of the Institute for Digital Citizenship Foundation. Author of the book titled Wychowanie przy ekranie (Education in Front of a Screen). Originated the idea and co-authored the pioneering "National Digital Hygiene Survey". Established and manages Poland's first university course on digital hygiene in the Korczak University. Winner of the 2024 Korczak Prize for her work for children's rights in the digital environment. Columnist of the Pismo. Magazyn opinii monthly magazine.

2.

The Digital Environment — in the Trap of Institutional Violence



Konrad Ciesiołkiewicz

Member of the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age

The digital environment

Functioning in the world of digital media has become so widespread, involving and permeating every aspect of life, that when analysing the mechanisms of society, one must assume an unprecedented scale of mediatisation. The term should be understood as "the process of intermediation of the media in learning about the world, the influence of the media on human perception of reality that is not accessible to direct experience, along with the consequences of such intermediation: the shaping of the image of the entire social reality and even of complex social experiences under the influence of media constructs"[1].

Neil Postman points to the impact of information technology — as an engine of transformation of the entire media ecosystem — on all areas of life, and urges the adoption of an ecological approach: "A new technology does not add and does not take away anything. A new technology changes everything [...] Media ecology focuses on how media can change our perceptions, our values, but it also encompasses attempts to answer the question of how our interactions with media facilitate or interfere with our survival"[2].

The media form a natural environment for life, development, leisure activities and the building and maintenance of a person's social relationships. Taking into account the basic unit of communication, which is information, one can also speak of the infosphere — the information space "in which a human being functions physically and virtually', being 'the sum of individual users' information spaces." This environment is formed by people, organisations and machines.

I would like to specifically emphasise this last aspect. In my view, discussions about the behaviour of people and social groups in the digital media space too rarely take into account that it is an institution—based environment and that the specific ecosystem it produces is an institutional space. It is primarily made up of companies — service and product providers, advertisers, marketing staff, content creators, regulatory institutions, organisations, editorial boards, agencies and many others. The digital environment is a public space in which all social and age groups function and are influenced by it.

I am highlighting the institutional dimension because of two paradoxes apparent in the public debate relating to the digital environment. The first concerns the perception of this area as a realm devoid of materiality. This is accompanied by an accentuation of the informational — the infosphere — and the social aspects. The particular ability of managers to redefine meanings is pointed out by Jan Kreft, who sees the use of the term 'social media' as a flagship example. Such 'communities', however, lack the key constitutive elements of belonging to them — a sense of identity and the shared experiences that lead to them[3]. Wording referring to 'community'

1 W. Pisarek, *Słownik terminologii medialnej*, Universitas, Kraków 2006, s. 4.

2 N. Postman, Technopol, *Wydawnictwo Muza*, Warszawa 2004, s. 31.

3 J. Kreft, *Władza platform* , Universitas, Kraków 2022, 73–74.

directs our attention towards values from the area of solidarity and the common good. In practice, however, argues Kreft, we are much more often confronted with an accumulation of individualistic attitudes, focusing on a strong sense of 'self'.

The second paradox relates to the digital companies' defining themselves firmly as "platforms" in discourses relating to public policies. Kreft explains that this is a move aimed at shedding media connotations in favour of technological ones, which are dependent on current developments, trends, fashions and innovations[4]. This trick is meant to indicate neutrality and egalitarianism, but also a sense of dispersion and elusiveness. In my view, shunning identity—based media self—definitions in favour of the technical and infrastructural functions implied by the term 'platform' is also linked to a lack of willingness to take responsibility for content and for shaping a culture of social behaviour, influencing the well—being of individuals and communities.

In the trap of violence

I am sure that the readers of this report appreciate the functions of social media such as education, personal development, maintenance of social relationships, emancipation or entertainment. Still, the digital environment can hardly be considered a friendly space. NASK's *Nastolatki 3.0* (Teenagers 3.0) report shows that **nearly half of all young people have encountered situations of their acquaintances being called names and attacked on the internet.** A third of the respondents mention humiliation and ridicule. Almost 33 percent admit having received someone's naked or half—naked photograph. **A vast majority (68.4 percent) consider hate speech to be the internet's main problem**, and 43.7 percent claim that it is impossible to tell true information from false on the web. Moreover, half aren't interested in the credibility of profiles and their authors on social media. **Almost half (46.7 percent) declare a high and above—average level of exposure to antisocial content on social media**[5]. A similarly worrying phenomenon is suggested in the Youth Skills report. **In comparison with five other countries surveyed, the Polish youth have the highest level of exposure to intentional cyberhate speech and harmful content**[6]. As many as a third of the teenagers surveyed undertake internet challenges in which they endanger their own or others' lives, **1.3 million use the most popular pornography site, and the biggest gambling site is used by 800 thousand**. More than one in four viewers watch trash streaming[7].

Sexual harm is a particular form of violence. Research done by the Empowering Children Foundation shows that 26 percent of children have experienced harm without physical contact[8]. In its reports, the We Protect international organisation indicates that **the probability of experiencing a form of sexual violence in childhood on the web is 69 percent in Poland.** 57 percent of the cases related to receiving sexual content from an adult. More than half of the survey participants (51 percent) have been asked online to do something of a sexual nature that they felt uncomfortable with or did not want to do. In 30 percent of cases, an adult asked them to keep parts of a sexually explicit interaction private, and 21 percent of respondents reported that someone had shared sexually explicit photos of themselves without obtaining their consent[9].

4 Ibid, 81.

5 R. Lange (red.), A. Wrońska, A. Ładna, K. Kamiński, M. Błażej, A. Jankiewicz, K. Rosłaniec, *Nastolatki 3.0. Raport z ogólnopolskiego badania uczniów i rodziców*, NASK, Warsaw 2023, 9. R. Lange (ed.), A. Wrońska, A. Ładna, K. Kamiński, M. Błażej, A. Jankiewicz, K. Rosłaniec, *Nastolatki 3.0...*

6 L. D'Haenens, W. Joris, E. Bossens, *Synthesis of ySKILLS results*, 10, https://doi.org/10.5281/zenodo.10255614 (accessed: 10.02.2025).

7 R. Lange (ed.), A. Wrońska, A. Ładna, K. Kamiński, M. Błażej, A. Jankiewicz, K. Rosłaniec, *Nastolatki 3.0...*, 9.

8 K. Makaruk, K. Drabarek, A. Popyk, S. Wójcik, *Diagnoza przemocy wobec dzieci w Polsce 2023*, Fundacja Dajemy Dzieciom Siłę, Warsaw 2023, 6.

9 We Protect, *Estimates of childhood exposure to online sexual harms and their risk factors*, 3–4, https://www.weprotect.org/wp—content/uploads/WeProtect—Global—Alliance_Economist—Impact_English—full—report.pdf (accessed: 10.02.2025).

Research[10] conducted by the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age on 245 penal procedures (345 cases) indicates that the largest number of crimes (122, that is 35.36 percent of all cases reviewed) took place on the internet[11].

The amount of material showing child sexual abuse, so—called CSAM (child sexual abuse material), is growing exponentially. In its 2023 report, We Protect (quoting Internet Watch Foundation) states that **the number of CSAM material has increased by 87 percent since 2020 (to 32 million in 2023) and by as much as 360 percent of this type of footage was made by children aged 7—10 (often under the influence of manipulation, intimidation or blackmail)[12]**. 2022 was a breakthrough year in this respect – 64 percent of all CSAM materials were generated by children 7—10 years old. In case of girls, it was as much as 94 percent, in case of boys – 41 percent[13].

In her analysis of IWF data, Katarzyna Staciwa notes that **55 percent of the 11–13 age group (most prevalent in CSAM) are girls. From od 2022, an increase of such CSAM in the 7–10 was by 65 percent, but in comparison with 2019, an increase of as much as 1816 percent is reported.** Of this, as much as 41 percent of the material falls into the most violent category A, which includes images showing penetrative relationships, including elements of sadism and animal involvement. The author of the study also writes about IWF reports on children aged 3—6 years. In this case, 15 per cent of the material fell into the most violent category, and 28 per cent also showed at least one accompanying child.
One of the factors enabling such young children to produce and transmit images and videos is, as the IWF experts point out, their use of equipment with cameras or camcorders with internet access and applications, which are used intuitively, although completely unaware of the seriousness of the activities undertaken, by increasingly young children[14].

> Children from minority and marginalized groups based on sexual orientation, ethnicity, race or disability are most vulnerable to online abuse[15].

The risk factors here are exactly the same as in contact harm, the consequences in terms of trauma too. The phenomenon of children being financially blackmailed with threats to make intimate material public (so—called sextortion) is growing at a very fast pace. The US—based National Center for Missing & Exploited Children (NCMEC), with a global reach (only about 4 per cent of reports are in the US), recorded as many as 10,700 reports classified as financially motivated in 2022, up from 139 the year before[16]. In 2023, another increase took place, up to 26.7 thousand reports of such incidents[17]. The Polish Dyżurnet.pl team at NASK reports that in 2024 it received three times as many CSAM reports than the year before. Information on 9,300 such incidents was passed to the Police (the average in previous years was 150) and 9,800 reports were redirected to ISPs (the average in previous years was 600)[18].

10 PKDP, *Pierwszy raport Państwowej Komisji do spraw wyjaśniania przypadków czynności skierowanych przeciwko wolności seksualnej i obyczajności wobec małoletniego poniżej lat 15.*, Warszawa 2021, 112.

11 It is worth noting that, according to the PKDP study, the largest group of perpetrators of sexual offences against minors were not preferential perpetrators. These made up a heterogeneous group of 8 percent of all perpetrators. According to many other research findings, those with so—called surrogate motivation are the most frequent offenders. As far as online offenders are concerned, the overall statistics are similar. Of the cases investigated by the PKDP, regressive—frustrated perpetrators (45 percent) and morally indiscriminate perpetrators (23 percent) were the most frequent online perpetrators. Source: PKDP, *Pierwszy raport Państwowej Komisji...*, 110.

12 We Protect, *Global Threat Assessment 2023*, s. 4, https://www.weprotect.org/wp—content/uploads/Global—Threat—Assessment—2023—English.pdf (accessed: 10.02.2025).

13 IWF, *'Self—generated' child sexual abuse*, https://www.iwf.org.uk/annual—report—2023/trends—and—data/self—generated—child—sex—abuse/ (accessed: 10.02.2025).

14 K. Staciwa, *System przeciwdziałania przemocy seksualnej wobec małoletnich w środowisku cyfrowym — opis i kierunkowe rekomendacje działań*, Biuro Ekspertyz i Oceny Skutków Regulacji, Chancellory of the Sejm of the Republic of Poland, Warsaw 2024, 15.

15 Ibid., 10.

16 Ibid., 20.

17 Ibid., 12.

18 NASK, *20 lat walki z wykorzystywaniem dzieci w sieci! Dyżurnet.pl dba o ich bezpieczeństwo*, https://nask.pl/magazyn/20—lat—walki—z—wykorzystywaniem—dzieci—w—sieci—dyzurnet—pl—dba—o—bezpieczenstwo—najmlod-

Katarzyna Staciwa, following Europol reports, points out that there is a growing threat from people using encrypted communication (instant messaging) to exchange CSAM material, as well as to contact minors and entire networks. One form highlighted by the cited researcher is **similar to the way sects operate: "charismatic leaders use deception and manipulation to make others obedient and dependent. They force them to share extreme and/or sexually explicit photos or videos**, often mutilating themselves during live sessions, while their abusers make ever—new demands in search of entertainment and sexual gratification. It is significant that perpetrators operating in such groups were often found to be minors"[19].

It is also worth noting that the grooming time of a child in the gaming space has decreased tremendously. **The average time to enter a conversation assessed as having sexual and high—risk overtones is now 45 minutes, and sometimes this type of interaction occurs after a mere 19 seconds**. The longest time from entry into contact to a relationship identified as grooming was 28 days. When looking for reasons for such a short grooming time, one must also consider the digital footprint of the children themselves — the multitude of information about them available online as a result of the lack of adequate protection of their image and other personal data. The perpetrator has easy access to this type of material, which can assist in building credibility and choosing manipulative techniques [20].

Thanks to the fact that international organisations include in their research adult potential perpetrators seeking contact with children and CSAM material, we know that 77 percent have encountered them or links to them on the official web: 32 percent indicated pornographic sites, 29 percent — social networking platforms, 12 percent — regular websites, 12 percent — instant messaging applications[21].

When asked about where they seek contact with children, **31 percent of them pointed to social media platforms and online games**. The sites they list include pretty much all popular platforms, such as: TikTok, Facebook, Snapchat, Twitter (now X), WhatsApp, Minecraft, Roblox, Instagram, Discord[22].

Violence—oriented algorithms and data protection

A development that requires separate treatment is the algorithms created and used by the companies managing social media platforms. At present, they are not controlled in the slightest by the public, even though their influence on the way people function is overwhelming. They are used as a basis for recommending content and advertising messages, with which internet users are in constant and highly personalised contact. New light is being shed on their detrimental impact on mental health and, more broadly, on psychosocial well—being by the findings of reports by specialised organisations, the content of testimony by platform managers before the US Senate, hearings in the UK Parliament, and ongoing proceedings in the European Commission and some countries.

szych/ (accessed: 10.02.2025).

19 K. Staciwa, *System przeciwdziałania...*, op. cit., 12.

20 We Protect, *Global Threat Assessment 2023*, s. 24, https://www.weprotect.org/wp—content/uploads/Global—Threat—Assessment—2023—English.pdf (accessed: 10.02.2025).

21 Protect Children, *What Drives Online Child Sexual Abuse Offending? Understanding Motivations, Facilitators, Situational Factors, and Barriers*, 16–17, https://c5629789—604e—4d02—9190—059599b68044.usrfiles.com/ugd/bd9606_46894722843345d2b7c2ac675b357bf1.pdf (accessed: 10.02.2025).

22 Ibid., 17.

In its report entitled *Algorithms of Trauma,* the Panoptykon Foundation shows that on the Facebook platform, a person with psychosomatic ailments is offered content that mainly exacerbates anxiety. Once a person has indicated that he or she does not wish to receive this type of material, the number has increased even further[23]. The worsened emotional state of users seeking health information is one of many examples of the enormous impact of algorithms on the lives of individuals and social groups[24]. "In less than two months of the study, more than 2,500 'suggested for you' posts appeared in the user's feed, making up 22 per cent of all content displayed. More than 56 percent of the posts from the analysed group (1,416) were related to topics indicated by the respondent as toxic"[25]. It has been repeatedly demonstrated that social media platforms, including Facebook and YouTube, prefer to stimulate hurtful emotions, rewarding hate speech and toxic communication, radicalising views[26]. Such is also the position of Frances Haugen, a whistleblower formerly working for Facebook and Instagram, who has testified before the US Senate and attended hearings in the UK Parliament[27]. She pointed out the practices and decisions made by the company's management, which is well aware of its destructive social impact. In her view, children are a particularly important audience. Attracting them at an early age increases the chances of increasing user numbers. Testifying in the US Senate, Hogan admitted that the company intentionally — and contrary to the provisions of the law and regulations — defined people under the age of 13 as the target group for its activities. The managers also had knowledge gleaned from internal research about the link between mental disorders, such as anorexia, and Instagram use[28]. Amnesty International has long pointed to the business model of digital platforms as a threat to human rights, including the right to privacy, non—discrimination and equal treatment[29]. A report published in 2023 describes how TikTok's algorithms work based on research conducted on users from countries with the largest populations on the platform — the Philippines, Kenya and the US. "The research showed that after 5—6 hours on the platform, almost half of the suggested videos were mental health—related and potentially harmful. This is about 10 times more than on accounts of users not interested in mental health.

"The 'rabbit hole' syndrome emerged even faster when the researchers themselves reviewed mental health—related videos suggested to dummy accounts posing as 13—year—old users"[30]. After falling down the 'rabbit hole', i.e. when the algorithm started proposing more and more content, which was less and less moderated
or not moderated at all, and causing the time spent on the site to increase, the dummy accounts displayed material containing suicide advice, romanticising and aestheticising this type of death[31].

In the Życie Warte Jest Rozmowy (Life is Worth Talking About) Foundation's report entitled *Understanding to Prevent. Suicidal behaviour among children and adolescents*, the increased online activity of children was listed among direct and indirect risk factors for suicidal behaviour. Exposure to self—harming content, the influence of social media algorithms, the option to make suicide pacts online, the incitement to suicidal behaviour, the accurate description of suicide attempts and the romanticisation and glorification of this type of death were identified as the most important direct factors[32]. The following were identified as the most important indirect factors: the impact of social media on adolescents' lowered self—esteem, cyberbullying

23 Panoptykon Foundation, *Martwisz się o zdrowie? Facebook nie pozwoli ci o tym zapomnieć*, https://panoptykon.org/martwisz—sie—o—zdrowie—facebook—nie—pozwoli—ci—o—tym—zapomniec (accessed: 10.02.2025).

24 Panoptykon Foundation, *Algorytmy traumy. Sprawdziliśmy, czy możesz kontrolować reklamy na Facebooku*, https://panoptykon.org/algorytmy—traumy (accessed: 10.02.2025).

25 Panoptykon Foundation, *Martwisz się o zdrowie...*, op. cit.

26 L. Munn, *Angry by design: toxic communication and technical architectures*, „Humanities and Social Sciences Communications" 2020, nr 7(53), https://doi.org/10.1057/s41599—020—00550—7 (accessed: 10.02.2025).

27 *Whistle—Blower Says Facebook 'Chooses Profits Over Safety'*, https://www.nytimes.com/2021/10/03/technology/whistle—blower—facebook—frances—haugen.html (accessed: 10.02.2025).

28 D. Milmo, K. Paul, *Facebook harms children and is damaging democracy, claims whistleblower*, https://www.theguardian.com/technology/2021/oct/05/facebook—harms—children—damaging—democracy—claims—whistleblower?CMP=Share_iOSApp_Other (accessed: 10.02.2025).

29 Amnesty International, *Kanał „Dla Ciebie" na TikToku rozpowszechnia wśród młodych osób treści szkodliwe dla zdrowia psychicznego*, TikTok rozpowszechnia treści szkodliwe dla zdrowia psychicznego — Amnesty International — Bronimy praw człowieka (accessed: 10.02.2025).

30 Ibid.

31 Ibid.

32 H. Witkowska, L. Kicińska, J. Palma, M. Łuba, *Zrozumieć, aby zapobiec 2024 — zachowania samobójcze wśród dzieci i młodzieży. II edycja raportu na podstawie danych KGP i serwisu www.zwjr.pl*, Życie Warte Jest Rozmowy, Warsaw 2024, 16.

as a new type of violence experienced across all geographies, relationship deficits, feelings of loneliness and lack of support, desensitization of aggression, addictions to online and social media use, access to pornography affecting the brutalization of life and the image of sexual life, constantly comparing oneself with others[33].

Last year, the US Federal Trade Commission reported on a study into the privacy policies of the largest digital platforms and video streaming services, which included: Amazon (Twitch), Meta (Facebook), YouTube, X Corp, Snap, ByteDance (TikTok), Discord, Reddit and WhatsApp. One of the most important findings concerned the lack of adequate protection for children and young people, thus circumventing US regulations in this area. The report noted that the platform security systems treat teenagers as adults, which is, after all, unacceptable in terms of the 18—year—old adulthood limit.

> However, the most distressing conclusion concerned the lack of protection for the youngest children, since, according to the official responses of platform managers, highlighted in the report by the Federal Commission, under—13—year—olds are not allowed to be users, pursuant to the regulations.

In their final conclusions, American officials pointed out the peculiar hypocrisy of social media platform owners and explicitly stated their disapproval of ignoring the presence of children in this environment[34].

