The Nature of the Misinformation before and during Covid 19 (case study of Slovakia)

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Abstract:

This article presents an outline of theoretical background followed by a presentation of our own research which aims to identify the most common misinformation in the period before the pandemic and in the period of the so-called first and second wave of Covid 19 in Slovakia. The research method was a qualitative content analysis of the most read conspiracy web portals in the period before the pandemic, and separately also during the pandemic. The result of the research is the identification of key topics that determined the character of the most watched conspiracy media in Slovakia in the two monitored periods. The article points to a negative phenomenon which, in our opinion, is "lost" in heated discussions about fears of the presence of misinformation in public space. It is a fact that during Covid 19, the time spent in the Internet environment increased radically, especially in the group of today's young peo-

ple. The study expresses concern that extending the time of young people on the Internet has exacerbated new forms of pitfalls that can make a significant contribution to making the younger group an even more vulnerable group as a result of the increase in online misinformation.

Introduction

Although misinformation is almost as old as humanity itself, the huge potential of fake news on the Internet, where millions of web users can create and, above all, share messages of a diverse nature, is only appreciated and seen in recent years. This is related to the increase in false information (Bakir, McStay, 2018; Bradshaw, Howard, 2018; Levy, 2017; Fitzpatrick, 2018), which became more and more shared and credible (Vosoughi *et al*., 2018) and thus contributed to the manipulative nature of the Internet, new media and especially social networks (Infosecurity.sk, 2020; Mitro, 2020; Biznar, 2021; Baum *et al., * 2020).

For almost two years now, communication and content evaluation in relation to health information has become a major challenge worldwide. The highlight of this challenge is health misinformation, defined in general, as any health-related claim of fact that is false due to a lack of scientific evidence (Wang, *et al., * 2019; Scherer, *et al., * 2021). Moreover, in parallel with the Covid 19 pandemic, an information pandemic is infiltrating social media. Thus, while true information helps to mitigate the pandemic-led crisis, false information may intensify it. Cambridge Dictionary introduces the term "infodemic" (i.e., information pandemic) as a situation, in which a lot of false information is being spread in a way that is harmful (Cambridge Dictionary, 2020). According to World Health Organization, infodemic represents a combination of terms "information" and "epidemic", and refers to a wild and widespread dissemination of both accurate and inaccurate information about an epidemic Covid 19 (World Health Organization, 2020a). Thus, infodemic means the very hard effort to find trustworthy sources as well as reliable a responsible guidance during corona crisis. In World Health Organization's situation report is stated that term "infodemic" was coined to make categorization of some common features of rumors, stigma, fake news and conspiracy theories during public health emergencies which is related to the in-

creasing number of conspiracy websites, conspiracy contents and its impact on public health worldwide (World Health Organization, 2020b).

The phenomenon of an ever-increasing number of misinformation (and especially misinformation about health) in the public online as well as offline space can be perceived as particularly dangerous in vulnerable groups, especially seniors, children and adolescents (European Commision, 2021; Unicef, 2020; Martellozzo, 2021; Ngamije, 2021; Crabbe, Flood, 2021; Stoilova, 2021; Ngamije, 2021). The latter is the subject of our interest in this study.

Although the hallmark developmental changes of adolescence can begin before age 10 and persist after age 19 (in some literature to age 25) (Graham, Kahn, 2020), adolescent is defined in this article as a young person ages 15-19 years old, i.e., a person whose current status is high school student.Adolescents are the subject of our interest in our own research because youth's time on the Internet has increased most during Covid 19 (Warc, 2020). The aim of our own research is to identify the most common misinformation in the period before the pandemic and during the pandemic in connection with SARS-CoV-2 in Slovakia. The research of misinformation in two separate time intervals is more closely focused on the most common fake news and hoaxes in the area of the most read conspiracy media and represents a pilot study, including its own methodology, created on an ad hoc basis.

