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## The problem of child safety in the digital space

### ПРОБЛЕМА БЕЗПЕКИ ДИТИНИ В ЦИФРОВОМУ СЕРЕДОВИЩІ

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
#### Abstract


The rapid development of digital technologies has transformed the lives of children and young people. The digital space offers children endless opportunities to learn, play, communicate and express themselves. However, it also poses a number of risks and threats, such as cyberbullying, grooming and exposure to harmful content. The purpose of this article is to analyze the current state of the criminological safety of a child in the digital space based on a survey among Ukrainian schoolchildren aged 11-17. Our task is to determine the level of awareness of teenagers about safe behavior on the Internet, as well as to identify the most common threats and assess the level of risky behavior of Ukrainian children on the Internet. The article emphasizes that the range of threats to underage Internet users is much wider than to adults due to the peculiarities of this age group. Empirical research shows that schoolchildren tend to act rather carelessly in the digital space, particularly in regards to making new contacts and communicating online. We believe that the


#### Анотація


Стрімкий розвиток цифрових технологій змінив життя дітей та молоді. Цифровий простір пропонує дітям безмежні можливості для навчання, ігор, спілкування та самовираження. Водночас, він також несе в собі низку ризиків і загроз, таких як кібербулінг, грумінг та вплив шкідливого контенту. Метою цієї статті є аналіз сучасного стану кримінологічної безпеки дитини в цифровому середовищі на основі опитування українських школярів віком 11-17 років. Наше завдання – визначити рівень обізнаності підлітків щодо безпечної поведінки в Інтернеті, а також виявити найпоширеніші загрози та оцінити рівень ризикованої поведінки українських дітей в Інтернеті. У статті підкреслюється, що спектр загроз для неповнолітніх користувачів Інтернету значно ширший, ніж для дорослих, що пов'язано з особливостями цієї вікової групи. Емпіричні дослідження показують, що школярі, як правило, досить легковажно поведуться в цифровому середовищі, особливо стосовно

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family and the school should play the dominant role in familiarizing children with existing online threats and the fundamentals of safe behavior in the digital space.

**Keywords:** digital space, Internet, child, social media, social network, survey.

## Introduction

Modern communication media and the digital space as a whole have permeated every sphere of society to such a degree that picturing today's life without them is next to impossible.

According to Internet World Stats (2023), there are 5,3 billion Internet users in the world, i.e. 67,9% of the world's population (7,9 billion). As of January 2022, with a population of 43,3 million, Ukraine had 40,9 million users, i.e. 94,5% of the entire population (93,4% in 2019). 26,5 million of those use Facebook (compared to 9,5 million Facebook users in 2019) (Internet World Stats, 2023).

Thus, as statistics show, the number of Internet users keeps growing, in no small part due to children, who are among the most active users. The age of Internet initiation is going down as well: it is now common to find even preschoolers online, while modern gadgets play the role of digital babysitter. Modern technology gives today's schoolchildren access to digital libraries and various websites of educational, informational, and entertainment nature as well to free communication unrestricted by people's physical location. In other words, the virtual space also serves as a means of socializing, with social media like Facebook, Twitter, Instagram and the like making it possible to maintain social connections even under difficult circumstances (pandemics, wars, etc.), which helps children, particularly adolescents, deal with loneliness.

However, despite all the positive aspects of progress in the field of digital technologies, one also should not overlook the existence of a negative side to it, namely the vast number of threats present within the Internet environment, especially for children. These include risks to privacy, harmful content, fraud, cyberbullying, grooming, sexual violence and exploitation, etc. Moreover, recent events in the world and in Ukraine (the COVID-19 pandemic and the full-scale war in Ukraine) have further increased the number of children that started using the Internet for the first time to continue their studies and

віртуальних знайомств та онлайн-комунікації. Ми вважаємо, що саме сім'я та школа повинні відігравати домінуючу роль в ознайомленні дітей з існуючими онлайн-загрозами та основами безпечної поведінки в цифровому середовищі.