It is worth noting that the European Commission has also launched proceedings against Meta and the operator of the TikTok platform, suspecting them of violating the Digital Services Act (DSA). The former is mainly accused of 'deceptive advertising"[35]. In the case of TikTok, allegations involving children are also implicated: "The investigation will focus on several areas. These involve, among other things, the fulfilment of the DSA's obligations to assess and mitigate systemic risks in terms of actual or foreseeable negative effects arising from the design of the TikTok platform system, including algorithmic systems that may stimulate behavioural addictions [...]. Such an assessment is required to counter potential threats to the exercise of a person's fundamental right to physical and mental well—being, respecting children's rights, as well as the impact on radicalisation processes. The European Commission further points out that the mitigation measures applied in this regard, in particular the age verification tools used by TikTok to prevent minors from accessing inappropriate content, may not be reasonable, proportionate or effective"[36].

33 Ibid, 17.

34 Federal Trade Commission, *A Look Behind the Screens. Examining the Data Practices of Social Media and Video Streaming Services*, s. 5, https://www.ftc.gov/system/files/ftc_gov/pdf/Social—Media—6b—Report—9—11—2024.pdf (accessed: 10.02.2025).

35 European Commission, *Commission opens formal proceedings against Facebook and Instagram under the Digital Services Act*, https://digital—strategy.ec.europa.eu/pl/news/commission—opens—formal—proceedings—against—facebook—and—instagram—under—digital—services—act (accessed: 10.02.2025).

36 bg, *Komisja Europejska wszczyna formalne postępowanie przeciwko TikTok*, https://www.wirtualnemedia.pl/artykul/komisja—europejska—postepowanie—tiktok (accessed: 10.02.2025).

The grim reality — the first conclusions

The findings and sources indicated above were chosen only as examples to show the inconsistencies existing between public, legal and social declarations and political promises on one hand and, on the other, the practices demonstrated in the selected reports from public institutions and international organisations and academic research. I am aware that some of these, like the Amnesty International study, involve users from other continents, including the US. Clearly, the Federal Trade Commission investigation scrutinises management methods in the context of US law. However, notwithstanding the differences in management policies of different regions, it is still important to remember that we are dealing with global corporations. Thus, the managerial and cultural DNA is a common denominator and to some extent these practices can be generalised and, in the most optimistic approach, treated as high—risk practices that are very likely to occur in Europe as well. It is the fact that many of them have been identified by the European Commission conducting the relevant proceedings. It is also difficult not to see some similarities between the conclusions of the *Driven into the Darkness* by Amnesty International and the Panoptykon Foundation's *Algorithms of Trauma* reports. It should be remembered that Frances Haugen, mentioned above, was describing precisely the global politics of a company in which she had played an important role at one time.

The explanation sent to US officials by the digital platforms, stating that the lack of protection for children under the age of 13 is due to their lack of presence on the services, as stipulated by law, sounds like a grim joke.

Teenagers spend over 5 hours and 36 minutes on the internet on weekdays and significantly more, over 6 hours and 16 minutes, on non—school days. This time is steadily increasing year on year. More than a quarter (25.8 percent) of respondents in this age group have between 5 and 8 accounts on social media platforms, and 36 percent have more than 8. On average, they spend 4 hours and 12 minutes per day on social media[37]. Detailed data describing the online functioning of young people is provided in this report, especially the chapters by Jadwiga Przewłocka and Anna Miotk and by Aleksandra Załęska.

Analyses of both authors and their teams hint at the status quo in Poland.

Allow me to remind you some of the data they refer to: **2.7 million 7–14—year—olds** use the internet (83 percent of all young people in this age group), 2.6 million among those use mobile devices for this, social networking and streaming platforms being their main spaces on the web, and as many as **92 percent use instant messaging apps**. Let us look at the under—13s, those who, in theory, are absent from these spaces. **Statistically, a third of all children aged 7—12 in Poland use TikTok (760,000), slightly fewer use Facebook (580,000) and 1/8 use Instagram (290,000)**. In terms of IM apps, **900,000 among this age group use Messenger, and 700,000 use WhatsApp**[38].

37 R. Lange (red.), A. Wrońska, A. Ładna, K. Kamiński, M. Błażej, A. Jankiewicz, K. Rosłaniec, Nastolatki 3.0..., op.cit, 7.

38 These numbers are so overwhelmingly large that there appears to be a legitimate need to carry out research relating to the social impact and to calculate the financial costs incurred by a person (and his or her family) experiencing various forms of violence in the digital environment and, above all, in the social platforms indicated above. With regard to the phenomenon of sexual abuse of minors and its long—term consequences, calculations that can provide a methodological reference point are found in the 2023 PKDP report entitled "What is the cost of the suffering of a sexually abused child."

Final conclusions

In summary, I would like to once again note the institutional nature of the public space created by the digital media. From institutions, we must expect due diligence in respecting human rights and children's rights, managing compliance[39], ethics, reporting and managing risks, transparency of management processes, appropriate regulations geared towards protecting the social interest, and many other instruments typical of large entities with an immense impact. Institutions should be appraised on the basis of their attitude towards the most sensitive and most vulnerable groups. Naturally, children are exactly such a group.

Taking into account the analysis presented above and the conclusions of the study by experts from the University of Warsaw, PBI and Gemius, questions need to be asked about the reasons for the lack of consistency in the declarations of many stakeholders in the digital environment and about the legal, financial and social consequences that should be taken to compensate for the social, economic and political costs incurred by individuals and society.

There is no doubt in my mind that in the search for answers to the questions posed in this way, it is necessary to use the category of institutional violence, which is suffered to the greatest extent by minors — who are, for many reasons, those most vulnerable to the consequences. Institutional violence should be understood as "any deliberate action of an institution that adversely affects health, physical or psychosocial development"[40]. It can be reflected in laws and social norms, exacerbating harm to specific groups in society. Sometimes this violence is an end in itself or, as in the case at hand, an indirect objective. It seems entirely reasonable to hypothesise that companies and their owners offering services in the form of social platforms and others use it for the purpose of profit maximisation.

> Apart from the big techs themselves, advertising and marketing companies are the most powerful players in this space. This is a result of the model created by the big techs — the owners of the platforms (but also of other 'digital media') — and the advertising, marketing and media agencies, the entire digital environment, and hence the young person's place of life and development, operates primarily in a commercial paradigm.

What this means in practice is that **every little activity** — the time devoted to the given site, the attention, every bit of information, comment, behaviour and item of the child's personal data — **is instantly monetised and used to grow the profits of their owners**.

In such circumstances, a human being, especially an underage person, is reduced to the role of a means to an end. Antoni Kępiński referred to such an approach as a **"technical approach to another person"**[41] and warned against reducing the value of other people to those related to the efficiency of the production process and neglecting them, insisting that essentially human traits should be emphasised. Pondering on the functioning of the digital economy, Shoshana Zuboff concludes that people, with their personal data, constitute **"free raw material for translation into behavioural data"**[42], enabling optimi-

39 Compliance — a system of managing processes to ensure compliance with all applicable laws (international, national, internal — by—laws, codes, good practices, instructions and procedures of conduct), with the aim of ensuring consistency between declared values and management practice, minimising the risks of breaches of economic, criminal, labour, human and children's rights law, the risk of civil liability and protecting reputation. Detailed compliance regulations are overseen by international organisations and global stock exchanges. They are referred to by regulatory institutions, law enforcement agencies and courts.

40 J. Brągiel, Pedagogika rodziny. *Obszary i panorama problematyki*, Adama Marszałek, Toruń 2005, 296, quoting: J. Helios, W. Jedlecka, *Przemoc instytucjonalna wobec dzieci. Kulturowe uzasadnienie przemocy instytucjonalnej*, Difin, Warsaw 2020, 9.

41 A. Kępiński, *Rytm życia*, Sagittarius, Warsaw 1992, 64.

42 S. Zuboff, *The Age of Surveillance Capitalism*, Public Affairs, New York, 9.

sation of sales of services and products, predicting purchasing decisions and web activity, and ceaseless production of new market trends.

If we use the terms of institutional violence, the situation should be verified in three aspects: knowledge, attitudes and effects[43].

Knowledge and attitude: Do key stakeholders have adequate knowledge of the social costs of the governance models and public policies in place, of violations, infringements and the destructive impact of the adopted technological tools? What attitude do they take based on the knowledge they receive?

Actions: What measures are being taken to correct the mistakes — strengthening the autonomy and agency of underage users, improving systems to protect privacy and well—being and to counter the likelihood of sexual, physical, psychological violence, cyberbullying? To what extent is the principle of the best interests of the child (child welfare) taken into account in governance models?

Effect: To what extent have knowledge, attitudes and actions taken by institutions led to optimal solutions for the protection of minors from abuse?

All the data and interventions of state authorities, international organisations, national institutions, think tanks and academia cited in the study, which have been public for many years, indicate that actors such as owners of digital platforms, the advertising and marketing industry and many other companies, while having full knowledge, do not take optimal corrective actions and decisions taking into account the wellbeing of the child.

Consequently, as demonstrated by the data cited in this report, young people are still experiencing the effects of this unacceptable and hurtful situation that has been going on for years.

The intention of the project, which I have the pleasure of co—organising, is not to look for scapegoats or to resort to categories of blame. We are much more inclined to refer to the values of the common good and shared responsibility.

The state of affairs presented in the report points to the responsibility of a large number of stakeholders. Of course, the degree of responsibility depends on the resources at hand, the nature of the entity's activities and the extent of authority. However, apart from the obvious digital companies pointed out here (big techs), as well as the advertising and marketing industry, the responsibility lies with all entities — public and private alike — whose business models include the use of digital media (marketing, advertising, sponsoring, sales activities, services). A hugely important role is played by political authorities and international organisations, including regional ones (e.g. the European Commission and the European Parliament), national governments and parliaments, as well as supervisory and advocacy bodies, academia and civil society.

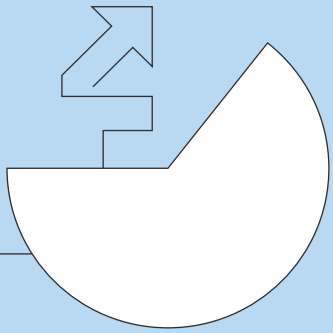
Konrad Ciesiołkiewicz

Member of the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age, PhD in social sciences, psychologist and political scientist associated with Korczak University, where he directs the Centre for the Analysis of the Information Society.

43 A model taken from the empowerment concept (from: R. Szarfenberg, *Empowerment – krótkie wprowadzenie*, http://rszarf.ips.uw.edu.pl/pdf/Empowerment2.pdf, accessed: 10.02.2025).

3.

The Online Presence of Children and Adolescents — Analysis Results



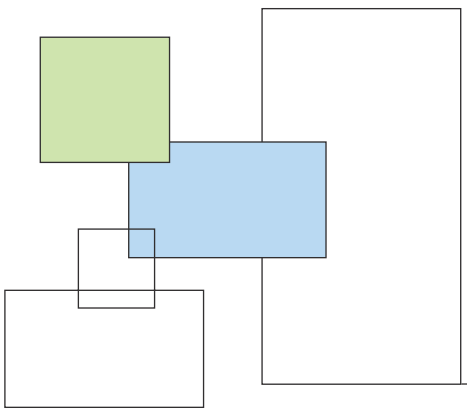
Introduction:

This part of the report presents the results of the analysis of children and adolescents' online activity, based on measurements conducted by the Gemius research company. To describe the topic as comprehensively and precisely as possible, this part is divided into three chapters:

- Section 3.1 — 'Internet use by children and adolescents in Poland' presents quarterly and daily cross—sectional data for the group of 7—18 year olds on the use of different types of websites and applications, thematic scope of the content viewed, and time spent online. 'Internet use by children and young people in Poland' presents cross—sectional quarterly and daily data for the group of 7—18 year olds, concerning the use of various types of websites and applications, thematic scope of the content viewed, time spent online, connecting to the Internet from various devices, etc. The data is based on the results of the Mediapanel survey using standard age groups presented in this study. The chapter includes statistics broken down into the group of children aged 7—14 (primary school) and older adolescents (secondary school), but only up to the age of majority.

- In section 3.2 'Use of social networking sites on smartphones among children under 13', we focus only on the group that is formally not supposed to use social networking sites (and yet does). Children of this age use the internet (and especially social networking sites) overwhelmingly via smartphones, so it is these devices that we focus on in this section. Here, we rely on data from Gemius' smartphone research panel, which allows us to analyse user activity at the level of individual app launches, providing a unique insight into how phones are used by the group studied.

- In section 3.3 'Specifics of smartphone use by children and adolescents', we also draw on data from the smartphone survey panel, but return to the wider group of children and adolescents between 7—18 (but separate out the 7—12 subgroup in the analyses) and examine in detail the specifics of smartphone use by young people at different times of the day and week.



→ 3.1 Internet use by children and adolescents in Poland

Authors:

Aleksandra Załęska
Gemius

Anna Miotk
Polskie Badania Internetu /
University of Warsaw

Consultation:

Marcin Niemczyk
Polskie Badania Internetu

This analysis looks at internet use by two age groups, 7—14 and 15—18, as compared to internet users in general (7—75). The first part of the analysis presents demographics and basic data on internet use by the above groups. The second part of the analysis focuses on the most popular types of sites among younger internet users in terms of features (e.g. video streaming or social networking). The third part analyses the most popular sites in terms of content (e.g. educational or games and gaming—related sites). The data in parts 1—3 refer to Q4 2024. The fourth part of the analysis shows the websites and mobile apps most popular with children and young people, based on December 2024 data.

1. Behavioural and demographic profile

According to the Mediapanel study, 29.94 million internet users aged 7—75 used the internet in the last quarter of 2024. The group of the youngest internet users (7—14 years) amounted to 2.74 million in the last quarter. According to CSO data, the size of the 7—14 age group in 2024 was 3.2 million, so internet penetration in this group reached 85.6%. On the other hand, the group of users aged 15—18 was 1.49 million, and internet penetration in this group was almost 100%.

To connect to the internet, users use personal computers (laptops, desktops) and mobile devices (predominantly smartphones, much less so tablets, which are mainly used by older internet users). Some people use more than one device. This is taken into account in the Mediapanel study — it presents the real number of users, regardless of the number and types of devices or browsers the users utilise.

In the last quarter of 2024, 27.18 million internet users aged 7—75 were connecting to the internet from mobile devices and 25.14 million from personal computers (PCs). Reach was 91% for mobile devices and 84% for PCs.

Among young people aged 15—18, 1.38 million users used mobile devices, translating into 93% reach. PCs, on the other hand, were used by 1.22 million, resulting in 82% reach.

The youngest internet users (7—14) use the internet much more widely than older groups. The reach for mobile devices in this group was 96% (2.63 million users) and 86% for PCs (2.35 million users).

The Mediapanel survey presents a number of qualitative indicators from which it is possible to describe accurately the behaviour of internet users and their choices, as well as their demographic profiles.

According to data for the last quarter of 2024, 91.54% of **the youngest group of internet users (7—14)** connected to the internet at least once a day and spent as much as **4h and 29 min** online. At the same time, in the 7—75 population, the average daily reach was 88%, and the average daily time was 3h and 35 min. As many as 89.63% (2.47 million) of the youngest users reached for a **phone or tablet** and spent **4h and 8 min** a day with it, while a personal computer was chosen by only 29% (780,000) of the youngest population, who spent 1h and 23 min with it.

The youngest spend more than twice as much time per page view on the internet as the general population. On mobile devices, the average daily time per page view was 12 minutes and 51 seconds, and on PCs, it was 3 minutes and 36 seconds, while for the entire population, this time was 5 minutes and 8 seconds and 2 minutes and 55 seconds, respectively. This statistic may indicate that the youngest often use video or instant messaging services, where page views are not generated as frequently as in the case of browsing content, e.g. reading articles.

The internet use profile of **adolescents (15—18)** is similar to the behaviour of the youngest group. 90.28% of young people access the Internet every day, 88% of this population use mobile devices, while only 32% use personal computers. They spend an average of **4 hours and 28 minutes** online per day, with an average of 9 minutes per page view.

> The Mediapanel survey data clearly demonstrate that the youngest internet users and teenagers are 'heavy users' compared to the population of 7—75. They connect to the internet more frequently than the general internet population, choose mobile devices to do so and spend an hour longer on online activity.

In terms of gender, the breakdown of internet users aged **15—18** is similar to that in the entire population of 7—75: **women are 51%, men 49%**. A more marked advantage on the female side is present in the youngest users' group: **53% (1.45 million) among them are girls, and 47% (1.28 million) — boys**. However, gender does not differentiate the device choice or the amount of time spent online, with boys and girls alike reaching for mobile devices more often and using them the longest.

The distribution of the different age groups: 7—75, 15—18 and 7—14 differs in terms of the voivodeship (province) from which internet users come.

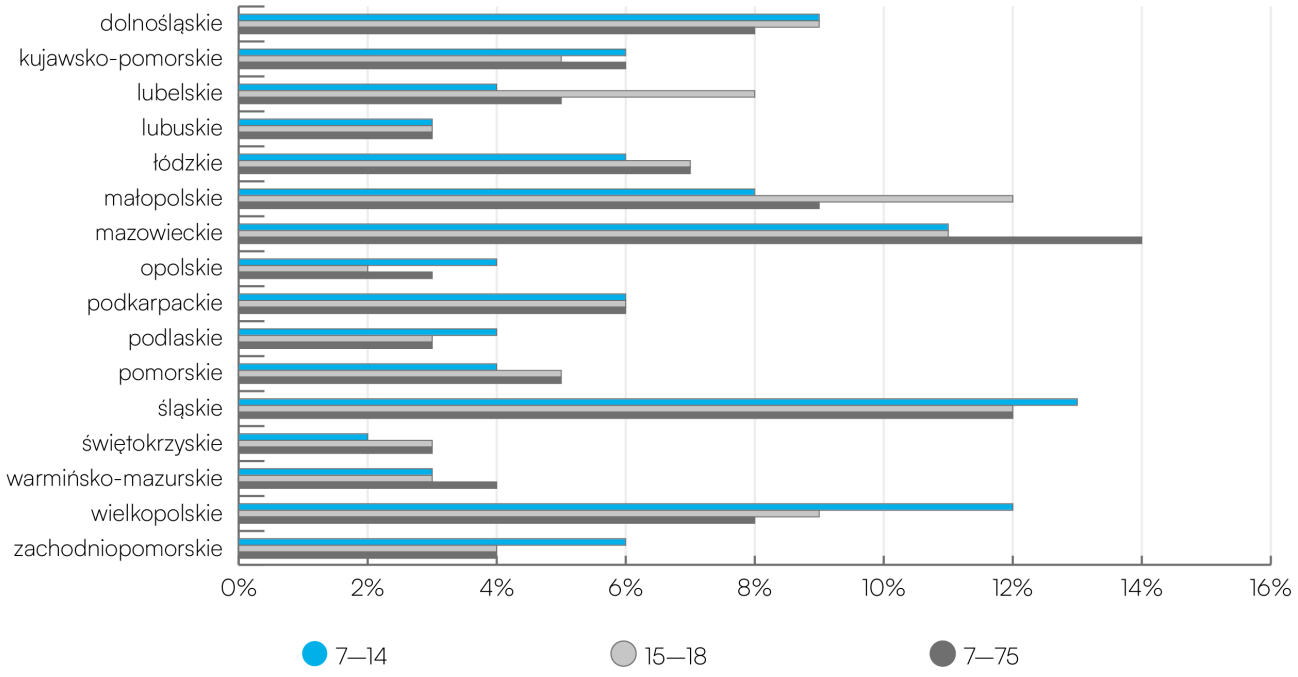


Figure 1 — % distribution of the number of users in different age groups and voivodeships.
Source: Mediapanel survey, aggregate data for Q4 2024.

In the entire population, most users come from the Mazovian voivodeship (14%), while most young people connect to the internet from the Silesian (12%) and Lesser Poland (12%) voivodeships. Most children come from the Silesian (13%) and Greater Poland (12%) voivodeships.