Covid 19 and related research about the nature of the misinformation

Since misinformation is a powerful entity in society and co-creators of social culture at the time of the Covid 19 pandemic, in addition to the visible misinformation-conspiracy war in which they participate in the media space (i.e., so called infodemic), they also have a demonstrable impact on ordinary people. The influence of misinformation on a person, his character or health is not doubted by experts. According to the BBC, misinformation greatly affects human health because

it "undermines public health reports." The nature of the misinformation in relation to Covid 19 also affects the mental health of the individual and society as a whole (BBC, 2020; Al-Zaman, 2021; Coleman, 2020; CBC News, 2021). The nature of the misinformation in relation to Covid 19 also affects the mental health of the individual and the whole society (Fraser *et al.,* 1999; Rajkumar, 2020; Xiao, Torok, 2020). Chou *et al.* (2018) takes the view that misinformation about health on social networks can encourage people to use drugs and other toxic substances. Zandifar, Badrfam (2020) as well as Xiang *et al.* (2019) talk about an increase in stress and mental illness, especially depression. Jusko (2021) considering about the increasing of loneliness and Rajkumar (2020) as well as Xiao, Torok (2020) suggest a clear link between misinformation and anxiety. Budayova, Cintulova (2021), Rasskazova *et al.* (2020) or Tkacova *et al.* (2021) are researching the impact of current pandemic on the mental health and well-being, and Radi *et al.* (2021) think even further, talking about the late psychosocial consequences of pandemics.

Other experts point out that the fear caused by misinformation also affects consumer behavior (e. g., the purchase of personal protective equipment is increasing (Addo, *et al.,* 2020; BBC, 2020); the purchase and use of over-the-counter medicines (Chan *et al.,* 2021; Cuan-Baltazar *et al.,* 2020), etc.). Experts therefore agree that misinformation in the media space can have a life-threatening effect. Let us add, finally, that false news and hoaxes also have an impact on the increase of racism, antisemitism, stigmatization of persons or groups, including of other forms of risky behavior (Ippolito *et al.,* 2020; Smith *et al.,* 2020), and thus also affect the character of the whole society. For the reasons just mentioned, the mass spread of conspiracy media raises relevant questions about their socializing and dissocializing impact on recipients.

The nature of the misinformation in the context of Slovakia

Over the past 5 years, the list of conspiracy websites in Slovakia has grown from an original 90 to an alarming 210, i.e., increased by 120 conspiracy sites which can be consider as negative or even an alarming phenomenon (Dennik N, 2017). Increased number of conspiracy sites and

theirs contents might be also one of the main reasons why Covid 19, as it appears today in false reports and hoaxes, polarizes the Slovak public in relation to its government or in relation to science and scientific institutions and, as follows from the opinion of the Slovak Police, it represents a "dangerous tool that has the potential to negatively and fatally affect the lives of the population" (Ministry of the Interior of the Slovak Republic, 2020).

Another alarming finding is, that up to 56% of Slovaks believe in conspiracy theories, which is the most among the countries of Central and Eastern Europe, which, together with Slovakia, were part of recent representative research (Globsec, 2020). The conclusions of further research follow up on these findings and point out that Slovaks' credibility in relation with misinformation is closely related to shortcomings in education; Experts talk in particular about the lack of incentives that would encourage pupils and students to increase their critical thinking in education (O médiách.com, 2020). On the contrary, the fact that almost 70% of Slovaks, in addition to misinformation media, regularly watch serious news newspapers and web portals can be considered good news (Transparency International Slovakia, 2020). Thus, we can see that the inclination of the audience to conspiratorial information, on the other hand, is balanced by the efforts of the recipients to stick to a certain established recognized mainstream in society.

Finally, in the context of theoretical background and recent research findings, the paper continues with the presentation of the research part. Based on the back-gathering of fake news and hoaxes before the Covid 19 period and separately during the corona crisis, the aim of our own research is to identify the most common conspiracy topics (i.e., misinformation) and to provide several other observations and examples in connection with the findings.

Methods

Objective of research

Many similar features can be seen on fake news and hoaxes, such as their engaging processing; attractive headline; both represent a shocking message; contain an emotional request for help; have a strong graphic representation; etc. Despite

our relatively small differences, we will distinguish in the paper between fake news and hoaxes on the basis of their basic characteristics, i.e., fake news is intentionally misleading information intended to obtain an advantage for the originator (such as damage to the name of a person or financial gain from advertising), while hoaxes are intentionally false information (often very emotional to alarming) that inherently encourages further dissemination (such as vaccination hazard reports) (Radio Regina, 2021).

