

DOI 10.31261/IJREL.2024.10.2.01

#### Natalia Maria Ruman

University of Silesia Faculty of Arts and Sciences on Education

https://orcid.org/0000-0002-7127-7651

#### **Zdenek Mruzek**

Albrechtova Stredni Szkoła in Český Těšín

https://orcid.org/0000-0001-7015-867X

# Challenges for Youth Resulting from the Internet Use a Reflection on the Example of Two Secondary Schools: in Pszczyna and in Český Těšín

#### **Abstract**

The Internet these days has endless possibilities. It is used in virtually every human activity. The purpose of this article is not to demonize the Internet, but to examine various dimensions of how young people function in the virtual world. The goal is also to determine what the negative consequences students face and what positive results come from the use of this technology. The first part will be the presentation of the most important news in the field of new media, and, in particular, the characteristics of the Internet. Issues related to various aspects of the Internet use will be addressed – from the psychological mechanisms of the Internet use by young people, through media education and the chellanges of various online activities to the socio-practical phenomena occurring in the digital world. The knowledge gained through the theoretical part will form the basis for conducting empirical research. The purpose of the research will be to determine the importance of computer and Internet use in the lives of secondary school students. The results of this research, discussed together with their elaboration and the presentation of ways to counteract the threats and methods of a positive use of the Internet, can be a valuable source of knowledge, useful both in the pedagogical work of those involved in education and for parents, since they are most responsible for the education of their children in the use of media.

K e y w o r d s: Internet, computer use, cyberbullying, youth media use

#### Introduction

The Internet "is the fabric of our lives. If information processing technology were to be considered today's equivalent of what electricity was in the industrial age, then the Internet, because of its ability to transmit the power of information to all spheres of human activity, could be likened to both an electric grid and an electric motor." This is how well-known media scholar, Manuel Castells, describes the importance of the Internet network. It is hard not to agree with these words, given that the Internet has become not only a tool used by 2,3 billion people in the world (or about 33% of the world's total population), but also a tool that determines the organization of important enterprises of economic, social, political and cultural dimensions. Navigating in the areas of the Internet, it "creates almost unlimited opportunities to acquire various types of information, shapes a number of psychophysical functions: reflexes, motor coordination, ability to focus attention. In addition, it develops knowledge and interests. It allows people to make new contacts." (Castells, 2003, pp. 23–24).

The computer is an attractive tool, which is due to a number of factors, including the fact that barring unexpected failures – it is always ready to work; it provides the opportunity to return to the same content repeatedly. It also gives a sense of influence over what is going on; it helps in effective learning; for players who win with the computer and gives a sense of increased satisfaction. On the other hand, for those who lose, it does not cause a sense of great defeat; it allows to relieve stress and emotions; it facilitates communication; it allows to satisfy some needs that are difficult to satisfy in real life.(Augustynek, 2010, pp. 8–9; Techmańska, 2019, p. 246).

Computers and the Internet are also tools for work, and no one needs to be convinced that they definitely facilitate work in almost all fields. Computers also help people with disabilities. Of course, the use of these devices and media can be associated with a number of negative consequences, among which are Internet crime, excessive fascination with the Internet, verbal aggression, the destructive impact of computer games on the psyche of their users, as well as health problems resulting from excessive time spent in front of a computer screen (Kamieniecki et. al., 2017, pp. 31–34).

As Ryszard Tadeusiewicz points out, "for psychologists dealing with personality issues, it is obvious that the personality traits of an Internet user are revealed, among other things, in the form of the ways he/she uses the Internet. It can also be thought that certain psychological traits make people more inclined to use

the network, while others are more conducive to shying away from using the Internet. This is also related to gender, age, education. The psychological profile and personality traits of a particular person also have a lot to say here. Moreover, the relationship between the Internet and the psyche can be two-way. On the one hand, a particular person's psychological silhouette may determine whether and how he or she uses the Web, but on the other hand, it can also be expected that Web use, especially long and intensive use, affects the psyche, although it is not yet known exactly how." (Tadeusiewicz, 2002, pp. 18–19; Angielczyk, 2019, p. 58).

A symptom of Internet abuse, in the life of an individual, that is closely related to the perspective of cognitive-behavioral psychology is FOMO (fear of missing out). This is the fear of "falling out of the loop," that is, the feeling that something very important will be missed if we "disconnect from the network" for a while. The most vulnerable to the harmful effects of psychological mechanisms of computer and Internet use are children and adolescents, especially those who use it regularly from an early age. As early as two-year-old children demand to be allowed to use the computer – they want to press keyboard keys, put on headphones, watch photos or videos on the computer. This activity requires the help of parents, but the child, observing adults at the computer, on his/her own initiative insists on it (Laska, 2006, pp. 105–106; Skoczylas, 2023, pp. 118–119). The principles instilled in a child will have a direct impact on their future use of the Internet. The Internet is becoming their source of knowledge on all sorts of issues. Young people make numerous friends on the Internet, are very active on social networks, upload their photos to the web without restraint, express all kinds of opinions without restraint. At this time, a virtual self-creation is as important (or sometimes more important) than others' perceptions in the real world. Comparing oneself and one's ordinary life with the colorful world created on the Internet can make young people feel depressed and worthless (Chocholska & Osipczuk, 2009, pp. 33–34).

Functioning in virtual reality is furthermore related to the form of culture we can observe in today's society. Zbyszko Melosik pointed out the connection between a popular culture seen as a factor of socialization and growing up in a media society. Modern culture is largely characterized by consumerism, immediacy, the rapid pace of change, the disappearance of great ideals, the cult of the body, youth and sexuality, appearances and schematicity. These features of culture are compounded by the media, which promote a certain pattern of life despite the fact that people seem to be individual and diverse individuals (Melosik, 2000, p. 41; Witek, 2018, p. 40).

Almost every member of society strives for social success – having a good job, prosperity, position. "Social messages – propagated by the mass media – proclaim that "you cannot be a failure." In doing so, there are two basic contexts for success. The first is determined by the pursuit of power, position (standing) and money, the second by so-called popular fame." This means that there is only one fundamental path to happiness. Getting too deeply involved in ideas or ambitious activities

is received with disapproval. Melosik also introduced the concept of "instant culture," which refers to the habit and necessity of living a life of "immediacy" typical of our times." According to the author, the "rule of immediacy" also prevails on the Internet – "any message can be entered instantly, and there is also the possibility of free movement through information, cultures and societies (...). The prism of immediacy in modern culture has a huge impact on the identity and lifestyle of young people. Modern youth expects immediacy, they don't want to and cannot wait." This is why children raised from birth in a culture shaped by the media, and to a large extent by new media, are extremely susceptible to all its negative influences. This is exploited by marketing and advertising specialists, TV producers, manufacturers of movies, games, music, equipment. Even the youngest children want to own branded products, to be "up to date" and in line with current fashion (Melosik, 2008, pp. 98–102).

Therefore, it is worth looking at the psychological mechanisms that occur during the use of computers, computer games and the Internet. According to neuroscientists, how children absorb and process media content depends on various factors – their own experiences, specific circumstances, cognitive maturity, social environment or cultural placement. "The perception and processing of images is a complex process in which many factors must be taken into account. (...) The impact of images on the viewer is tremendously relativized for this reason, as both children and adults perceive the images differently. (...) Only images that have some significant meaning will embed themselves in the brain and be permanently stored in it." (Hotltkamp, 2010, p. 48; Jastrzębska, 2020, p. 97).

Whether a particular image is important to a child may depend on whether the child assimilates it alone or in a group, personal interests, age and maturity. Which images will be absorbed by children and adolescents, how their brains will process them, and whether this will trigger negative behavior is therefore not obvious or simple to pin down (Griffiths, 2004, p. 43). Children born after 1980 are even referred to as digital natives, meaning people characterized by growing up surrounded by media and the ability to use many of them simultaneously (Forma, 2006, pp. 66–67; Jopek & Kinda, 2019, pp. 78–80).

It is extremely important in the modern world to educate audiences in the proper use of means of communication, to make them aware of the mechanisms of the media, and, in particular, to inform them about the dangers of their improper use. The urgent need to educate for the reception of the media, that is, in today's terms, the need to conduct media education was taken up (even in the Church!) in the Vatican II decree Inter mirifica, issued in 1963: "The special task of these offices will be to see to it that the consciences of the faithful are properly formed in the field of the use of these means, as well as to support and guide all actions that Catholics take in this field." (Denek, 2000, p. 22).

#### Literature Review

Kośla wrote about cyber threats, stating that they are actions that block, distort or destroy information processed, stored or transmitted in ICT systems. He also points out that the use of these systems leads to disinformation, as the target of the attack is the information, not the system itself (Kośla, 2018, p. 18). Oleksiewicz, meanwhile, states that cyberbullying is one of the main threats to the world in the 21st century (Oleksiewicz, 2018, p. 54).

The currently increasing number of young people at risk of addiction is becoming a social problem. Media reports and appeals from the scientific community are not indifferent to the growing threats to the development of children and adolescents. Thus, questions become topical not only about the causes and determinants of these phenomena, but also about contemporary approaches and methods in a diagnostic and therapeutic practice, i.e., consequently, the question of their effectiveness in the first place. The following article is a review and is a presentation of contemporary theoretical approaches and trends in the practice of therapeutic interventions applied to children and adolescents (Kusztal & Piasecka, 2018, pp. 89–93).

Nomophobia and Phubbing are negative phenomena associated with the prevalence of smartphones and unlimited access to the Internet. Individual and social changes in behavior conditioned by the ubiquity of smartphones require an analysis of these two types of problematic Internet use. Both types of behavior are particularly prominent among teenagers. The article reveals the extent of nomophobia and phubbing among adolescents in Bosnia and Herzegovina, and the link between these phenomena and well-being and the influence of the family on the style of smartphone use among young people (Tomczyk & Selmanagic, 2022, p. 46).

To fight against the disastrous consequences of cyber addictions, young people often conduct online searches for explanations of failures and crises experienced in everyday life. They find help through running sites that offer cyber therapy. This therapy is aimed at people who, for various reasons (e.g. lack of time, shyness), do not want to have a face-to-face session with a psychotherapist. Online psychotherapy comes in many different forms (Jaroszewska, 2024, p. 5). It can be conducted via email, live video sessions (Skype), chat or text messaging (SMS). The main advantage of e-therapy is its speed focused on a short-term contact. What is more, the price is also attractive compared to therapy conducted through traditional methods. On the other hand, it has its disadvantages, such as the lack of emotional contact between the patient and psychotherapist, the impersonal relationship and the possibility of misunderstandings (Makara-Studzińska & Madej, 2017, pp. 23–24).

