



**THE NEED
FOR MEDIA
LITERACY AND
YOUTH DIGITAL
IDENTITY
PROTECTION**

Lila Karanfilovska

ABSTRACT

Nowadays, our lives are completely intertwined in the digital world, and online activities leave a lasting mark, that is, a digital footprint. The information we share and the data we generate leave an indelible mark on the internet, shaping not only our online reputation but also affecting our future capabilities and security. Therefore, it is important to understand the digital footprint and how to navigate the landscape of our online identities. In the online sphere, our digital identity is “a way to securely verify who we are online while offering data protection and protecting our personal information.” In practice, it is an extension of our identification documents, but also aggregates information about us that exists on the Internet and can provide us with a digital representation as individuals. Our online identity is all the information we leave online. It is our digital fingerprint with details such as our email address, date of birth, and even our shopping habits through online stores. It also confirms that we are who we say we are. From traditional passwords to facial recognition and fingerprints, we have many ways to identify ourselves online. Our digital identity is how we present ourselves online. It contains vital information about who we are and may include multiple accounts, browsing data, purchase history, and more. If you spend any time online, you already have a digital identity. To avoid becoming a victim of digital identity theft due to deepfakes, it is essential to first understand all the challenges and dangers that lurk in the online space.

Keyword: Internet Security, Fingerprint, Password, Online Identity, Deepfakes

1. INTRODUCTION

We live in a time when information is becoming a basic tool that brings primacy in almost all fields of human activity. Today, timely possession of correct information is a basic prerequisite for making very important decisions. Thanks to technological advances, the problem of finding that information is no longer a difficulty, as it is now available to almost everyone. But precisely because of this reason, the easy availability of a large number of different information, some other problems have arisen that relate primarily to the completeness, reliability, and security of that information.

It is impossible to determine the amount of information available on the internet at any given time because it is constantly increasing. Thanks to rapid technological advances, the means of using Internet communication have become cheap and accessible to everyone. One of the basic characteristics of today's time is the increasing amount of information we receive from various sources such as the daily press, TV, propaganda material, or the Internet. On the one hand, a large amount of that information enabled the ever-faster development of human society, and on the other hand, it required additional technical aids that had to be remembered, organized and presented all that information promptly. The enormous speed, easy accessibility, manipulation, and virtually unlimited storage possibilities provided by the Internet open up unprecedented opportunities for the most diverse use of new technologies that have allowed man to make a large number of quick, complete, and comprehensive decisions.

Namely, the uncontrolled use of the Internet, especially related to children's curiosity and their desire to have fun, carries with it numerous potential risks. New technologies are an integral part of life and have many opportunities for learning and development, but they also carry many potential risks, especially for children and young people, who have not yet developed the ability to assess risks and make decisions. Children and young people use the Internet for learning, communication, social interaction with friends, and for play and entertainment. They are subject to many dangers on the Internet, such as inappropriate content, images, peer violence, pornography, data theft, and the like.

On the one hand, computers have brought many benefits, but on the other hand, they have threatened some of our most important values, such as security, functionality, and data privacy. The question arises: Can a digital fingerprint really affect the safety and life of young people so much?

A digital footprint is the sum of all activities on the internet. The everyday things we do - post on social media, make a purchase, activate an account, sign up for a newsletter, check the weather, take a survey, or share an article. All of these actions leave a digital trail, which can include our IP address, as well as all the personal details of our lives that we've shared online. (An IP address is a unique series of numbers assigned to each device connected to the Internet. It may reveal the city, area, or zip code from which we connect, but not our name, mailing address, or phone number). Data may be tracked and analyzed by marketers, advertisers, institutions, and other organizations to learn about our habits and create customized profiles. In short, our digital footprint is similar to the footprints we leave when we walk on freshly blown snow. Others can see where we have gone. The difference is that snow footprints disappear after a while, and digital prints can remain permanently.