With the intention of talking about intentionally false information in relation to Covid 19 in the online environment (focusing on fake news and hoaxes), we present the research in two separate time intervals.

The aim of the research is:
1. Analysis of media content of conspiracy websites before so-called coronary crisis;
2. Analysis of media content of conspiracy websites during Covid 19.

The nature of research

The time frame of the first part of the research is the interval from June 1, 2019 to December 31, 2019, when the Chinese office of the World Health Organization was officially informed about the outbreak of the disease (Islam *et al*., 2020).The time frame of the second part of the research represents an equally long period, which was limited to 1 January 2021 - 30 July 2021. With the intention of meeting two research objectives, qualitative content analysis of texts published on selected conspiracy web portals is proving to be a suitable research method. The research file, examined through content analysis, represents a total of 80 texts. Design of the research represents a pilot study, including its own methodology created ad hoc. The research design is shown in Table 1.

Research sample

We will examine the nature of fake news and hoaxes separately in two research files: 1) On the most read conspiracy web portals before the corona crisis and 2) on the most read conspiracy web portals during the first and second waves of the corona crisis (Transparency International Slovakia, 2020). The list of investigated conspiracy sites is shown in Table 2.

Table 2 Description of the research file subjected to content analysis

Phase of the research	Name of the conspiracy medium	Number of examined texts
1st Phase	Slobodnyvysielac.sk	10
	Domacaliecba.sk	10
	Radynadzlato.sk	10
	Zem a Vek	10
2nd Phase	Hlavné správy	10
	Zem a Vek	10
	Slobodný vysielač	10
	Infovojna	10

The study consists of two research questions:

Q1: What are the most common topics of fake news and hoaxes on conspiracy sites before the pandemic?

Q2: What are the most common topics of fake news and hoaxes on conspiracy websites during a pandemic?

Data collection

We consider content analysis of 80 randomly selected texts from 8 researched conspiracy web pages as appropriate research technique to make inferences by interpreting and coding textual material. Although the coding is identifying several

Table 1 Design of the qualitative research

Research phase	Aim of the research	Time interval of the research
1st Phase	Content analysis of the most read conspiracy	(June 1, 2019 – December 31, 2019) web portals before the corona crisis
2nd Phase	Content analysis of the most read conspiracy	(January 1, 2021 – July 30, 2021) web portals during the corona crisis

important characteristics (e.g. the frequency, space, direction or intensity), we have chosen only research of the main message of content of researched texts (Clootrack, 2021) that maps the main intention in which the content appears (e. g., denying science, alleviating the situation, negativism, emphasizing emotions, etc.)

Data analysis

Within Q1, the coding took place in a total of eight categories. We noticed, what authors of conspiracy content say about world Jewry, about the Roma, about America, about supranational institutions such as the UN, NATO or the EU, how they assess the issue of migration, the consequences of the convention called the "Global Pact on Refugees", etc. Identification of the most discussed categories (i.e., fake news and hoaxes) among research texts before corona crisis are presented in the "results" section.

Similarly, within Q2, the coding took place in a total of 8 categories. We noticed what the authors of the conspiracy contents discussed during the pandemic. The identification of topics represents the following: presence of opinions and attitudes against vaccination; topics focusing on pro-Russian propaganda; negativism in relation to international institutions; emphasizing negative emotions in relation with current situation; promoting unapproved medicinal products; etc. The most discussed categories (i.e., topics of fake news and hoaxes) within the examined articles are presented in the "results" section.

Results

Based on the retrospective collection of reports before the Covid 19 period and separately during the corona crisis, it was possible to identify the most common topics processed by conspirators in the form of fake news or hoaxes.