The Internet is not only a threat, it is primarily a communication tool for young people. The positives were presented by the authors of the article, showing Facebook as a tool for information management (Popiołek & Nierenberg, 2017, p. 96).

Adolescents form various groups on the Internet, seek out authority figures, and form friendships. Contexts and structures of relating to others: how membership in different types of groups shapes the construction of interpersonal relationships, shows an article examining youth from Portugal (Brito et. al., 2011, pp. 423–424). Young people are learning their information literacy through technology (Koltay et. al., 2011, 60). It is important to make classes or lessons more interesting with various technological innovations, as shown by the authors of the article on blended learning (Spanjers et. al., 2015, p. 61). For a discussion of gender similarities that increase students' motivation to participate in STEM, see the article titled Focusing on gender similarities increases female students' motivation to participate (Jaśko, Dukała & Szastok, 2019, pp. 474–476).

The purpose of another article was to demonstrate the importance of the effect of subjective reinforcement value when applying gamification elements in the development of mobile applications and their use in educational and health promotion work (Łosiak-Pilch, 2018, p. 202).

### **Risks Associated with Computer Use**

Too much time spent in front of the computer leads to disorganization of the day, as well as a reduction in time that should be spent on other duties or more constructive leisure activities. In turn, the wrong time of a day for computer use affects the child, preventing him or her from taking a light, media-free rest, or interferes with the concentration necessary for learning. The range of content available on the Internet is also questionable due to its moral and social nature and its huge volume. Too much information causes chaos, confusion and, in younger children, anxiety or fear. This mix of "content of widely varying social, moral meaning, lacking a reliable cultural basis, an explosion of advertising slogans leads to the real world being perceived by the child through the prism of media images. (...) Abnormal relations between the child and the media can lead to destructive changes in the cognitive sphere of the child's personality." (Izdebska, 2008, p. 216; Siedlecka, Żukiewicz-Sobczak & Sobczuk, 2019, p. 35). In turn, watching violence leads to children acquiring "aggressive behaviors, increased levels of aggression, emotional desensitization, disturbed perception of the real role of violence in society, acquisition of impulsive and egocentric tendencies, stimulation of new aggressive behaviors, use of vulgarities." (Siemieniecki, 2012, p. 27).

It is also worth noting the importance of two other problems of improper media use. The first is a passive reception of content, which involves unreflective absorption of messages (Szpunar, 2005, p. 378; Maj, 2019, pp. 144-145). This causes intellectual laziness, indiscriminateness, inhibition of creative activity and development of imagination, creativity, absorption of vulgarisms, linguistically incorrect phrases, that is, a general negative impact on intellectual development. The second threat is negative health effects divided into ophthalmic, neurological, and orthopedic. Prolonged staring at a screen can result in myopia, conjunctivitis, burning, irritation, tearing, sudden loss of visual acuity, changes in color perception (Stunza, 2012, p. 29). In addition, the computer screen is a source of several types of radiation: ionizing, thermal, optical and electrostatic fields. Neurologically, on the other hand, excessive time spent at the computer can cause anxiety, hyperactivity, feelings of restlessness and fear, and a tendency to aggression. In turn, limiting outdoor exercise at the expense of time spent in front of a monitor causes skeletal conditions, including postural defects, decreased physical fitness, scoliosis, decreased muscle mass, obesity, neck and back pains (Ordon & Skoczylas-Krotla, 2003, pp. 142–143).

Internet use is also linked to the danger of exposure to violence and pornography. Violence on the Internet is linked to the huge availability of computer games (downloadable or online), abounding in scenes of aggression. Through computer games, each person has the opportunity to participate in scenarios from horror movies or thrillers to test their skills (Kozak, 2011, p. 34). "The computer offers an extremely attractive world, which is an extension of the area of actual play. (...) Violent computer games can provide a model of aggressive behavior here (...). However, as psychologists and sociologists emphasize, the decisive causes triggering violence lie outside the virtual world. They are to be seen in the truly experienced and psychologically unneutralized traumas from school or the family home." (Huber & Neuschaffer, 2003, pp. 50–51; Kim, 2018, p. 668).

Children and teenagers are very eager to create accounts on social networks. In fact, the principle of "if you are not on Facebook, it means you do not exist" is being beaten. The space of social networks, especially Facebook, provides an additional social area for meetings, communication and social life (Borkowska & Witkowska, 2009, p. 10). Having an account comes with several risks. First, young people are all too eager to share all kinds of information about themselves on forums. Social networks encourage the disclosure of personal information, age, school, place of residence, phone numbers, email address, instant messenger numbers, Skype. "Children and adolescents quickly forget that their data is available to the general anonymous public, and the younger a community member is, the more private information he or she reveals." (Figurska, 2012, pp. 29–30). The second aspect of the use of social networks is the posting of a huge number of photos, documenting travels, possessions, events, and often photographs showing oneself in an erotic capacity. Meanwhile, such photos can seriously harm, after

all, family, teachers, complete strangers also have access to them. Possession of a compromising photo can become the cause of many problems, not necessarily in the present, but also in the distant future, because you never know whether the photo has not been copied and is stored somewhere (Barlińska, 2009, p. 107).

Based on the above considerations, it can be concluded that the use of the Internet, especially by young or inexperienced users, should be subjected to regular monitoring and combined with prevention carried out at home and at school. Awareness of the dangers arising from the seemingly simplest forms of Internet activity can protect children and adolescents, as well as their parents, from many difficult and problematic situations.

## Computer and Internet Use – in the Opinion of Surveyed Students

The subject of the research in this article is the group of students of secondary schools: in Pszczyna and Český Těšín, and their opinions on computer and Internet use. The aim of the research, in turn, is to determine the importance of computer and Internet use in the lives of adolescents.

Growing from the same Slavic roots, Poland and the Czech Republic are culturally similar. Centuries of development side by side have made us neighboring countries. Young people in Poland and the Czech Republic think alike and have similar experiences using the Internet.

The research problems formulated for the purpose of this paper have been posed, in such a way that the answers can be found in the research process. Obtaining these answers will carry out the tasks – acquiring knowledge to determine whether it is possible for contemporary teenagers to live without computers and the Internet, whether they have experienced digital violence; how important the computer and the Internet are to them and whether it is already possible to talk about the problem of Internet addiction or other problems associated with an excessive use of computers and the Internet. The analysis of our own research, will also allow us to determine what the level of media competence of adolescents is, what their awareness of safe use of the Internet is, the ability to accurately select valuable content, and to determine the attitude of parents to the amount of time their own children use the Internet. The issue of the dangers of Internet use by Polish and Czech youth was also included in the author's article in the journal Fundamentals of Education.

#### Material and Methods

Providing a comprehensive and factually correct answer to the formulated main research problem requires its decomposition into specific problems. In view of this, the following specific problems and corresponding specific hypotheses were identified. The research problem, which is the subject of the research undertaken, took the form of the following research questions:

- RQ1: What are the most serious challenges and threats to youth cyber security distinguished?
- RQ2: What are the potential problems associated with youth Internet use?
- RQ3: According to the youth, what are the parents' solutions to the topic of protecting youth from the dangers of Internet access?
- RQ4: What health changes do adolescents see as a result of prolonged time in front of the computer?

In response to the research questions posed, the following research hypotheses were formulated:

- H1: The most serious challenges to youth cyber security are the increasing time they use the Internet and the associated strong attachment to electronic devices and excessive online activity.
- H2: Potential problems for young people are hate speech, sharing images without permission, and ridicule.
- H3: The only form of action taken to protect youth by parents is the intervention of taking away Internet access as a punishment for bad behavior or failure to keep one's word.
- H4: Adolescents have trouble seeing changes in health and appearance as consequences of prolonged time in front of the computer.

The research confirmed the hypotheses.

Unfortunately, the youth surveyed use the Internet excessively and become potential recipients of hate speech and negative opinions, including ridicule. Parents are not prepared in schools how to talk to their children about technology use prevention. Simply acting to ban Internet use for a period of time does not help young people to understand the risks. Even health problems that affect young people are not an alarming factor.

#### **Procedure**

The presented research uses the survey method. Surveys include all types of social phenomena of importance for upbringing, as well as states of social awareness, opinions and views of specific communities, the growth of the studied phenomena, their tendencies, and their intensity (Maszke 2008, p. 157). The survey technique was used. It is a technique with a high degree of self-activity, and the role of the respondents comes down to distributing and collecting questionnaires. A survey is a standardized technique of receiving information in the process of communicating in writing without the intermediation of the examiner. In addition, the scaling method was used in the research. In the statistical literature, the Likert scale is treated as an ordinal or interval scale, and it seems that the more complex the scale, the greater the tendency to treat it as an interval scale. The advantage of this scale over simple scales is evident in the fact that individual positions on the scale are not able to significantly affect the final measurement result. These positions are supposed to balance each other, taking into account the scale being constructed, while the specific properties of the simple scale can have a great impact on the conclusions drawn from the research (Maszke 2008, p. 232). In the research for the purposes of this article, a 5-point Likert scale was used. The task of the examined person is to respond to each question and select one of the five answers: 1 – I completely agree; 2 – rather yes; 3 – I have no opinion; 4 – I tend to disagree; 5 – I completely disagree.

The Internet Threats Questionnaire consisted of 10 statements containing an estimated scale with a five-point Likert scale. The tool consisted of one part, which was related to knowledge and skills, and also referred to the implementation and reflection of preventive measures in everyday life.

The article uses the results of both the quantitative and qualitative parts of the survey, conducted from September 2023 to May 2024 among adolescents aged 15–19 in two secondary schools – Powiatowy Zespół Szkół nr 2 im.Karola Miarki w Pszczynie and Albrechtová Stredni Szkola in Český Těšín.

#### Measures

The quantitative part involved surveying a representative sample of 1650 (1700 total questionnaires were distributed, but only 1650 returned) respondents at two institutions

This is the statistical distribution of respondents by gender of the two schools. Here is a description of the sample of the people surveyed.

Table 1
Distribution of respondents by gender and place of residence

| Category | LP      | %     |
|----------|---------|-------|
| woman PL | 364     | 22.06 |
| male PL  | 342     | 20.72 |
| woman CZ | 436     | 26.43 |
| male CZ  | 508     | 30.79 |
| tot      | al 1650 | 100   |

Source: Own work.

In terms of the place of residence the group included only 87 people living in rural areas (47 from Poland and 30 from the Czech Republic) and 1563 persons (649 from Poland and 914 from Chech Republic) living in urban areas. Non-significant Chi-square test value (chi = 420,309; p = 0,159) show that the sample was fairly homogeneous in terms of place of residence. This makes further analysis of the relationship between place of residence and the dangers hidden on the Internet unnecessary. Women constituted 22.06% of the Polish group and 26.43% of the Czech group. In contrast, men in the Polish group constituted 20.72% of the population and 30.79% of the sample in the Czech group.