**Ключові слова:** цифрове середовище, Інтернет, дитина, соціальна мережа, опитування.

maintain social connections. The time children spend online has also risen dramatically, which increases the risk of encountering the aforementioned threats.

This shows that the issue of child safety in the digital space has only become more relevant in recent years and requires an in-depth study of its various aspects, which is the **purpose** of our **article**.

The study will help identify online threats to children and help develop strategies to protect them.

## Theoretical Framework or literature review

Safe use of modern information and communication technologies was studied by Pazyuk and Chernykh (2016), Snitko (2014), Udalova, Shved, Yevsyukova, Kuznetsova and Kolesnikova (2010), Lytovchenko (2010) and others.

The influence of the Internet on a child's mind was studied by such national and foreign researchers as: Batyrgareyeva (2019), Naidyonova (2012), Burov et al., (2018), Sokurenko et al., (2021), Ciarrochi et al., (2016), Park, Hong, Park, Ha and Yoo (2013), Rodriguez, Garcia and Ventisca (2021) and others.

Researchers from many different countries dedicated their efforts to studying children's behavior in the digital space and the threats they face on the Internet, in particular: Popadić, Pavlović and Kuzmanović (2020); Ponte (2019), Livingstone and Haddon (2009), Dewan (2022), Frank, Frank, Honzik and Jakeš (2019), Lukić (2022), Nain and Chaudhary (2022), Milosevic, Kuldass, Sargioti, Laffan, Norman (2022), Núñez-Gómez, Larranaga, Rangel and Ortega-Mohedano (2021). UK scientists Livingstone and Haddon (2009), researching the topic of online risks for children, concluded that online

opportunities and online risks are inseparable. Therefore, there is a need to constantly study what children do online and what interests them.

### Methodology

To achieve this, we made use of a range of general and specialized research methods for studying the socio-legal realities, which allowed us to ensure the objectivity and reliability of obtained data.

Thus, we used the dialectical method to identify threats that minors face online as well as to find basic measures for ensuring child safety in the digital space. The comparative method was used in our analysis of studies conducted in other countries on children's behavior in the digital space and the most common online threats and risk factors. The sociological method was implemented during a survey among secondary school students of Kyiv and Kyiv Oblast regarding their online habits and understanding of associated risks and threats, based on which we formulated ways to prevent crimes against children in the digital space. The descriptive statistics method was used when analyzing the survey's results.

The survey was conducted in Kyiv and Kyiv Oblast from November 2022 to February 2023 by experts of the State Research Institute of the Ministry of Internal Affairs of Ukraine among secondary school students aged 11-17. The sampling included two stages: a random selection of schools followed by a random selection of classes. All pupils in these classes were offered to fill out questionnaires via Google Forms. Sampling selection method: convenience sample. The final selection includes 925 pupils, with 364 (39,4%) boys and 561 (60,6%) girls. Distribution by age is as follows: 11 years old – 17,1%, 12 years old – 13,9%, 13 years old – 15,9%, 14 years old – 17,8%, 15 years old – 14,7%, 16 years old – 15,8%, 17 years old – 4,8%. Thus, the respondents are distributed by age almost evenly, with the exception of 17-year-olds who make up only 4,8% of the total number of respondents. The reason for this is the small number of 10th and 11th grades in Ukrainian schools. The sample is representative of the general population in terms of gender and age.

**Sources.** The problem of online safety for underage users is a priority for developed countries and a focus for numerous institutions, including international organizations, government bodies, and NGOs, as well as law

enforcement agencies, educators, and researchers from various fields.

### Results and Discussion

The problem of online safety for underage users is a priority for developed countries and a focus for numerous institutions, including international organizations, government bodies, and NGOs, as well as law enforcement agencies, educators, and researchers from various fields.

For today's children, the Internet is not just a source of information but also a means of communication, socializing, and recreation – a place where they spend a significant part of their lives. The crises that occurred over the recent years, namely the COVID-19 pandemic and the war in Ukraine, have clearly demonstrated how important and irreplaceable digital technologies have become to children.