Differences in distribution between age groups are also apparent when the size of the municipality of residence is taken into account.

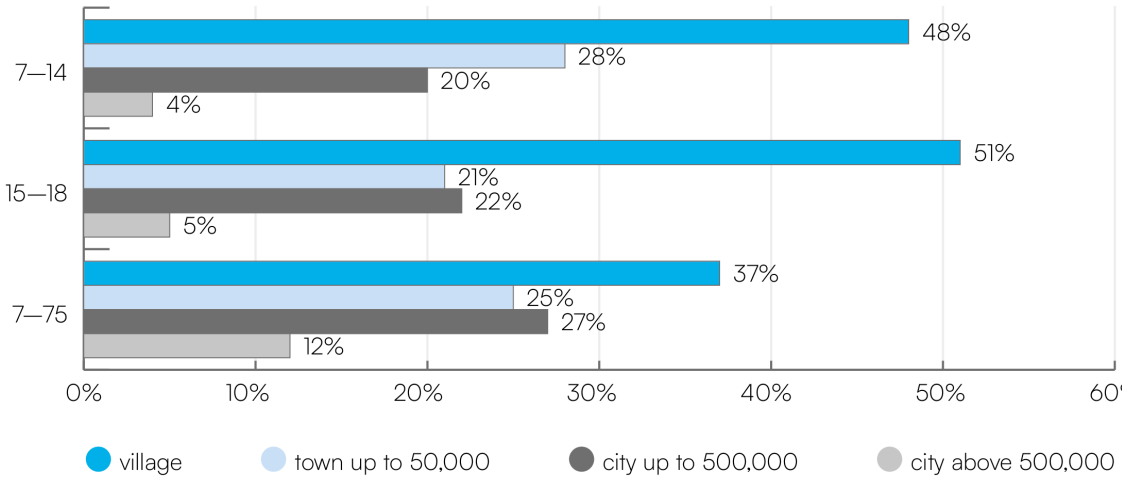


Figure 2 — % distribution of the number of users within age groups, by the population of the municipality of residence
Source: Mediapanel survey, aggregate data for Q4 2024

37% of the entire population of internet users (7—75) declare rural areas as their places of residence, whereas **as many as half of the users are from rural areas — 51% in the 15—18 group and 48% at ages 7—14.** The situation is reversed in **cities with populations above 500,000: their share among younger users is less** than in the internet users' population overall, which is 12%. Only 4% people of the youngest age group (7—14) and 5% of adolescents (5—18) live here.

Neither the voivodeship nor the size of the place of residence of Internet users differentiates the age groups in terms of choice of devices or amount of time spent online.

2. Functions of sites and apps used

The Mediapanel study allows for the analysis of websites and applications in terms of the functions they perform. Two indicators were used to determine which categories are strongly used by a particular user group: 7—14 and 15—18 years old:

- Affinity Index (AFF) — is the ratio of the affinity of users in a given target group in a given category to the affinity value of people in that target group in the population. Thanks to the Index, it is possible to determine the overrepresentation of the analysed group; a value of 100 is typical for an average Internet user, values above 100 indicate an overrepresentation of users from a specific group in a given category.

- Time composition — the proportion of time spent by persons in the target group in the selected category to the time spent by all persons in the category.

For the 7—14 age group, the functional categories most used are: Streaming, Communities and Services — they have the highest time composition, and Affinity Index values are above 100 in their case.

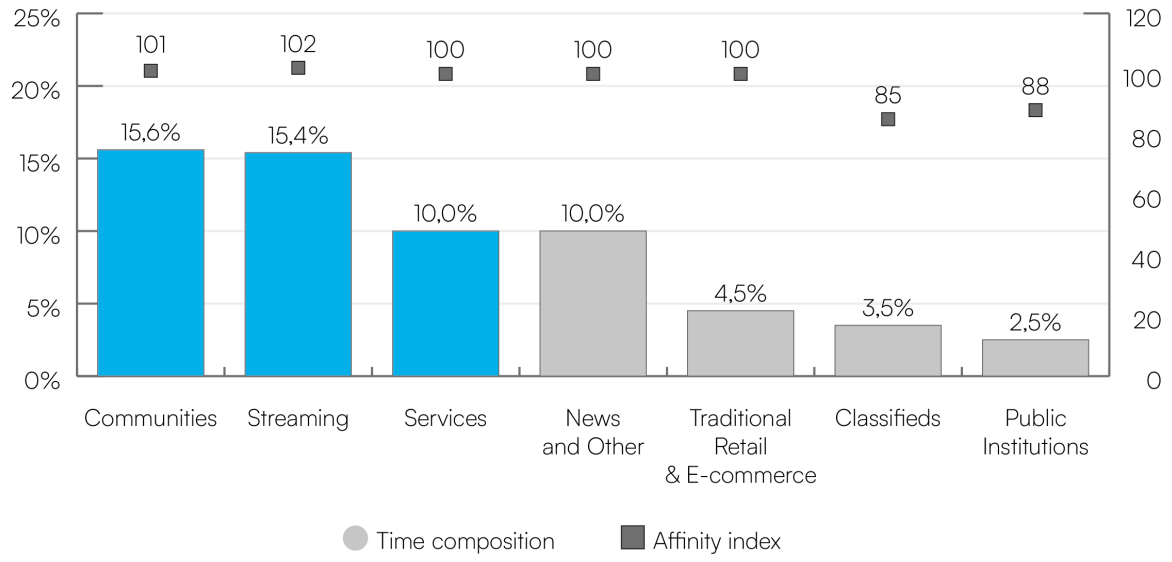


Figure 3 — Functional categories of sites and apps used by the 7—14 age group
Source: Mediapanel survey, aggregate data for Q4 2024

The situation is very similar for the 15—18 age group: the categories with the highest Time composition and higher Affinity Index values are Communities, Streaming and Services.

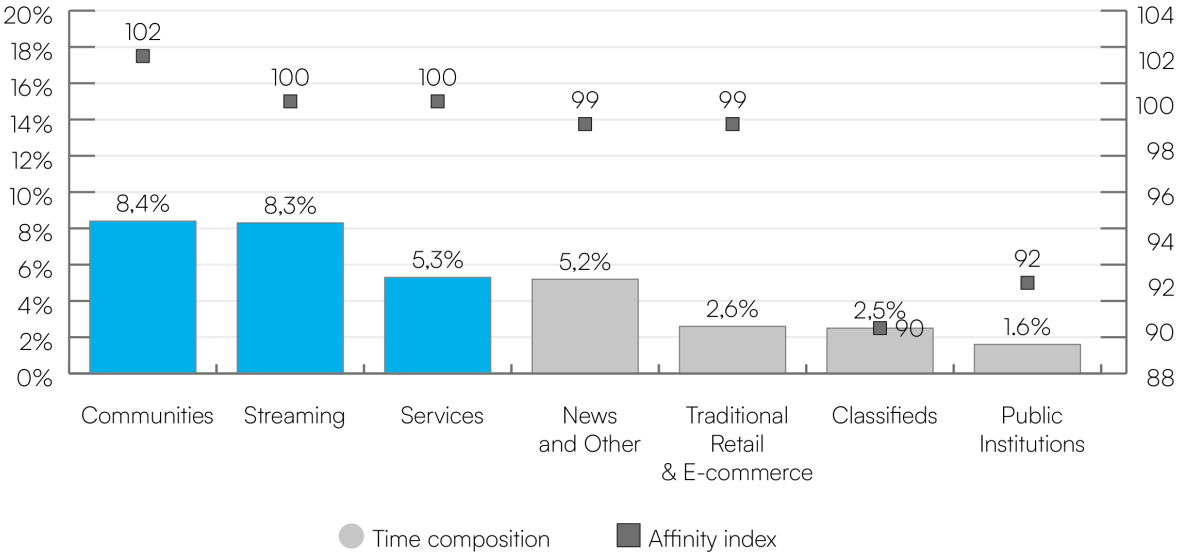


Figure 4 — Functional categories of sites and apps used by the 15—18 age group
Source: Mediapanel survey, aggregate data for Q4 2024

In the Mediapanel study, the functional categories are broken down into specific categories, which provide a more in—depth insight into the types of content popular online. For the analysis in groups 7—14 and 15—18, specific categories that are most popular for these groups were taken from the three general categories mentioned above. These are:

- Streaming: Video streaming and Audio streaming
- Communities: Forums and discussion groups, Social media and Dating
- Services — Communication: Mail services and Instant messaging.

Media channel	No. of Real Users	Reach	Avg. Daily Time (hh:mm:ss)	Time Share	Affinity index
Video streaming	2 711 232	83,03%	01:55:39	30,52%	102,68
Social media	2 649 024	81,13%	02:09:16	35,55%	100,52
Instant messaging	2 537 730	77,72%	00:40:46	11,73%	108,58
Audio streaming	2 374 596	72,72%	00:11:27	1,24%	115,41
Mail services	2 363 904	72,40%	00:04:18	0,37%	98,96
Forums & discussion groups	1 411 992	43,24%	00:03:04	0,02%	105,38
Dating	676 836	20,73%	00:07:08	0,03%	74,32

Figure 5 — The most popular specific functional categories frequented by the 7—14 age group
Source: Mediapanel survey, aggregate data for Q4 2024

In the *Audio streaming* category, a strong overrepresentation can be noticed of persons at ages 7—14 (AFF 115); however, those people only spend 11 minutes a day there, on average — not much in comparison with other popular categories with a lower Affinity Index. **The youngest spend most time on Social media — 2.64 million people dedicate 2 hours per day to this content, that is 35.5% of the time that all internet users spend in this category.** Most users in this age group, 2.71 million, can be found in the *Video Streaming* category.

Media channel	No. of Real Users	Reach	Avg. Daily Time (hh:mm:ss)	Time Share	Affinity index
Video streaming	1 466 100	98,13%	01:56:28	30,84%	102,12
Social media	1 423 980	95,32%	02:08:19	35,16%	99,38
Instant messaging	1 353 024	90,57%	00:40:19	11,50%	106,48
Audio streaming	1 304 262	87,30%	00:04:49	0,46%	100,43
Mail services	1 284 984	86,01%	00:12:07	1,30%	114,87
Forums & discussion groups	941 868	63,04%	00:02:40	0,02%	129,28
Dating	411 804	27,56%	00:08:22	0,04%	83,16

Figure 6 — The most popular specific functional categories frequented by the 15—18 age group
Source: Mediapanel survey, aggregate data for Q4 2024

Internet users at ages 15—18 are overrepresented in the *Forums and discussion groups category* (AFF = 129), however, these persons spend very little time here, only 2 minutes and 40 seconds per day. **Young people spend the most time being active on *Social media* — similarly to children, the time spent here by this group of 1.42 million people exceeds 2 hours per day.** This accounts for 35% of the total time that Internet users spend browsing content from this category. Young people are most attracted by content from the *Video streaming* category: there are 1.46 million users aged 15—18, or 98% of all internet users of this age.

Further in the report, the specific functional categories that most engage the youngest internet users are described: *Video Streaming, Social Networking* and *Instant Messaging*. The services and applications aggregated in these categories are used for entertainment, establishing and maintaining relationships or creating and presenting one's own content, which may explain their exceptional popularity.

Video streaming

In the Mediapanel study's classification, the *Video streaming* category includes websites and applications:

- which allow the viewing of video content, e.g. youtube.com, vimeo.com, and which may have a social character, where the main idea is to allow the sharing and viewing of various, mainly short, video content;
- whose publishers offer direct playback of longer video content (films, series, programmes) and bear editorial responsibility for the content provided, e.g. netflix.com, max.com;
- VODs of TV stations, offering various video materials (entire films, series, programmes) broadcast in the station's programme, e.g. vod.tvp.pl, player.pl;
- TV channels enabling live viewing (OTT), e.g. pilot.wp.pl.

The category represents internet traffic data, including data on the viewing of pages and applications that host video players. The results presented in this section should not be understood explicitly as active viewing of video content, but as hits on pages and apps with such content — the hits may or may not be accompanied by actual video playback.

Streaming video sites are one of the most popular categories on the internet across all age groups. It was used by 28.78 million internet users aged 7—75 in Q4 2024, with a reach of 96%. The overwhelming majority of internet users — 26.26 million — accessed streaming video via mobile devices (87.7% reach), and slightly fewer — 20.34 million — via PCs (68% reach). Internet users spent an average of 1 hour and 40 minutes per day on these services, mobile time was 1 hour and 52 minutes, and time on PCs was 1 hour and 20 minutes.

1.46 million video streaming users are adolescents (15—18 years old). This means that 98.1% of this group of internet users visited a video service or VOD/OTT platform in the last quarter of 2024 at least once. 1.37 million of them connected from mobile devices (91.85% reach), while 1.07 million connected from PCs (72.2% reach). The Affinity Index for this group was 102.12, 102.25 for mobile devices and 108.59 for PCs. Young people spent an average of 20 minutes more per day consuming content in this category than the average internet user aged 7—75: the **average daily time was 1h 56 min in the 15—18 age group**. Those connecting from mobile devices spent 1h and 40 min on streaming sites and apps, while those connecting from PCs spent 1h and 33 min. **The daily Affinity Index was 141, indicating an overrepresentation of adolescents in the category.**

Video streaming was used by 2.71 million children aged 7—14 in Q4 2024, which translates into 98.6% reach in this group. Similar to the 15—18 group, the Affinity Index in this case was 141. **The average daily time spent by children on video streaming was 1h 55 min**. Mobile devices were used for this purpose by 2.6 million children (94.8% reach and 1h and 44 min per day) and PCs by 1.98 million (72.2% reach and 1h and 35 min per day).

> Children aged 7—14 and adolescents aged 15—18 used video streaming more intensively than average internet users in Q4 2024. On average, they spent 15 min more per day on this content than the 7—75 group.

Social media

The *Social media* subcategory aggregates websites and apps whose main concept relies on:

- creating one's own profile, containing information about the user;
- building up a network of online friends and contacts;
- enabling communication between users, e.g. instagram.com, facebook.com;
- creating blogs, e.g. Blogger.com.

In Q4 2024, 28.72 million internet users aged 7—75 used the category, with a reach of 96%. The overwhelming majority of internet users — 26.54 million — connected to social networks via mobile devices (88.6% reach), with a significantly smaller number — 18.48 million — using personal computers (61.7% reach). During the period in question, the average Internet user spent an average of 1 hour and 22 minutes per day browsing social networks.

Social networks were used by 1.42 million users aged 15—18 (95% reach), of which 1.36 million used mobile devices for this purpose (91% reach) and 744,000 used personal computers (50% reach). **This category can be labelled mobile not only because of the greater number of users, but also the time they spend on it: it is this platform that young people use the longest, spending an average of 2h and 9 min per day browsing social networks.** For PCs, this time is only 20 min per day.

As for children aged 7—14, social media sites were used by 2.64 million of them (96.4% reach), of which 2.58 million used mobile devices (94% reach) and 1.25 million used personal computers (45.8% reach). **Children, like adolescents, establish and maintain relationships on social networks via mobile devices, spending an average of 2h and 10 min per day on this activity.** They only use personal computers for this purpose for an average of 24 min per day.

Children aged 7—14 and adolescents aged 15—18 use social networks more intensively than the average internet user. On average, they spend 45 minutes more time per day on this activity than the 7—75 group. They primarily use mobile devices to connect to these sites.

Instant messaging

The Instant messaging specific category groups sites and apps that allow their registered users to:

- communicate in real time with other registered users, e.g. Messenger, WhatsApp, Telegram, Signal;
- engage in text conversations in real time, among several people, with the conversation typically taking place in so—called "rooms" (chats).

In Q4 2024, 25.47 million internet users aged 7—75 used instant messaging, which translated into 85% reach in the internet population. Three in four internet users — 24.38 million — used instant messaging via mobile devices (81.42% reach), and one in four — 8.1 million — used PCs (27.1% reach). Internet users spent an average of 29 minutes per day on these sites and apps.

Instant messaging is used by 90.6%, i.e. 1.35 million adolescents present on the Internet. Of all young people aged 15—18, as many as 1.31 million use mobile devices for this purpose (88.1% reach), and only 466,000 use PCs (31.2% reach). **The average daily time young people spend chatting online is 40 minutes**, primarily using mobile devices — mobile time was 40 minutes and PC time was 15 minutes.

For children aged 7—14, 2.53 million users used instant messaging (92.3% reach), of which 2.48 million accessed it on mobile devices (90.5% reach) and 755,000 on PCs (27.4% reach). **Similarly to adolescents, the average daily time was 40 minutes in this group.**

The youngest age groups of internet users, 7—14 and 15—18, use instant messaging more often than average internet users. The apps are used by nine out of ten Internet users in each of these age brackets. On average, they spend 40 minutes a day establishing and maintaining relationships, 10 minutes more than the 7—75 group

3. Subject range of the content consumed

In the Mediapanel study, websites and applications are aggregated into thematic categories. As in the case of the functional analysis, two indicators were also adopted here: Affinity Index and Time composition, which make it possible to identify the thematic categories most extensively used by particular age groups.

For children 7—14 years of age, two particularly popular subject categories are *Education and Culture* and *Entertainment.*

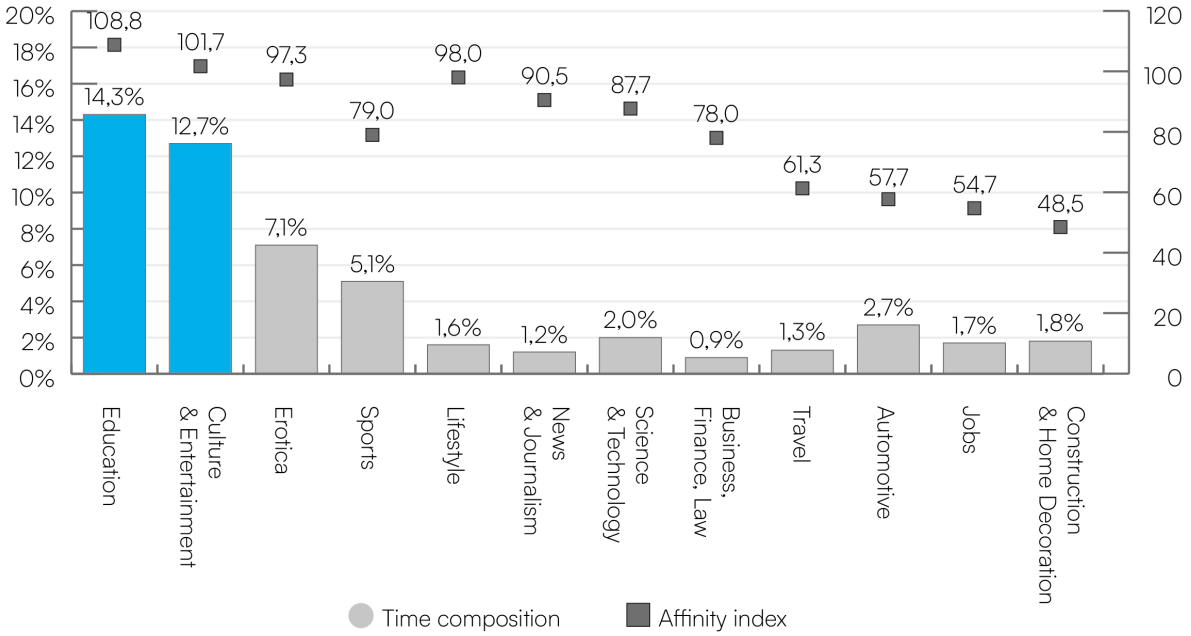


Figure 7 — Thematic categories of sites and apps accessed by the 7—14 age group
Source: Mediapanel survey, aggregate data for Q4 2024

The situation is similar for 15—18 year olds — Education and Culture & Entertainment are still the most engaging thematic categories here, but sites in the Erotica category are also gaining popularity: they have a high Affinity Index, although a relatively low (compared to the average internet user) time share.