Q1: The most common topics of fake news and hoaxes on conspiracy websites before the pandemic

Our own research of 80 randomly selected misinformation texts before the period of the corona crisis, which we examined using content analysis on four of the most widely read conspiracy websites at the time, yielded several interesting findings. The eight most common topics processed by conspirators in the form of fake news or hoaxes in the selected period before the pandemic are presented in Graph 1.
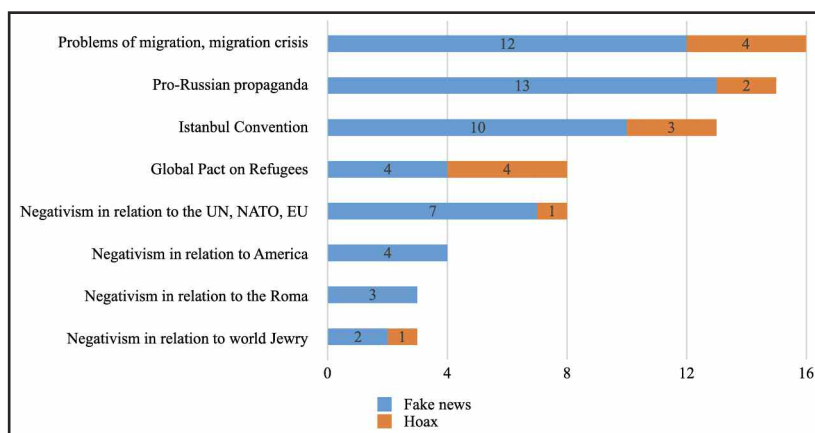
As we can see in Graph 1, researched conspiracy media deal mainly with three topics:

(1) Migration - so-called the migration crisis is an international, primarily humanitarian and political crisis that has been taking place in Europe since 2014;
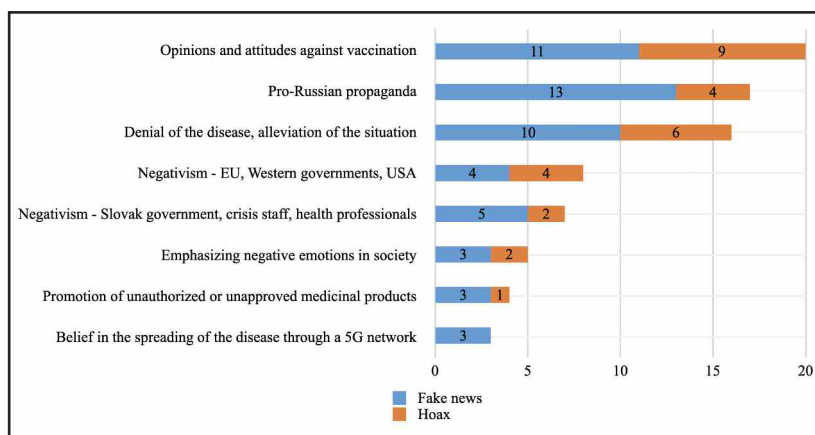
(2) Istanbul Convention - the basic goal of the so-called The Istanbul Convention makes a clear link between achieving gender equality and eliminating violence against women. Its brief goal is to create a Europe without violence against women and without domestic violence. The public discussion has been running since the second half of 2017;

(3) The Global Pact on Refugees - Slovakia, like Austria, Hungary, the Czech Republic or the USA, has rejected the so-called The UN Migration Pact and the so-called The Global Pact on Secure, Managed and Legal Migration, signed in December 2018 by representatives of more than 150 countries at a conference on migration in

Graph 1 The most common topics of fake news and hoaxes before the pandemic (selected time period)

Topic	Fake news	Hoax
Problems of migration, migration crisis	12	4
Pro-Russian propaganda	13	2
Istanbul Convention	10	3
Global Pact on Refugees	4	4
Negativism in relation to the UN, NATO, EU	7	1
Negativism in relation to America	4	
Negativism in relation to the Roma	3	
Negativism in relation to world Jewry	2	1

Graph 2 The most common topics of fake news during a pandemic (selected time period)

Morocco. In both cases, it is a global agreement within the UN for international cooperation on migration (European Parlament, 2018).

