
THE CRITICAL ROLE OF PRIVACY AND SAFETY KNOWLEDGE IN THE DIGITAL AGE

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Abstract: As the internet has become a ubiquitous part of our lives, concerns about online privacy and safety have grown exponentially. Understanding these concepts requires strong, widespread, and equally ubiquitous media literacy skills, to foster the ability to access, analyze, evaluate, and create media messages across various digital media platforms and formats. Digital literacy also involves the ability to understand and ethically use the information and tools in digital environments.

This paper will address the importance of knowledge and skills concerning privacy and safety online, as presented through the comparative analysis of the research results from the survey conducted in April 2024 through an online questionnaire with the students at International Balkan University in Skopje, North Macedonia. These results are compared to the results from the Survey On Privacy In Media And Information Literacy With Youth Perspectives, done by Sherri Hope Culver and Alton Grizzle (2017).

We argue that educating and informing the public about the rules, regulations, and policies of online platforms, particularly those related to privacy and safety is crucial. It is also essential to ensure that users fully understand their rights and obligations when they agree to the 'terms and conditions' of any online platform.

Keywords: knowledge, digital literacy, skills, privacy, safety, online platforms

1. INTRODUCTION

In the digital age, where technology integrates seamlessly into every facet of life, the importance of privacy and safety knowledge cannot be overstated. As individuals increasingly depend on digital platforms for communication, education, entertainment, and commerce, understanding how to navigate this environment securely is essential. Without adequate knowledge, people expose themselves to significant risks, including identity theft, cyberbullying, financial fraud, and unauthorized data exploitation (Kraus, S. et al., 2021).

Privacy and safety knowledge serve as the foundation of digital literacy, enabling individuals to recognize threats, manage personal information responsibly, and protect their digital identities. This knowledge is particularly crucial as cyber threats evolve in complexity, exploiting gaps in users' awareness. For instance, phishing schemes, malware attacks, and social engineering tactics often succeed because users lack the skills to identify and counteract them. Awareness of safe practices, such as using strong passwords, enabling two-factor authentication, and recognizing suspicious online behavior, empowers users to mitigate these risks effectively (Powell, L., 2023).

Beyond individual protection, privacy and safety knowledge contribute to societal well-being. Informed digital citizens can advocate for stronger cybersecurity policies and ethical data usage by organizations. They can also educate others, creating a ripple effect that fosters a safer online environment for all. This collective awareness is particularly important as data breaches and misinformation campaigns pose threats not only to individuals but also to democratic systems and public trust (Quach, S. et al., 2022).

For this study, a modified version of the UNESCO (2017) questionnaire, consisting of 24 multiple-choice questions, was used. The questions were straightforward, well-defined, and easy for participants to understand. The target group for this research was students from International Balkan University in Skopje, North Macedonia. A total of 145 responses were collected, forming a sample that represents the university. This paper presents the results from the second part of the larger research, focusing on answering the question of students' perspectives on the importance of privacy and safety knowledge in the digital age. Other research questions addressed in this survey explore the significance of online privacy and safety (Adjaip-Velichkovski, S. 2024), the protection of others' privacy on digital platforms, and the use of personal data by governments and various companies.

2. DIGITAL LITERACY

Digital literacy can be defined as the ability to understand information and perform tasks in digital environments using digital tools and information ethically and safely. Technology changed our lives completely and since our world is becoming an "Information Society", new concerns started rising. The information about everyone using new technologies, especially the internet is accessed, it is also stored, manipulated, analyzed, bought and sold, and potentially misused by countless organizations, corporations, and governmental and nongovernmental bodies, most

often without the knowledge or consent of people whose information is used (Pangrazio, L., Godhe, A.-L., & Ledesma, A. G. L.,2020).

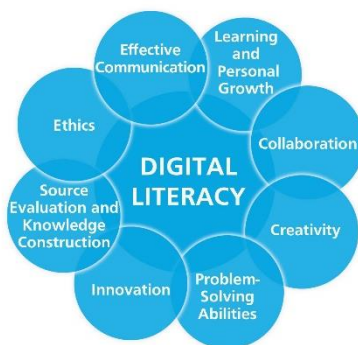
Digital literacy (DL) is a fundamental skill set in today’s technology-driven world, enabling individuals to navigate, evaluate, and effectively utilize digital tools and information. Its importance spans personal, professional, and societal domains, encompassing various uses and benefits. DL is essential for active participation in modern society, enabling individuals to engage with digital communication platforms, access online services, and contribute to civic and cultural activities. It fosters inclusion by bridging gaps in access to information and resources. In the workplace, digital skills are increasingly necessary for a wide range of professions as they improve employability by equipping individuals with the ability to use industry-standard tools, adapt to new technologies, and collaborate in virtual environments.