However, every year, the amount of content that depicts sexual violence involving children is steadily increasing: according to a report by the Internet Watch Foundation, the number of web pages containing such content more than doubled in 2022 compared to 2020 (51,369 and 25,050, respectively) (Internet Watch Foundation, 2023, April 25).

As the first step in our research on the state of child safety in the digital space, we decided to find out how much time per day on average Ukrainian adolescents spend on the Internet. Among the respondents, 36,5% reported that they spend 4-6 hours on the Internet; 23,1% – under 3 hours; almost every fifth (18,8%) – 7-9 hours. Two groups are of particular concern here: the first includes 7,1% of respondents who spend 10-12 hours online daily, while those from the second one (12,5%) are “always online,” i.e. they effectively “live” in the digital space.

This situation is not limited to Ukrainian schoolchildren. For instance, a survey among 1,350 Spanish children between the age of 6 and 12 showed that they spend 5 hours a day in front of a screen on average. Also, during the pandemic their use of mobile phones increased by 38% (Núñez-Gómez et al., 2021).

Meanwhile, according to a study conducted by Oxford researchers, the ideal time limit for using a PC and other electronic devices in terms of having a positive effect on a child's brain is 4 hours and 17 minutes. It's best for them to spend no more than two hours using a smartphone and no more than 100 minutes a day playing video

games. This is sufficient time for developing social connections and skills, while beyond that gadgets starts negatively affecting the child's brain (Maximum, January 25, 2017).

Citing a survey by the NGO Parents Together (conducted in April 2020), which found that the bulk of the children's time online is, unfortunately, spent on entertainment rather than educational content, the American Academy of Pediatrics recommends that middle schoolers spend no more than 2 hours per day in front of a monitor for entertainment purposes (Kiselyova, 2023). Similar recommendations have been voiced in Australia and Europe. Therefore, it is necessary to consider not just the amount of time spent by children online but also the nature of their activities in the digital space, even though the former is much easier for adults to control.

It's also necessary to remember that children that spend a lot of time online are prone to aggressive behavior and outbursts of unmotivated violence and cruelty even if they don't play video games. This was demonstrated by a survey by Salwa Al Majali (2020) conducted among Dubai schoolchildren aged 8-16: it shows that excessive use of the Internet leads to aggression, increased anxiety, depression, indifference toward others, and irresponsible behavior. Furthermore, such children have issues with communication and overly impulsive behavior as well as a lack of desire to help others. According to the author, this shows that excessive use of the Internet has a negative effect on children's mental health and may cause personality disorders (Al Majali, 2020).

We would also draw attention to the two-year study by Jonathan Chu et al., who, in their work "Screen time and suicidal behaviors among U.S. children 9-11 years old: A prospective cohort study" (2023), emphasize that each additional hour of the total time spent in front of a screen significantly increases the chances of suicidal behavior in children. Having analyzed a number of studies on this issue, namely Dunlop, More and Romer (2011) "Where do youth learn about suicides on the Internet, and what influence does this have on suicidal ideation?", Birbal Ria et al. (2009) "Cybersuicide and the adolescent population: challenges of the future?", Phillips, Diesfeld and Mann (2019) "Instances of online suicide, the law and potential solutions", Lee and Kwon (2018) "Twitter as a place where people meet to make suicide pacts", we can conclude that the virtual space can promote suicidal thoughts and intentions among adolescents with its content or even encourage them to commit

suicide through the "support" or cheering on by online "friends". It's also clear that excessive and unsupervised use of the Internet multiplies the chances of the child encountering harmful content or contacts.

Returning to our own survey, over half of the respondents exceed safe limits of screen time by a considerable margin. In light of the above, when children say they are "constantly online", their parents should consider not only the negative psychological impact on the child and the risk of Internet addiction, which experts define as an obsessive desire to go on the Internet while offline as well as inability to go offline (Shugailo, 2015, p.19), but also all the threats that their children may encounter in the digital space.

To find out whether schoolchildren are aware of the danger that being on the Internet exposes them to, we asked them, "Do you think it is possible to get into a dangerous situation, or feel unsafe, on the Internet?" The absolute majority of respondents (91,2%) answered that it is indeed possible to get into a dangerous situation online. Incidentally, during the survey among Spanish children aged 6-12 that was mentioned earlier, 54,5% also mentioned that they don't feel safe online (Núñez-Gómez et al., 2021).