In the period before the Covid 19 pandemic, other topics of conspiracy websites are negatively portrayed contributions about the UN, NATO, the EU, America, world Jewry or the Slovak Roma. Articles with the character of fake news or hoaxes in the period under review are also significantly related to pro-Russian propaganda. We recorded information about: the achievements of Russian science and technology (Russian armaments, Russian military equipment, discoveries of space); the spread of Pro-Putin propaganda (glorification of the President of the Russian Federation) or the designation of Ukraine as the aggressor who provoked and launched a military operation against the (pro-Russian) Luhansk and Donetsk Republics.

Q2: The most common topics in fake news and hoaxes on conspiracy websites during a pandemic

In the case of research into the nature of Fake news and hoaxes during the Covid 19 pandemic, we examined also a total of 80 texts using content analysis, which were published on the four most read conspiracy web portals. Graph 2 shows the 8 most common topics with the character of fake news or hoaxes in the observed period during a pandemic.

In connection with the pandemic, the content of conspiracy websites consists mainly of false reports presenting opinions and attitudes against vaccination. Thus, "mysterious Russian agency" is associated with anti-vaccination topics (Rey-

naud, 2021). In addition, creators of conspiracy contents to opinions against vaccination, attempt to legitimize concepts such as "Devil's plan" (i.e., vaccination), "chipping", "covid criminals", geopolitical "holy war", "data hell" (for example in connection with population morbidity data), etc. A large number of hoaxes are also associated with vaccination on the conspiracy sites studied. In the context of vaccination, these are hoaxes that aim to present the vaccine in various negative contexts, i.e., as a tool to blackmail people or watch people. In addition, hoaxes also evoke a kind of demonization of vaccination (e. g., fear of infection in the presence of vaccinated people; posters with the text "no entry of vaccines to protect pregnant women"; hoax about being attacked by bees, etc.).

The second most common category is "pro-Russian propaganda" in which conspirators create content with the intention of undermining Slovaks' confidence in "Western" vaccines. Among the frequent fake news in connection with pro-Russian propaganda during the pandemic we also include texts emphasizing the achievements of Russian scientists in the fight against Covid 19; indicating the US rivalry with the Russian Federation (e. g., in the form of a "victorious" conversation between a Russian journalist and the US Ambassador); etc. Pro-Russian narratives also existed in the form of hoaxes during the Covid 19 period; e. g., Russian video of fake corpses (in fact, it is behind the scenes footage of a Russian music video), which was used to amplify 'hoax' narrative on the pandemic.

Other categories of fake news include topics that completely deny the disease, or facilitate re-

ports of a pandemic and the number of victims, i.e., alleviated of the situation. Covid 19 hoaxes contain nonsense and misleading ideas about the virus or its treatment. Treatment for Covid 19 is interpreted in the form of various guaranteed recipes and prevention tips against infection.

During the period under review, there was also fake news about the pharmaceutical conspiracy or conspiracy of world governments (especially the governments of Western countries in the context of the EU and America). Similarly, hoaxes have repeatedly questioned the European Union and its assistance to member states in the fight against coronavirus. It can be stated that negativism in relation to the EU is a category that existed in the period before Covid 19 and persists among conspirators even during a pandemic.

Further, in our research we confirm fake news that are questioning the competencies and regulations of the Slovak government and questioning the work of health professionals.

There are claims on social networks whose authority among users grows on the basis of the statement "it is secret information from a friend from the crisis staff". Among the hoaxes, there are relatively frequent statements in this category that the state knows about many things in connection with the coronary crisis, but is silent from the citizens, and even conceals the information. In this context, hoaxes can be described for example through "secret" reports on preparations for the total isolation of Slovaks, hoaxes on the transport of the disease by train or the transmission of the virus by so called chemtrails.

A popular method of fake news creators during the pandemic is to emphasize negative emotions (misinformation associated with distrust, frustration) and false information that has the power to affect emotions (e. g., "Covid will end when you put the drape down"). Further, emotional hoaxes are often associated with Covid 19 to create fear. An example is the claim that Covid 19 is a biological weapon or hoax that coronavirus testing is a covert method of introducing infection into the human brain and the like. Let us add that in this context, theories about a hidden "enemy": appearing in various contexts; destroying our society; killing people through a pandemic; frequent personalities depicted in hoaxes are G. Soros (world domination through

Covid 19); or B. Gates (vaccine as a tool for chipping people).