As technology evolves, digital literacy also promotes lifelong learning by enabling individuals to independently acquire new skills, access educational resources, and stay updated with global trends. It also helps in mastering emerging technologies, such as artificial intelligence and data analysis. In many aspects digital literacy simplifies interactions with digital platforms for healthcare, banking, education, and government services, ensuring individuals can access essential resources efficiently. It is especially critical in regions where digital access is expanding.

Very importantly, digital literacy supports the development of informed and active citizens who can engage with digital governance, online activism, and community-building initiatives. It empowers individuals to voice their opinions and influence change through digital platforms

According to UNESCO, digital literacy as a broader concept, is the critical use of digital technologies for information, communication, and problem-solving in various aspects of life. It emphasizes fundamental ICT skills, such as retrieving, assessing, storing, producing, and communicating information. This definition connects digital literacy to broader societal engagement and participation (Laanpere et al.,2021).

Figure 1. Digital literacy across the curriculum



Source: Miller, C., 2024

Digital literacy encompasses a range of knowledge and skills essential for a variety of professional engagements in the 21st century, particularly in careers and industries reliant on technology and information management. Key aspects of digital literacy (Laanpere et al.,2021) include:

- **Using Technology for Information Access and Communication:** Digital literacy requires proficiency in using computers, smartphones, and other digital devices to access, manage, and communicate information.
- **Navigating Diverse Information Formats:** Digital literacy involves the ability to identify, interpret, and use information from various media formats (online databases, websites, social media platforms, digital publications), and also includes understanding metadata, cloud-based information storage, and search engine optimization.
- **Critical Evaluation of Media and Information Sources:** With the proliferation of information in the digital age, evaluating the truthfulness, credibility, and reliability of media sources is crucial.
- **Responsible and Ethical Use of Digital Tools:** Digital literacy also involves understanding the ethical implications of using technology, such as intellectual property, adhering to copyright laws, protecting digital footprint, data privacy, etc.

The “Digital Competence Framework for Citizens”, also known as DigComp, was first introduced in 2013 by the European Commission. It was introduced as a key tool to improve the digital competence of citizens and to help

society in planning education systems and training initiatives. DigComp also provides tools how to identify the key aspects and features of 21st-century digital competence (Vuorikari et al. 2016). Individuals who are media and information literate show a better capacity for making the right decisions about their privacy online and offline, as part of their broader media and digital competence.

3. METHODOLOGY

One key objective of this study was to explore students' perspectives on the importance of privacy and safety knowledge in the digital age. By building on existing research in this area, the study aims to contribute to the ongoing discourse on the significance of online privacy and security awareness, particularly in the context of North Macedonia. Given the scarcity of research on this topic within the country, especially in English, this study seeks to expand the academic literature and provide meaningful insights for scholars and students interested in digital safety. The research employed a modified version of UNESCO's 2017 questionnaire, which included 24 multiple-choice questions that were clear, concise, and easy for participants to understand. The target demographic was students from International Balkan University in Skopje.

Data collection took place in April 2024 via an online questionnaire that could be accessed on various devices, such as computers, tablets, and smartphones, making participation convenient. The survey ensured anonymity and voluntary participation, as no personally identifiable information was collected. Additionally, the random distribution of the survey and the absence of an interviewer reduced potential bias in the responses.

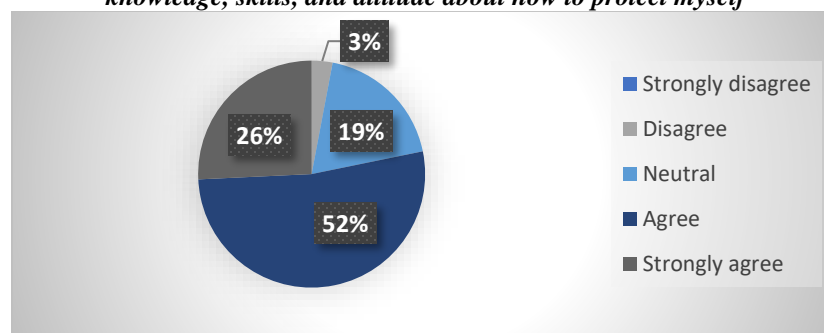
The findings were compared to results from The Survey on Privacy in Media and Information Literacy with Youth Perspectives by Sherri Hope Culver and Alton Grizzle (2017). This comparison offered a broader perspective on students' awareness of the importance of privacy and safety knowledge in the digital age.