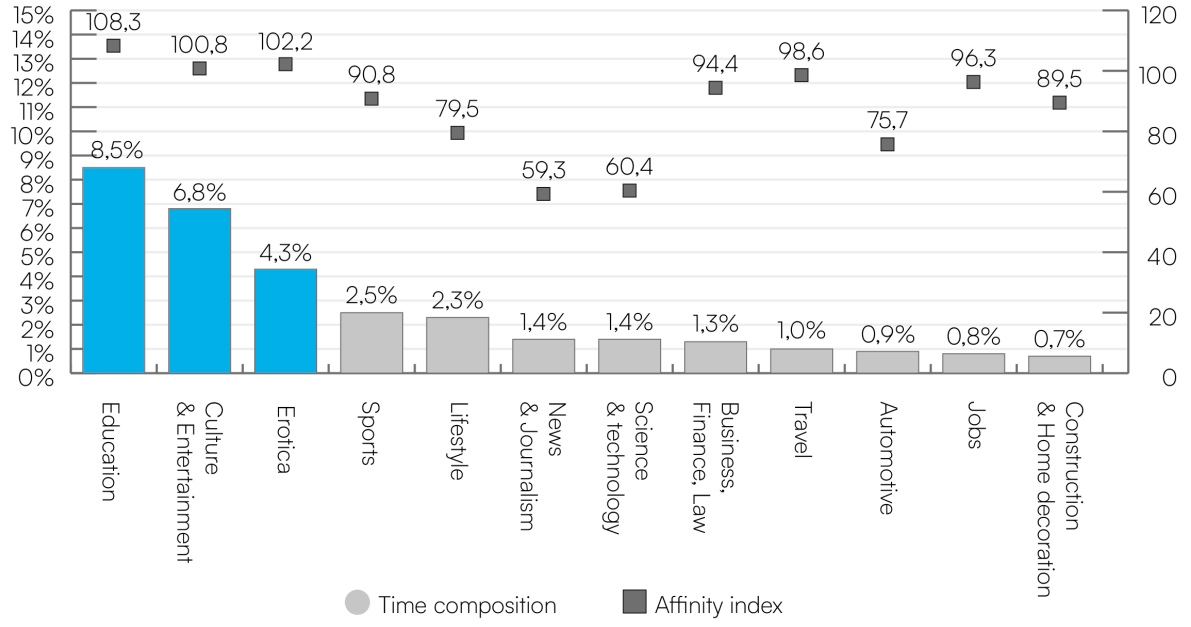


Figure 8 — Thematic categories of sites and apps accessed by the 15—18 age group
Source: Mediapanel survey, aggregate data for Q4 2024

Due to the highest values of the analysed indicators, the thematic categories: *Education, Culture and Entertainment* and *Erotica* were selected for further analysis.

Education

This category includes sites and applications related to education in the broadest sense, such as educational portals and forums, cheat sheets, sites containing information on courses and training, university directories and rankings, as well as sites on conferences related to education and science.

In Q4 2024, educational websites were used by 26.22 million internet users aged 7—75, with a category reach of 87.5%. The overwhelming majority of internet users — 24.25 million — accessed educational content via mobile devices (81% reach) and 13.62 million via PCs (45.4% reach). Internet users spent an average of 6 minutes per day on these sites.

In the 15—18 age group, educational content was used by 1.41 million users (94.8% reach), of which 1.35 million used mobile devices for this purpose (90.7% reach) and 820,000 used personal computers (55% reach). The average daily Affinity Index for this group was 173, for mobile devices it was 184, and 130 for personal computers. These are very high values, showing a strong overrepresentation of adolescents in this thematic category compared to the population as a whole. The average user in this group spent an average of 6 minutes per day consuming educational content.

Brand	No. of Real Users	Reach	Avg. Daily Time (hh:mm:ss)	Avg. Daily Affinity Index
WIKIPEDIA	646 380	43,64%	0:01:51	73,95
BRAINLY	590 328	39,86%	0:02:09	378,33
LIBRUS	552 420	37,3%	0:02:27	238,74
GOOGLE	472 230	31,88%	0:02:53	129,53
EDU VULCAN	334 530	22,59%	0:02:50	253,6
DUOLINGO	309 096	20,87%	0:07:00	198,69
BRYK	290 790	19,63%	0:08:19	353,8
VULCAN	243 486	16,44%	0:01:26	214,3
WORDWALL	199 584	13,47%	0:04:41	277,42
KNOWUNITY	190 026	12,83%	0:05:12	480,66

Figure 9 — Top 10 brands in the Education category for the 15—18 age group
Source: Mediapanel survey, aggregate data for Q4 2024

Educational content was used by 2.61 million users aged 7—14 (95.2% reach), of which 2.53 million used mobile devices for this purpose (92.2% reach) and 1.34 million used personal computers (49% reach). The average daily Affinity Index for this group was 163, for mobile devices 174 and for personal computers 127. The average daily time spent by children on sites in this category was 5 min 30 sec.

Brand	No. of Real Users	Reach	Avg. Daily Time (hh:mm:ss)	Avg. Daily Affinity Index
WIKIPEDIA	1 061 586	39,12%	0:01:45	65,57
LIBRUS	980 262	36,13%	0:02:30	222,08
BRAINLY	931 662	34,33%	0:02:11	327,53
GOOGLE	854 064	31,47%	0:02:55	135,53
EDU VULCAN	612 360	22,57%	0:02:47	260,27
DUOLINGO	550 152	20,27%	0:06:37	201,84
VULCAN	432 540	15,94%	0:01:32	198,31
KNOWUNITY	353 808	13,04%	0:05:12	518,61
BRYK	344 574	12,70%	0:08:44	258,22
WORDWALL	333 558	12,29%	0:04:26	245,6

Figure 10 — Top 10 brands in the Education category for the 7—14 age group
Source: Mediapanel survey, aggregate data for Q4 2024

The above rankings, ordered by the highest number of real users, indicate that in both age groups under analysis, the internet is widely used for learning and homework. The higher activity on mobile devices indicates that children and young people check a lot of information on the fly, using a smartphone, which is usually within reach. However, the time spent in this category is not as much as the time young internet users spend on social networks or watching streaming video.

Culture and Entertainment

This thematic category in the Mediapanel survey consists of several specific categories. The following shows the intensity of use of each content by a group of children aged 7—14 and adolescents aged 15—18.

In the case of the 15—18 age group, interest can be seen in mainly two categories — these are *Games and gaming sites* and *Music and audio sites*. The values in the Affinity Index (110 and 109, respectively) indicate an overrepresentation of adolescents in these categories.

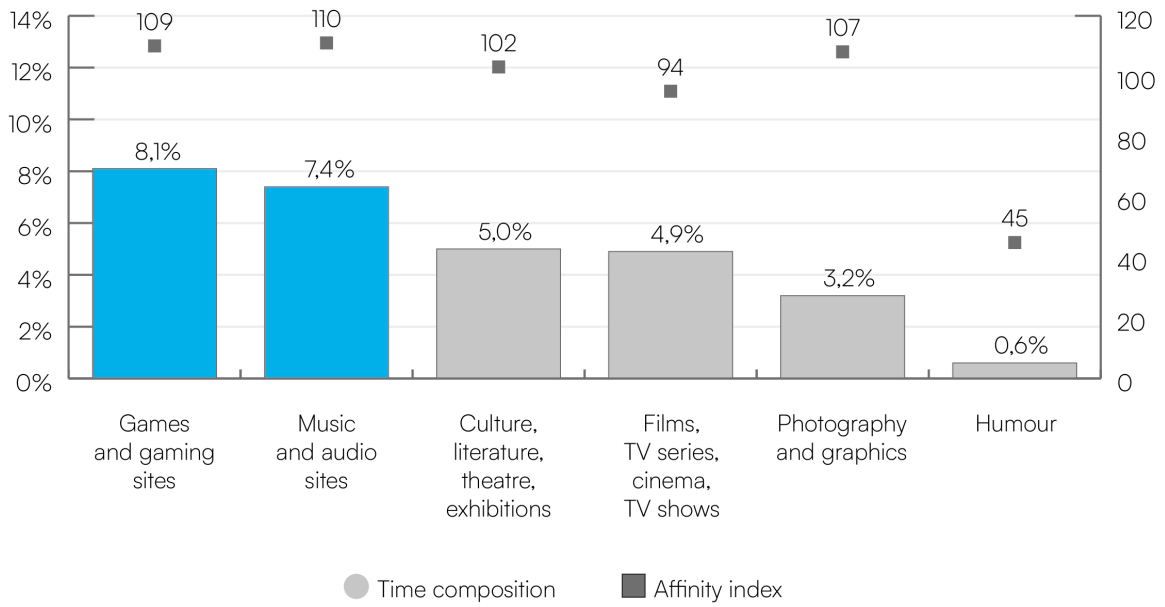


Figure 11 — Specific thematic categories of sites and apps accessed by the 15—18 age group.
Source: Mediapanel survey, aggregate data for Q4 2024

For the 7—14 age group, a trend similar that among adolescents is apparent, i.e. interest in the same two categories: *Games and gaming sites* and *Music and audio sites*.

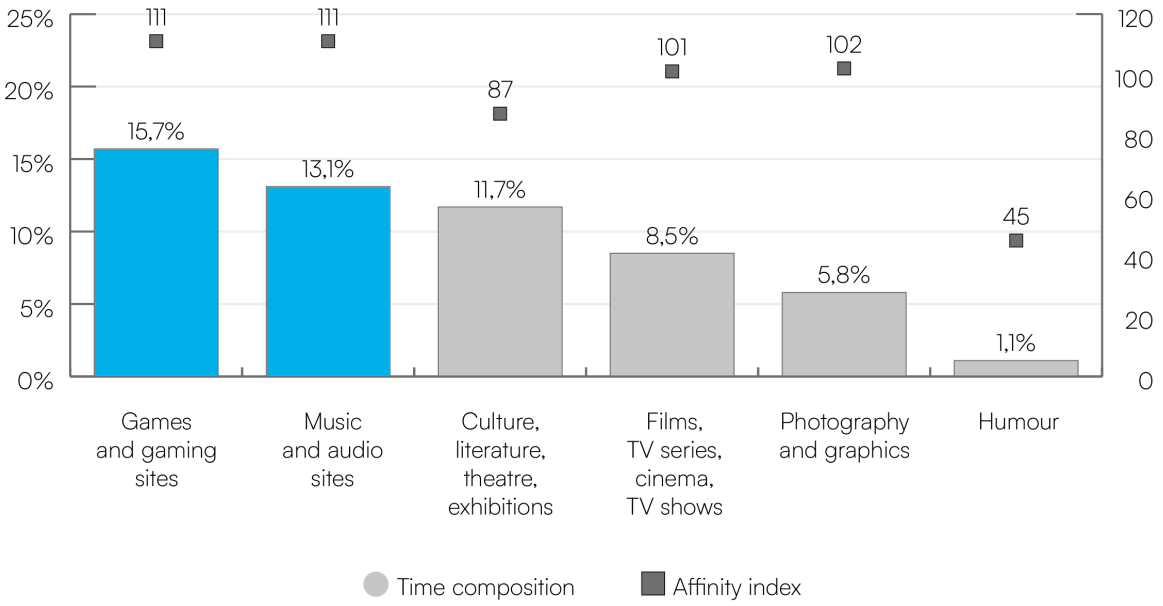


Figure 12 — Specific thematic categories of sites and apps accessed by the 7—14 age group
Source: Mediapanel survey, aggregate data for Q4 2024

We will now expand on the two specific categories: *Games and gaming sites* and *Music and audio sites*.

Games and gaming sites

The Games and gaming sites category includes:

- games — both games for playing via web browsers and dedicated applications;
- websites devoted to computer games, console games, also offering download of games for playing on computers;
- online gaming magazines;
- sites where users upload videos of their gameplay, e.g. Twitch.tv.c.

Using online games and developing their knowledge of games is a form of entertainment and socialisation for internet users. In Q4 2024, sites in this category were viewed by 25.68 million internet users aged 7—75, with a reach of 85.7%. The overwhelming majority of internet users — 23.85 million — accessed these sites via mobile devices (79.6% reach) and 10.9 million accessed them on PCs (36.6% reach). Internet users spent an average of 59 minutes per day on these sites.

In the 15—18 age group, 1.39 million users accessed games and game websites (93.3% reach), of which 1.35 million connected via mobile devices (91% reach) and 652,000 used personal computers (43.6% reach). The Affinity Index for this group was 201, with mobile devices reaching 208 and PCs 172. This represents twice the representation of young people in this category than in the population. On average, 748,000 15—18 year—olds visited gaming—related websites every day. **The average daily online activity time in this category was 46 minutes.**

The category in question is also popular among children aged **7—14: 95.3% of this group, or 2.6 million users, used content in it.** 2.56 million used mobile devices (93.2% reach) and 1.08 million personal computers (39.6% reach) to communicate in these media. The average daily Affinity Index for this group was 205. The Index is particularly high for mobile devices (212), slightly lower for personal computers (168). This category engages children to a similar extent as adolescents: the average daily time that **internet users aged 7—14 spent browsing gaming sites was 48 minutes.**

The 7—14 and 15—18 age groups use games and gaming websites more often and more intensively than the average internet user, and are more likely to use mobile devices for this purpose.

Music and audio sites

The *Music and audio sites* includes sites and apps:

- devoted to music (e.g. music band sites);
- containing reports from concerts and musical events;
- radio stations other than journalism stations and podcasts;
- streaming platforms and apps for music and for watching video clips.

In Q4 2024, sites in this category were visited by 24.21 million internet users (80.85% reach), who spent almost 15 minutes on average per day. 25% of the internet population — 7.47 million — consumed this content on personal computers, spending an average of 24 min of their time per day. 23.12 million users (77.19% of reach) connected from mobile devices, spending almost 14 minutes browsing music content.

1.33 million users in the 15—18 age group were recorded in this category, which translates into an 89% reach in this group of internet users. To consume music content, young people most often chose mobile devices, from which 1.3 million users connected (87% reach), spending an average of 11 minutes and 30 seconds per day. The Music and audio services category is over—represented by young people connecting from mobile devices, as the Affinity Index is as high as 190. The use of stationary devices is not popular in this thematic category; only 344 thousand adolescents chose personal computers to access this content (23% of reach), spending almost 14 minutes per day on this activity.

In the 7—14 age group, sites in the above category were visited by 2.46 million users (89.8% reach), who spent more than 11 minutes per day browsing music content. 88% of the child population (2.41 million) used mobile devices for this purpose, and 553,000 used PCs (20% reach). The average daily Affinity Index for this group was 185.

Children and young people are interested in musical content to a similar extent. Both groups are more likely to use mobile devices for this purpose. An Affinity Index close to 200 indicates a high overrepresentation of both groups in sites and apps in the Music and audio sites category. This means that children and young people visit them more often than the average Internet user.

Erotica

The category includes websites and apps with erotic content (videos, images, games, etc.), including erotic magazine sites, blogs, chat rooms, classified ads and erotic stories.

In Q4 2024, erotic websites were used by 15.8 million internet users aged 7—75, with a 52.7% reach in this category. The overwhelming majority of internet users — 14 million — accessed these sites via mobile devices (46.8% reach) and 5.1 million via PCs (17.2% reach). Internet users spent an average of 17 minutes per day on these platforms.

Unfortunately, although websites containing erotic content are theoretically intended for adult Internet users, minors are also interested in this subject. **In the 15—18 age group, 805,000 people used erotic websites in the period under analysis** (53.8% reach), of which 753,000 used mobile devices (50.4% reach) and 160,000 used personal computers (10.7% reach). The average daily Affinity Index for young people was 153, and the average daily time spent on erotic websites was 9 minutes, with almost 9 minutes for mobile devices and over 14 minutes for PCs.

In the 7—14 age group, 1.4 million users viewed erotic websites (51.3% reach), of which 1.31 million used mobile devices (48% reach) and 275,000 used PCs (10% reach). The average daily Affinity Index for this group was 131, and the average daily time spent on erotic content was almost 10 minutes.

In Q4 2024, one in two underage internet users was exposed to erotic content, on which they spent an average of 10 to 14 minutes per day.

4. The most popular domains and websites

This section of the report presents the top ten most popular domains, apps and brands (combined data for domains or websites from domains and corresponding apps) among children and young people in December 2024.

The 7—14 age group

Summary:

- The list of the most popular domains used on mobile devices differs slightly from that for PCs. While the same social networks, video content or current news sites are viewed on both types of devices, domains containing erotic content or solutions to school textbook assignments appear in the top 10 on smartphones.
- The presence of websites from the Online Shopping category among the most popular domains and brands may be due to the festive period (data for December 2024 was analysed) — children browsed these websites in search of presents.
- The most popular apps in this age group are those of international technology companies (Facebook, Instagram, WhatsApp; Google, YouTube, Gmail, Google Maps, TikTok).