Finally, it is possible to identify fake news in the Slovak media space, the aim of which is to promote unauthorized or unapproved medicinal products (e. g., ivermectin) or to spread the idea of the spread of the disease through a 5G network. Let us add that, compared to the period before corona crisis, the volume of false reports in relation to Jews and Judaism, Roma and migrants is declining. These topics can, as can be seen, be neglected at the expense of the main topic which is a pandemic, and sub-topics that are closely related to it (vaccination, anti-pandemic measures, specific kinds of negativism etc.).

Discussion

The aim of the research was the content analysis of 80 texts, which took place in two separate groups. The first research group consisted of the most read conspiracy media in the period before the pandemic and the second group consist of the most read conspiracy media during the pandemic (Transparency International Slovakia, 2020). The result of our own research is the identification of topics that determined the character of the most watched conspiracy media in Slovakia in the two monitored periods.

Perhaps the most surprising finding is the marked change in conspiracy themes that dominated the pre-pandemic and pandemic periods. While, for example, the issue of migration was one of the dominant conspiracy links before the Corona crisis, it is marginalized during a pandemic. During a pandemic, however, the activity of conspirators grows, for example, in connection with topics aimed at negative evaluation of the work of health professionals.

We also consider to be interesting the relatively constant volume of topics we have confirmed in connection with pro-Russian propaganda. This topic is one of the key topics of conspiracy websites in both monitored periods, i.e., conspiracies in favor of Russia have maintained their status quo for a long time, as the volume of these reports is virtually the same before and during the corona. The same findings are repeatedly confirmed by experts (Euractiv, 2021; About media.com, 2021; Infosecurity.sk, 2021; Novotny, 2020). In addition, the effects of pro-Russian propaganda on the audience are also

confirmed by research by the Slovak non-profit organization GLOBSEC. In April this year, it was found that Slovaks perceive Russia as a strategic partner (and a victim of Western states) rather than a threat for Slovakia or other states in Europe (Standard editorial, 2021).

According to us, the findings of our research point to a new phenomenon which we believe is "losing" in heated discussions about fears of the presence of misinformation in public space. First of all, it is necessary to realize that during Covid 19, the time spent in the Internet environment increased radically, especially in the group of today's young people. However, while Generation Z used media and social media on a daily basis for education, communication or leisure activities, it was also exposed to the risk of conspiratorial websites and their contents. Based on our research findings, we see that respondents from the media are in principle affected by completely new content (with the exception of 2 themes that persist, i.e., pro-Russian narratives and, to a lesser extent, criticism of the EU). The problem is that the Slovak school system does not reflect the new conspiracy contents, or reflects them only a little (Dennik N, 2017; Kacinova, 2018; Globsec, 2020; O médiách.com, 2020; Trend.sk, 2020; TASR, 2021).

According to Kacinova (2018), the issue of education in Slovakia, aimed at developing the ability of pupils and students to detect misinformation in the content of school education, is still insufficient. The topic of misinformation and conspiracy media is not even explicitly mentioned in any thematic unit of the teaching of focal subjects in Slovak schools and it can be implicitly seen only marginally, as part of other topics in compulsory education. In addition, the author points out that building media literacy is partly trained for students of Slovak schools only in the context of print media, i.e., new media and social media are on the fringes of educational topics in both explicit and implicit levels. For this reason, too, we consider topics related to misinformation as compulsory educational topics that need to be incorporated into current educational curricula and standards. The topicality of the situation is confirmed by our research, which points not only to the presence of diverse conspiracy content in the pre-pandemic period (we identified 8 most common topics), but also new conspiracy content (we identified 8 most common topics) and their growing number, which can be seen on Slovakia (Urad verejneho zdravotnictva Slovenskej republiky, 2021; Startit Up, 2020; HN Slovensko, 2020; Trend.sk, 2020; TASR, 2021; Kacmar, 2021), worldwide (Nyilasy, 2019; Tsfati *et al.,* 2020; Benkler *et al.,* 2018; Fletcher *et al.,* 2018; Jang *et al.,* 2019).