To assess their level of awareness in regards to online threats, we had our respondents name the most common problems that using the Internet has caused them personally. The most frequent answer, mentioned by half of the respondents, was visual impairment (50,5%), second most frequent – getting distracted from studies (44,8%). The third most frequent answer (36,5%) was danger of falling victim to illegal acts, from stalking and sexual harassment to fraud and involvement in extreme games. Girls chose this answer more often (41,0% as opposed to 29,7% among boys). 35,1% of respondents also mentioned the risk of coming across harmful content (depiction of violence, propaganda of self-harm and suicide, etc.), with the percentage of girls and boys who chose this answer being about the same: 36,5% and 33,0%, respectively. In addition, almost every third respondent mentioned Internet addiction (32,5%). The percentage of girls and boys who chose this answer did not differ significantly: 34,8% and 29,1%, respectively. The number of those who answered that they experienced no problems because they know how to use the Internet safely was very small – 4,9%.

A significant number of the respondents have had personal negative experiences while using the Internet. Thus, 53% of them have encountered fake news about the war in Ukraine.

Also, children often come across photos and videos depicting violence and cruelty, including murder, fights, bullying, etc. This was indicated by 40,3% of respondents. This particular threat deserves special attention. After viewing such content, the user may notice changes in one's mental or even physical state, such as increased anxiety, trembling of the limbs, suffocation, rapid heartbeat, confused thoughts, fear, anger, etc. Because of the war, violent content is everywhere these days, which has a traumatic effect on all Internet users, and especially children. Seeing such content often makes the viewer experience fear, giving the impression that violence and rash behavior are the norm. Viewing this content over long periods of time can cause changes in a child: in terms of behavior – manifested in feelings of alienation, loneliness, restlessness, apathy, lack of interest toward things that used to be important, new fears and concerns; mood – i.e. sadness and annoyance with the entire world; and sleeping habits – i.e. insomnia, often accompanied by early awakening or, on the contrary, late rising, as well as nightmares (Filonenko, Kasilova, & Dyakova, 2022, p.12). Therefore, adults should avoid watching news and videos about the situation on the front lines in the presence of children (especially younger ones) and discussing this subject in too much detail while children are around. Furthermore, they should refrain from posting such content on their social media if there are children on their friends list that would be able to see it. It's also necessary to explain to children that they should not view or disseminate such content in chats, e.g. in class chats, on their social media pages, etc. (Filonenko, Kasilova and Dyakova, 2022, p.12).

A considerable number of respondents – 37,9% – have been the target of insults, humiliation, harassment, threats, intimidation, and obscene language while communicating on social media; 36,3% have encountered malicious software (viruses); 30,6% – images of sexual nature. It should be noted that when answering another question, 42,7% of respondents indicated that they periodically (“often” – 7,7%, or “occasionally” – 35%) visit adult sites. So, despite the fact that the survey was anonymous, the children sometimes weren't completely honest, perhaps because the question concerned a potentially embarrassing subject.

According to 18,1% and 17,2% of respondents, respectively, they have encountered fraudulent actions or theft of funds online, as well as had their social media accounts or e-mail hacked, with more boys than girls having experienced this by a large margin: 26,1% of boys and 12,8% of girls have experienced fraud or theft while 22,3% of boys and 13,9% of girls have had their social media accounts or email hacked. About every seventh student has come across proposals to buy them alcohol or drugs (14,7%). 14,6% of respondents have been subjected to sexual harassment on the Internet, with an almost equal number of girls and boys (14,8% and 14,3%, respectively). 12,2% admit that they have had their personal information, photos, or videos posted on the Internet without their consent. Every 9th student (10,9%) has faced extortion, boys twice more often than girls – 15,7% and 7,8%, respectively. Almost every 10th student (9,5%) has had offers to participate in extreme games like Blue Whale. 5,8% have received requests to take pictures of military vehicles, checkpoints, and other military targets.