Digital footprints can be useful. They can enhance the time you spend online by providing a personalized, convenient experience - such as remembering your last food order or enabling targeted, exclusive offers that are aligned with your interests. On the other hand, insufficient attention paid to this imprint can be a problem of who, what and how can create and manipulate the "online reputation" of the child.

Internet users, ie. e-mail owners are daily exposed to a large number of spam messages of an advertising nature, provocative or obscene content. Therein lies the key problem. We do not pay for the internet with money; we can no longer pay for our equal participation in society with money - we pay for it with our private data.

The subject of user privacy in general, especially children, comes to the fore in parallel with the growth in popularity of social networks, especially Facebook. By presenting their everyday life, young people expose themselves and their privacy to the online space, without being aware of the potential risks that such behavior may bring to them now, but also in the future.

Deepfakes, one of the achievements of artificial intelligence, can also be one of the most dangerous, on many grounds - from ruining a person's reputation and privacy to manipulating the public and completely twisting events of any kind in the social sphere. Any of us can suddenly and suddenly become a part of a viral video, status, tweet, story, or TikTok video. The ubiquity of digital media and the possibility of being plunged into the vortex of viral content without any of our consent or control creates a new kind of discomfort for most of us, and often stress or anxiety (Macedonian Institute for Media, 2022).

But if one had to describe what a "deepfake" is, one of the achievements of artificial intelligence, then it would, in the simplest terms, look like this: you are watching a video that looks quite real, whether it is a politician, an actor, a singer, an ordinary citizen. You wouldn't even wonder if the same thing is authentic because there is a picture in front of you. The character in the video is speaking, opening his mouth according to what he is saying, you can even see the recognizable smile on his face. And yet, the video is fake. What you see is not correct. You are watching a "deepfake" video. Hence, the biggest danger posed by "deepfakes" is their ability to spread false information that appears to come from trusted sources and is a complete lie. So from there, it is extremely difficult for viewers to it was explained to them that what they see and hear has no point of contact with reality.

This topic is the subject of numerous research, and the discouraging results we face, as well as the unpleasant information about the abuse of children and young people caused by the inappropriate use of online media, have become our everyday lives. All the actors involved in the process of growth, upbringing, and education are unanimous in the opinion that it is necessary to pay special attention to the education of children and young people to use the Internet in a way that is safe for their privacy. In a situation where personal autonomy has disappeared, when individuals, including children and young people, create a false image of themselves in the network, it is necessary to direct special attention to the acquisition of a general, conventional education that will be able to form a clear relationship of the individual to the network culture and the internet in general.

One of the problems we face in this regard is the fact that computers are given to children and young people as toys and as a means of entertainment, that is, as a substitute for parents who are absent or overloaded with their daily responsibilities.

However, although the Internet has brought many advantages that have significantly improved human life, it has also brought some negative consequences that have been increasingly pointed out in recent years.

2. RESEARCH METHODOLOGY

The time that young people and all of us spend on the Internet, and access to all information is not free. They knowingly or unknowingly expose their private lives or personal data to an audience of millions. By posting a picture or clicking on a post, they leave an imprint that never disappears. For this purpose, research is being carried out, through which I gained knowledge about how much young people use social networks, which are their favorites, what content they publish, and whether they know how to protect their personal data.

The primary source of data is a survey that was distributed to students in different schools. The survey contains a combination of closed and open questions, which enabled a detailed analysis of the various aspects of the need for media literacy and protection of the digital identity of young people.

The survey questionnaires were intended for students (appendix 1). This research includes 90 students aged 14 and 15 from 5 primary schools in the Republic of North Macedonia.

Data obtained from the survey were analyzed using qualitative and quantitative text analysis methods.

This involved identifying themes and trends in the participants' responses, as well as analyzing the frequency of certain expressions and concepts. The research methodology aims to enable detailed and exhaustive research on the topic and provide relevant and significant results that will contribute to the improvement of education through the integration of digital media in teaching.