The research project had the following objectives:

- To determine the magnitude of prevalence and risk factors of Internet abuse among adolescents;
- To qualitatively analyze the phenomenon of Internet abuse among young people;
- To raise public awareness of the problem of Internet abuse among young people.

The first objective was to be achieved primarily through a quantitative survey research, while the second was to be achieved primarily through an extensive qualitative research based on in-depth individual interviews.

For the quantitative survey, the research procedure was as follows: The schools were informed by phone about the survey procedure and I asked for their consent to participate. To both schools, I delivered questionnaires. At each school, I myself, as the person responsible for conducting the survey, participated in conducting the survey. The questionnaires were filled out by the young people during class time (usually parenting lessons). Beforehand, the respondents were informed about the purpose of the survey and the procedure for filling out the questionnaire.

The results of the survey are shown in Table 2.

Table 2Polish and Czech student opinions on Internet threats. Distribution of survey answers

| Question         Month Interest of the Interest of Poland Pol                                 | 5                     |                            |                  |                       |                |                     |                             |                                  | )                         |                                |                |              |                           |
|--|-----------------------|----------------------------|------------------|-----------------------|----------------|---------------------|-----------------------------|----------------------------------|---------------------------|--------------------------------|----------------|--------------|---------------------------|
| let Rather yes 32.00 1.94 41.00 2.48 15.00 0.91 14.00 0.85 102.00 6.18 let Rather yes 68.00 4.12 72.00 4.36 68.00 4.12 101.00 6.12 309.00 18.73 let A an opinion 163.00 9.88 102.00 6.18 198.00 12.00 1.80 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 18.00 19.00 1 | _                     |                            | Women,<br>Poland | %<br>Women,<br>Poland | Men,<br>Poland | %<br>Men,<br>Poland | Women,<br>Czech<br>Republic | %<br>Women,<br>Czech<br>Republic | Men,<br>Czech<br>Republic | %<br>Men,<br>Czech<br>Republic | Sum in<br>rows | % in<br>rows | Chi<br>square;<br>p value |
| lay an opinion and solved the set of the set | Ise                   | Definitely yes             | 32.00            | 1.94                  | 41.00          | 2.48                | 15.00                       | 0.91                             | 14.00                     | 0.85                           | 102.00         | 6.18         |                           |
| Hon't have   C2.00   1.33   31.00   1.88   30.00   1.82   55.00   3.15   135.00   8.18   18.00   1.80   1.80   18.00   1.80   18.00    | rnet                  | Rather yes                 | 68.00            | 4.12                  | 72.00          | 4.36                | 68.00                       | 4.12                             | 101.00                    | 6.12                           | 309.00         | 18.73        |                           |
| Rather no         163.00         9.88         102.00         6.18         198.00         12.00         181.00         10.97         644.00         39.00           Definitely no         79.00         4.79         96.00         5.82         125.00         7.58         160.00         9.70         460.00         27.88           Definitely no         13.00         6.85         129.00         7.82         223.00         13.52         309.00         18.73         774.00         46.00           Rather yes         85.00         5.15         104.00         6.30         13.52         309.00         18.73         774.00         46.00           Rather yes         85.00         5.15         104.00         6.30         13.52         309.00         18.73         774.00         46.90           Rather yes         85.00         1.58         75.00         4.55         46.00         2.79         67.00         7.33         444.00         26.91           Definitely no         1.08.00         6.55         26.00         1.58         72.00         1.33         40.00         0.24         67.00         12.90           Definitely no         3.20.00         1.39         302.00         1.33         <   | day                   | I don't have<br>an opinion | 22.00            | 1.33                  | 31.00          | 1.88                | 30.00                       | 1.82                             | 52.00                     | 3.15                           | 135.00         | 8.18         | 71.151;                   |
| Definitely no Sum         79.00         4.79         96.00         5.82         125.00         7.58         160.00         9.70         460.00         27.88           Sum Sum         364.00         22.06         342.00         2.073         436.00         26.42         508.00         9.70         460.00         9.70         460.00           Definitely yes         113.00         6.85         129.00         7.82         223.00         13.52         309.00         18.73         774.00         46.91           Rather yes         85.00         5.15         104.00         6.30         4.55         46.00         2.79         67.00         4.69  |                       | Rather no                  | 163.00           | 9.88                  | 102.00         | 6.18                | 198.00                      | 12.00                            | 181.00                    | 10.97                          | 644.00         | 39.03        | p<0.0001                  |
| Sum         364.00         22.06         342.00         20.73         436.00         26.42         508.00         30.79         1650.00         100.00           Definitely yes         113.00         6.85         129.00         7.82         223.00         13.52         309.00         18.73         774.00         46.91           Rather yes         85.00         5.15         104.00         6.30         134.00         8.12         121.00         7.33         444.00         26.91           Idon't have an opinion         108.00         6.55         26.00         1.58         22.00         1.33         4.00         0.24         160.00         9.70           Definitely no         32.00         1.94         8.00         0.48         11.00         0.67         7.00         0.24         56.00         9.70           Definitely no         32.00         1.94         8.00         0.48         11.00         0.67         7.00         0.24         56.00         9.70         17.89           Poffinitely ves         16.00         2.01         30.70         18.30         30.70         12.00         17.89           Poffinitely ves         11.00         0.67         2.00         0.12         <   |                       |                            | 79.00            | 4.79                  | 96.00          | 5.82                | 125.00                      | 7.58                             | 160.00                    | 9.70                           | 460.00         | 27.88        |                           |
| Definitely yes         113.00         6.88         129.00         7.82         223.00         13.52         309.00         18.73         774.00         46.91           Rather yes         85.00         5.15         104.00         6.30         134.00         8.12         121.00         7.33         444.00         26.91           I don't have an opinion         26.00         1.58         75.00         4.55         46.00         2.79         67.00         4.06         21.40         26.91           Definitely no sum opinion         32.00         1.94         8.00         0.48         11.00         0.67         7.00         0.42         58.00         12.97           Definitely yes         26.80         1.94         8.00         0.48         11.00         0.67         7.00         0.42         58.00         12.90         17.39           Definitely yes         26.80         16.24         28.70         17.39         302.00         18.30         29.00         12.40         10.00           Rather yes         76.00         4.61         4.10         2.48         74.00         24.06         6.30         17.89           Rather no         8.00         0.48         6.00         0.36   |                       | Sum                        | 364.00           | 22.06                 | 342.00         | 20.73               | 436.00                      | 26.42                            | 508.00                    | 30.79                          | 1650.00        | 100.00       |                           |
| Pather yes   Se.00   S.15   104.00   G.30   134.00   S.15   121.00   T.33   444.00   26.01     Idon't have a ropinion   Se.00   L.58   T.5.00   4.55   46.00   T.33   4.00   T.33   4.00   T.37   T.00   T.37     Rather no   108.00   G.55   26.00   T.58   T.00   T.33   T.00   T.00   T.00   T.00   T.00   T.00   T.00     Definitely yes   Ze8.00   T.24   Ze7.00   T.35   T.00   T.30   T.00   T.00   T.00   T.00   T.00   T.00   T.00   T.00     Definitely no   T.00     Handring yes   T.00     Handring yes   T.00   T.00   T.00   T.00   T.00   T.00   T.00   T.00   T.00     Handring yes   T.00   T.00   T.00   T.00   T.00   T.00   T.00   T.00   T.00     Handring yes   T.00   T.00   T.00   T.00   T.00   T.00   T.00   T.00   T.00     Handring yes   T.00     Handring yes   T.00     Handring yes   T.00     Handring yes   T.00   | nse                   |                            | 113.00           | 6.85                  | 129.00         | 7.82                | 223.00                      | 13.52                            | 309.00                    | 18.73                          | 774.00         | 46.91        |                           |
| Indiviting the patient   26.00   1.58   75.00   4.55   46.00   2.79   67.00   4.06   214.00   12.97     Rather no pinion   32.00   1.58   26.00   1.58   22.00   1.33   4.00   0.24   160.00   9.70     Definitely no   32.00   1.94   8.00   0.48   11.00   0.67   7.00   0.42   58.00   3.52     Definitely no   32.00   1.94   8.00   2.73   436.00   26.42   508.00   30.79   150.00     Definitely no   364.00   22.06   342.00   2.48   74.00   7.39   362.00   14.30   397.00   24.06   15.40   76.00     Definitely no   1.00   0.67   2.00   0.12   38.00   0.18   0.00   0.00   18.00   1.58     Definitely no   1.00   0.06   6.00   0.36   19.00   0.15   0.00   26.00   30.79   1650.00   10.00     Definitely no   364.00   22.06   342.00   20.73   436.00   26.42   508.00   30.79   1650.00   10.00     Definitely no   364.00   22.06   342.00   20.73   436.00   26.42   508.00   30.79   1650.00   10.00     Definitely no   364.00   22.06   342.00   20.73   436.00   26.42   508.00   30.79   1650.00   100.00     Definitely no   364.00   22.06   342.00   20.73   436.00   26.42   508.00   30.79   1650.00   100.00     Definitely no   364.00   22.06   342.00   20.73   436.00   26.42   508.00   30.79   1650.00   100.00     Definitely no   364.00   22.06   342.00   20.73   436.00   26.42   508.00   30.79   1650.00   100.00     Definitely no   364.00   364.00   367.00   367.00   367.00   367.00   367.00   367.00     Definitely no   364.00   364.00   367.00   367.00   367.00   367.00   367.00   367.00     Definitely no   364.00   364.00   364.00   367.00   367.00   367.00   367.00   367.00   367.00   367.00   367.00   367.00   367.00     Definitely no   364.00   364.00   364.00   367.00      | >,≌                   | Rather yes                 | 85.00            | 5.15                  |                | 6.30                | 134.00                      | 8.12                             | 121.00                    | 7.33                           | 444.00         | 26.91        |                           |
| Rather no         108.00         6.55         26.00         1.58         22.00         1.33         4.00         0.24         160.00         9.70           Definitely no         32.00         1.94         8.00         0.48         11.00         0.67         7.00         0.42         58.00         3.52           Definitely no         22.0         342.00         20.73         436.00         26.42         508.00         30.79         1650.00         100.00           Pather yes         76.00         4.61         41.00         2.48         74.00         4.48         104.00         6.30         295.00         17.88           I don't have an opinion         8.00         0.67         2.00         0.12         38.00         2.30         6.00         0.36         75.00         17.89           Pather no         8.00         0.48         6.00         0.36         3.00         0.18         0.00         0.36         1.00         0.00         1.58         1.00         0.00         1.58         1.00         0.00         1.58         1.00         0.00         1.58         1.00         0.00         1.58         1.00         0.00         1.58         1.00         0.00         1.58   | to<br>u               | I don't have<br>an opinion | 26.00            | 1.58                  | 75.00          | 4.55                | 46.00                       | 2.79                             | 67.00                     | 4.06                           | 214.00         | 12.97        | 329.065;                  |
| Definitely no Sum         32.00         1.94         8.00         0.48         11.00         0.67         7.00         0.42         58.00         3.52           Sum Sum         364.00         22.06         342.00         20.73         436.00         26.42         508.00         30.79         1650.00         100.00           Definitely yes         268.00         16.24         287.00         17.39         302.00         18.30         397.00         24.06         1254.00         100.00           Rather yes         76.00         4.61         41.00         2.48         74.00         4.48         104.00         6.30         295.00         17.88           I don't have an opinion         8.00         0.67         2.00         0.12         38.00         2.30         0.36         1.00         0.36         1.00         0.36         1.00         0.36         1.00         0.00         1.00         0.36         1.00         0.00         26.42         508.00         0.00         26.00         1.00         0.00         1.00         0.00         1.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00 <t< td=""><td>our</td><td>Rather no</td><td>108.00</td><td>6.55</td><td>26.00</td><td>1.58</td><td>22.00</td><td>1.33</td><td>4.00</td><td>0.24</td><td>160.00</td><td>9.70</td><td>p&lt;0.0001</td></t<>   | our                   | Rather no                  | 108.00           | 6.55                  | 26.00          | 1.58                | 22.00                       | 1.33                             | 4.00                      | 0.24                           | 160.00         | 9.70         | p<0.0001                  |
| Sum         364.00         22.06         342.00         20.73         436.00         26.42         508.00         30.79         1650.00         100.00           Definitely yes         268.00         16.24         287.00         17.39         302.00         18.30         397.00         24.06         1254.00         76.00           Rather yes         76.00         4.61         41.00         2.48         74.00         4.48         104.00         6.30         295.00         76.00           I don't have an opinion         11.00         0.67         2.00         0.12         38.00         2.30         6.00         0.36         57.00         7.09           S Rather no         8.00         0.48         6.00         0.36         7.00         0.15         7.00         7.00         7.00           Definitely no         1.00         0.06         6.00         0.36         436.00         26.42         508.00         30.79         1650.00         100.00  | <u> </u>              | Definitely no              | 32.00            | 1.94                  | 8.00           | 0.48                | 11.00                       | 0.67                             | 7.00                      | 0.42                           | 58.00          | 3.52         |                           |
| Definitely yes         268.00         16.24         287.00         17.39         302.00         18.30         397.00         24.06         1254.00         76.00           Rather yes         76.00         4.61         41.00         2.48         74.00         4.48         104.00         6.30         295.00         17.88           I don't have an opinion         11.00         0.67         2.00         0.12         38.00         2.30         6.00         0.36         57.00         3.45           S Rather no         8.00         0.48         6.00         0.36         19.00         1.15         0.00         26.00         18.00         1.09           Definitely no         1.00         22.06         342.00         20.73         436.00         26.42         508.00         30.79         1650.00         100.00   |                       | Sum                        | 364.00           | 22.06                 | 342.00         | 20.73               | 436.00                      | 26.42                            | 508.00                    | 30.79                          | 1650.00        | 100.00       |                           |
| Rather yes         76.00         4.61         41.00         2.48         74.00         4.48         104.00         6.30         295.00         17.88           I don't have an opinion         11.00         0.67         2.00         0.12         38.00         2.30         6.00         0.36         57.00         3.45           S Rather no Definitely no Sum         8.00         0.36         0.36         19.00         1.15         0.00         26.00         1.58           Sum Sum         364.00         22.06         342.00         20.73         436.00         26.42         508.00         30.79         1650.00         100.00   | -                     | Definitely yes             | 268.00           | 16.24                 | 287.00         | 17.39               | 302.00                      | 18.30                            | 397.00                    | 24.06                          | 1254.00        | 76.00        |                           |
| I don't have an opinion         11.00         0.67         2.00         0.12         38.00         2.30         6.00         0.36         57.00         3.45           S Rather no Definitely no Sum         8.00         0.48         6.00         0.36         19.00         0.18         1.00         0.00         26.00         1.58           Sum         364.00         22.06         342.00         20.73         436.00         26.42         508.00         30.79         1650.00         100.00  | ciai<br>King          | Rather yes                 | 76.00            | 4.61                  | 41.00          |                     | 74.00                       | 4.48                             | 104.00                    | 6.30                           | 295.00         | 17.88        |                           |
| 8.00 0.48 6.00 0.36 3.00 0.18 1.00 0.06 18.00 1.09 1.09 1.09 1.09 1.09 1.09 1.09 1   | sites to<br>establish | I don't have<br>an opinion | 11.00            | 0.67                  | 2.00           |                     | 38.00                       | 2.30                             | 00.9                      | 0.36                           | 57.00          | 3.45         |                           |
| no 1.00 0.06 6.00 0.36 19.00 1.15 0.00 26.00 26.00 Sum 364.00 22.06 342.00 20.73 436.00 26.42 508.00 30.79 1650.00 10  | ships                 | Rather no                  | 8.00             | 0.48                  | 00.9           |                     | 3.00                        | 0.18                             | 1.00                      | 0.06                           | 18.00          | 1.09         | p<0.001                   |
| 364.00 22.06 342.00 20.73 436.00 26.42 508.00 30.79 1650.00  |                       |                            | 1.00             | 0.06                  | 00.9           | 0.36                | 19.00                       | 1.15                             | 0.00                      | 0.00                           | 26.00          | 1.58         |                           |
|  |                       | Sum                        | 364.00           | 22.06                 | 342.00         | 20.73               | 436.00                      | 26.42                            | 508.00                    | 30.79                          | 1650.00        | 100.00       |                           |