According to the State Special Communications Service of Ukraine, the enemy gets 80% of its intelligence from public content on the Internet. It is for this purpose that the Russian military is so eager to try and involve Ukrainian children in these dangerous activities.

It should be noted that 22,4% of respondents say they have not encountered any trouble in the digital space whatsoever. One possible explanation for this is that parents are usually more diligent in monitoring children when they are younger: among the aforementioned percentage, the majority are 11- and 12-year-olds.

Since boys usually run into the above problems more often than girls despite better digital competences, the work on preventing incidents and crimes involving children should be done taking into account not just the children's skills but also their gender.

To find out how best to address these issues, we asked the children, “Do you tell your parents about the problems you experience on the Internet?” 37,3% answered that they do so regularly, 34,8% – that they report only certain problems, while 27,9% never notify their parents about this.

It should be noted that children tend to hide certain problems more often than others, such as sexual harassment (19,4%); offers to buy alcohol

or drugs (17,4%); invitations to participate in extreme games (10,9%), etc. This is probably due to fear that their parents would forbid them to use the Internet, or perhaps they are embarrassed to discuss such topics with their parents. Another possibility is that children simply doubt that their parents would be able to help with these problems, since the level of digital competences among adults is generally lower than that of children today.

This is confirmed by answers to the question *“Have your parents ever asked you for help with a computer or phone?”* The vast majority – 84,7% – said yes, with an almost equal percentage of boys and girls.

This indicates a breakdown in the established tradition of older generations passing on their experience to younger ones. After all, it’s the family that lays the foundation of a child’s social behavior, and the digital space should be no exception. However, parents today often have nothing to offer their children in terms of such knowledge and skills, thus discouraging them from asking for help in the first place. Incidentally, according to the first all-Ukrainian digital literacy survey conducted in December 2019, 53% of the population (based on the digital skills assessment methodology used by the European Commission) is below basic level: of those, 37,9% of Ukrainians aged 18-70 are at basic level while 15,1% have no relevant skills at all (Ionan, 2020, February 10). That is why, when they encounter difficulties, have questions, or require advice, they often turn to the virtual world and online “friends” rather than their parents.

Considering that children actively communicate in the digital space, with social media playing a dominant role in this, we wanted to know whether they follow basic safety precautions. Having previously found out that the vast majority of children (88,9%) know how to change privacy settings for their social media accounts, we asked them, *“Are your accounts on social media private?”* Despite the aforementioned skills, most of the respondents answered negatively, namely 53,2% (56,3% of girls and 48,4% of boys). A bit over a third answered yes, while 5,1% said they don’t know whether their accounts are private. 7,1% said they have no accounts on social media. These are mostly younger adolescents aged 11-12.

It should be noted that most social networks only allow registering an account if the user is over 13 (e.g. TikTok, YouTube, Instagram, Facebook,

and Twitter). Thus, considering that the percentage of 11- and 12-year-olds among our respondents is 17,1% and 13,9%, respectively, we can say with a high degree of probability that about 24% of the children (every fourth) lied about their age when registering accounts on social media. Similar results were obtained during a 2019 survey in the UK, according to which 18% of children aged 8-11 already have accounts on popular social networks (Kobzar, 2019). Sometimes children do this without their parents knowing, although a third of the parents, as it turns out, doesn’t even know about age restrictions for registration in the first place (Kobzar, 2019).

Also, children often have multiple accounts for accessing social networks. In 2022, an Ofcom study showed that 60% of children aged 8-11 have at least one account, which they registered simply by indicating a false date of birth (Miroshnikova, 2023).

Violations of age restriction rules on social media also come up in the study by Núñez-Gómez et al. (2021) *“Critical Analysis of the Risks in the Use of the Internet and Social Networks in Childhood and Adolescence”*. According to the researchers, children aged 9-16 use social media daily (or very frequently), with younger adolescents indicating a false date of birth to register an account. Older adolescents start creating several accounts on social media: the primary one, which their parents know about, and one or more other accounts that they use to search for information anonymously, freely express their opinions, follow the accounts of people they are interested in, etc.