3. LITERATURE REVIEW

An interesting research conducted by UNICEF (UNICEF, 2016) indicates two dominant areas, which according to parents occupy children's attention the most on the Internet, namely: entertainment and free time (playing games and music content) and communication on social networks with peers. Social networks and communication with peers become an Internet preoccupation at the age of 12, and at the age of 14 to 17, for 70% of children of that generation, it is a daily activity on the Internet. When it comes to learning and education, research shows that these are not activities that dominate children, although 60% of children use the Internet several times a week for learning, the frequency of this activity is not sufficiently pronounced.

More than 400 children and youth from North Macedonia participated in the AU-Report online safety survey conducted in 2023 by UNICEF. One in three (31 percent) of respondents reported experiencing online bullying. Many, 18 percent, admit that a lack of knowledge and information about how to stay protected is one of the reasons why online violence continues, while as many as 41 percent believe that it is not taken seriously by institutions.

Growing up online offers limitless opportunities for critical learning, skill development, and expression. According to the latest data (SSO, 2023) every (100 percent) young person aged 15-24 in our country uses the Internet and almost all (97 percent) use it several times every day. Keeping children informed and engaged about the risks, in a way that matches their developmental capacities, is a critical defense and also one of the cornerstones of the Committee on the Rights of the Child Guidelines on the rights of children in the digital environment. Researchers from the University

of Amsterdam (Peter, Valkenburg & Schouten, 2005; according to Radovanović, Spasić, 2009) analyzed the model of creating online friendships among adolescents. The findings of the research showed the connection between the psychological characteristics of the person, motives and patterns of Internet use, and their joint influence. The indirect influence of extraversion/introversion dimensions on making friends on the Internet was determined. It is realized indirectly through the willingness to present information about oneself and the frequency of online communication.

In the last few years, we have witnessed an increase in the use of digital technologies and the Internet, especially among children and young people. According to some authors, the Internet was created in 1969 and is defined as “a global communication system of interconnected computer networks intended for information exchange” (Radovanović, Spasić, 2009: 243).

In the draft strategy for the development of the broadcasting activity in the Republic of North Macedonia in the period from 2013-2017, for the first time in the legislation, attention is paid to media literacy. That document emphasizes the need to promote media literacy as one of the greatest interests of our society, a process where educational institutions should be involved with various mechanisms for checking the effects of media education in the curriculum, regulatory bodies, developing self-regulatory codes where it talks about professional standards for increasing responsibility when creating media products, creating special programs with different activities related to media literacy and different projects and initiatives. It is significant to say that within the Education Strategy 2018-2025 of the Ministry of Education and Science, the term “media literacy” is omitted entirely. The term “digital literacy” is represented only five times.

A bright spot is the existence of the term “critical opinion”, which is encountered for the first time in a public policy document, mentioned four times in the Education Strategy 2018-2015.

Young people should not only acquire the skills of media literacy but should also be its biggest promoters. They are increasingly associated with media literacy. The better the young people know the media and are familiar with their work and role, the easier they will understand their role, as well as the responsibility for protecting the public interest. But when it comes to information, it seems that they want to be informed quickly, and that means that the information released quickly is not always accurate. Research conducted by the Center for European Strategies “EuroTink” and the Internet and Society Foundation “Metamorphosis” in 2018 and 2019 shows statistical data about which types of media are most often informed. As expected, young people are mostly informed via the Internet, namely 38.4%, this includes electronic versions of televisions, information portals, and daily newspapers. About 32% of young people are informed through the social media Facebook and Twitter. Television is next with over 7%, and a devastating figure is that only 1% of young people are informed through print media. From this sample, only three young people were informed through them, and even 21% of the respondents did not express themselves on this issue. Concerning that, if only the Internet is taken as a means of information, most often the respondents are informed through Facebook and Twitter, namely 32.1%, from other Internet portals 22.2%, from electronic versions of daily newspapers 21.2%, and only 9.3% of them through electronic versions of televisions.

