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## **Digital privacy and data protection knowledge and skills of Generation Z**

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### **Introduction**

In a world where many aspects of the lives of individuals take place online, personal data has significant value. By using various and numerous applications and online tools on a daily basis, users leave their traces, which are then collected, analyzed and used for various purposes. Data collection is often associated with some form of satisfaction of user needs, in terms of obtaining information, personalized content, access to additional content etc. whereby users often ignore privacy settings, but also their concerns, and voluntarily agree to provide data in order to receive various benefits in return.

At the center of this paper is the digital privacy of Generation Z, a generation that is considered the first generation of digital natives, that is, a generation that has been living with technology from an early age. The use of the Internet and mobile devices is a central part of their everyday life. For them, access to information is just a few clicks away, and in addition to finding and using the content available on the Internet, they also often create it at the same time. Communication with others for them naturally takes place through social networks, therefore they spend a considerable amount of time online. For all the mentioned reasons, there is a need to better understand their approach to sharing and protecting their data in the online environment, because despite the fact that members of this generation are active participants in the digital world from a very early age, it cannot be said with certainty that they have the necessary knowledge and skills to adequately protect their digital privacy.

### **Theoretical framework**

The research is based on a theoretical corpus on digital privacy literacy, privacy concerns and privacy management. Research on digital privacy concerns and privacy management has found mixed results which indicate that concern may or may not translate into significant changes in user

behavior and greater engagement to reduce the perceived risks (Wilson et al. 2012; Bergstroem 2015; Chen et al. 2016; Chen et al. 2017; Chen et al. 2020; Choi, et al. 2010; Choi, et al. 2018; Kokolakis 2017). Privacy paradox represents a disparity between the expression of concern about one's own privacy, on the one hand, and behavior, i.e. actions that show inertness and lack of concern for privacy protection, on the other hand (Kambuno et al. 2021; Lillehovde 2020; Debb et al. 2020; Engels 2019; Nuzulita et al. 2019; Taken Smith 2019; Verma 2018).

The recent literature review on data privacy preferences, attitudes, and behaviors of college and university students, as adult members of Generation Z, concludes that they deeply care about data privacy, and their concern with regard to it appears to be increasing. Therefore, further studies on college students' attitudes and behaviors regarding data privacy are needed (Park and Vance 2021.)

### **Research questions**

The aim of the research was to investigate the knowledge, attitudes and behavior of members of Generation Z in the context of digital privacy protection.

The research was guided by the following research questions:

1. To what extent and in what ways are members of Generation Z informed about digital privacy protection?
2. How do members of Generation Z perceive the sensitivity of different types of personal data online?
3. What are the habits and practices of members of Generation Z regarding the protection of their digital privacy?
4. What are the experiences and attitudes of members of Generation Z regarding the violation of digital privacy?

### **Methodology**

The research used a survey method conducted via an online questionnaire that contained 22 questions. The research was conducted at the Faculty of Humanities and Social Sciences in Osijek and via social networks on the profile of the Faculty social network Instagram. The survey began on June 1 and ended on July 25, 2022.

### **Research Results**

A total of 149 respondents participated in the research, of which 112 were female (75.2%) and 37 (24.8%) were male.

The majority of the respondents got the information about digital privacy protection searching the Internet on their own (68.5%, n=102); 63.8% got the information at the school (n=95); 57.7% got the information through the media (n=86); 30.9% got the information at the university (n=46), 28.9% got the information from family members (n =43) and 26.8% got the information from friends (n=40). Knowledge about digital privacy protection was tested with 7 statements about digital privacy facts in which respondents had to indicate whether they considered the statement correct, incorrect or they did not know the answer. On average 49.2% of respondents said that they don't know if the statement is correct, 40% of respondents knew the correct answers, while 10.8% gave the wrong answer.