With unhindered access to social media, a child can easily invite the attention of criminals. In light of this, we asked the children, *“Are there people on your friends list on social media whom you have never met in real life?”* As it turns out, the majority of respondents – 56% – are willing to add people they have never actually met. This is more prevalent among boys (61,0% against 52,8%).

So, despite the fact that most of the respondents have the necessary skills to adjust privacy settings on social media, they not only ignore this option but also carelessly add strangers to their friends list.

Some children add friends to get as many “likes” as they can for their posts or other content (e.g. photos or videos). This way they gain respect, recognition, and popularity among their peers. In

addition, according to a 2016 study by researchers at the University of California, getting a “like” or looking at a large number of “likes” on their photos activates the same part of the brain in adolescents as when eating chocolate or winning money (Sherman, Payton, & Dapretto, 2016). Stimulation of the brain’s so-called “reward center” makes adolescents spend more and more time on social media, posting photos, videos, etc.

The danger lies in the fact that by adding strangers, children give them access to personal details and may end up having regular conversations with them, potentially of a sexual nature. This can even lead to meetings offline. The war has only exacerbated this issue by severing children’s social connections, which they now seek to replace.

The next question in the questionnaire was meant to help us understand how cautious adolescents are when meeting people on the Internet. We asked, “*What personal information are you willing to share with a new online friend?*” 67,5% of respondents are willing to talk about their interests and hobbies; 48,2% – to give their first and/or last name; 20,1% – to send their photos, with girls somewhat outnumbering boys here (23% against 15,7%); 10,1% – to give their phone number; a bit over 5% – to say what school they go to. 26,5% of respondents don’t share personal details, while 14,5% say that they give false information.

Other answers, which were provided by 2,8% of respondents, are as follows: “*I share information only with my parents’ permission*”; “*I will report non-confidential information*” etc.

Since criminals often use online communication as groundwork before the actual crime, we had to find out whether children limit themselves to online when socializing with their Internet friends. In response to the question “*Have you ever had offline meetings with your online friends?*” almost 32,2% answered yes, with the percentage of boys (34,1%) and girls (31,0%) here almost the same. The frequency of face-to-face meetings with Internet “friends” rises significantly as the child gets older: among 11-year-olds, every seventh child had such meetings, as opposed to every second in the older age group. It’s unlikely that they fully realize the danger of such meetings.

It is unlikely that these students are aware of the dangers they may be exposed to when meeting virtual acquaintances. Parents and teachers

should constantly remind children to be careful about meeting people in the digital environment and following up with them, as well as about sharing personal information (photos, contacts, etc.) online. Children often become victims of sexting because they see it as a harmless and simple way to get complimented for their appearance through positive comments and likes rather than something dangerous (Ionan, 2020, February 4).

Furthermore, their age itself, which is characterized by the desire to experience new and unknown, even dangerous, things, pushes them toward risky behavior, including in the virtual space.

This is demonstrated by answers to our question regarding extreme games (challenges). First and foremost, it should be noted that the overwhelming majority (79,2%) of respondents is aware of the existence of so-called “death groups” on social media, such as Blue Whale, Red Owl, “Wake me up at 4:20,” “Run or die,” Momo, etc., which encourage adolescents to perform potentially lethal tasks and inflict bodily harm on themselves or even commit suicide. Also, children’s awareness of such games increases with age (63,3% among 11-year-olds and 86,4% among 17-year-olds).

It should be noted that 4,8% of respondents answered that they might agree to participate in such games, if only out of curiosity, while 11,2% were undecided. We believe that the latter could be persuaded to participate through professional psychological manipulation. This puts 16% of respondents at risk, i.e. one in six children.