| 1.39 14.00 0.85 26.00 2.00 24.00 1.45 51.00 3.76 78.00 4.73 96.00 14.18 217.00 13.15 247.00 1 22.06 342.00 2.97 54.00 0.12 0.00 0.00 0.00 0.12 0.00 0.00 0.00 0.12 17.01 17.27 36.00 2 22.06 342.00 20.73 436.00 2 1.04 49.00 7.21 210.00 1 1.70 34.00 20.73 436.00 2 0.79 9.00 0.05 14.00 0.55 0.00 0.00 0.00 0.55 0.00 0.00 0   |         | 2      |           |                | 3.09           |
|---|---------|--------|-----------|----------------|----------------|
| 33.00 24.00 1.45 51.00 62.00 3.76 78.00 4.73 96.00 234.00 22.06 342.00 20.73 436.00 2 326.00 19.76 285.00 17.27 361.00 2 326.00 1.94 49.00 2.97 54.00 3.00 0.12 0.00 0.00 0.00 2.00 0.12 0.00 0.00 0.00 364.00 22.06 342.00 20.73 436.00 2 168.00 10.18 119.00 7.21 210.00 1 146.00 8.85 180.00 10.91 171.00 1 13.00 0.79 9.00 0.55 14.00 2 364.00 22.06 342.00 20.73 436.00 2 364.00 22.06 342.00 20.73 436.00 2 364.00 22.06 342.00 20.73 436.00 2 364.00 22.06 342.00 20.73 436.00 2 364.00 22.06 342.00 20.73 26.00 1 364.00 22.06 342.00 20.73 26.00 1 365.00 17.33 237.00 14.36 214.00 1 367.00 3.45 72.00 4.36 125.00 1 367.00 3.45 72.00 1.33 26.00   | 00 1.58 | 46.00  | 2.79 10   | 109.00 6.61    | <del>.</del> . |
| 62.00 3.76 78.00 4.73 96.00 234.00 14.18 217.00 13.15 247.00 13.64.00 22.06 342.00 20.73 436.00 236.00 1.94 49.00 2.97 54.00 326.00 19.76 285.00 17.27 361.00 2.00 0.18 6.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0  |         | 52.00  | 3.15 16   | 160.00 9.70    |                |
| 234.00       14.18       217.00       13.15       247.00         364.00       22.06       342.00       20.73       436.00       2         326.00       19.76       285.00       17.27       361.00       2         32.00       1.94       49.00       2.97       54.00       2         3.00       0.18       6.00       0.36       18.00       2         2.00       0.12       0.00       0.00       0.00       0         364.00       22.06       342.00       20.73       436.00       2         168.00       10.18       119.00       7.21       210.00       1         168.00       10.18       119.00       7.21       210.00       1         28.00       1.70       34.00       2.06       41.00       1         28.00       0.79       9.00       0.05       14.00       0         364.00       22.06       342.00       20.73       436.00       2         364.00       22.06       342.00       20.73       436.00       2         364.00       22.06       342.00       20.73       436.00       2         286.00       17.33       237.00      |         | 125.00 | 7.58 36   | 361.00 21.88   | 18 p<0.020     |
| 364.00     22.06     342.00     20.73     436.00     2       326.00     19.76     285.00     17.27     361.00     2       32.00     1.94     49.00     2.97     54.00     2       3.00     0.18     6.00     0.36     18.00     18.00       1.00     0.06     2.00     0.12     3.00     0.00       364.00     22.06     342.00     20.73     436.00     1       168.00     10.18     119.00     7.21     210.00     1       146.00     8.85     180.00     10.91     171.00     1       28.00     1.70     34.00     2.06     41.00     0       9.00     0.55     14.00     0     0     0       9.00     0.55     0.00     0.00     0     0       364.00     22.06     342.00     20.73     436.00     2       286.00     17.33     237.00     14.36     214.00     1       4.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     4.36     125.00       286.00     1.33     26.00     20.00       286.00     1.33     26.00     20.00       286.00 <td></td> <td>271.00</td> <td>16.42 96</td> <td>969.00 58.73</td> <td>က</td> |         | 271.00 | 16.42 96  | 969.00 58.73   | က              |
| 326.00 19.76 285.00 17.27 361.00 2 32.00 1.94 49.00 2.97 54.00 3.00 0.18 6.00 0.36 18.00 1.00 0.06 2.00 0.12 3.00 2.00 0.12 0.00 0.00 0.00 364.00 22.06 342.00 20.73 436.00 2 146.00 8.85 180.00 10.91 171.00 1 146.00 8.85 180.00 10.91 171.00 1 13.00 0.79 9.00 0.55 14.00 9.00 0.55 0.00 0.00 0.00 364.00 22.06 342.00 20.73 436.00 2 286.00 17.33 237.00 14.36 214.00 1 57.00 3.45 72.00 4.36 125.00  |         | 508.00 | 30.79 165 | 1650.00 100.00 | 00             |
| 32.00 1.94 49.00 2.97 54.00 3.00 0.18 6.00 0.36 18.00 1.00 0.06 2.00 0.12 3.00 22.00 342.00 20.73 436.00 28.00 146.00 8.85 180.00 10.91 171.00 113.00 0.79 9.00 0.55 14.00 9.00 0.55 0.00 0.00 0.00 364.00 22.06 342.00 20.73 436.00 2 286.00 17.33 237.00 14.36 214.00 13.00 0.79 22.00 4.36 125.00 13.00 0.79 32.00 13.3 26.00  |         | 430.00 | 26.06 140 | 1402.00 84.97  |                |
| 3.00 0.18 6.00 0.36 18.00 1.00 0.06 2.00 0.12 3.00 2.00 0.12 0.00 0.00 364.00 22.06 342.00 20.73 436.00 2 168.00 1.70 34.00 2.06 41.00 13.00 0.79 9.00 0.55 14.00 9.00 0.55 0.00 0.00 0.00 364.00 22.06 342.00 20.73 436.00 2 286.00 17.33 237.00 14.36 214.00 13.00 0.79 22.00 4.36 125.00 13.00 0.79 22.00 1.33 26.00   |         | 57.00  | 3.45 19   | 192.00 11.64   | 4              |
| 1.00     0.06     2.00     0.12     3.00       2.00     0.12     0.00     0.00     0.00       364.00     22.06     342.00     20.73     436.00     2       168.00     10.18     119.00     7.21     210.00     1       146.00     8.85     180.00     10.91     171.00     1       28.00     1.70     34.00     2.06     41.00     1       13.00     0.79     9.00     0.05     14.00     0       364.00     22.06     342.00     20.73     436.00     2       286.00     17.33     237.00     14.36     214.00     1       4.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00   |         | 11.00  | 0.67      | 38.00 2.30     |                |
| 2.00     0.12     0.00     0.00       364.00     22.06     342.00     20.73     436.00       168.00     10.18     119.00     7.21     210.00       146.00     8.85     180.00     10.91     171.00       28.00     1.70     34.00     2.06     41.00       13.00     0.79     9.00     0.05     14.00       9.00     0.55     0.00     0.00       364.00     22.06     342.00     20.73     436.00       286.00     17.33     237.00     14.36     214.00       13.00     0.79     22.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00  |         | 4.00   | 0.24      | 10.00 0.61     | 1 p<0.010      |
| 364.00     22.06     342.00     20.73     436.00     2       168.00     10.18     119.00     7.21     210.00     1       146.00     8.85     180.00     10.91     171.00     1       28.00     1.70     34.00     2.06     41.00     1       13.00     0.79     9.00     0.05     14.00       364.00     22.06     342.00     20.73     436.00     2       286.00     17.33     237.00     14.36     214.00     1       57.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00  |         | 00.9   | 0.36      | 8.00 0.48      | œ              |
| 168.00     10.18     119.00     7.21     210.00       146.00     8.85     180.00     10.91     171.00     171.00       28.00     1.70     34.00     2.06     41.00       13.00     0.79     9.00     0.55     14.00       9.00     0.55     0.00     0.00       364.00     22.06     342.00     20.73     436.00       286.00     17.33     237.00     14.36     214.00       57.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00  |         | 508.00 | 30.79 165 | 1650.00 100.00 | 0              |
| 146.00     8.85     180.00     10.91     171.00       28.00     1.70     34.00     2.06     41.00       13.00     0.79     9.00     0.55     14.00       9.00     0.55     0.00     0.00       364.00     22.06     342.00     20.73     436.00       286.00     17.33     237.00     14.36     214.00       57.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00   |         | 298.00 | 18.06 79  | 795.00 48.18   | 8              |
| 28.00     1.70     34.00     2.06     41.00       13.00     0.79     9.00     0.55     14.00       9.00     0.55     0.00     0.00     0.00       364.00     22.06     342.00     20.73     436.00     2       286.00     17.33     237.00     14.36     214.00     1       57.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00  |         | 144.00 | 8.73 64   | 641.00 38.85   | 55             |
| 13.00     0.79     9.00     0.55     14.00       9.00     0.55     0.00     0.00     0.00       364.00     22.06     342.00     20.73     436.00     2       286.00     17.33     237.00     14.36     214.00     1       57.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00  |         | 40.00  | 2.42 14   | 143.00 8.67    | 7 75.150;      |
| 9.00 0.55 0.00 0.00 0.00 22.06 342.00 20.73 436.00 286.00 17.33 237.00 14.36 214.00 13.00 0.79 22.00 1.33 26.00   |         | 17.00  | 1.03 5    | 53.00 3.21     |                |
| 364.00     22.06     342.00     20.73     436.00     2       286.00     17.33     237.00     14.36     214.00     1       57.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00  |         | 9.00   | 0.55      | 18.00 1.09     | 61             |
| 286.00 17.33 237.00 14.36 214.00 1 57.00 3.45 72.00 4.36 125.00 13.00 0.79 22.00 1.33 26.00   |         | 508.00 | 30.79 165 | 1650.00 100.00 | 0              |
| 57.00     3.45     72.00     4.36     125.00       13.00     0.79     22.00     1.33     26.00  |         | 250.00 | 15.15 98  | 987.00 59.82   | 12             |
| 13.00 0.79 22.00 1.33 26.00   |         | 203.00 | 12.30 45  | 457.00 27.70   | .0 209.352     |
| 900 009 800   |         | 35.00  | 2.12      | 96.00 5.82     | •              |
| 0.70 0.30 0.70  | 0.42    | 9.00   | 0.55      | 26.00 1.58     | 88             |

