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Information behavior of Czech and Slovak students during the COVID-19 pandemic: A case of information hygiene

Michaela Dombrovská¹

ABSTRACT: The Institute of Czech Language and Library Science at the Faculty of Philosophy and Science at the Silesian University in Opava (Czechia), in cooperation with the Department of Library and Information Science at the Faculty of Philosophy at Comenius University in Bratislava (Slovakia), conducted comparative research into the information behavior of university students during a pandemic and lockdowns. This article is a summary of the results of the first and second phases of the research and introduces the third phase, in which the aim is to contextualize the results of the previous research with similar studies based on the desk research method and secondary data analysis. It appears that the results promise the possibility of finding connections between research of different scope and focus (on a similar topic) and opening the way for further research topics. A practical outcome is the introduction of a new course, Information Hygiene, into the curriculum of library science at Silesian University in Opava.

KEY WORDS: information behavior, information literacy, information hygiene, COVID-19, pandemic

INTRODUCTION

The Institute of Czech Language and Library Science at the Faculty of Philosophy and Science at the Silesian University in Opava (Czechia), in

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cooperation with the Department of Library and Information Science at the Faculty of Philosophy at Comenius University in Bratislava (Slovakia), conducted comparative research into the information behavior of university students during a pandemic and lockdowns. The Czech data collection was made possible within the framework of an internal student grant competition at Silesian University (SGS/2/2021 and SGS/2/2022), in the first phase through online questionnaires with open-ended questions with an emphasis on self-reflection of the respondents and in the second phase through in-depth semi-structured interviews with selected participants of the first phase. The results of both phases were compared (Dombrovská, Rankov, 2021) with the published results of Slovak research (Rankov 2021] in close cooperation. A comparison of the results of the first and second phase [Dombrovská, Valjentová, 2022), with a particular focus on the area of hoaxes and misinformation, shows that the experiences of students from different countries are very similar despite the adjusted method, time gap and different level of coverage of the respondents. It can therefore be assumed that the global experience of the pandemic affected young people from similar backgrounds in very similar ways and the results of this comparative study may inspire others.

In the third phase of the research in 2023, facilitated by the student grant competition at Silesian University in Opava (SGS/4/2023), the data collected underwent comparison with other research efforts, focusing on similar topics. The comparison primarily focused on aligning the findings with those outlined in the National Report on Digital Addictions in the Czech Republic 2022 (The Report, 2022) and 2023 (The Report, 2023), marking the first official report of its kind in the Czech Republic. This comprehensive report delves into people's behaviors within the digital realm and on social networks. Through this comparison, we aimed to gauge whether the observations made by students in the second phase were roughly consistent with the conclusions drawn in the report within the corresponding focus group. The following students (now graduates) of the Silesian University in Opava gradually collaborated on and contributed to the research: Lucie Valjentová, Dominika Schrammová, Alžběta Martinková, Viktorie Vltavská and Tereza Lysoňková.

RESEARCH METHODOLOGY

In the first phase of the Czech research on students' information behavior, we used a questionnaire with open-ended questions, to which respondents could express themselves in their own words in the form of more comprehensive statements. The research probe was carried out through an e-mail invitation and Google Forms questionnaire application in the months of June to July 2021 (the end of the academic year during the period of anti-epidemic measures). 26 out of 69 contacted students participated, which means 38 % (the minimum requirement was 20 students). Of the participants, 4 were male and 22 were female, 21 students of bachelor's and 5 students of master's degree studies at the Faculty of Arts and Science of the Silesian University in Opava. The questionnaire form contained 6 questions in the format of broad topics, which were focused so that the answers could be compared with two research surveys of Slovak students focused on analogous topics.

In the second phase, we proceeded in the form of semi-structured interviews with selected respondents of the first phase of the research, which took place between June and August 2022 (which corresponds to the end of the academic year). Seven interviews were conducted (the minimum requirement was five interviews), involving five women and two men of the Master's (continuing) studies at the Faculty of Philosophy and Science of the Silesian University in Opava. Three of the students took part only in the second phase, due to the turnover of students during the transition between Bachelor and Master studies. We then compared the results of both phases with the published results of Slovak research, with whose author we also worked closely throughout both phases of the research.

While in the second phase we focused on the topic of misinformation and hoaxes, in the third phase we went back to the information behavior itself and searched the previous data for information on how students (based on their self-observations) behaved in digital world, in particular whether they observed an increase in time spent online or expressed concerns about possible emerging digital addiction.

RESEARCH RESULTS

The first phase of the research showed that the short-term change in students' information behavior was a rapid increase in interest in current health and political and social information, coupled with a shift towards traditional mass media (television, online newspapers) during the first wave of the pandemic. However, this interest gradually faded until it returned to pre-pandemic levels. Parallel to the declining interest in up-to-date information, students' disgust with social networks grew, which gradually became an uncontrollable arena for the spread of hoaxes and misinformation. Although the amount of time spent on social media initially grew, a significant number of students realized that they had to limit this time. Students have also realized, through the example of distance online education, that technologically unmediated interpersonal contact has its psycho-hygienic importance as well as its practical benefits. The generally felt problem of concentrating on lectures or seminars in the home environment may also provide this generation with an experience useful in the future when thinking critically about telecommuting and working from home.