4. THE CRITICAL ROLE OF PRIVACY AND SAFETY KNOWLEDGE IN THE DIGITAL AGE

To stay safe online and protect one's privacy, it is essential to be media literate and possess the necessary knowledge and skills. Managing online security, privacy, and digital identity has become a critical aspect of digital literacy in both personal and professional contexts. Staying safe in the online environment requires awareness of appropriate practices, policies, and standards related to the use of digital information.

With this context, participants in the study were asked questions designed to explore the knowledge and skills necessary for ensuring online safety and security. The first question in this section inquired whether acquiring the knowledge, skills, and attitude to protect oneself online is the most effective way to stay safe. As shown in Figure 2, the majority of respondents agreed (52%), while a substantial portion strongly agreed (26%). These findings suggest that students recognize the importance of this issue and are motivated to educate themselves to improve their online safety.

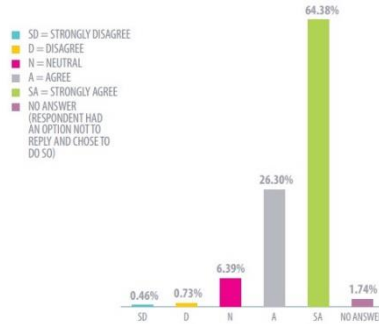
Figure 2. Summarized answers to the question: The best way for me to stay safe online is to acquire the knowledge, skills, and attitude about how to protect myself



Source: Results from own work

The findings of Culver, S. and Grizzle, A. (2017) indicate a much higher level of awareness among young people regarding the issue. As shown in Figure 3, 64.3% of participants strongly agree (compared to 26% in our research) that acquiring the necessary knowledge, skills, and attitude is the most effective approach to staying safe online.

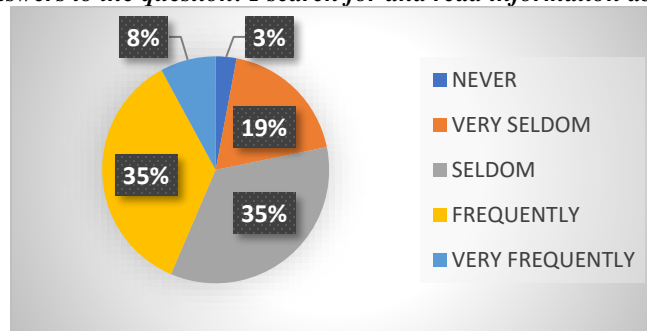
Figure 3. Summarized answers to the question: The best way for me to stay safe online is to acquire the knowledge, skills, and attitude about how to protect myself



Source: Culver, S. and Grizzle, A., 2017

The second question, "I search for and read information about how to stay safe online," seeks to determine whether students actively pursue information on maintaining online safety in today's complex digital landscape. The results, shown in Figure 4, indicate that, despite the significance of the topic, only a limited number of students report doing so very frequently (8%) or frequently (36%).

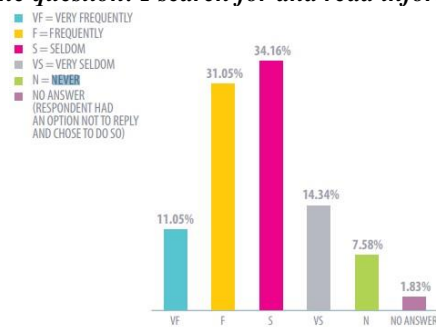
Figure 4. Summarized answers to the question: I search for and read information about how to stay safe online



Source: Results from own work

This research was also compared with the study by Culver, S. and Grizzle, A. (2017), which reported that 42% of surveyed youth frequently or very frequently searched for and read information on staying safe online. These findings closely align with the results of our study.