Several traditional media (TV, radio stations, newspapers) are expanding their presence in the digital environment by publishing their information online. According to a public opinion survey (2021) conducted by NDI (National Democratic Institute), citizens mostly receive information on social, political, economic, and other local and global topics through television (76%), followed by social media (36%), online portals (26%), and least of all through radio stations, daily newspapers or magazines.

Analyses show that cases of online violence increased by 70% between March and April 2020, right in the middle of the pandemic. The fact is that the time spent on the Internet and the opportunities for various forms of digital violence are directly proportional, that is, more time

spent on the Internet creates more opportunities for harassment, violence, and abuse. Due to the new way of functioning of the educational system, only 20% of abuses occur within schools, while the remaining 80% refer to abuses on the Internet. Before the pandemic started, children spent a lot of time in front of the computer, and during the pandemic they spent most of it in their homes, constantly using the Internet, which has become a basic way of learning, but also for communication, entertainment, playing games, etc.

Young people spend a lot of time on social networks, create virtual friendships, and cultivate real social contacts less and less. This practice brings with it a very negative impact on the child's personality and their social life. That is why it is very important that young people acquire the skills of critical thinking and a critical approach to information that they need to build resistance to misinformation, and even more importantly to spend their time safely on the Internet. Young people should exercise the same caution in their online social life as they do in their real-life social life.

4. DISCUSSION AND CONCLUSION

In the first part, a general overview of the situation regarding the use of social networks by young people, the meaning of digital identity, and the acquisition of knowledge on how to protect oneself on the Internet is given. The protection of children's integrity about the protection of personal data is observed in the context of the use of the Internet and the growing popularity of social networks, especially Facebook.

Based on the answers received and the analysis made, the following insights were obtained. Almost 95% of young people actively use some kind of social network, and they have access to the Internet at home and school.

To the question: Where do they get information most often: about 70% answered that they get it from the Internet, while a small part from television or some print media. Favorite social networks among young people are Facebook and TikTok.

From the analysis of the questionnaire, about 60% of young people do not update their data on their Internet profile and thus are exposed to hacking, while a smaller part use strong passwords. It can also be pointed out that the profile of girls (70% of those surveyed) is more exposed to hacking and abuse of personal data than boys. The difference between boys and girls in terms of technology use is insignificant because the Internet and digital devices are available to young people.

To the question: Do they feel the need for additional information on how to protect themselves on the Internet? 85% responded that they need additional guidance and information about spending time safely online, while only a small percentage feel that they are safe in the digital world.

Based on the data, the fact that young people spend a lot of time on the Internet is alarming, even turning into an addiction to social networks and virtual contacts. Protection of children on the Internet and prevention of addiction requires the cooperation of the entire local community and society, not only parents, schools, police, and protection services. One of the ways to ensure protection and prevention is through educational campaigns, which are intended not only for children, parents, and experts but also for all people. The Internet has a great impact on social life and mental health, so this condition should be approached seriously. Whether there will be harm from using the Internet does not depend only on the time spent on the Internet, but the purpose for which the child uses it. For the protection of children, everyone should be well informed, and a warm and open relationship

should be established in which the children will be ready to communicate freely, even about the most sensitive matters. It is necessary to assess the risks and find ways for safe use and solid media literacy of young people.

To safeguard themselves from the potential risks associated with their digital footprint, young people—and individuals of all ages—can adopt proactive measures to mitigate harmful effects. One effective strategy involves periodically searching for one’s own name online using multiple search engines. While it may seem unusual, this practice offers valuable insight into the type of information publicly available and helps individuals identify and manage potential vulnerabilities. A comprehensive understanding of one’s digital identity is also essential. This identity encompasses vital details, such as accounts, browsing history, and purchase records, all of which collectively shape an individual’s online presence.