The most popular domains

Domain	No. of Real Users	Reach	Avg. Time per User
google.com	2 458 188	90,85%	0:51:17
youtube.com	1 840 320	68,01%	9:41:26
facebook.com	1 299 888	48,04%	0:49:43
wikipedia.org	1 015 254	37,52%	0:04:52
mediaexpert.pl	987 552	36,50%	0:03:35
onet.pl	984 798	36,39%	0:07:56
allegro.pl	896 670	33,14%	0:26:54
brainly.pl	873 990	32,30%	0:04:40
pornhub.com	863 622	31,92%	1:17:26
interia.pl	731 106	27,02%	0:05:34

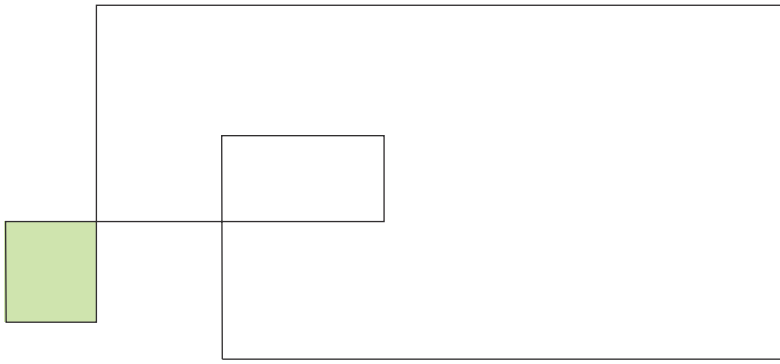
Table 1 — The most popular domains (on all devices)
Source: Mediapanel survey, aggregate data for December 2024

Domain	No. of Real Users	Reach	Avg. Time per User
google.com	2 184 408	80,73%	0:29:29
youtube.com	1 081 188	39,96%	4:02:12
facebook.com	961 794	35,54%	0:11:02
wikipedia.org	937 170	34,63%	0:03:07
onet.pl	883 872	32,66%	0:06:00
mediaexpert.pl	881 280	32,57%	0:02:37
pornhub.com	839 646	31,03%	1:16:59
brainly.pl	774 684	28,63%	0:03:32
interia.pl	686 880	25,38%	0:03:16
temu.com	611 712	22,61%	0:00:44

Table 2 — The most popular domains (on mobile devices)
Source: Mediapanel survey, aggregate data for December 2024

Domain	No. of Real Users	Reach	Avg. Time per User
google.com	1 529 604	56,53%	0:40:19
youtube.com	1 302 156	48,12%	10:20:39
facebook.com	520 992	19,25%	1:43:42
allegro.pl	491 346	18,16%	0:14:02
google.pl	309 744	11,45%	0:22:59
microsoft.com	309 096	11,42%	0:08:59
messenger.com	269 730	9,97%	0:52:48
filmweb.pl	267 138	9,87%	0:03:38
instagram.com	245 592	9,08%	0:18:51

Table 3 — The most popular domains (on PCs)
Source: Mediapanel survey, aggregate data for December 2024



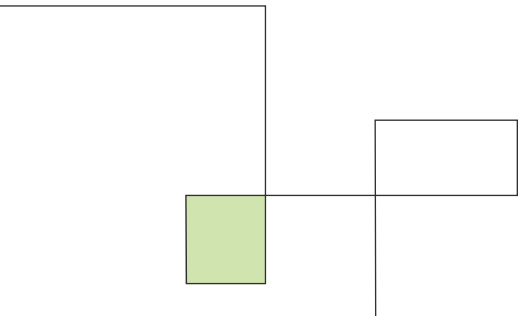
The most popular brands

Brand	No. of Real Users	Reach	Avg. Time per User
GOOGLE	2 661 174	98,07%	3:02:31
YOUTUBE	2 574 018	94,86%	1:12:28:14
FACEBOOK	2 370 546	87,36%	5:09:20
MESSENGER	2 264 598	83,46%	13:34:44
TIKTOK	2 148 120	79,16%	1:18:17:43
INSTAGRAM	1 866 240	68,78%	11:03:39
SPOTIFY	1 816 182	66,93%	1:27:29
WHATSAPP	1 693 224	62,40%	3:06:57
TEMU	1 602 018	59,04%	0:25:04
SNAPCHAT	1 557 792	57,41%	3:26:02

Table 4 — The most popular brands (across all devices)
Source: Mediapanel survey, aggregate data for December 2024

Domain	No. of Real Users	Reach	Avg. Time per User
GOOGLE	2 583 252	95,20%	2:40:40
YOUTUBE	2 450 412	90,30%	1:8:23:56
FACEBOOK	2 297 808	84,68%	5:00:53
MESSENGER	2 221 182	81,86%	13:34:08
TIKTOK	2 118 636	78,08%	1:18:45:10
INSTAGRAM	1 801 764	66,40%	11:18:01
SPOTIFY	1 757 214	64,76%	1:23:56
WHATSAPP	1 673 298	61,67%	3:09:03
TEMU	1 568 160	57,79%	0:21:56
SNAPCHAT	1 541 916	56,82%	3:27:56

Table 5 — The most popular brands (on mobile devices)
Source: Mediapanel survey, aggregate data for December 2024



Personal computers

Name	No. of Real Users	Reach	Avg. Time per User
GOOGLE	1 626 642	59,95%	0:43:27
YOUTUBE	1 409 076	51,93%	10:16:47
ALLEGRO	653 346	24,08%	0:19:01
FACEBOOK	549 504	20,25%	1:16:14
MICROSOFT	388 800	14,33%	0:12:05
MESSENGER	312 984	11,53%	1:57:21
NETFLIX	292 572	10,78%	13:10:05
FILMWEB	259 362	9,56%	0:04:30
MEDIA EXPERT	250 776	9,24%	0:05:53
BING	246 726	9,09%	0:37:05

Table 6 — The most popular brands (on PCs)
Source: Mediapanel survey, aggregate data for December 2024

The most popular mobile apps

App Name	No. of Real Users	Reach
Google	2 361 312	87,27%
Youtube	2 292 948	84,74%
Messenger	2 120 904	78,38%
Facebook	2 053 026	75,87%
TikTok	1 803 870	66,66%
Gmail	1 717 038	63,46%
Google Maps	1 693 224	62,58%
Spotify Music	1 571 724	58,09%
WhatsApp Messenger	1 541 592	56,97%
Instagram	1 520 370	56,19%

Table 7 — The most popular mobile apps
Source: Mediapanel survey, aggregate data for December 2024

The 15—18 age group

Summary

- For this age group, there are similar discrepancies between domains used on smartphones and those visited on PCs, as was the case for the youngest internet users. Most of the domains are repeated between devices and are social networking, video content or current news sites. Smartphone users are slightly more likely to visit a website with solutions to schoolbook assignments or a website with erotic content. PC users, on the other hand, use the Microsoft domain (groupware tools), Messenger and the classifieds site Olx.

- Like in the 7—14 age group, the most popular apps in this age range are those of international technology companies (Facebook, Instagram, WhatsApp, Messenger, Google, YouTube, Gmail, Google Maps, TikTok).

The most popular domains

Name	No. of Real Users	Reach	Avg. Time per User
google.com	1 370 196	92,12%	0:54:30
youtube.com	1 076 004	72,34%	10:42:56
facebook.com	793 962	53,38%	0:47:49
onet.pl	784 890	52,77%	0:08:59
wikipedia.org	638 118	42,90%	0:05:05
interia.pl	630 990	42,42%	0:05:41
allegro.pl	614 304	41,30%	0:22:57
mediaexpert.pl	585 630	39,37%	0:03:59
wp.pl	559 710	37,63%	0:13:23
brainly.pl	545 616	36,68%	0:04:37

Table 8 — The most popular domains (on all devices)
Source: Mediapanel survey, aggregate data for December 2024

Name	No. of Real Users	Reach	Avg. Time per User
google.com	1 234 764	83,01%	0:29:07
onet.pl	732 078	49,22%	0:06:22
youtube.com	648 000	43,56%	4:09:53
interia.pl	595 512	40,03%	0:03:48
wikipedia.org	588 708	39,58%	0:03:10
facebook.com	577 368	38,82%	0:08:29
pornhub.com	527 634	35,47%	1:19:59
mediaexpert.pl	526 986	35,43%	0:02:35
brainly.pl	497 664	33,46%	0:03:20
wp.pl	483 732	32,52%	0:06:24

Table 9 — The most popular domains (on mobile devices)
Source: Mediapanel survey, aggregate data for December 2024

Name	No. of Real Users	Reach	Avg. Time per User
google.com	894 726	60,15%	0:43:17
youtube.com	780 354	52,46%	11:19:01
facebook.com	342 954	23,06%	1:36:25
allegro.pl	307 800	20,69%	0:20:05
onet.pl	199 584	13,42%	0:11:58
microsoft.com	184 194	12,38%	0:09:01
google.pl	181 926	12,23%	0:21:57
messenger.com	173 340	11,65%	0:48:15
wp.pl	171 558	11,53%	0:25:39
olx.pl	171 558	11,53%	0:33:47

Table 10 — The most popular domains (on PCs)
Source: Mediapanel survey, aggregate data for December 2024

The most popular brands

Name	No. of Real Users	Reach	Avg. Time per User
GOOGLE	1 440 504	97,25%	3:02:42
YOUTUBE	1 402 920	94,72%	1:12:41:03
FACEBOOK	1 278 018	86,28%	5:29:06
MESSENGER	1 218 240	82,25%	13:28:07
TIKTOK	1 168 830	78,91%	1:17:39:05
INSTAGRAM	1 016 388	68,62%	10:41:21
SPOTIFY	992 736	67,02%	1:27:32
ALLEGRO	937 332	63,28%	1:22:59
WHATSAPP	913 194	61,65%	2:58:58
TEMU	876 096	59,15%	0:26:18

Table 11 — The most popular brands (across all devices)
Source: Mediapanel survey, aggregate data for December 2024

Name	No. of Real Users	Reach	Avg. Time per User
GOOGLE	1 371 330	92,58%	2:41:38
YOUTUBE	1 309 608	88,42%	1:8:29:45
FACEBOOK	1 231 362	83,13%	5:19:10
MESSENGER	1 190 214	80,36%	13:33:27
TIKTOK	1 149 714	77,62%	1:18:13:29
INSTAGRAM	977 832	66,02%	10:59:50
SPOTIFY	953 532	64,38%	1:22:06
WHATSAPP	902 340	60,92%	3:01:00
TEMU	860 544	58,10%	0:23:44
SNAPCHAT	828 630	55,94%	3:37:16

Table 12 — The most popular brands (on mobile devices)
Source: Mediapanel survey, aggregate data for December 2024

Name	No. of Real Users	Reach	Avg. Time per User
GOOGLE	929 394	62,75%	0:44:42
YOUTUBE	811 944	54,82%	10:58:16
ALLEGRO	410 670	27,73%	0:22:56
FACEBOOK	322 542	21,78%	1:25:32
MICROSOFT	246 888	16,67%	0:11:40
ONET	202 824	13,69%	0:13:29
MESSENGER	195 048	13,17%	1:23:31
NETFLIX	187 758	12,68%	11:29:33
WP	185 004	12,49%	0:28:39
MEDIA EXPERT	169 128	11,42%	0:06:03

Table 13 — The most popular brands (on PCs)
Source: Mediapanel survey, aggregate data for December 2024

The most popular mobile apps

App Name	No. of Real Users	Reach
Google	1 234 602	83,00%
Youtube	1 200 258	80,69%
Messenger	1 132 866	76,16%
Facebook	1 094 958	73,61%
TikTok	956 448	64,30%
Gmail	914 490	61,48%
Google Maps	902 988	60,71%
Spotify Music	845 802	56,86%
Instagram	819 558	55,10%
WhatsApp Messenger	814 050	54,73%

Table 14 — The most popular mobile apps
Source: Mediapanel survey, aggregate data for December 2024

Summary

- This analysis shows that in Q4 2024, streaming video content and social media sites were much more popular among the youngest groups of internet users than among average internet users. Instant messaging was slightly less popular, but children and young people still use it more intensively than the general internet population.
- In terms of the subject matter of the content consumed, games and gaming sites proved to be the most popular type of website among the youngest users. Educational content is much less popular — although still more so than for the average internet user.
- Children and adolescents also use sites with erotic content, even though those are, in theory, intended for adults. In practice, any internet user who clicks the ‚I'm 18' button on the homepage of such a site can access it.
- The most popular domains visited in December 2024 by the 7—14 and 15—18 age groups included social networking sites, sites with video or current news content, and e—commerce shops.
- The most popular apps in both age groups are those of international technology companies: Facebook, Instagram, WhatsApp, Google, YouTube, Gmail, Google Maps, TikTok.
- On smartphones, children and adolescents extensively use domains they would rather not access from their home computer, such as the popular adult entertainment site or a site with solutions to school textbook assignments. These ranked in the top 10 domains for younger users (7—14 years) and were also highly ranked in the older group (15—18 years).

Information about the Mediapanel survey

Mediapanel is a single—source cross—media study conducted by Gemius, involving the passive measurement of internet, TV, radio and outdoor advertising consumption. The internet part is commissioned by Polskie Badania Internetu, the radio part is commissioned by the Komitet Badań Radiowych (Radio Studies Committee), while the measurement of outdoor advertising is created in cooperation with the OOHlife Chamber of Commerce. The comprehensive solution is a combination of the Internet research standard, the Radio Track radio audience measurement standard and data from the single—source Gemius study. Mediapanel presents data broken down by eight media types: PC home, PC work, Phones, Tablets, TV in home, TV out of home, Radio and Outdoor advertising within 23 standardised indicators. The results of the study make it possible to determine the total reach of individual media channels and to estimate the potential of entire media groups. The solution is designed for all media market players: advertisers, publishers, advertising agencies and media houses. The results are available daily via an intuitive online interface.

Aleksandra Załęska

Graduate of psychology at the Catholic University of Lublin. She has been involved in the media research market for over 15 years. Since 2020, she has been responsible for the implementation of the cross—media Mediapanel study at Gemius.

Anna Miotk, PhD

Communications director at Polskie Badania Internetu and assistant professor at the Faculty of Journalism, Information and Bibliology at the University of Warsaw. Since 2001 in public relations, specialises in the research and new technology sector.

3.2 Usage of social media on smartphones among children under 13 years of age

Author:

Jadwiga Przewłocka
Gemius

The number of children using social networking sites

In theory, one needs to be at least 13 years old to create an account on most social networks. In practice, however, this is not effectively verified: it is sufficient for users to provide a false date of birth during registration and they can use the full functionality of these platforms and access any content there. It is therefore common for children 12 years old and younger to use TikTok, Instagram or Snapchat. What is the scale of this phenomenon? We will not know this from the statistics or reports published by the platforms themselves, which base their information on the age of users on these not always true declarations. Therefore, in order to reliably describe the phenomenon of children using social networking sites, in this section I use the results of an independent study based on data from a representative research panel of Gemius. I focus here on the use of smartphones, as this is how an overwhelming majority of children in this age group access the sites under analysis. The results presented here relate to the 7—12 age group (younger children are not included in the study).

To begin with, we need to define who the active users of a given application are, because the aim of this analysis is to estimate their number, profile and behaviour as precisely as possible. To exclude situations of accidental app launches or individual attempts to log in, register or browse the app, but which were not followed up in the following days or weeks, it was necessary to look closely at the specifics of the use of the app by individual panellists. Ultimately, in this study I consider active users to be those who launched the app on at least four different days of the month for a total daily time of at least 2 minutes. Let us then look at the numbers of users with such established criteria:

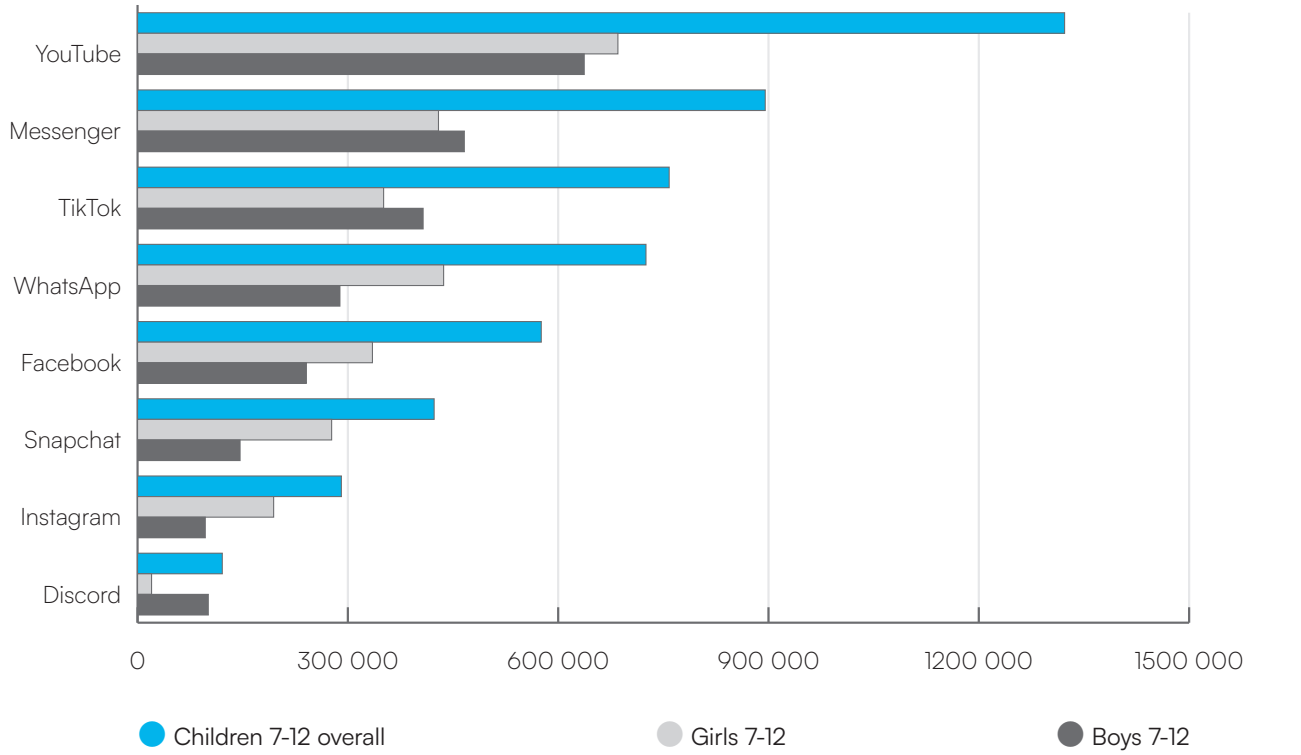


Figure 1 — Monthly number of active users aged 7—12 using each social media app (after excluding those running the apps incidentally)

A broad definition of social networks to be included in the chart has been applied. In addition to the undisputed social networks such as TikTok, Facebook and Instagram, I also include YouTube, undoubtedly providing opportunities for building interaction networks, as well as Messenger and WhatsApp, classified as instant messaging services, but providing social opportunities in the form of building social networks/groups, sharing media, creating basic profiles, etc. It is worth highlighting the specificity of YouTube at this point: children under the age of 13 are allowed to use it under adult supervision.

YouTube is the undisputed leader in this ranking (however, we will look at other measures of engagement later on, which nuances the ranking somewhat), followed by popular instant messaging services and, last but not least, social networking sites in the strict sense. A focus of WhatsApp, Snapchat and Instagram on girls and the evident boys focus of Discord are clearly visible; there is also a slight predominance of boys among TikTok users.

Looking at specific numbers and focusing on social networks in the strict sense, we can estimate that among children aged 7—12 in Poland, we have approx. 760 thousand active TikTok users, 580 thousand Facebook users and 290 thousand Instagram users. As far as instant messaging is concerned, nearly 900 thousand children use Messenger, and over 700 thousand use WhatsApp. When we relate these values to the number of all children of this age in Poland (data from the Central Statistical Office), we see that every third child aged 7—12 uses TikTok, slightly less use Facebook, and every eighth uses Instagram.

	Kids 7—12	Girls 7—12	Boys 7—12
YouTube	56%	59%	52%
Messenger	38%	37%	38%
TikTok	32%	30%	33%
WhatsApp	31%	38%	24%
Facebook	24%	29%	20%
Snapchat	18%	24%	12%
Instagram	12%	17%	8%
Discord	5%	2%	8%

Table 1 — Percentage share of active users of each social networking app in the entire population of children aged 7—12 in Poland

*Note: the table shows the share of users among all children of a certain age, not just internet users (as the coverage was presented in the previous chapter focused on internet users and as the standard coverage is presented in Mediapanel).

Many children use several of these apps, so it makes sense to look at the global number of users of the entire category:

- in total, more than 1.6 million children aged 7—12 actively use this broadly defined list of social networks. This is more than two thirds of the total population of children 7—12 in Poland;
- when YouTube is omitted from this list, which is, after all, allowed (under parental supervision) even under the age of 13, the reach of social networks defined in this way drops to 1.4 million — this is still more than half of the population of children of this age;
- in a third, even narrower view, we can exclude instant messaging due to its specific nature and limit ourselves only to TikTok, Facebook and Instagram. The data show that at least one of these three services is actively used by more than 900,000 users — nearly 40% of the entire population of children aged 7—12.

Intensity of usage

From the point of view of safety and the potential psychological costs incurred by children using tools not intended for such young users, intensity of use is extremely important, and the primary means of measuring it is time spent in front of the screen. Another measure of intensity of use is how many times a user returns to a particular app in a day. An excessive number of app launches can affect concentration or be associated with FOMO (fear of missing out by being offline). The data from the research panel provides us with a unique opportunity to track the exact times children launch apps and determine the number of individual sessions of social app use. When counting the daily number of single sessions, I apply a half—minute limit: if someone returns to the app after more than 30 seconds, I consider it a new launch; if after a shorter time, I count it as a continuation of the previous session. It is irrelevant here whether the person was browsing other apps in the meantime or if the smartphone was switched off.