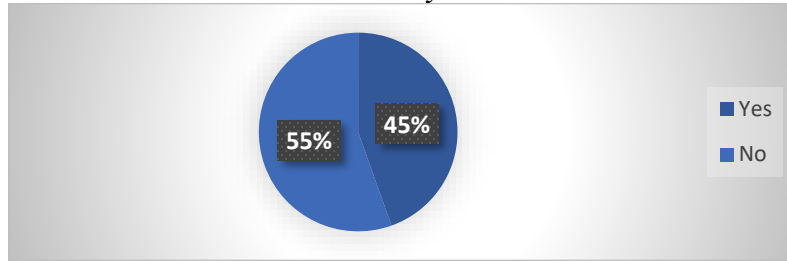
Figure 5. Summarized answers to the question: I search for and read information about how to stay safe online



Source: Culver, S. and Grizzle, A., 2017

Participants were asked, "Do you pay attention to debates about online safety in your country?" The findings revealed intriguing insights, with less than half (45%) of respondents indicating that they follow such discussions.

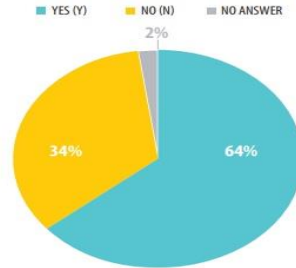
Figure 6. Summarized answers to the question: Do you pay attention to debates about safety online in your country?



Source: Results from own work

The findings from the research conducted by Culver, S. and Grizzle, A. (2017) indicate that young people worldwide are more likely to engage with and follow debates about online safety than students at International Balkan University. As shown in Figure 7, 64% of participants in their study reported following such debates in their respective countries.

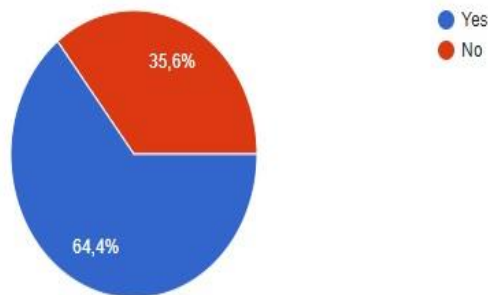
Figure 7. Summarized answers to the question: Do you pay attention to debates about safety online in your country?



Source: Culver, S. and Grizzle, A., 2017

The final question in this section of the research asked students, "Do you advocate for online safety?" This question aimed to assess whether participants actively promote safe practices and raise awareness about online security within their communities. The responses, summarized in Figure 8, provide insight into the level of engagement students have in encouraging others to adopt secure online behaviors. These findings highlight the role students play in fostering a culture of digital responsibility and advocacy.

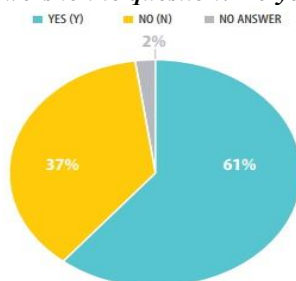
Figure 8. Summarized answers to the question: Do you advocate for safety online?



Source: Results from own work

In response to this question, young people worldwide who participated in the study by Culver, S. and Grizzle, A. (2017) demonstrated similar results. However, they appear less eager to advocate for online safety compared to students from International Balkan University.

Figure 9. Summarized answers to the question: Do you advocate for safety online?



Source: Culver, S. and Grizzle, A., 2017

5. CONCLUSION

As to what extent are students at International Balkan University in Skopje informed and do they possess the necessary knowledge about their privacy and safety online, the results show that the majority of students think that the best way to stay safe online is to acquire the knowledge, skills, and attitude about how to protect themselves. Even though they claim that this is the best way to stay safe online, there is a large amount of students who do not search for, and read information about how to stay safe online. A large number of students do not read parts of the privacy policies of the social networks and computer software that they use.

Despite its importance, privacy and safety knowledge remain underemphasized in many educational systems, leaving individuals, particularly young people, vulnerable. To address this gap, targeted initiatives, such as digital literacy programs and awareness campaigns, are essential. Governments, educational institutions, and tech companies must collaborate to provide accessible resources that equip individuals with the skills needed to navigate the digital world safely.

In conclusion, the digital age demands that privacy and safety knowledge be prioritized as a critical life skill. By empowering individuals with the ability to safeguard their personal information and navigate online risks, we can create a more secure, ethical, and inclusive digital landscape. This effort is not only a personal responsibility but also a societal imperative, essential for protecting the freedoms and opportunities that the digital age has to offer.

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