|               |         |                |                       | 83.104;                    | p<0.001   |               |         |                |                      | 154.164;                   | p<0.001   |               |         |                |                      | 218. 959;                  | p<0.001    |               |         |
|---------------|---------|----------------|-----------------------|----------------------------|-----------|---------------|---------|----------------|----------------------|----------------------------|-----------|---------------|---------|----------------|----------------------|----------------------------|------------|---------------|---------|
| 5.09          | 100.00  | 3.70           | 10.42                 | 20.18                      | 32.73     | 32.97         | 100.00  | 27.70          | 42.00                | 13.21                      | 11.09     | 00.9          | 100.00  | 13.09          | 39.82                | 19.88                      | 19.58      | 7.64          | 100.00  |
| 84.00         | 1650.00 | 61.00          | 172.00                | 333.00                     | 540.00    | 544.00        | 1650.00 | 457.00         | 693.00               | 218.00                     | 183.00    | 99.00         | 1650.00 | 216.00         | 657.00               | 328.00                     | 323.00     | 126.00        | 1650.00 |
| 0.67          | 30.79   | 0.97           | 4.18                  | 6.97                       | 7.82      | 10.85         | 30.79   | 6.18           | 16.67                | 3.15                       | 3.94      | 0.85          | 30.79   | 1.88           | 17.52                | 4.79                       | 2.30       | 4.30          | 30.79   |
| 11.00         | 508.00  | 16.00          | 00.69                 | 115.00                     | 129.00    | 179.00        | 508.00  | 102.00         | 275.00               | 52.00                      | 65.00     | 14.00         | 508.00  | 31.00          | 289.00               | 79.00                      | 38.00      | 71.00         | 508.00  |
| 3.88          | 26.42   | 1.33           | 2.97                  | 5.82                       | 11.27     | 5.03          | 26.42   | 6.73           | 10.24                | 2.06                       | 3.88      | 3.52          | 26.42   | 4.30           | 9.58                 | 3.82                       | 6.85       | 1.88          | 26.42   |
| 64.00         | 436.00  | 22.00          | 49.00                 | 96.00                      | 186.00    | 83.00         | 436.00  | 111.00         | 169.00               | 34.00                      | 64.00     | 58.00         | 436.00  | 71.00          | 158.00               | 63.00                      | 113.00     | 31.00         | 436.00  |
| 0.30          | 20.73   | 0.61           | 1.70                  | 3.27                       | 7.45      | 7.70          | 20.73   | 6.91           | 7.09                 | 3.64                       | 1.82      | 1.27          | 20.73   | 4.12           | 5.82                 | 5.27                       | 4.61       | 0.91          | 20.73   |
| 5.00          | 342.00  | 10.00          | 28.00                 | 54.00                      | 123.00    | 127.00        | 342.00  | 114.00         | 117.00               | 00.09                      | 30.00     | 21.00         | 342.00  | 68.00          | 96.00                | 87.00                      | 76.00      | 15.00         | 342.00  |
| 0.24          | 22.06   | 0.79           | 1.58                  | 4.12                       | 6.18      | 9.39          | 22.06   | 7.88           | 8.00                 | 4.36                       | 1.45      | 0.36          | 22.06   | 2.79           | 6.91                 | 00.9                       | 5.82       | 0.55          | 22.06   |
| 4.00          | 364.00  | 13.00          | 26.00                 | 68.00                      | 102.00    | 155.00        | 364.00  | 130.00         | 132.00               | 72.00                      | 24.00     | 00.9          | 364.00  | 46.00          | 114.00               | 99.00                      | 96.00      | 9.00          | 364.00  |
| Definitely no | Sum     | Definitely yes | Rather yes            | I don't have<br>an opinion | Rather no | Definitely no | Sum     | Definitely yes | Rather yes           | I don't have<br>an opinion | Rather no | Definitely no | Sum     | Definitely yes | Rather yes           | I don't have<br>an opinion | Rather no  | Definitely no | Sum     |
|               |         | 8. I would     | be able<br>to survive | 3 days<br>without the      | Internet  |               |         | 9. I have      | nouced<br>changes in | my health<br>or behavior   | due to    | internet use  |         | 10. I opened   | a message<br>from an | unknown<br>account at      | least once | me harm       |         |

Source: Own work.

There is no description of all the answers, as they were considered irrelevant. The following questions are described.