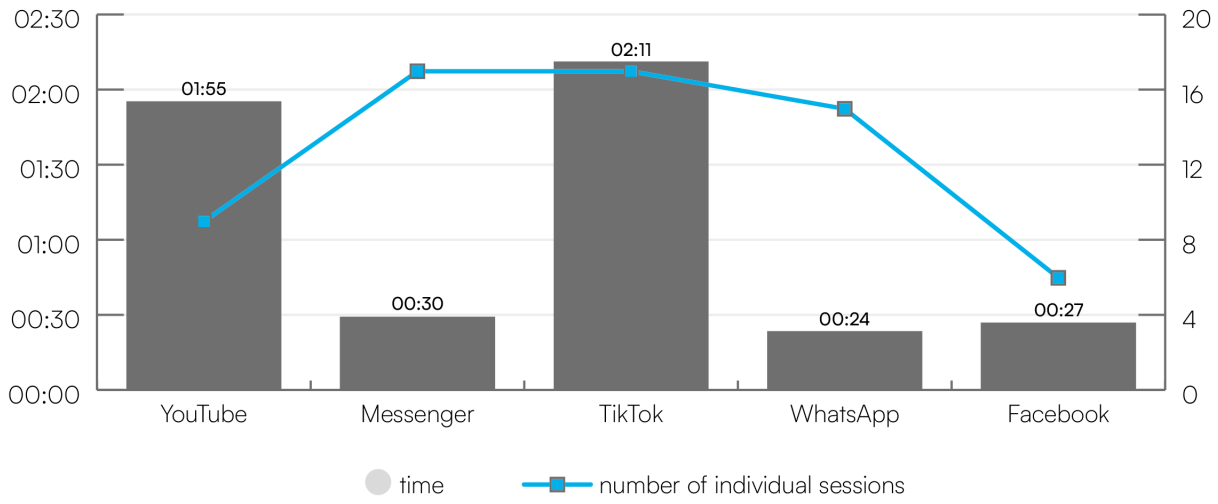


Figure 2 — Average usage times (screen run time only) among active users and average number of app launches per day

YouTube, which is the most popular among children, actually has a very high usage time: active users spend nearly 2 hours per day on average. However, it is TikTok that absorbs the attention of its users most effectively with an average time of 2 hours and 11 minutes per day per user. TikTok also engages children to a much greater extent: they reach out to it significantly more times per day (17 on average) than to YouTube (9 on average). Messenger is also launched at a comparable frequency with TikTok, but the total time of use here is much lower, which is not surprising given the specific nature of Messenger.

In summary: at the top of the intensity of use ranking, we have TikTok, which children launch very often throughout the day and for a long time in total (although it has a significantly lower reach than YT), Messenger, which children return to comparably often but for a short time, and finally the most popular service, YouTube, viewed for a relatively long time but with a significantly lower number of returns per day.

Heavy users, light users, non—users

To better understand the scale of the problem of social networking among children under 13, it is a good idea to look not only at the averages, but also at the percentages of users using the app a certain amount of time:

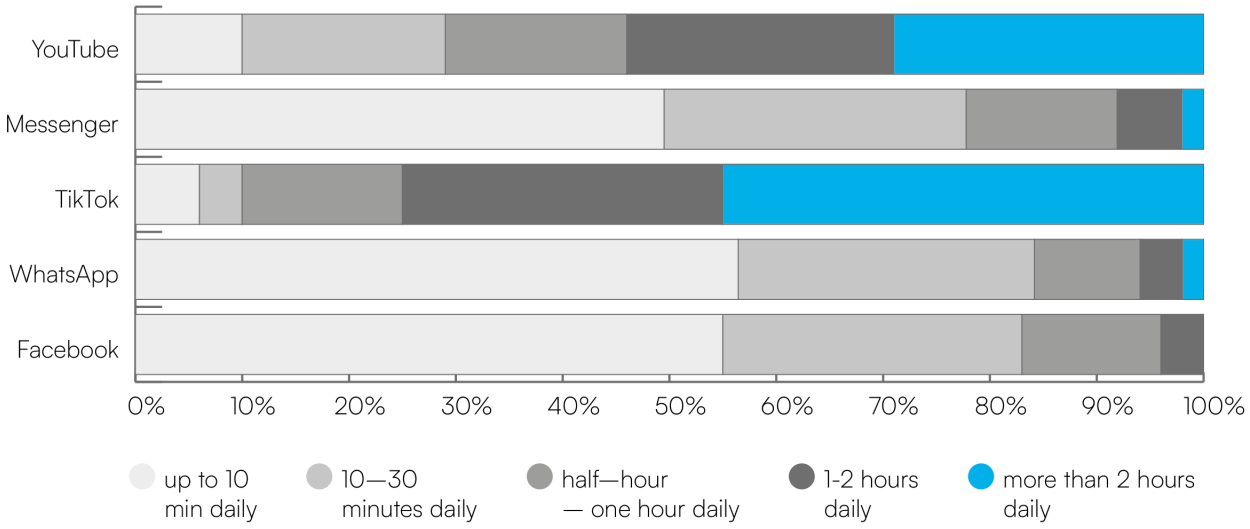


Figure 3 — Percentages of children using a certain amount of time on social media apps among the active users of each app

The chart above clearly shows the characteristics of the different apps and the level of engagement they build among children:

- in general, once a user starts using TikTok, he or she spends a lot of time there: almost half of active users spend an average of more than two hours a day on TikTok; the proportion of those who use less than half an hour is marginal;
- YouTube engages its users to a slightly lesser extent: the share of 'light users' among all users is a little higher than for TikTok, and those watching for more than two hours a day are less than 30% of active users;
- using Messenger and WhatsApp takes the vast majority of its users less than half an hour a day;
- we see similar statistics for Facebook, which is not a particularly engaging medium in this age group.

It is also worthwhile to look at the same data, but relativised to the entire population of 7—12 year—olds (rather than, as above, shown as percentages only of a group of users of specific apps).

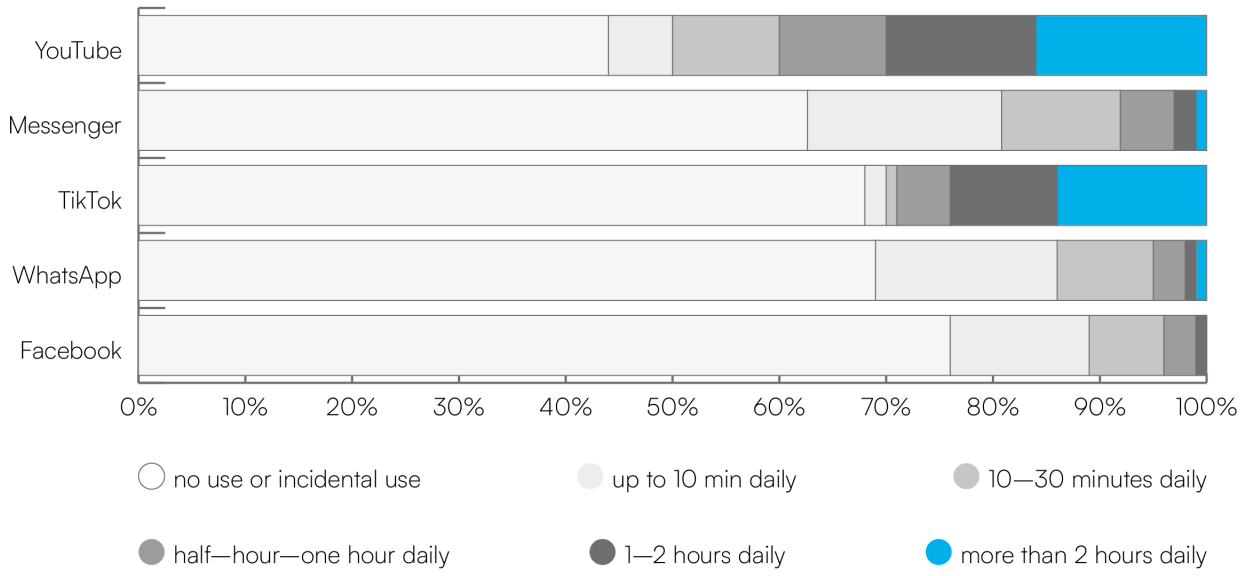


Figure 4 — Percentages of children using different amounts of time on social media apps among all children aged 7—12

You can see here that children collectively spend more time using the more commonly used YouTube. However, let us remember that in its case (unlike the other sites seen here) there is no usage limit set at the age of 13. Therefore, let's pay more attention to TikTok here: we can estimate that we have more than 300,000 children under the age of 13 in Poland who spend at least two hours a day on this app.

Now let us go back to intensity of use, measured by the number of daily returns to an app, i.e. single sessions of a particular app. As we did above with time, let us see how many children there are with a certain number of such returns on average per day:

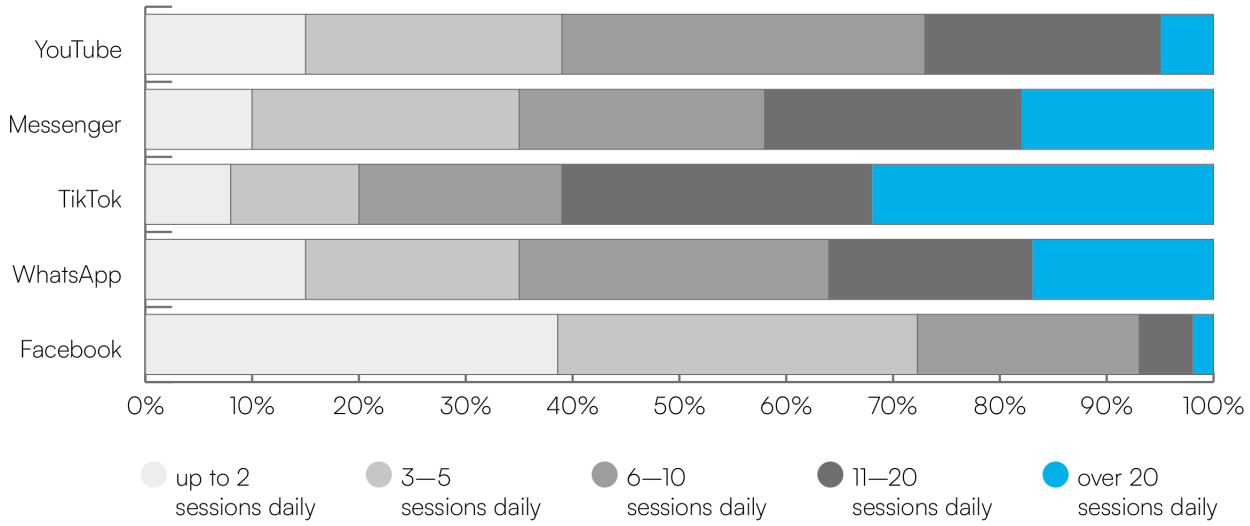


Figure 5 — Percentages of users returning to the app a certain number of times per day among active users of each app

The highest proportion of users returning to the app a huge number of times a day is seen in the case of TikTok: one in three who use it launch the app more than 20 times a day on average, almost as many again do so a dozen times or more. TikTok is followed by instant messaging apps: Messenger with around 40% of users returning to the app more than 10 times a day, and WhatsApp with just over 30% in this category. YouTube, the most popular among children, is launched by its users less times per day.

In the next section, we will take a closer look at how children use smartphones and individual apps — but we will no longer limit ourselves to social media (although these are the ones that children and young people spend the most time on) and will extend the target group to the limit of adulthood (7—18 years).

→ 3.3 Characteristic features of children's and adolescents' use of smartphones

Author:

Jadwiga Przewłocka
Gemius

Note: In this analysis, the length of use of an app refers to the time it is running on the smartphone screen. Music listening apps are, therefore, not included in the rankings, as they often run in the background rather than on the phone screen.

The pace of a day with a smartphone in hand. At what times do young people use their phones the most?

A large proportion of us adults reach for our phones as soon as we get up, contrary to experts' recommendations, and use them just before going to bed. The same phenomenon is also observed in children, as the hourly statistics of smartphone app launches show.

On weekdays between 6 a.m. and 7 a.m., one in three children in the 7—12 age group and almost half of young people aged 13—18 use their phones, while between 7 a.m. and 8 a.m., almost half of younger children and two—thirds of young people aged 13—18 do so. When we limit ourselves to online applications only, excluding such things as the clock, phone calls or settings, for example, the values drop slightly, as you can see in the graph. With this restriction, between 6:00 and 7:00, one in five children in the younger age group and one in three in the older age group use Internet apps; between 7:00 and 8:00, it is nearly 40% of the younger ones and nearly 60% of the older ones.

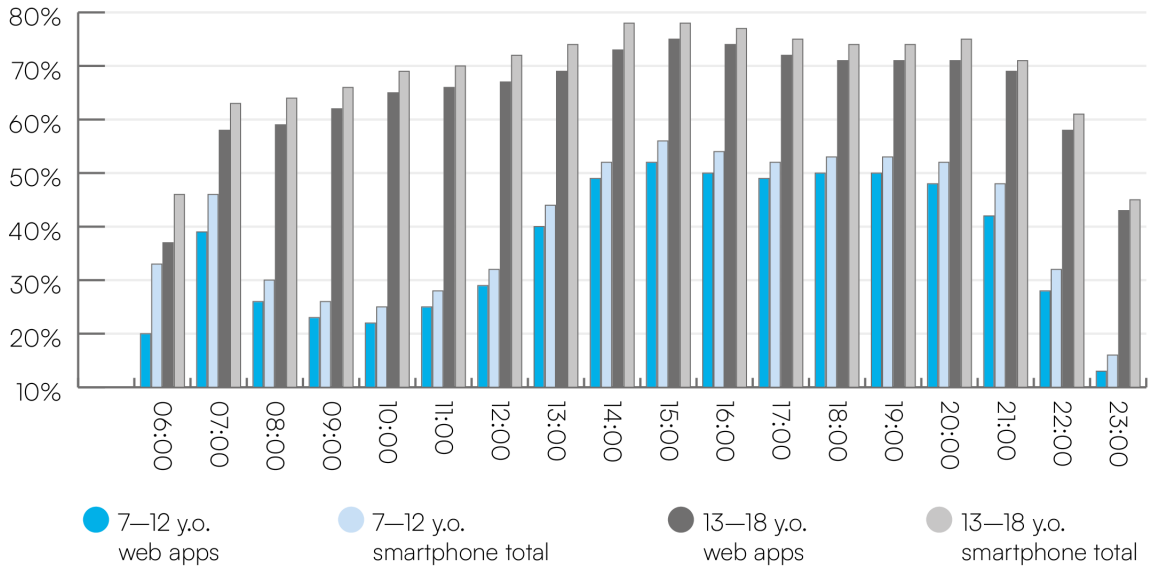


Figure 1 — Percentage of children in different age groups reaching for the telephone on weekdays at successive hours of the day

After using the phone in the morning, the number of children under 13 reaching for a smartphone drops significantly during school time, only to rise again around midday. This decline is due to a number of factors — undoubtedly some younger children leave their phones at home, some switch them off altogether, as can be seen from the data flowing from the panellists' devices. Among older users (13—18 years old), we no longer see this school 'decline' — this shows that they also have their phone at hand while at school.

However, the graph above only shows the mere fact that the phone was switched on during a given hour, regardless of whether it remained on for a few seconds or half an hour. It is therefore also worth looking at the total time of use in the following hours (limited to screen time only). Dividing it by the number of children/adolescents in each age group yields an average time, taking into account the fact that those who do not use smartphones at all have zero time, which affects the much lower rates for the younger group, in which there are more such individuals; in the 13—18 age group, almost everyone is already using a smartphone connected to the internet.

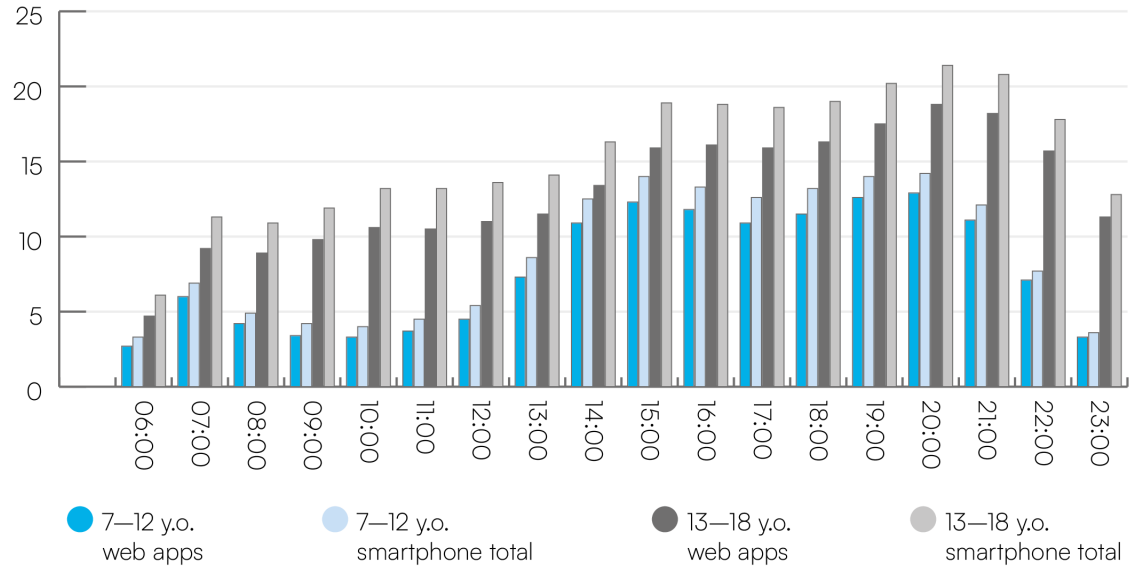


Figure 2 — Average time spent using a smartphone (calculated among all from a given age group) at different hours of the day on weekdays, expressed in minutes

In the graph, we can see an increase in the height of the bars of the older group around 14:00—15:00; after school is over, the time spent using smartphones by teenagers increases considerably, as they, on average, spend almost 20 minutes of each hour looking at their phone screen. This can also be interpreted to mean that, on average, a third of teenagers aged 13—18 use a smartphone every minute in the afternoon, and an average of more than a quarter use online apps. For younger children, the bars are lower, but still around one fifth of this group uses the internet on a phone every minute of the afternoon hours on average.

Although the older group does indeed reach for the phone every now and then during school hours, as expected, the time spent is lower than in the afternoon. However, the difference is not huge and the rates during school hours are surprisingly high. Especially when juxtaposed with the fact that, theoretically, about half of Polish schools have banned phone use on school premises and during classes[1]. It seems that the ban is not strictly observed by young people.

It is also worth noting how much time children and young people spend in front of smartphone screens in the evenings on weekdays. Referring back to the earlier graph, we see that on weekdays between 21:00 and 22:00, around 40% of children in the 7—12 group and nearly 70% of young people aged 13—18 reach for online applications at least once an hour; between 22:00 and 23:00, the figure drops below 30% among younger children, among older children it is still at 60%, and after 23:00 it is still at around 40%.

How does the popularity of apps change during the day?