Finally, we consider the reliability of researched data as an important part of the research process. To know if the data is reliable, we checked the validity and reliability of researched data and tested of the codes that have been designed during our research. Clear presentation of research findings after completing the content analysis in an article format that can be understood by the recipients was final goal of present study.

Conclusion

This article introduced the issue of the existence and increase of misinformation (with a closer focus on fake news and hoaxes) in the space of social media, that expanded and enriched existing links between people on the one hand, and become an essential communication tool for creating and disseminating fake news, misinformation, disinformation, hoaxes and propaganda on the other side.

Based on the retrospective collection of reports before the Covid 19 period and separately during the corona crisis, it was possible to identify the most common topics processed by conspirators in the form of fake news or hoaxes and to provide several other observations and examples. The research method was qualitative content analysis.

In relation with our research findings, we see that young respondents in our research sample are affected not only by older (and partly analyzed and explained) but also completely new conspiracy contents. In connection with these findings, we formulate several challenges, which in our opinion call for acute solutions:

(1) The advent of social media platforms in 1997 has radically changed the way how people consume daily information and form their opinions. The current challenge is the issue of media literacy (e. g., low media literacy, insufficient critical thinking, the presence of cognitive prejudices, etc.) in terms of the abil-

ity of pupils and students to detect misinformation (and other kinds of false information) in Slovakia. Slovak experts also talk about the lack of skills within media literacy (Globsec, 2020; O médiách.com, 2020; Dennik N, 2017; Trend.sk, 2020; TASR, 2021).

(2) Education focusing on the ability of pupils and students to detect misinformation in Slovakia is a relatively new topic in schools and, according to Kacinova (2018), it is moreover not yet anchored in the content of school education. The challenge is to include topics related to past and present misinformation, conspiracy media and the fight against misinformation in the educational content of compulsory subjects as soon as possible.

(3) Insufficient understanding of the educational potential of digital technologies which could be a helpful solution to the ongoing infodemic also seems problematic, i.e., a visible misinformation-conspiracy war in society and in the media. A suitable solution may be, for example, the use of mobile applications with an educational character that would support the development of critical thinking of young people. In short, the current challenge is to find effective and attractive ways how to build the immunization of the young individual from the negative effects of misinformation.

(4) Negatively can also be seen as a lack of regulation of social media content, despite the efforts of large social networks and companies (Google, Amazon, Apple, IBM, Microsoft, and so on), which coordinated various unethical efforts related to Covid 19, including the fight against misinformation (Overly, 2020). Their positive initiatives, such as eliminating misinformation about Covid 19 on Instagram, strengthening the position of scientific institutions through online data tools, or supporting global health organizations through free online advertising (Jin, 2020; Shu, Shu, Shieber, 2020) are respectable only if they stimulate further action to combat online lies within the online world. The problem is, that social media platforms only partially respond to suggestions from fact-controllers (Brennen *et al*., 2020).The current challenge is to find effective societal tools to strengthen the protection of recipients.

(5) The Internet environment seems impersonal to many people giving the impression that it is not real and that practically everything can be used in it. This leads users to the idea that everything is allowed in the online space and that they do not have to be held responsible for their behavior or opinions (unfortunately, in a sense, due to the lack of Internet regulation which we talk about above). The challenge is to lead young people to personal responsibility, i.e., to find ways how to build responsibility of the young and active "creators" of new online contents.

(6) The Covid 19 pandemic has come to dominate the media, both domestically and abroad. Alongside increased attention on the pandemic, has come the viral spread of fake news (in relation with pandemic) online. For almost 2 years now, communication and content evaluation in relation to health information has become a major challenge worldwide. The culmination of this challenge is misinformation about health; we mean the consequences that misinformation about health have in society and in individual decisions of individuals (the findings of relevant research about consequences of misinformation into individual we pointed out in the theoretical part of this paper). Similar concerns are expressed by experts. They are convinced that if a person receives news from social media, they are more likely to believe in misinformation about coronavirus conspiracies, risk factors and preventive treatment (Baum *et al.,* 2020). In this situation, we believe that governments have a key role to play here in providing detailed, clear and transparent official information that crowds out false reports. In our opinion, available and reliable official information is crucial to curbing false and, to varying degrees, harmful information.

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