Based on self-reports about behavior when leaving personal data online, it can be concluded that members of Generation Z consider most types of personal data sensitive because the great majority of respondents (96%, n=143 to 62.4%, n=93) feel some hesitation while leaving this data online (personal interests, sexual orientation, personal views on various issues, telephone number, photos, religious denomination) while the most sensitive data are personal experiences, home address, videos and locations.

Results show 50% of the protective measures online that were tested (n=7 out of 14 tested) are used by more than 60% percent of the respondents (ranging from 61.1%, n=91 to 87.2%, n=130), while other 50% (n=7 out of 14 tested) of the protective measures online are used by less than 50% of the respondents (Using incognito mode to browse sensitive content on the Internet; Not sending or receiving sensitive data on public wireless networks (e.g. in a coffee shop); Deleting user accounts on services that are no longer used; Using a special e-mail address (unlike private e-mail) for subscribing to various newsletters, registering for websites or shopping online address). Privacy protective behaviors applied by less than 25% of respondents are checking and adjusting privacy settings when downloading software applications (22.8%, n=34); protecting their messages in applications such as Viber, WhatsApp, etc. if necessary (20.1%, n=30) and protecting sensitive data in the cloud with encryption (16.1%, n=24).

43.6% (n=65) of the respondents have experienced a privacy violation on the Internet either by having photos on which they appear published without their consent (24.4%, n=6), by having a hacked profile (22.1%, n=33) or even experiencing a fake profile of them being made on social networks (10.1%, n=15) etc.

Their attitudes regarding the seriousness of different privacy violation scenarios show that the majority of respondents find the next situations a very serious violation of their privacy: the publication of information about their locations and activities without their consent (63.8%, n=95), the publication of their photos without their consent (61.7%, n=92) and the publication of videos in which they appear without their consent (63.8%, n=95). Respondents were less worried about the collection of data about locations, activities and searches that are used for marketing purposes.

Two-thirds of the respondents (65.1%, n=97) stated that they would like to be further educated about the protection of their digital privacy.

## **Discussion**

The results of this study show that a third of respondents were not informed at the school about digital privacy, two-thirds of the respondents were not informed at the university and less than 30% were informed in the family. The majority of the respondents (68.5%) obtained information about digital privacy searching on their own. Although this data shows a certain level of awareness and self-initiative among the respondents, having in mind the complexity of the modern information environment, media, tools etc., it is not likely that sporadically and situative familiarization with online privacy issues will result in comprehensive and efficient understanding and application of digital privacy management.

Results regarding the feelings of hesitation while leaving certain personal data online, indicate that it is either the data that could enable an unwanted threat to privacy in the physical realm (home address, phone number, location) or it is data that reveals details about personality, habits and experiences that could jeopardize one's image. Also, feelings of hesitation while leaving certain personal data online possibly point to feelings of lack of control in protecting their data.

Respondents expressed that they found a very serious violation of their privacy if their activities, photos or videos are published without their permission, which can be connected to the previous research on generational differences in digital privacy, which show that the members of Generation Z attach more importance to data creating a certain "self-image", while the collection of data for various marketing purposes does not worry them to such an extent.

Two-thirds of the respondents stated that they would like to be further educated about the protection of their digital privacy possibly indicating their awareness of the lacking protective strategies and the importance of digital privacy protection.

## **Conclusion**

Having in mind that this study was conducted on a sample of students of social sciences and humanities, the results cannot be generalized. However, the results provide more than a convincing argument that the digital privacy behavior of Generation Z is a topic that needs further consideration.

The research results show that members of generation Z are not familiar with certain advanced data protection strategies and having in mind that they use a variety of online tools and applications on an everyday basis, the established deficiencies in their online privacy knowledge and the application of data protective strategies, can result in privacy violations. Evidently,

respondents themselves are aware of this since as many as two-thirds of them would like to be further educated on this topic.

Another interesting finding relates to the perception of the sensitivity of different types of personal data possibly pointing to feelings of lack of control in protecting their data. However, this finding needs further investigation to understand more clearly the reasons for the perception of the sensitivity of different personal data.

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