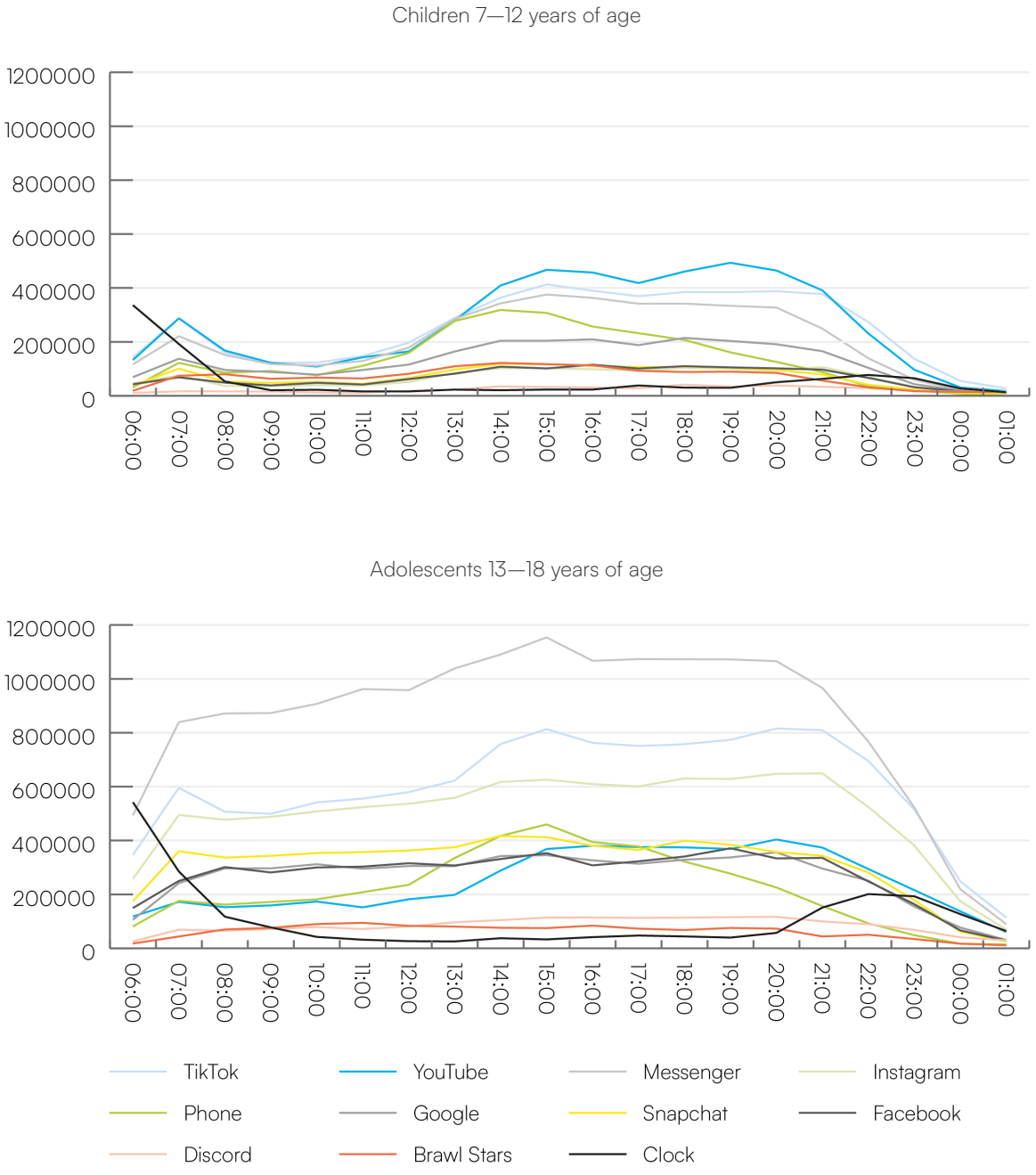
Let us now look at the specific most popular apps. For the sake of completeness, we include here all the apps among those most frequently used by young people, not the online services themselves.

1 Report *Edukacja cyfrowa*, GrowSPACE Foundation, https://drive.google.com/file/d/1JdI—oT5b4E3SqO7bH_GBOuG1hgEE_tjq/view (access: 01.02.2025)

- In the older group, aged 13—18, Messenger is at the top of the rankings in terms of the number of users (but not the time spent!). It reigns supreme for almost all hours of the day. However, it turns out that after midnight, when only a handful of users are left with their phones, Messenger is equalled (even slightly overtaken) by TikTok, which takes second place for most of the day. Third place for almost all hours of the day is occupied by Instagram. In the chart, it is worth noting the marked increase in the use of ordinary traditional calls (the Phone app) after 1 p.m. We should also add, for the sake of argument, that early in the morning, before 7 a.m., the most frequently launched (or rather automatically launched) app is of course... the alarm clock.

- In contrast, among younger children (7—12 years old), YouTube is at the top of the ranking at the beginning of the day; during school hours (when there are very few users), it is equalled by TikTok, before it clearly regains from 2 pm onwards.

As a conclusion, let us look at the hourly user numbers of the most popular apps on weekdays. The groups of 7—12 year—olds and 13—18 year—olds are roughly equal in terms of population size (around 2.4 million each according to the Central Statistical Office). In both charts, the Y—axis is set to the same value (half the group size, i.e. 1.2 million) so that the differences in the intensity of app use among these two groups can be directly compared:



Rysunek 3 — Liczba użytkowników najpopularniejszych aplikacji w kolejnych godzinach (długość korzystania nie ma znaczenia)

However, these figures do not show the intensity of use of the apps, only the fact of using them (even if only very briefly) in particular hours, so let us take another look at the hourly pattern of the average time of use (as before, this is an average calculated among all people in each age group).

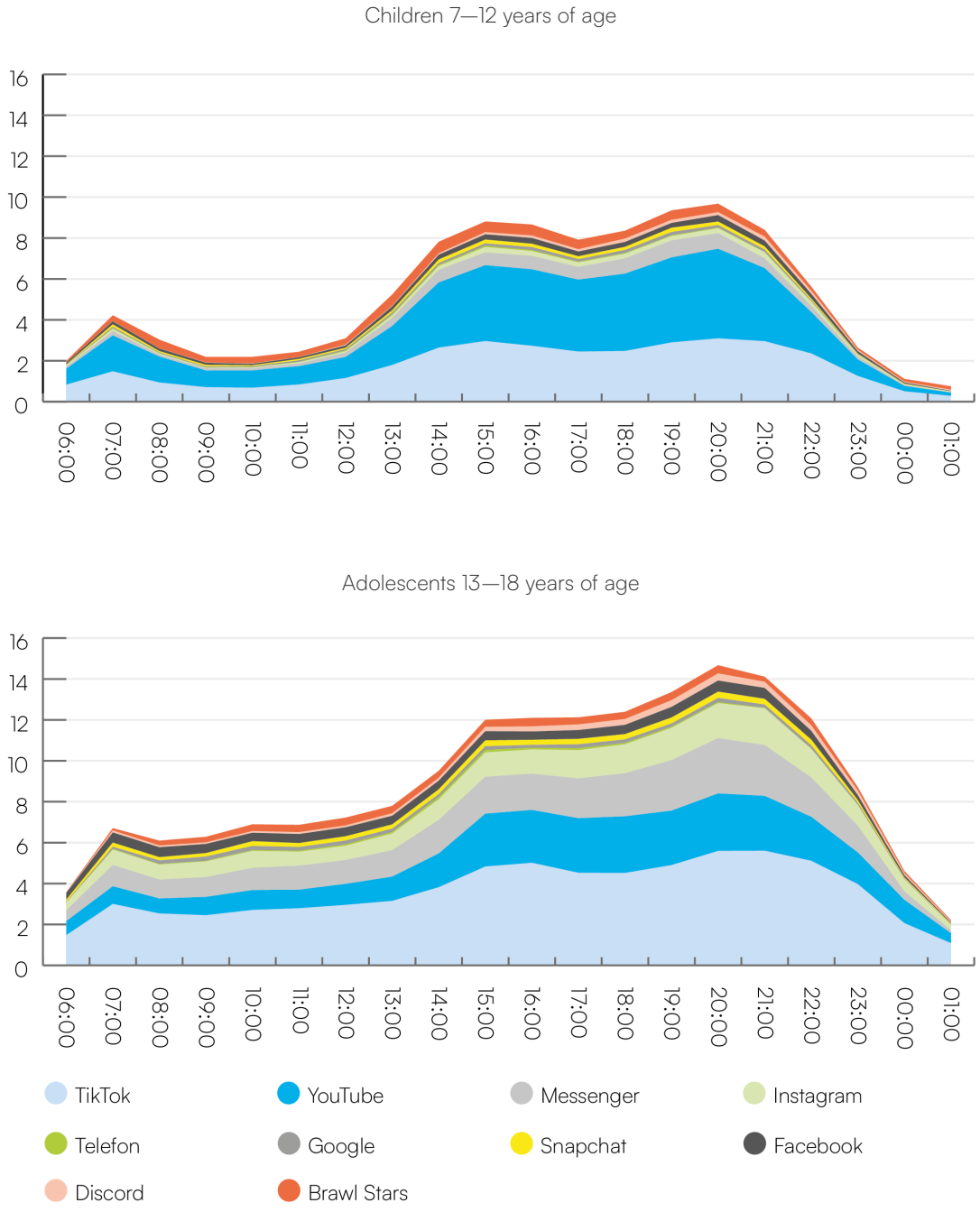


Figure 4 — Average time spent using the most popular apps (calculated among all from a given age group) by hour

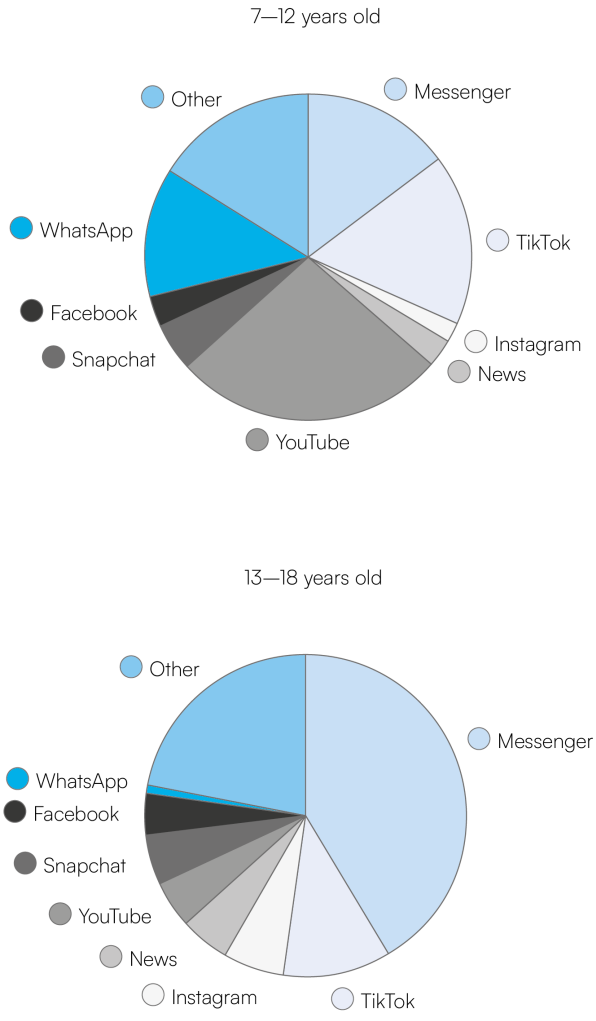
In terms of time spent, the dominance of apps with video content is evident at all times of the day:

- in the older group, TikTok is unrivalled at any time of day: it takes first place and is significantly ahead of other apps; in second place, also at any time of day, is YouTube, while third place for most of the day goes to Messenger;
- for younger children, the first two places in the ranking of time spent are swapped with respect to older children: YouTube reigns supreme, only surrendering primacy to TikTok at certain hours. On the other hand, third place changes depending on the time of day: during school hours it is occupied by the BrawlStars game, while in the afternoon it is occupied by Messenger.

What apps do the youngsters begin their day with, and which are turned off last?

The first purpose for which young people reach for their smartphone after waking up (other than to turn off the alarm clock) is to keep in touch with friends: across the entire 7—18 year—old group, one in three smartphone users most often turns on Messenger as their first app in the morning. This is especially true for the older group: as many as 42% of young people in the 13—18 group most often check Messenger first. For the younger group, the figure is only 15%, while they most often choose YouTube as the first app. In both groups, the next app most frequently launched when reaching for the phone for the first time is TikTok. The end of the day with a smartphone looks different: young people are already limiting the use of instant messaging at this time (in the case of some of them, as we have seen, very late), and focus more on video content on TikTok and YouTube.

First apps launched in a day



Last apps before putting the phone away for bedtime

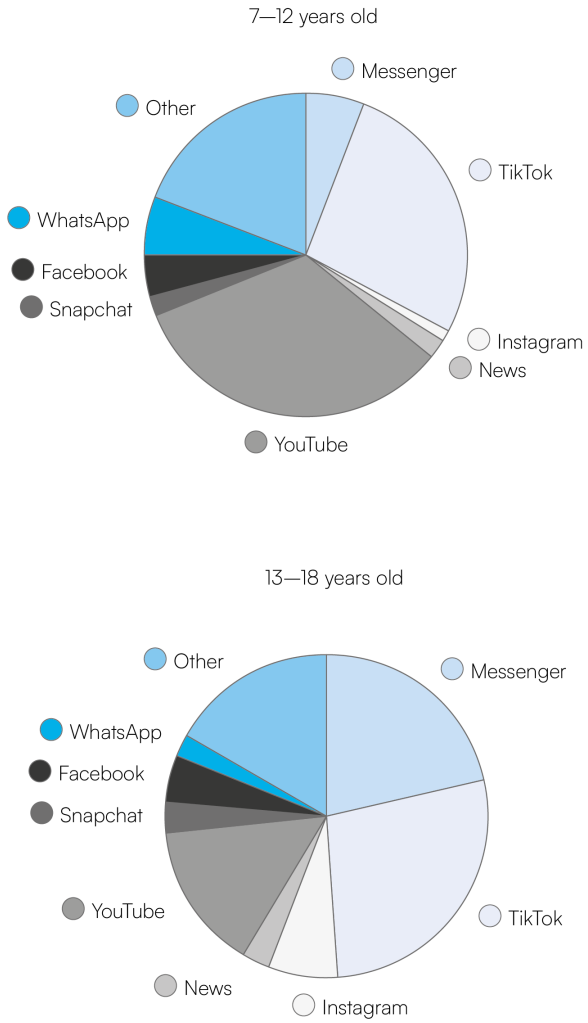


Figure 5 — The first and last online applications accessed by children and adolescents using smartphones

Monday to Sunday

The rhythm of the day described above applies to school days, Monday to Friday. But what about weekends? Of course, in the first place, the hours of use shift: young people get up later and go to bed later too — often using the smartphone late into the night. While in the younger group, the evening weekend time increase can be seen around 9 p.m. (when weekday smartphone time is already clearly decreasing), among the older group, it tends to become more apparent after 10 p.m., while the biggest differences can be seen after midnight. The number of teenagers using their phones after one o'clock in the morning is still at more than half a million, nearly a quarter of the entire age group.

When it comes to morning activity, the differences are particularly apparent in the younger group: at weekends we see around twice as many users and around three times as much smartphone time between 9 am and noon. In the case of older youths, the gap is much smaller, because — as we have seen above — they also use their phone much more frequently than their younger colleagues on a daily basis during school hours.

Figure 6 — Number of people using a smartphone at successive hours of the day (time of use is not relevant here)

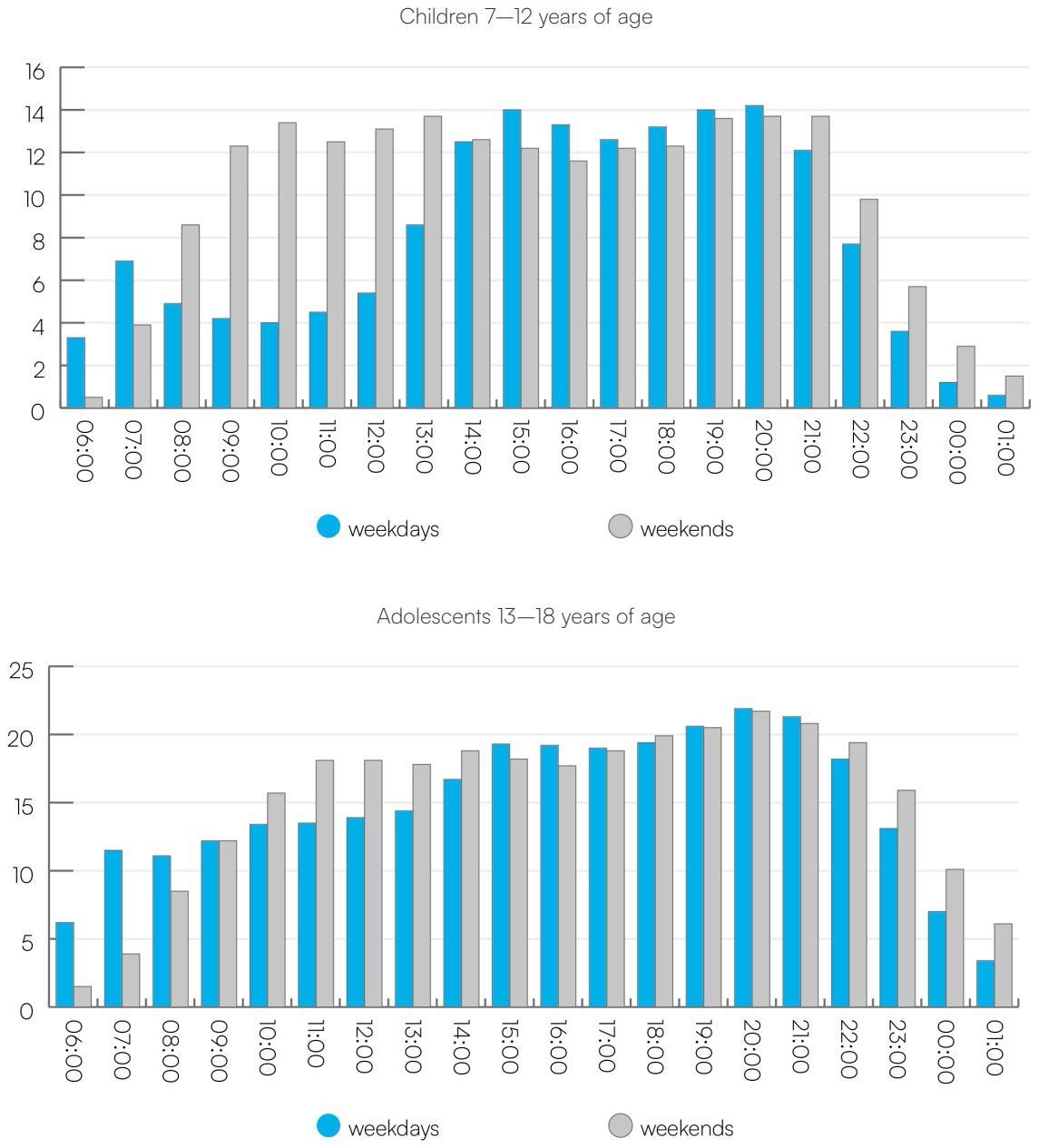


Figure 7 — Average time (calculated among all from a given age group) per hour of the day, expressed in minutes

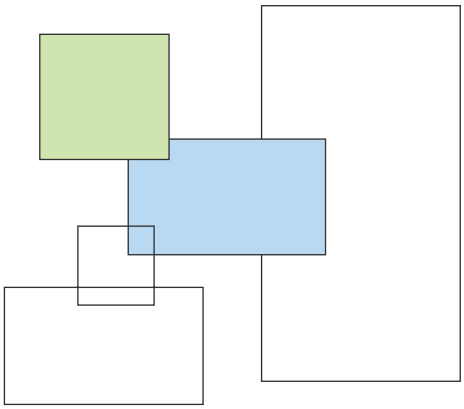
In addition to changes in the daily rhythm, weekends are also distinguished by longer time spent using apps: this increases particularly among younger children — by more than a quarter; among teenagers 13—18 years, the difference is less than 10%. In contrast, the time spent on the two largest video content apps clearly increases among both younger and older people to a similar extent: for YouTube we note an increase of around ¼ in both groups, while for TikTok it is up by several percent (19% in the younger group and 12% in the older group).

What does not change at weekends is the dominance of these two apps: they consume more than half of the time spent online on the mobile phone by children in the 7—12 group and nearly half of that of older teenagers.