The authors were inspired by an article presenting the potential of young people using the potential of modern IT tools by Kuźmińska-Solśnia (2006, pp. 115–119) which concerned the use of scientific websites for homework. The majority of respondents are in favor of using the Internet mainly for academic purposes, which is optimistic. It can still be cited as an interesting fact that in the second question, concerning the use of the Internet to do homework, women from Poland (1.94% of the subgroup) answered "definitely not," thus admitting that they can handle the tasks on their own without the help of artificial intelligence, while 11 women from the Czech Republic (0.67%) opted for this answer. The fifth one concerned the problems (the authors based their question after reading the article by Tokunaga (2010, pp. 277–287) on hate speech problems encountered by respondents on the Internet. To question five, encountering hatred on the Internet, respondents admitted that they had encountered this problem. The respondents in Poland and the Czech Republic answered with similar frequency in Poland and the Czech Republic, but fewer women (8.79% from Poland and 12.39% from the Czech Republic), and more men (14.33% from Poland and 11.22% from the Czech Republic). A definite yes was given by 19.76% of women from Poland and 21.88% of women from the Czech Republic. As for men, it was 17.27% from Poland and 26.06% from the Czech Republic. It can be concluded that there were definitely more problems in online communication among the respondents from the Czech Republic. Question seven shows a significant difference in the answers given by Polish and Czech women. A small number of Polish women (1.1%) believe that anonymity is a threat on the Internet, Czech women are more aware of this (14.68%). In question ten, there is a noticeable difference only in men's responses. Men from Poland were certainly warned about the danger at school (22.22% answered "rather not"), while men from the Czech Republic (only 7.48%) admit to not opening messages from unknown sources that caused harm. And it is enough to avoid connections to untrustworthy sites, in particular, not to enter IDs and passwords, make sure that the connection is encrypted when we are to provide important data, change passwords to Internet devices and applications, not to open e-mail attachments from unknown sources as they may contain viruses or harmful programs. It is advisable to read the regulations of the Internet services we use. If the computer works slowly, crashes, it does not always mean some kind of failure. In such a case check if it is not infected, make sure it has an anti-virus program, and if we fall a victim to a malicious program, we must not send a ransom to recover data, but with the help of an IT specialist, we will restore a backup copy.

From the data gathered it is very clear that the most frequently chosen answer in the entire subgroup is at the same time the most frequently chosen answer by the respondents altogether. The answers are not randomly distributed, but in each subgroup there is a significant bias towards the same kind of answer. Hence Chi square values for answers to each survey question are significant. Thus, in question one, about using the Internet more than 7 hours a day, respondents most often chose

the answer "rather not." The analysis of the first thesis is alarming because students are busy with their phones most of the day, not the real world around them. Over 25% of respondents use the Internet for more than 7 hours, which is more than they sometimes spend at school or in class.

The most common answer to the third question was "definitely yes" regarding the use of social media by young people. To the fourth question, about entering erotic sites, the respondents definitively gave a negative answer. There were only sporadic cases of such behavior. In question six, there was a "definitely yes" answer regarding experiencing an incident of posting an image without permission on the Internet of our respondents. Young people in both countries face the same problems, regarding abuse and threats on social media. The correlation of choosing the same answer by the respondents can also be seen in the eighth question, concerning the possibility of experiencing 3 days without the Internet. The respondents unanimously stressed that this is impossible (answer "definitely not" – 32.97%). This result fills us with optimism because mostly young people treat online life as something natural. This is a generation in which the Internet plays an important role like water or oxygen to breathe. Of course, always being online does not necessarily mean that the user pays maximum attention to the Internet all the time. Usually, attention is divided between several activities and "jumps", for example between doing homework and checking online news.

As for the interviews, they took place at the respondents' schools, in places where they could have a face-to-face conversation with me, the researcher, (most often it was a teacher's office). The interviews were conducted on the basis of general dispositions, which were developed jointly for all interviewees. Most questions were open-ended, and the respondents were encouraged to narrate freely. The interviews were recorded and then transcribed.

During the interview, the following questions were asked:

- 1. What websites do you most often browse and why do you use them? What do you use them for?
- 2. What problem situation have you encountered while using the Internet?
- 3. What is anonymity on the Internet? Comment on it, pointing out the positive and negative sides.
- 4. What health problems or bodily changes have you observed in yourself during long-term Internet use?
- 5. How do you react to aggression you encounter on the Internet?
- 6. What experience do you have in making friends via the Internet?

The following responses were obtained during the interviews.

1. During in-depth interviews, the survey participants responded that they often visit gaming sites, which they openly admitted to. Online therapy, which gives the client more freedom and openness, also appeared in the responses.

The respondents were also able to list other sites. Such statements appeared: Automotive -216 (13.09%), promotional newspapers/stores -167 (10.12%), language translators -141 (8.54%), technological assistance (for repairs, alterations, etc.,) -75 (4.54%).

The teens also listed the following websites they use. Here are sample statements:

- Help with writing essays, artificial intelligence is better than me after all (boy, 16, PL)
- Help in explaining how to solve homework well, giving calculations and formulas (girl, 17, PL)
- Gossip and entertainment (girl, 16, CZ)
- Sports and more sports (boy, 16, CZ)
- I like movies, especially romantic ones, Netflix is in first place for me (girl, 16, PL)
- Stock charts (boy, 16, CZ).
- 2. The respondents were given the opportunity to describe a problematic situation they experienced during the interview. Unfortunately, there were only the following responses:
  - Pictures displayed as "on."
  - Pictures that were processed for ridicule,
  - · Misunderstanding of the content by others
  - · Lack of defense and consequences for the aggressor,
  - A desire to erase something, to turn back time.

When asked about the problem they encountered online, the respondents also listed the following responses:

- I played and didn't associate that so much money was taken from my dad's account for it (boy, age 16, PL)
- I sent a short video to a friend and it turned out that she sent it to everyone in the class, it was humiliating (girl, 16, PL)
- Inability to undo decisions on payments and purchases (girl, 17, CZ)
- Hate speech, insulting, name-calling (girl, 16, CZ)
- Dangerous friends, thought he was my age (boy, 16, CZ)
- I didn't even know that my friends took such pictures of me and set up a group to make fun of me (boy, 16, PL)

The above statements show the dangers faced by the respondents. It can be seen that similar dangers affect young people from Poland and the Czech Republic.

- 3. For those surveyed, anonymity exists on the Internet. The youth described it in this way:
  - You write whatever you want, the most made-up things about a person or yourself and others believe it unfortunately (girl, age 16, PL)

- It's cool because without consequences, you are hidden under a nickname (boy, age 16, CZ)
- You can come out of the mask you wear, if someone is shy then on the Internet they can check themselves and speak out without any problem (girl, age 17, PL)
- This is the advantage of the Internet, without fear, you give vent to your emotions (boy, age 17, PL)
- Anonymity is to protect yourself, I never give my real data (girl, age 16, PL) Unfortunately, only a few of the people quoted the above. This question probably caused the greatest difficulty for respondents.
- 4. The thesis concerned the changes in pathology and behavior that the respondents noticed in themselves. During the in-depth interview, we received interesting answers. They mentioned:
  - Tears were pouring from my eyes,
  - I don't want to sleep,
  - I don't do my duties,
  - I constantly think about what I have read or seen,
  - I quote in my everyday life what I have heard or I try to do something in the way that was recorded.
- 5. In interviews conducted, Polish and Czech teenagers stressed that they often respond to electronic aggression, which takes place most often on social networks:
  - I don't even report it to anyone, because it's just verbal texts, what can they do to me, one day they will finally stop writing (boy, 16, CZ)
  - I get concerned, I cry, then I have to talk about it to a friend and I get over it (girl, 16, PL)
  - sometimes someone doesn't know the limit of a joke and that's it, you have to let it go (boy, 17, PL)
  - The fact that there is freedom of speech does not mean that we should accept everything, I report to whom I can an act of aggression against me (girl, 17, CZ)
  - I have a thin line of tolerance towards evil, if you allow once, there will be more of it unfortunately (girl, 17 years old, CZ)
  - I have had depressive states because of such situations, I am very emotional and approach everything in this way (girl, 16, CZ)
  - I'm anxious, fussy, can't focus and see everything in black colors (girl, 16, PL)
  - I wrote back even worse to the one who wrote me like that, and he detached himself (girl, 16, PL).
    - These are only selected statements.
- 6. It was also an interesting question to ask the youngsters about contacts in the real world after having made contact online. It turns out that girls have more courage

or, perhaps, hope, that the person claiming to be a friend/friend is truthful. Here is a description of some of the youth's experiences:

- Well it worked out that we had fun writing and then she proposed to meet, but it turned out that she was a bit lacking to the ideal from the photo, she was fat and that was it, that is, she lied (boy, age 17, PL)
- We played together, then in the vacations we say that together we can go maybe for a pizza and something to jump, but he did not come in time and contact even in the game stopped (boy, age 16, CZ)
- I had a difficult time with my family, so it was easier for me to write than to talk, and so I met a friend from Czechowice-Dziedzice, then my mother told me that maybe she should come to my place, that we should go out together, but when we met, her looks and style did not suit me, I could not open up like that (girl, age 16, PL)
- I wrote with my boyfriend, that Pole but lives in the Czech Republic, I wanted to meet, because so on the Internet a little weak, and he disappointed me, all the time at the meeting the nose in the phone, failure (girl, age 16, CZ)
- we met 1 year and 2 months ago, then she lied that I was older, then I confessed, now we see each other regularly, I can say that I found love on the Internet (girl, age 17, CZ)
- I have a cooking blog and I have a lot of friends who first only wrote with me, and then we met and are still friends, and with one individual I am going to his prom (girl, age 17, PL)

The results of the quantitative survey show that new contacts on the Internet are made more often by girls (174 - 63.27%) than boys (212 - 55.78%).

Based on the analysis of the survey results, it can be concluded that despite the relatively high awareness and significant level of knowledge about media education, both among parents and teachers, media education in Poland is downplayed and almost completely ignored in family upbringing and school education. There is a lack of formal subjects in this area in schools.

The study described here provided insight into this diversity and attempted to identify the complex processes that shape an individual's use of the Internet. Most young people have the ability to find information, but it should be remembered that they do not have a fully developed media awareness and culture. A large proportion declares knowledge of online safety, but this is not enough to use the Internet consciously, to distinguish a true content from the false one , or to choose the valuable ones in a flood of useless information.

The Internet and the computer are undoubtedly useful, helping to search for information and collect, store, process it like no other tools known to date. In addition, they enable cheap or free communication, which in today's society, where family members or friends are often separated by hundreds of kilometers of distance, can be invaluable. Therefore, it is hardly surprising that young people

would not want to give up access to computers and the Internet, which does not at all mean that the way they use them is correct (Morbitzer, 2006, p. 411).

Unfortunately, the respondents do not realize what further consequences in adulthood their current abuse of Internet time may cause. The most appropriate way to solve this difficult situation seems to be to organize compulsory media education as part of an already functioning school subject, such as computer science, or as part of parenting hours. Nevertheless, the program of these classes would have to be formalized, standardized for all schools.

The attempts could also be made to educate parents, for example, during school meetings between teachers and parents, i.e. the so-called "interview sessions," or by providing parents with professional studies.

Within the framework of the topic undertaken, there are still many issues to be considered and explored in empirical research. It would be possible to investigate topics in other settings – such as elementary schools and even universities (Wysocka-Narewska, 2022, p. 78; Skvortsova & Haran, 2018, p. 54–55). The collation of these data would make it possible to obtain a complete picture. It seems that addressing the topic of media education is extremely important. Technological and informational development means that the introduction of media education classes will soon become not just a positive, additional issue of school education, but a real necessity.

