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Information Behavior of Czech and Slovak Students during the COVID-19 Pandemic with a Focus on Hoaxes and Misinformation

Introduction

The Institute of Czech Language and Library Science of the Faculty of Philosophy and Science of the Silesian University in Opava, in cooperation with the Department of Library and Information Science of the Faculty of Arts of Comenius University in Bratislava, conducted comparative research on behavior and information literacy of university students in times of the COVID-19 pandemic and related lockdowns. The collection of Czech data was made possible within the framework of an internal student grant competition at Silesian University (SGS/2/2021 and SGS/2/2022) using support for specific undergraduate research. The first phase was done in cooperation with Lucie Valjentová (a former student and now a graduate of the master's degree in Library Science), and the second phase also with Dominika Schrammová (currently a master's degree student of the same field). The Czech study followed similar research carried out among university students in Slovakia under the leadership of Pavel Rankov and took place in October 2020 and then in spring 2022 (Rankov 2021b; and the results of ongoing research made available through the cooperation). Rankov's research was supported by the Agency for Research and Development under contract APVV-19-0074 and was also part of the project VEGA 1/0360/21 – Social Representations of Ethical Challenges of the Digital Information Revolution. It focused on information behavior and general living conditions during the lockdown period, and it was conducted using a qualitative method of a retrospective essay, and in-depth interviews in the second phase.

Studies focusing on the impact of the pandemic on students and higher education started to appear during 2020; however, no similar research directly focused on

students' information behavior has been carried out in the Czech Republic. Although the area of research overlaps with the COVID-19 International Student Well-being Study that was conducted by the University of Antwerp in 2020 and involved students from seven public Czech universities. In collaboration with twenty-seven countries, this study was an international research initiative that focused on university students and how they were affected by the coronavirus pandemic in terms of studies, mental well-being, and other related topics, (Academy of Sciences 2020a); and more recently, similar research has also emerged that still requires exploring the possibility of comparing.

The effects of the pandemic on students' mental health have been felt worldwide (Superio et al. 2021). Concerning the factors involved in information overload and the resulting information anxiety, studies have confirmed social networks as a significant factor (Soroya et al. 2021). However, social networks are perceived with reservation as a source of information because the majority of respondents were still considering rather official sources of information (Skarpa & Garoufallou 2021). Libraries, however, have retained their status as relevant and independent sources of information during the pandemic era (Guo & Huang 2021).

Research Methodology

In the first phase of the Czech research on students' information behavior, we used a questionnaire with open-ended questions which invited respondents to express themselves comprehensively in their own words. The research probe was carried out through email invitations and Google Forms questionnaires from June 2021 to July 2021 – the end of the academic year during the period of anti-epidemic measures. Out of sixty-nine students contacted, twenty-six participated, which was thirty-eight percent (the minimum requirement was twenty students). Of the participants, four were male and twenty-two were female, twenty-one students were studying at the bachelor's level, and five students were in master's degree studies at the Faculty of Arts and Science of the Silesian University in Opava. The questionnaire contained six questions, and the answers were compared with two research surveys of Slovak students that focused on analogous topics.

In the second phase, we proceeded in the form of semi-structured interviews with selected respondents from the first phase of the research. These interviews took place between June 2022 and August 2022 (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 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 transitioning between undergraduate and graduate level studies. We then compared the results of both phases with the published results of the Slovak research (Rankov 2021b), and we also worked closely with its author throughout both phases of the research. The latter highlights and the claims of other authors on the pandemic wave was also accompanied by a wave of the

so-called infodemic (e.g., Dubey et al. 2020); therefore, in the second phase, we also compared mainly the responses related to the issue of hoaxes and misinformation (other results are still to be compared).

Research Results

The first phase of the research showed that the short-term change in students' information behavior rapidly increased as an interest in current health, as well as in political and social information. This was coupled with an increased shift towards media during the first wave of the pandemic. 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 because these networks 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 unmediated interpersonal contact through technology has its psycho-hygienic importance as well as its practical benefits. The widespread problem of concentrating on lectures or seminars in the home environment may also provide this generation with future professional experiences that will be useful when thinking critically about telecommuting and working from home (Dombrovská, Rankov 2021).