A methodological note

The analyses in the chapters 'Usage of social media on smartphones among children under 13 years of age' and 'Characteristic features of children's and adolescents' use of smartphones' were developed for the purposes of this publication based on data from the Gemius research panel representative of the Polish population aged 7—75, consisting of nearly 3,000 people with smartphones, from which detailed data is processed collectively to measure internet, TV and radio consumption in Poland. In October 2024, the period covered by the analysis in this chapter, the panellists included 422 people aged 7—18 using the internet via a smartphone. To generalise the results to the population of internet users of a particular age, the data was adjusted using an analytical weighting that takes into account demographic variables and the level of internet penetration in particular age groups.

The length of use of a particular app in these chapters refers to the time it runs on a smartphone screen.

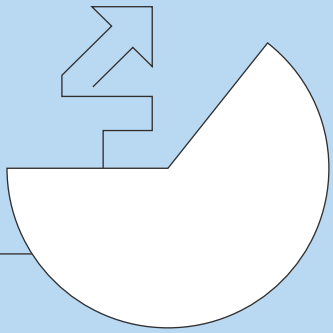


Jadwiga Przewłocka

Data analysis expert at Gemius; she deals with media consumption measurement. Previously, she conducted research projects related to, e.g. internet communication, civic activity and education. Author of studies on peer violence and school climate, as well as publications on the non—governmental sector in Poland. A sociologist and mathematician, she graduated from the University of Warsaw.

4.

Children’s Rights in Digital Media — a Lesson to Be Learnt Almost from Scratch



Monika Rosa

Chairwoman of the Children and Youth Committee of the Sejm

As I hand over to you this report, which shows, in an extremely precise way, children and adolescents' online activity, their use of the devices and social media platforms, I wish to express my gratitude to the analysts and all those who contributed to its production.

It forms an integral part of the social and parliamentary initiative entitled *35 years of the Convention on the Rights of the Child — Challenges for the Future*. As part of this endeavour — thanks to the involvement of many communities, organisations and institutions, in particular the authors of this study — we have started work in teams dedicated to nine areas defined as: counteracting children's exposure to trash streams and freak fights, the practical application of the Convention's legal principles, assessing the status of implementation of children's rights in Poland, standards of child protection in the digital environment, advertising and marketing, counteracting sexual violence on the internet and child sexual abuse material (CSAM), protecting children's image and other personal data, the minimum age for using social media platforms, more effective assistance for child victims, education on counteracting violence, including learning digital hygiene and social and emotional competence.

The Foundations

In 2024, we celebrated the 35th anniversary of the United Nations General Assembly's adoption of the Convention on the Rights of the Child — the first constitution of children's rights as human rights. Importantly, this document was created on the initiative of Poland, which was the first to make such a proposal internationally in 1979.

The Convention introduces — even if only as a postulate in many areas — full agency of under—age persons, as well as four principles of fundamental importance:

- the best interest of the child, or the principle of the child's good;
- the non-discrimination principle;
- the right to life, survival and development in optimally friendly and safe conditions;
- respect for the views of the child in all matters that affect them.

Poland ratified the Convention in 1991. Since then, we have improved our approach to the empowerment of children and young people in many areas of life. We have also created public institutions tasked with being guardians of human rights and children's rights, specialised non-governmental organisations — national and international — without whom progress in this field would be difficult to imagine.

However, we must honestly acknowledge that there is much more work left for us all to do than what has been accomplished so far. The world of politics also needs to understand that a constant concern for the youngest group in our society, almost one-fifth of us, is a legal obligation and a moral duty, and at the same time in the best interests of all parts of society.

The problems faced by young people bring into focus, as if through a lens, the shortcomings, errors and deficiencies of systemic solutions. It is safe to say that today's efforts to counter anti-democratic trends in the world, too, will not lead to the effective instilling of democracy based on respect for the dignity of every human being without doing the homework of prioritising minors and their rights. For 35 years, apart from the exceptions of amendments following crisis situations in the media, we have not developed laws or a legislative process that is dedicated to children and puts their well-being at the centre. The adoption of a key principle of the Convention - to be guided by the best interests of the child — means, as Adam Łopatka explained, that in situations of deficits of certain goods or financial resources allocated to public policies, the interests of children should always be taken into account first. It is also some measure of socio-political awareness that, in the middle of last year, the Sejm of the Republic of Poland established a committee for children and young people for the first time in history. Previously, unfortunately in keeping with the peculiarities of the legislative process mentioned, a need for a committee dedicated to this — as some of the activist circles reiterate — largest social minority was not recognised. Just as in the vast majority of government strategies and laws to date the child has been treated as an appendix and understood through the prism of other actors, e.g. parents and guardians, in parliamentary work, for three decades, the issues concerning the youngest citizens were restricted a narrowly defined scope of the legislative solutions.

The most important tasks — safety and recognition

There is, however, an area where children's rights, understood as human rights, are ignored to an extent that is incomparable to the state described above. By this I mean the digital environment, which does not take into account — as the UN Committee on the Rights of the Child itself admits — the principle of the child's good, while playing an extremely important role in children's lives. I believe it is not an exaggeration to say that we are almost at the beginning of the road in terms of respect for the rights of minors online. The pace of change in this area is so great that any delay means disproportionate damage in terms of experiencing extreme forms of objectification, cyberbullying, psychological abuse, sexual abuse, misuse of children's personal data for commercial purposes, economic crimes, sexual crimes, human trafficking and much more.

When forming the Parliamentary Committee on Children and Young People's Affairs, I set as a key challenge the objective of making every possible endeavour to improve safety and prevent all forms of violence — sexual, psychological, physical, cyber, economic and neglect. The task of absolute priority is safety in digital media, without which most people, especially young people, cannot imagine life today. Recognition by businesses, public institutions, especially central authorities and market regulators, and society of the needs, rights and necessary conditions for the full development of the child is a prerequisite for a qualitative change.

Within the framework of our socio—parliamentary activities, which require the adoption of a specific value system, I would like to draw attention to a certain inspiration that comes from the thinking of Axel Honneth[1]. The German sociologist and philosopher's concept of the 'struggle for recognition' can be used to verify the realisation of the child's best interests in practice. According to her, recognition is built in three aspects of life. The first is the immediate family environment, where the appropriate experience should be unconditional love. The second area is the law, which must not lead to any inequality of treatment based on origin, social

1 A. Honneth, Walka o uznanie, Zakład Wydawniczy Nomos, Kraków 2012, s. 128–135.

status, age. The third aspect is the capacity, based on solidarity, for society to appreciate the attitudes, talents, competences contributed to its socio-economic development. The negation of recognition is the experience of contempt, which can take various forms — overt and covert (structural). Taking into account the three areas of young people's experience (love, justice and equality, and solidarity), contempt is accordingly led to by violence, deprivation of rights and dignity.

It is our duty to ensure optimal conditions of recognition in every environment in a child's life. This obligation also applies to the digital media and the economic sector. All too often nowadays, these are, from a minor's point of view, a source of suffering, contempt and objectified treatment. This is demonstrated by the reports of respected organisations and national and international institutions cited by Magdalena Bigaj and Konrad Ciesiołkiewicz in their analyses. The culture of violence that characterises much of what we call the 'digital agora' was not created by children. It is the adult world — states, businesses, institutions and organisations — that bears full responsibility for this state of affairs.

A call for responsibility

Unfortunately, evasion of responsibility is all too common. This can be seen in the ongoing public debate around online threats. It is difficult to find someone who does not see them, but all too often, the reaction to this state of affairs is hysteria and panic, which do nothing to uncover the essence of the problem. On the contrary, they lead to ideas that are more populist than serious. For example, there are calls for the government to introduce explicit and restrictive bans on children and young people's use of the Internet. Such solutions shift the burden of responsibility onto the children themselves, often inducing feelings of guilt in them. The other strategy of escaping responsibility used in the discourse is the claim that the only appropriate way to deal with the threat should be through parents and guardians, on whose shoulders rests all responsibility for children's online functioning.

Unfortunately, the responsibility of the economic sector, including owners and managers of digital businesses, agencies, service providers, content providers, infrastructure, business organisations, market regulators tasked with protecting consumer rights, privacy rights, policy makers and authorities — executive, legislative and judicial — is too rarely addressed.

The Commitment

I envisage being guided by such a perspective as the mission of the Parliamentary Committee for Children and Youth Affairs. It is to be a place that, to the best of its capacity, integrates public policies and legislative efforts aimed at improving the system of protection, care and empowerment of a critically important social group — children and adolescents. I want the parliamentary committee to be a space for the exchange of experiences of diverse communities, NGOs, grassroots movements, universities, think tanks and institutions. There should be an ongoing dialogue on children's rights with all sectors — public, social and economic. When discussing the digital environment, EU regulations and the complexity of new technology issues, it is impossible not to invite the new media sector to seek optimal solutions.

The data in this report clearly show that there are hardly any areas of the web today that are unknown to children. Unfortunately, they also use websites aimed at older teenagers and adults on a massive scale. Representatives of the digital

sector and companies involved in professional marketing, sponsoring and advertising are fully aware of this, and what is more, they have precise knowledge of children's use of their services, products and participation in their events.

Legal provisions indicating 13 as the minimum age of use of digital platforms are largely a dead letter for most. What we have here is an attempt to sugarcoat reality and hide under the cloak of the 'complexity of the problem' the truth that millions of young people are using them, in defiance of existing legal provisions. Referrals to bans or appeals for action by parents and guardians are also common. From the official responses of large technology companies, for example to the US Federal Trade Commission, it can be read that there are no extraordinary protection procedures for this social group, because according to the laws and regulations of the platforms, children under a certain age should not be present in these places.

In the current term, the aim of the parliamentary committee and its partners is to seek to change this institutional irresponsibility and to begin to apply in practice the principle of the best interests of the child and the other principles derived directly from the Convention.

With this report, thanks to the kindness of its authors and institutional creators, we are launching an ongoing monitoring of children's activities in specific online spaces, with a particular focus on under—13s. This is because the quality of their online experience is the responsibility of the digital industry and all entities — public and private — that contribute to this space.

Every six months, during public meetings of the Parliamentary Committee for Children and Youth Affairs, open to all interested parties, current data will be presented in an effort to draw conclusions, prescriptions and changes relating to improving the safety of children and young people. We will also engage in dialogue with stakeholders in the business sector, regulatory institutions, central government and grassroots organisations.

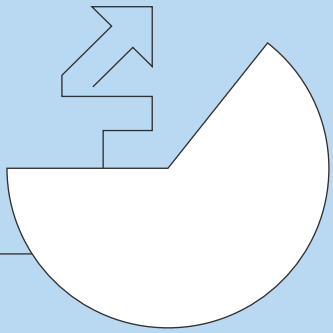
I encourage all interested parties to join in.

Monika Rosa

Member of the Sejm of the Republic of Poland of the eighth, ninth and tenth parliamentary term, chairwoman of the Sejm Committee for Children and Youth Affairs established in 2024, founder and chairwoman of the Parliamentary Group for Children's Rights and member of the Committee on Social Policy and Family. She has participated in the work of the Korczak Award Chapter since its inception. Political science graduate of the University of Silesia.

5.

Selected Directional Recommendations



Areas of regulation:

- Revision and updating to the realities of the digital world of the criminal provisions on the exposure of children online to crimes in the areas of sex, drugs, gambling, and fraud (exploitation).
- Prohibiting the targeting of any advertising communication to children under 13 and the use of their image in advertising.
- Strong restrictions on the ability of establishments, organisations, clubs and institutions to share the image and other personal data of children under 13 in digital media.
- Introduce mandatory ESG/CSR reporting and obligatory regulatory audits (including those of the Office of Electronic Communications (UKE), the Office of Competition and Consumer Protection (UOKiK) and the National Broadcasting Council (KRRiT)), verifying that entities offering services, products and undertaking activities such as the organisation of hybrid events show concern for the safety of children and young people. Particular attention should be paid to respecting the right to privacy and protecting against profiled advertising directed at minors.
- Establishing a framework package of statutory solutions in the form of child protection standards in the digital environment for the advertising and marketing industry and other sectors. This area should be the responsibility of the President of the UOKiK, who could issue binding industry regulations in the absence of industry self-regulatory solutions.
- Implementation of an EU strategy to combat child sexual abuse more effectively. A particularly important element is the regulation of child sexual abuse material (CSAM), which provides for the establishment of a European Centre (EC), modelled on US solutions. The regulation should oblige providers of online services and products to immediately submit all CSAM material to the CE on a mandatory basis. Such a procedure would enable national agencies to take further action to save children.
- Implementing the EU Directive 2011/93/EU on combating the sexual abuse and sexual exploitation of children, which imposes an obligation to be guided by the best interests of the child at all stages of law-making.
- Introducing topics on information, digital and media literacy into education and upbringing programmes in the broadest possible way, teaching digital hygiene, a critical and reflective approach to online content from an early age.

Areas of self—regulation:

- Developing specific solutions - standards for child protection in the digital environment for the advertising and marketing industry, based on statutory authority.
- Public institutions, in cooperation with academia and the non-governmental sector, to take up the challenge of regularly measuring the social impact resulting from the experience of violence by children and adolescents in the digital environment, with a particular focus on minors under the age of 13 allowed to use services and products offered by owners of social media platforms. Analyses of this type should also include calculations of the social and financial costs associated with the long-term consequences of the experience of abuse. The 2023 report of the State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age, entitled *How much does the suffering of a sexually abused child cost?*[1].

Enforcement of existing legislation:

- Effective and consistent law enforcement by law enforcement and supervisory authorities (regulatory institutions) regarding the specific protection of children under 13 in the space of social media platforms and criminal law protection of minors from violence in digital media.
- A much more restrictive treatment of online sex offenders, which includes the inevitability of punishment. Currently, the highest punishment is very rarely imposed; instead, very often the lowest is applied. In addition, the use of mixed penalties and the non-application of the mandatory criminal measure of prohibition from working in areas related to education, sport and other areas where contact with minors may occur is questionable. There is an urgent need to build awareness among judges and prosecutors of the seriousness of this type of crime, the social costs and the traumatic consequences of the victims' experience of digital sexual abuse. Knowledge of how perpetrators function is essential, such as that contained in the aforementioned EU (2020) strategy, which indicates that up to 85 percent of online abusers are also contact abusers. In 60 percent of such cases, the victim knows the perpetrator, according to WeProtect (2024). Another important aspect is the link between the over-consumption of (adult) pornographic content and the search for child-pornographic material at later stages, which is acknowledged in studies by those inclined to engage in such activities.
- Working with mobile operators and internet providers to develop solutions that allow parents to 'tag' phone numbers used by children; introduce digital hygiene mechanisms at a global level that parents could use free of charge; obliging operators to offer them.

1 J. Kotowska, H. Elżanowska (red.), *Ile kosztuje cierpienie dziecka wykorzystanego seksualnie?*, PKDP, Warsaw 2023.

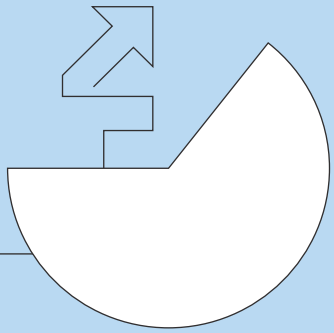
Building public awareness, education of all age groups:

- Awareness-building programmes for adults - parents and selected occupational groups, e.g. civil servants, educators, teachers, trainers - on the phenomenon of online child abuse and possible preventive measures.
- Encouraging participation in the 'health education' subject, to be introduced to primary schools (grades IV-VIII) for volunteers from September 2025. The curriculum of the subject provides for an integrated approach to health education and the prevention of sexual violence.
- A more extensive offering of training for parents on how to recognise risks and possible response scenarios in the event of a suspected online offence.
- Widest possible promotion of telephone hotlines, e-mail addresses and websites for reporting suspected online crime and destructive content.
- Promotion of helplines.

Prepared by Krzysztof Mikulski (PBI) and Konrad Ciesiołkiewicz (PKDP)

6.

Organisers

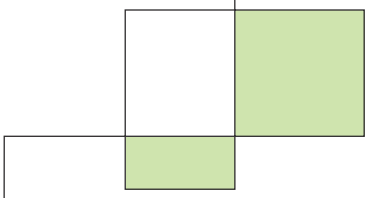


Institute for Digital Citizenship Foundation

The Institute for Digital Citizenship Foundation (*Fundacja Instytut Cyfrowego Obywatelstwa*) is dedicated to cushioning social changes caused by the rapid development of new technologies. As part of our activities, we conduct National Digital Hygiene Surveys, implement the 'Digital Hygiene Lessons' educational programme, which is free and accessible to everyone, and popularise knowledge through training courses and lectures across Poland. As part of our pro bono publico activities, we are present in places where we can influence systemic change. We support the work of the Parliamentary Committee for Children and Youth Affairs, take part in public consultations on laws related to digitisation and education, and co-create initiatives for children's rights on the internet.

Polskie Badania Internetu

For more than 20 years, PBI has been supporting the market with knowledge that helps make business decisions in the digital environment. To this end, the organisation conducts and makes available the results of internet research — the Mediapanel internet audience measurement standard. PBI data are used by representatives of publishers, media houses, research departments of large companies and interactive agencies. PBI contributes to the development of the digital market, also shares its expertise and establishes cooperation with partner organisations with a similar scope of activity.



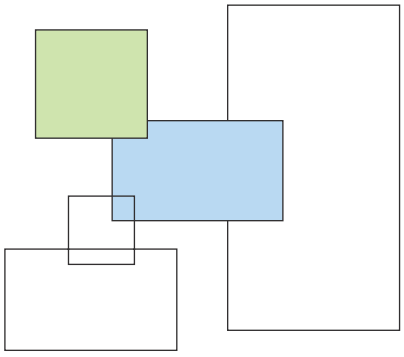
State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age

State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age - is a state body, sworn in on 24 July 2020, which is dedicated to the protection of children under 15 from sexual violence.

The tasks of the State Committee include monitoring currently pending proceedings at the pre-trial and trial stages, participating as an auxiliary prosecutor in criminal proceedings, submitting requests to the Attorney General to file either an extraordinary complaint or a cassation, and conducting educational, preventive and research activities. The State Committee acts as a quasi-judicial body with the power to issue orders for the registration in the Sexual Offenders Register of a person designated as an offender in cases where the statute of limitations has expired.

Gemius

Gemius is an international research and technology company that has been operating for more than 25 years. It provides cross-media audience measurement covering internet, TV, radio and outdoor advertising, as well as advanced marketing solutions. Its products are used by advertisers, publishers, media agencies and houses as well as Joint Industry Committees across Europe. Its mission is to create a fair and transparent environment for all media market players by providing reliable data for any device and for walled garden ecosystems. Gemius is a member organisation of IAB Poland, IAB Europe, OFBOR and I-COM Global. The research conducted by the company complies with the principles of the international ICC/ESOMAR code.



The report titled: *Internet of Children. A report on the monitoring of the presence of children and adolescents on the Internet* presents the results of analyses of children and young people's activity in the digital space, based on measurements conducted by the Gemius research company and expert analyses concerning the scale of abuse of children and adolescents online, children's rights in the digital environment and the social responsibility of companies and institutions for protecting the youngest users of the internet. The publication launches an initiative to monitor the presence of children and young people on the Internet, which is organised by the Institute for Digital Citizenship Foundation, State Committee for Counteracting Sexual Abuse of Minors Below 15 Years of Age and the Polskie Badania Internetu and Gemius companies. The digital version of the report is available at:

www.cyfroweobywatelstwo.pl/internetdzieci
www.gemius.com/pl/internetdzieci
www.pbi.org.pl/raporty/raport-internet-dzieci
www.pkdp.gov.pl

Organisers:

Instytut Cyfrowego Obywatelstwa

Polskie Badania Internetu

PKDP

GEMIUS

Partners:

Wydział Dziennikarstwa Informacji i Bibliologii Uniwersytet Warszawski

SEJM RZECZYPOSPOLITEJ POLSKIEJ
Komisja do Spraw Dzieci i Młodzieży

ISBN 978-83-970364-1-3