#### **Conclusions**

The analysis from our own research shows that Polish as well as Czech youth spend too much time on the Internet. They use the Internet as a source of entertainment, not just as a study aid. They do not see the dangers of improper use of new technologies, despite the health problems that happen to them.

The Internet has become part of the cultural everyday life of today's youth. Young people who use the Internet intensively exhibit different behavioral patterns, and there is a possibility of losing control over the intensity of Internet use. Young people most often communicate through social media. The Internet has also become a platform for young people to realize the need for self-expression. Users are often forced to literally construct an identity by building their profile. The other person is judged by how they construct their identity on the portal. The Internet has become one of the most important tools for learning and communication. The widespread use of the Internet by children and adolescents has many advantages, but, like any tool, it brings risks to which young people are particularly vulnerable (Szpunar, 2005, p. 379). The phenomena brought by the expansion of the media and access to modern technology into areas of life previously reserved for traditional broadcast-

ing were reflected upon. And attention was also paid to the level of understanding of the digital world.

Globalization creates opportunities to learn about the world, including education of different nations. The opportunities to raise awareness of the benefits and risks of mass communication are becoming almost limitless. It must become increasingly important for future generations to manage to equip themselves with the skills to use the Internet properly. The young, despite a different culture, experience the same dilemmas and problems, which are often due to under-information and lack of being equipped with technological competence.

The authors realise that this article is only a contribution to further analysis, which will be deepened to include indicators such as Internet access at home or parental education. It would certainly be appropriate to look at the cultural differences between the two countries and the relationship of these elements to technology education. This article is only meant to inspire further research, which we should extend to other countries.

Just as Chocholska and Osipczuk (2009) outlined many dangers of the new mass media for young people, the respondents from Poland and the Czech Republic equally admitted to abusing the Internet in their daily lives. Kusztal and Piasecka (2018) warns that young people will not even notice the Internet addiction that will devastate them systematically. In fact, despite noticing their deteriorating health, respondents unfortunately do not react and reduce the frequency of the Internet use.

The Internet is first and foremost a communication tool for young people, as reckoned by Popiołek and Nierenberg (2017), as well as in the analysis of the survey results obtained.

#### **FUTURE LINES OF RESEARCH**

Given these results, it is necessary to further develop and implement measures to make youth and their parents aware of the dangers deriving from the Internet. If this recommendation is followed, young people will be protected from the negative consequences of cyberbullying. This approach will take into account parents' expectations of online safety in these difficult times.

#### **LIMITATION**

The article presents the main areas of youth safety risks, where it is particularly important to educate them. The results of the survey on the risks associated with the use of the Internet by adolescents are presented to show what the awareness of adolescents is, regarding the safe use of the Internet, and the ability to accurately select valuable content.

The Internet is an important part of every teenager's daily life, so it is particularly important to monitor the risks associated with it and educate young people about it so that they learn the secrets of looking critically and reflectively at the content available online.

#### References

- Angielczyk, P.Z. (2019). Homo crudelis w dobie Internetu. [Homo crudelis in the age of the Internet.] *Parezja*, 2, 48–64. https://doi.org/10.15290/parezja.2019.12.04.
- Augustynek, A. (2010). Uzależnienia komputerowe. Diagnoza, rozpowszechnianie, terapia. [Computer addictions. Diagnosis, dissemination, therapy.] Warszawa: Wyd. Difin. ISBN 978-83-764-1146-0.
- Barlińska, J. (2009). Wpływ kontaktu zapośredniczonego przez komputer na nasilenie zachowań antyspołecznych i cyberprzemocy. [The impact of computer mediated contact on the severity of antisocial behavior and cyberbullying.] *Dziecko krzywdzone. Teoria, badania, praktyka*, [The Abused Child. Theory, research, practice] 1, 107–112. ISSN 2545-3475 eISSN.
- Borkowska, A, & Witkowska, M. (2009). *Media społecznościowe w szkole*. [Social media at school] Warszawa: NASK Państwowy Instytut Badawczy. ISBN 978-83-65448-03-3.
- Broto, R., Waldzus, S., Sekerdej, M., & Schubert, T. (2011). The contexts and structures of relating to others: how memberships in different types of groups shape the construction of interpersonal relationships. *Journal of Social and Personal Relationships*. 28, (3), 406–432. https://doi.org/10.1177/0265407510384420.
- Castells, M. (2003). Galaktyka Internetu. Refleksje nad Internetem, biznesem i społeczeństwem. [Galaxy of the Internet. Reflections on the Internet, business and socjety.] Poznań: Wyd. Rebis. ISBN 8373012338.
- Chocholska, P. & Osipczuk, M. (2009). Uzależnienie od komputera i Internetu u dzieci i młodzieży. [Computer and Internet addiction in children and adolescents] Warszawa: Wyd. Hachette Livre Polska. ISBN 61907911.
- Denek, K. (2000). Aksjologiczne aspekty edukacji szkolnej. [Axiological aspects of school education.] Toruń: Wydawnictwo Adam Marszałek. ISBN 978-83-232-2332-0.
- Figurska, O. (2012). *Nadmierne korzystanie z komputera i Internetu przez dzieci i młodzież*. [Excessive computer and Internet use by children and adolescents.] Warszawa: Naukowa i Akademicka Sieć Komputerowa, Fundacja Dzieci Niczyje. ISBN 978-83-931508-6-1.
- Forma, P. (2006). Znaczenie Internetu dla rozwoju dzieci i młodzieży. [The importance of the Internet for the development of children and adolescents]. Świętokrzyskie Centrum Edukacji na Odległość SCENO. Zeszyty Naukowe, [Swietokrzyskie Center for Distance Education SCENO. Scientific Journals] 2, 64–68.
- Griffiths, M. (2004). *Gry i hazard. Uzależnienia dzieci w okresie dorastania*. [Gaming and Gambling. Addictions of children during adolescence.] Gdańsk: GWP. ISBN 9788389574145.
- Hotltkamp, J. (2010). Co oglupia nasze dzieci? Nowe media jako wyzwanie dla rodziców. [What stuns our children? New media as a challenge for parents.] Kraków: Wyd. Salwator. ISBN 9788375802122.
- Huber, F. & Neuschaffer, C. (2003). Rodzice offline? Jak nawiązać kontakt ze skomputeryzowanym dzieckiem. [Offline parents? How to get in touch with a computerized child.] Warszawa: Wyd. Lekarskie PZWL. ISBN 83-200-2797-7.
- Izdebska, J. (2008). Media elektroniczne zagrażające współczesnemu dziecku przejawy, przyczyny, wyzwania edukacyjne. [Electronic media threatening the modern child manifestations, causes, educational challenges.] In S. Guz (Eds.), *Dziecko a zagrożenia współczesnego świata*. [The child and the dangers of the modern world.] Lublin: Wyd. Uniwersytetu Marii Curie-Skłodowskiej, 212–217. ISBN 978-83-2272-918-2.
- Jaroszewska, I. (2024). Parents' knowledge about media education. *Social Dissertations*. 18, 1–23. eISSN 2657-9332.

- Jastrzębska, J. (2020). Internet jako miejsce nawiązywania relacji interpersonalnych. Grupy społeczne w obszarze cyberprzestrzeni. [Internet as a place to establish interpersonal relationships. Social groups in the area of cyberspace.] *Fides et Ratio 42*, (2), 92–100. https://doi.org/10.34766/fetr. v42i2.277.
- Jaśko, K., Dukała, K., & Szastok, M. (2019). Focusing on gender similarities increases female students' motivation to participate. *Journal of Applied Social Psychology*. 49, (8), 473–48. https://doi.org/10.1111/jasp.12598.
- Jopek, A. & Kinda, M. (2019). Zagrożenia cybernetyczne dla młodego użytkownika sieci w perspektywie rozwoju społeczeństwa informacyjnego. [Cyber threats to the young online user in the perspective of the development of the information socjety.] Security, Economy & Law 23, (2), 67–85. https://doi.org/10.24356/SEL/23/4.
- Kaliszewska, K. (2007). *Nadmierne używanie Internetu. Charakterystyka psychologiczna*. [Excessive use of the Internet. Psychological characteristics.] Poznań: Wyd. UAM. ISBN 8323218501.
- Kamieniecki, W., Bochenek, M., & Tanaś, M., (2017). Raport z badania "Nastolatki 3.0". [The "Teens 3.0" survey report.] Warszawa: NASK Instytut Badawczy. ISBN 978-83-65448-02-6.
- Kim, S. et al. (2018). Cyberbullying victimization and adolescent mental health: Evidence of differential effects by sex and mental health problem type, *Journal of Youth and Adolescence 47*, (3), 660–678. https://doi.org/10.1007/s10964-017-0678-4.
- Koltay, T., Krakowska, M., Landova, H., & Prókai, M. (2011). Umiejętność korzystania z informacji w krajach Grupy Wyszehradzkiej: literatura i inicjatywy. [Information literacy in Visegrad countries: literature and initiatives.]. *Education for Information*. 28, (1), 57–76. https://doi.org/10.3233/EFI-2010-0886.
- Kośla, R. (2018). Cyberterroryzm definicja zjawiska i zagrożenie dla Polski, wystąpienie na konferencji w Bemowie, 29 XI 2002 r. [Cyberterrorism definition of the phenomenon and the threat to Poland, speech at a conference in Bemowo, 29 XI 2002.] za: P. Jankowski, Cyberterroryzm jako współczesne zagrożenie dla administracji publicznej. [Cyberterrorism as a contemporary threat to public administration.] *Młody Jurysta* [Young Jurist.], 4, 12–22. https://doi.org/10.21697/mj.11305.
- Kozak, S. (2011). *Patologie komunikowania w Internecie. Zagrożenia i skutki dla dzieci i młodzieży*. [Pathologies of communication on the Internet. Threats and consequences for children and adolescents.] Warszawa: Wydawnictwo Delfin. ISBN 978-83-7641-388-4.
- Kusztal, J. & Piasecka, M. (2018). A contemporary approach to substance abuse treatment for children and adolescents: a rview of theoretical and empirical perspectives. *Edukacja Elementarna w Teorii i Praktyce*. [Elementary Education in Theory and Practice.] *13*, (4), 85–102. https://doi.org/10.14632/eetp.2018.13.50.85.
- Kuźmińska-Sołśnia, B. (2006). Nowe technologie informacyjne szansą i zagrożeniem dla młodzieży szkolnej. [New information technologies an opportunity and a threat for schoolchildren.] In J. Morbitzer (Eds.). *Komputer w edukacji*. [Computer in education.] (pp. 115–119). Kraków: Impuls. ISBN 83-7271-341-3.
- Laska, E. I. (2006). Dzieciństwo w świecie mediów szanse i zagrożenia (wybrane problemy). [Childhood in the world of media opportunities and threats (selected problems).] In S. Juszczyk, I. Polewczyk (Eds.), *Dziecko w świecie wiedzy, informacji i komunikacji*. [The child in the world of knowledge, information and communication.] (pp. 105–111), Toruń: Wyd. Adam Marszałek. ISBN 83-7441-010-8.
- Łosiak-Pilch, J. (2018). Gamification and subjective reinforcement value: indications for education and health promotion. *Edukacja, Technika, Informatyka*. [Education, Technology, Information Technology.] *2* (24), 201–205. https://doi.org/10.15584/eti.2018.2.27.