In the second phase, we limited the comparison of the results to the issue of hoaxes, misinformation, as the research was conducted by quite extended semi-structured interviews. This comparison showed that the students involved were generally cautious about hoaxes and misinformation – which is to some extent also due to their field of study, which focuses (among other things) on verifying information. They agreed that the level of misinformation increased significantly during the pandemic, and they said that it was often spread by people who exhibited attention-seeking behaviors, and they suspected it might have been those with lesser education. 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 were often the same people who continued to spread it during the war. Some respondents also mentioned that they prefer not to talk about certain issues with people in their immediate environment (with close family members or friends). Unfortunately, they were also not so much willing to get involved in the possible refutation of hoaxes and misinformation. They also all have in common that they consider social networks to be the main source of hoaxes and misinformation; and therefore, they try to spend less time on them. These findings are similar to those of the interviews with Slovak students (Rankov 2021b; and the results of ongoing research made available through the cooperation). Students from both countries agreed that hoaxes and misinformation divide society, make it more difficult to navigate current events, and generally increase information anxiety.

Additionally, in the second phase of the survey, students also answered questions in more detail about their interest in timely information, news, and how their interests evolved over time. New technologies and applications they started using that had changed from the previous period were tracked too. There were also questions focused on coping with online or distance learning, the loss of face-to-face contact with classmates and teachers, and possible changes in attitudes about social networking and communication in general.

A high level of interest in all the news was evident at first but gradually waned. The use of new technologies or applications was to some extent due to the necessity to work with them for school or to contact friends and other people. As this second phase of the research involved students who spent the first two years of their studies in the normal (pre-pandemic) mode, there was also a certain tendency to compare previous studies and studies during the pandemic. All of them described a sense of alienation with classmates despite their efforts to maintain contact. Because these are library science students who have a higher level of awareness of the functioning of social networks, they were aware during the pandemic of the discomfort related to the high level of time spent online – some even naming their behavior as a tendency towards social network addiction which caused them great concern (and which they were trying to correct). Most participants also mentioned that while they appreciated the benefits of online learning, they preferred to participate in person. Online learning is attention-demanding and may tempt them to engage in other activities during the online learning, including browsing social media. Generally, the participants viewed their social media browsing as a waste of time. On the other hand, the benefits of online learning are also undeniable. All participants welcomed the possibility of hybrid learning, which would be flexibly arranged between teachers and students. Unfortunately, however, such a solution is not usually favored by educational institutions where the research was conducted.

Meanwhile, a detailed analysis of the responses in areas not related to misinformation and hoaxes is still pending. Returning to the original topic of this paper, it is very pleasing that library science students are aware of the problem of misinformation and hoaxes and their possible consequences. Sometimes these students try to influence their immediate environment in attempt to mitigate the negative effects while also attempting to verify the information. Although they are not yet fully aware of the opportunities presented by their future profession, where they can act as curators of information in libraries and other information organizations to identify trustworthy information sources, they are already aware of some kind of professional credit. They are intrigued, for example, by the possibility of acting essentially as micro-influencers (because it is terminology they understand). In this capacity, they are not only aware of the rise of misinformation and hoaxes, but they can actively counteract them in their immediate environment. Students are not only genuinely aware of the rise in misinformation and hoaxes, they are concerned about it and would like to be involved in addressing it (although they're not always sure what their options are). In the next phase of the research, it is possible to open the topic of existing projects against the spread of misinformation and hoaxes that are available in Czechia or Slovakia, their

quality, students' experiences with them, and suggestions for their improvement and implementation.

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 them spreading. Despite the fact that the pandemic has affected and changed students and their information behavior, these changes are not of the type that put them at an increased risk of being subjected to misinformation and hoaxes.

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Abstract

The Institute of Czech Language and Library Science of the Faculty of Philosophy and Science of the Silesian University in Opava (Czechia), in cooperation with the Department of Library and Information Science of the Faculty of Philosophy of Comenius University in Bratislava (Slovakia), conducted comparative research on information behavior of university students during the COVID-19 pandemic and related 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, data was gathered through online questionnaires with open-ended questions emphasizing self-reflective thinking of the respondents. In the second phase, the data was collected through in-depth, semi-structured interviews with selected participants from the first phase. The data collection in Slovakia was supported by the Agency for Research and Development Support under contract APVV-19-0074 and was also part of the project VEGA 1/0360/21 – Social Representations of Ethical Challenges of the Digital Information Revolution. With a particular focus on the area of hoaxes and misinformation, a comparison of the results showed that the experiences of students from different countries are very similar despite the adjusted method, time gap, and different sample size of the respondents.

Keywords: information behavior, information literacy, COVID-19, pandemic, hoaxes, misinformation.