In the second phase, when we limited the comparison of the results to the issue of hoaxes and misinformation in view of the extensive collected responses to the semi-structured interviews, it turned out that the students involved are generally cautious about hoaxes and misinformation, which is to some extent also due to their field of study, which focuses on verifying information. They agree that the level of misinformation has increased significantly during the pandemic and, from their own experiences, say that it is often spread by people who crave attention that they cannot get otherwise, and also mention that lack of education may be the cause. As the second phase of the research took place during the ongoing war in Ukraine, respondents also commented on the fact that the people spreading misinformation during the pandemic are often the same people who continue to spread it during the war. Some respondents also mentioned that they prefer not to talk about certain issues with people in their environment and, unfortunately, they are also less involved in the possible refutation of hoaxes and misinformation. They also have

in common that they consider social networks to be the main source of hoaxes and misinformation and therefore try to spend less time on them. These findings are similar to those of the interviews with Slovak students. Students from both countries also agreed that hoaxes and misinformation divide society, make it more difficult to navigate current events and generally increase information disorder.

In the third phase, we revisited the collected data and turned our attention to other research with a similar focus in order to find similarities. In particular, comparisons were made with The Report on Digital Addictions in the Czech Republic 2022 and The Report on Digital Addictions in the Czech Republic 2023.

DIGITAL ADDICTIONS

The Report on Digital Addictions in the Czech Republic 2022 (The Report, 2022) was issued by the Government Council for Coordination of Policy on Addictions at the Governmental Office of the Czech Republic. As it is the first report of its kind in this country, it is already significant in that it introduces the concepts needed to understand the implications of the enormous increase in the availability and use of new technologies in the population, which has recently been exacerbated by the covid pandemic. Officially, digital addiction has not yet been clearly defined (within the classifications of mental disorders) and is usually considered to be primarily the excessive use of time spent searching the Internet, watching social networking sites, playing digital games, watching streaming movies and TV series, or shopping online. The report establishes, on the basis of conclusive and verifiable data, that the problem of excessive use of the internet, social networking and digital technologies affects a large part of the population in general and is the cause of a number of health disorders and negative impacts on the individual and his/her environment. A second report followed a year later confirmed the results of the first report (The Report, 2023).

The report explicitly identifies the overuse of digital technologies as a serious public health problem, although the negative impacts have

not yet been systematically monitored. It can cause, among other things, disruptions in daily rhythms, neglect of personal hygiene, eating and sleeping, various manifestations of fatigue and impaired orientation in time, and in the long term it can lead to a decline in concentration, problems in maintaining attention and concentration, social difficulties caused by impaired personal relationships, and civilisation diseases caused by increased weight, among others. There is a link with anxiety and depression, but also with aggression or suicidal thoughts. However, as this type of addiction is not officially diagnosed, there is no consistent treatment yet.

The report focuses particularly on the use of digital technologies among children and young people and in the adult population. For example, risky use of social networking sites, which the report defines as more than 4 hours a day, affects up to 30% of primary school pupils and up to 50% of secondary school pupils, with figures clearly higher for girls. Risky digital gaming, again more than 4 hours a day, affects up to 25% of primary school pupils and 15% of secondary school pupils, with higher figures for boys. All of these values increase even further at weekends compared to weekdays. Among adults, the use of the internet and mobile phones (and in particular internet-enabled phones) is now quite common, with the most common activities being searching for information (71%), social networking (60%) and shopping (52%). Outside work and study, people spend up to two and a half hours a day online, and half an hour more at the weekend. According to the report, about 6% of people are outright addicts, which includes compulsive behavior, but this rises to an alarming 22% in the 15 to 24 age group. However, those who are not yet at risk are at risk of developing a gradual addiction, not least because we are generally not yet aware of this danger.

In both phases of our research, students observed and described an increase in the amount of time spent online and concerns about possible social media addiction. Although we do not have data to disentangle how much time and how they spent time online, the results are mutually corroborative. For example, the increased time spent on social media is in line with the findings of the report, which also found that values are

increasing. Further research will be conducted in the future to compare the values from that report and the information behavior of students, but it will no longer be linked to the pandemic period as too much time has passed and such research would no longer be relevant. In the research conducted so far, especially in its second phase, there has also been an expressed need for some form of help in learning to cope with the potential risks of the online world. One answer (among others) is the emergence of a new course in the library studies curriculum that returns to the concept of information hygiene and brings it back to the center of attention, this time in relation to digital detox, information minimalism or digital wellbeing, and information/media/digital literacy in general.