We fully agree with Astorri and his co-authors (2023), who, in their study “*Online extreme challenges putting children at risk: what we know to date*”, concluded that in most cases, children and adolescents go into it with no intention to die. Unaware of the danger to their health, they do it for the thrill, because they want to try something new and unfamiliar. After all, most children are looking for new sensations and impressions in the virtual world, as well as for something they were unable to get in the real world from the people closest to them – support (according to a member of one of the “death groups”) (Kovalevska, & Gribanova, 2022). As noted above, the desire to take risks during adolescence occurs in part due to elevated neural sensitivity to the so-called “reward” (stimulation of the part of the brain responsible for the sensation of satisfaction at achieving certain

goals) combined with the undeveloped capacity for cognitive control (Sherman et al., 2016).

In addition to the aforementioned death groups, various dangerous challenges spring up on the Internet every day. For instance, recently there was a popular challenge on Instagram that involved posting a photo of one's city to the user's Instagram Stories with a geotag. While harmless at first glance, such actions could result in tragedy during a war. There also exist challenges that pose a more obvious risk to one's health and even health. One example of this was the pill poisoning incident involving children who took part in a challenge to "swallow 40 pills and see what happens" after watching a video on TikTok.

In light of this, we decided to ask the children, "Do you participate, or have you ever participated, in online challenges?" The results were as follows. 68,5% don't participate in challenges; 31,5% (every third respondent) do it with varying frequency: 28,1% – occasionally, 3,4% – frequently.

We asked the children that have experience with challenges: "What kind of Internet challenges do you participate in most often?" 85,2% of respondents – an encouraging figure – mainly participate in safe challenges; 11,3% – in both kinds (safe and dangerous alike), as long as they seem interesting; and 3,4% – mainly in dangerous ones (those which can be dangerous to one's health or life). Looking at the answers through the lens of gender, boys are twice as likely to opt for dangerous challenges, or else they only take into account how interesting the challenge is and ignore safety considerations entirely.

In regards to whether their parents know what they do on the Internet, 54% answered in the negative or that their parents know about it only partially. Such a large percentage of parents that are ignorant regarding this issue presents a serious danger to their children.

## Conclusion

The survey's results demonstrate that the Internet has captured the hearts and minds of schoolchildren due to its accessibility, emotional appeal, and rich opportunities for learning, communication, and entertainment, which resonates with the desire of adolescents to experience adulthood and independence.

Considering the peculiarities of adolescence and the excessive activity of children on the Internet, the list of online threats for minors is much larger than for adult users.

Excessive and unsupervised use of the Internet may damage the child's physical and mental health and lead to such issues as Internet addiction; supplanted traditional forms of socializing; negative social influences that push adolescents toward illegal, antisocial, or destructive behavior; and the risk of falling victim to illegal acts like cyber violence, fraud, pornography, sexual harassment, incitement to suicide etc.

As the survey shows, most adolescents are aware of the threats they can come across while navigating the digital space, but they don't fully realize the extent of these threats.

Meanwhile, the older generations are increasingly lagging behind the developments in the digital world. Perhaps this why children today are often reluctant to ask adults for help with their problems.

Modern life is characterized by a constantly shifting balance between the real and virtual components, and the younger the generation, the more they see the virtual component as the dominant one. Therefore, family and school should remain the focal points where traditional forms of socialization prevail, while the digital environment is only a part of real life and serves as a tool that expands human capabilities.

It's especially important to help children realize that this tool comes with a set of mandatory safety rules, much like traffic rules. Given the nature of adolescence and our survey's results, we must point out that schoolchildren behave rather carelessly in the digital space, especially in regards to online acquaintances and communication. This issue has become particularly serious because of the war.

To ensure the safety of children in the digital space today, parents need to:

speak with their children as often as possible (without any devices), talk with them about their state during stressful situations, support them and never leave them to deal with "dark" thoughts on their own;  
 discuss universal rules of online safety with them (e.g. don't share personal details with online friends, don't share your posts or the posts of your relatives, don't exchange indecent photos



and videos; don't agree to offline meetings with strangers or do this only in public places and in the presence of parents or other adults that you are sufficiently close with, etc.); adjust, together with the children, privacy settings on their social media accounts and make them private. It's important to explain to the child that a geotag on a post or picture, a funny video on a social network, or a simple message can pose real danger, especially during a war; foster critical thinking in the children; this will help them better navigate the digital space and avoid negative situations in the future.

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