To enhance digital security, maintaining strict control over login credentials is crucial. Passwords should be kept private, never shared, and designed to meet robust standards—a minimum of eight characters, including uppercase and lowercase letters, numbers, and special characters. Employing two-factor authentication methods, such as SMS codes or authentication apps, further fortifies account security. Additionally, using unique passwords for each account and regularly updating them—at least annually—can significantly reduce risks associated with breaches or unauthorized access. By implementing these measures, individuals can take meaningful steps toward protecting their online identities in an increasingly connected world.

In essence, the impact of online activities on personal lives is multifaceted, and individuals play a key role in shaping their digital experiences. Achieving balance, being aware of potential challenges, and using responsible online behavior contribute to a positive and harmonious integration of the online and offline aspects of everyone’s life, especially young people. The need to educate young people through the media to navigate safely in this digital age is relevant.

LITERATURE

1. Media literacy: a manual for trainers, LEARN2DISCERN
2. https://metamorphosis.org.mk/izdanija_arhiva/istrazhvanje-kritichkoto-mislenje-imedia-skata-pismenostkaj-mladite-vo-republika-severna-makedonija/
3. <https://mim.org.mk/mk/edukacija/1390-kolku-e-mozna-privatnosta-vo-erata-na-onlajnmediumite>
4. Risks of the virtual world for young people and prevention of Internet addiction, Jovana D. Jokovič, Innovation in teaching, XXXI, 2018/4, p. 145–159
5. Research on critical opinion and media literacy among young people in the Republic of North Macedonia [Electronic source] / [author Aleksandar Stojanovski]. - Skopje: Metamorphosis: Center for European Strategies EuroTink, 2020
6. MEDIA LITERACY IN RS MACEDONIA, TRAJCHOV, Christian, Faculty of Law, University “Goce Delchev” - Shtip, UDC: 316.774:003-028.31053.6(497.7)
7. DIGITAL LITERACY A MODERN CHALLENGE EDUCATION, Svetlana Pandiloska Grncharoska, KNOWLEDGE – International Journal Vol.48.2
8. FOR THE SAFETY AND PROTECTION OF CHILDREN FROM VIOLENCE IN THE DIGITAL WORLD, Prof. Ph.D. Gordana Lažetic, Ph.D. Nevena Petrovska Prof. Dr. Lazar Nanev, September 2020
9. Center for European Strategies EuroTink and Foundation for Internet and Society Metamorphosis (2018/19). Research - Critical opinion and media literacy among young people in the Republic of Macedonia.

APPENDIX 1

QUESTIONNAIRE FOR STUDENTS

1. Gender:

- a) Male
- b) Female

2. Place of residence

- a) City
- b) Village

3. Where do you usually get your information from?

- a) Internet
- b) Television
- c) electronic portal
- d) magazine
- e) _____

4. Which social networks do you use most often?

- a) Facebook
- b) Tik Tok
- c) Snapchat
- d) _____

5. How much time do you spend interning?

- a) Often
- b) Sometimes
- c) _____

6. Have you ever had your account hacked?

- a) Yes
- b) No

7. When sharing on the Internet, do you pay attention to privacy and personal data?

8. List some examples through which you protect your personal data on the Internet!

9. Do you need additional information on how to be safe on the Internet?

- a) Yes
- b) No

ABOUT THE AUTHOR



LILA KARANFILOVSKA

lila_karan@yahoo.com

Lila Karanfilovska is a class teacher in OOU St. Naum Ohridski - village. Peshtani, Ohrid. She has worked on various projects to develop and encourage empathy among students and has been the coordinator of international eco-projects to raise awareness among students about climate change. In 2020, as an E-Twinning ambassador, she participated in a series of international projects that received European quality marks and has also realized training for teachers. She is a Certified Media Literacy Trainer and EDUINO Educator.