INFORMATION HYGIENE

Information hygiene refers to the practices and behaviors that individuals use to maintain a healthy lifestyle in relation to information and for a safe digital environment. Given the vast amount of information available, it is important that the information we use and share is accurate, reliable and secure. The concept of information hygiene is not new. It is thought to have emerged in the late 1990s when Linda Stone described “continuous partial attention” as a state where the human mind is constantly searching for information in an effort not to miss anything (Stone, 2009). In small doses it can lead to greater productivity, but in larger amounts it over-stimulates and exhausts. There are older sources (Janoš, 1978), however, and librarians have addressed this topic in various forms since at least the 1980s, when information literacy, with which information hygiene is closely related, began to receive attention, as well as the terms digital divide or information overflow (Bawden, Robinson, 2017). Around the year 2000, the term media refusal was introduced by Laura Portwood, which she defines as “voluntary nonuse of a media technology or nonconsumption of media content” (Portwood-Stacer, 2013) as well the term liquid society or liquid modernity by Zigmund Bauman (Bauman, 2002). Greater interest in the topic was foreshadowed by the 2010 book *The Information Diet* (Johnson, 2011), after which terms such as digital detox, information minimalism or digital well-being began to appear more

widely. With the recent growth of artificial intelligence, our dependence on the online world is likely to increase.

Moreover, in recent years, especially in the context of the pandemic and later the war conflict in Ukraine, there has been a growing problem of disinformation, hoaxes and conspiracies in society. The World Health Organization (WHO) in its February 2020 Novel Coronavirus Situation Report states that the COVID-19 epidemic and the response to it “has been accompanied by massive ‘infodemia’, i.e. an excess of sometimes accurate but sometimes misleading information that makes it difficult for people to find trusted sources and reliable guidance when they need it” (Novel Coronavirus, 2020). One of the key aspects of information hygiene is the ability to spot false or incorrect information. That is, being able to verify information and having built a solid foundation of critical thinking. Another important aspect of information hygiene is the protection of personal information and data. This includes, for example, being mindful of what information is shared online, using secure passwords and two-factor authentication, and avoiding suspicious links or information found on the internet. Information hygiene is also linked to the idea of “info-environmentalism”; that is, if our information environment is polluted, we should not abandon it, but instead help clean it up (Caulfield 2017).

Information hygiene is closely related to information literacy and is also a key element of critical thinking and active citizenship. While information literacy means knowing how to handle information, information hygiene also means understanding when and how to take care of oneself in the digital environment, including the necessary rest from it. It also means building healthy information habits as well as healthy life habits (sleep, diet, breathing, movement, etc.) that strengthen overall mental resilience. It is in information hygiene that the difference between knowing and actually doing is of particular importance. Because, for example, we all know that sugar is harmful, yet we still eat it. The overload of the digital world can have similarly damaging effects. Information hygiene also means being a responsible digital citizen and taking steps to protect ourselves and others in the online world. By being aware of the

risks and taking proactive action, we can create a safer and more secure digital environment for all.

CONCLUSION

The research has shown the possibilities of comparing the experiences of students from different countries, which are very similar despite the adjusted method, the time gap and the different level of coverage of the respondents. It can therefore be assumed that the global experience of the pandemic affected young people from similar backgrounds in very similar ways. However, library science students show a great deal of critical thinking and awareness of the dangers of hoaxes and misinformation. In addition, some of them are also thinking about how they (as so-called micro-influencers within their immediate environment) can influence their families and friends and support the prevention of their spread. Despite the fact that the pandemic has affected and changed students and their information behavior, these changes are not of such a nature as to put them at increased risk of being subjected to misinformation and hoaxes.

Digital addiction is becoming an increasingly widespread phenomenon in today's digital era. It is a condition where an individual exhibits an uncontrolled need to spend excessive time connected to digital devices such as smartphones, computers or social media. This addiction can have a negative impact on an individual's physical and mental health, including sleep problems, social isolation, reduced productivity and emotional instability. Digital addiction can be caused by a variety of factors, such as the easy availability of technology, the appeal of online content and interaction, and an escape from reality and personal problems. It is important to be aware of your digital behavior and maintain a healthy balance between the online and offline worlds. Preventing digital addiction involves setting healthy boundaries for digital device use, scheduling time without digital technology, seeking alternative activities, and strengthening social relationships outside of the digital space. Digital literacy education and the development of good digital life management skills are key to preventing and addressing digital addiction. It is important to recognise

that digital technology is a powerful tool that can improve our lives if we use it wisely and with awareness. Spending time offline, taking care of physical and mental health and maintaining a balanced approach to the digital world are key to preventing and managing digital addictions.

One solution (among others) may be to include a course focused on building good information habits in the curriculum of universities. Such a course should be very practical and contribute to the mental or/and overall well-being of students, also because we are facing a noticeable increase in mental health problems in schools in the Czech Republic (ČTK, 2023). In contrast to information literacy, which teaches (in simple terms) how to use information correctly, information hygiene also teaches when to disconnect from information and the online world and how to take care of oneself properly so that good information habits support mental and physical resilience in a digital environment (Dombrovská, 2024). In an increasingly connected world, this is proving to be really important.

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