- Maj, B. (2019). Internet jako przestrzeń edukacyjna życia młodzieży akademickiej. [Internet as an educational space in the lives of academic youth.] *Studia z Teorii Wychowania 29*, (4), 135–154. https://doi.org/10.5604/01.3001.0016.1640.
- Makara-Studzińska, M. & Madej, A. (2017). Cybertherapy: a modern form of therapy. Journal of Education, Health and Sport. 7, (7), 21–28. https://doi.org/10.5281/zenodo.821840.
- Maszke, A. W. (2008). Metody i techniki badań pedagogicznych. [Methods and techniques of pedagogical research]. Rzeszów: Wyd. Uniwersytetu Rzeszowskiego. ISBN 83-7338-372-7.
- Melosik, Z. (2000). Kultura instant. Paradoksy pop-tożsamości. [Instant Culture. Paradoxes of pop identity.] In M. Cylkowska-Nowak (Eds.), Edukacja. Społeczne konsumowanie idei i rzeczywistości. [Education. The social consumption of ideas and reality.] (pp. 34–48). Poznań: Wyd. Wolumin. ISBN 8388536052.
- Melosik, Z. (2008). Kultura popularna jako czynnik socjalizacji. [Popular culture as a factor of socialization.] In Z. Kwieciński, B. Śliwerski (Eds.), *Pedagogika. Podręcznik akademicki*. [Pedagogy. Academic textbook.] t. 2. (pp. 98–102). Warszawa: PWN. ISBN 978-83-01-14133-2.
- Mitchell, K. J., Finkelhor, D., Wolak, J., Ybarra, M. L., & Turner, H. (2011). Youth Internet Victimization in a Broader Victimization Context. *Journal of Adolescent Health*, 48, 128–134. ISSN 1054-139X.
- Morbitzer, J. (2006). O potrzebie i celach wychowania medialnego dzieci. [On the need and goals of media education of children.] In S. Juszczyk, I. Polewczyk (Eds.), *Dziecko w świecie wiedzy, informacji i komunikacji*. [The child in the world of knowledge, information and communication.] (pp. 409–414). Toruń: Wyd. Adam Marszałek. ISBN 83-7441-010-8.
- Oleksiewicz, I. (2018). Cyberterroryzm jako realne zagrożenie dla Polski. [Cyberterrorism as a real threat to Poland.] *Rocznik Bezpieczeństwa Międzynarodowego* [International Security Yearbook.] *12*, (1), 53–67. https://doi.org/10.34862/rbm.2023.1.2.
- Ordon, U. & Skoczylas-Krotla, E. (2003). Środki masowego przekazu szansą czy zagrożeniem w procesie edukacji dziecka. [Mass media an opportunity or a threat in the process of a child's education.] In T. Banaszkiewicz, W. Szlufik, A. Pękala (Eds.), *Z najnowszych badań nad wczesną edukacją dziecka*. [From the latest research on early childhood education.] (pp. 140–146) Częstochowa: Wyd. Wyższej Szkoły Pedagogicznej w Częstochowie. ISBN 8370989446.
- Popiołek, M. & Nierenberg, B. (2017). Facebook as an information management tool: in light of the research conducted among Polish students. *Journal of Education, Culture and Society*. 2, 89–102. https://doi.org/10.15503/jecs20172.89.102.
- Siedlecka, M., Żukiewicz-Sobczak, W., & Sobczuk, S., Oddziaływanie mass mediów na kształtowanie stylu życia dzieci klas 4–6 w Bialskich Szkołach Podstawowych. [Impact of mass media on the formation of lifestyles of children in grades 4–6 in Biala Elementary Schools]. *Rozprawy Spoleczne*. [Social Dissertations] *13*, (1), 34–42. ISSN 2081-6081.
- Siemieniecki, B. (2012). Rzeczywistość wirtualna a edukacja. [Virtual reality and education.] In T. Lewowicki, B. Siemieniecki (Eds.), *Cyberprzestrzeń i edukacja*. [Cyberspace and education.] (pp. 28–35). Toruń: Wyd. Adam Marszałek. ISBN 978-83-7780-326-4.
- Skoczylas, D. (2023). Cyberzagrożenia w cyberprzestrzeni. Cyberprzestępczość, cyberterroryzm i incydenty sieciowe. [Cyber Threats in Cyberspace. Cybercrime, cyberterrorism and network incidents.] PRAWO W DZIAŁANIU. SPRAWY KARNE, [LAW IN ACTION. CRIMINAL CAS-ES.] 53, 97–113.
- Skvortsova, S. & Haran, M. (2018). Multimedialna prezentacja wykładu jako sposób percepcji, rozumienia i zapamiętywania informacji edukacyjnych przez studentów. [Multimedia lecture presentation as a way for students to perceive, understand and remember educational information.] *International Journal of Research in E-learning* Vol. 4 (2), 52–58. https://doi.org/10.31261/IJREL.

- Spanjers, I., Konings, K., Leppink, J., Verstegen, D., de Jong, N., Czabanowska, K., & van Merrienboer, J. (2015). The promised land of blended learning: quizzes as a moderator. *Educational Research Review*. 15, 59–74. https://doi.org/10.1016/j.edurev.2015.05.001.
- Stunża, G. D. (2012). Edukacja medialna w podstawie programowej. [Media education in the core curriculum.] In J. Lipszyc (Eds.), *Edukacja medialna i informacyjna w Polsce raport otwarcia. Aneks*.[Media and information education in Poland opening report. Annex.] (pp. 27–31). Warszawa: Wyd. Narodowy Instytut Audiowizualny.
- Szpunar, M. (2005). Internet jako pole poszukiwania i konstruowania własnej tożsamości. [Internet as a field of search and construction of one's own identity.] In E. Hałas, K. Konecki (Eds.), Konstruowanie jaźni i społeczeństwa. Europejskie warianty interakcjonizmu symbolicznego. [Constructing the self and society. European variants of symbolic interactionism] (pp. 378–403). Warszawa: Wyd. Scholar. ISBN 83-7383-144-4.
- Tadeusiewicz, R. (2002). *Społeczność Internetu*. [Internet community.] Warszawa: Akademicka Oficyna Wydawnicza EXIT. ISBN 83-87674-33-8.
- Tapscott, D. (2010). Cyfrowa dorosłość. Jak pokolenie sieci zmienia nasz świat. [Digital Adulthood. How the net generation is changing our world.] Warszawa: Wyd. Akademickie i Profesjonalne. ISBN 9788361408963.
- Techmańska, B. (2019). Czy młodzi ludzie potrafią korzystać z Internetu? Uwagi i spostrzeżenia. [Can young people use the Internet? Comments and observations] *Edukacja Technika Informatyka*. [Education Technology Information Technology] 2, (28), 245–251. https://doi.org/10.15584/eti.2019.2.36.
- Tokunaga, R. S. (2010). Following you Home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26, 277–287. ISSN 0747-5632.
- Tomczyk, Ł. & Selmanagic, L. E. (2022). Nomophobia and phubbing: wellbeing and new media education in the family among adolescents in Bosnia and Herzegovina. *Children and Youth Services Review.* 137, 40–58. https://doi.org/10.1016/j.childyouth.2022.106489.
- Więckowska, M. (2012). Co wciąga Twoje dziecko? [What draws your child in?] Kraków: Wydawnictwo M. ISBN 978-8375954104.
- Witek, K. (2018). Przestępczość komputerowa aspekty prawne. [Computer crime legal aspects.] *Edukacja – Technika – Informatyka* [Education – Technology – Information Technology.] *24*, (2), 36–49. ISSN 2719-6550.
- Wysocka-Narewska, M. (2022). Distance learning at the elementary school level: parents' opinions and reflections. *International Journal of Research in E-learning* (8)2, 76–81. https://doi.org/10.31261/IJREL.

Natalia M. Ruman, Zdenek Mruzek

Wyzwania młodzieży wynikające z użytkowania Internetu. Refleksja na przykładzie dwóch szkół ponadpodstawowych: w Pszczynie i w Czeskim Cieszynie

#### Streszczenie

Internet w obecnych czasach ma nieskończenie wiele możliwości. Używany jest praktycznie w każdej działalności człowieka. Celem niniejszego artykułu nie jest demonizowanie Internetu, ale zbadanie różnych wymiarów funkcjonowania młodzieży w wirtualnym świecie. Celem jest również

określenie z jakimi negatywnymi skutkami spotykają się uczniowie i jakie pozytywne zjawiska wynikają z korzystania z tej technologii.

Pierwsza część stanowić będzie prezentację najważniejszych wiadomości z zakresu nowych mediów, a w szczególności charakterystykę Internetu. Poruszona zostanie problematyka związana z różnymi aspektami korzystania z Internetu – począwszy od psychologicznych mechanizmów użytkowania sieci przez młodzież, poprzez edukację medialną oraz zagrożenia wynikające z różnego rodzaju działalności w sieci, do społeczno-praktycznych zjawisk zachodzących w cyfrowym świecie.

Wiedza pozyskana dzięki części teoretycznej stanowić będzie bazę dla przeprowadzenia badań empirycznych. Celem badań będzie określenie, jakie znaczenie w życiu młodzieży w wieku ponadpodstawowym ma korzystanie z komputera i Internetu. Omówione wyniki tychże badań wraz z ich opracowaniem oraz przedstawienie sposobów przeciwdziałania zagrożeniom oraz metod pozytywnego wykorzystania Internetu, może stanowić wartościowe źródło wiedzy przydatnej zarówno w pracy pedagogicznej osób związanych z oświatą, jak i użytecznej dla rodziców, gdyż to oni w największym stopniu odpowiadają za edukację swoich dzieci w zakresie użytkowania mediów.

Słowa kluczowe: Internet, korzystanie z komputera, cyberprzemoc, użytkowanie mediów przez młodzież

Natalia M. Ruman, Zdenek Mruzek

#### Desafíos a los jóvenes por el uso de Internet. Una reflexión sobre el ejemplo de dos centros de enseñanza secundaria: en Pszczyna y en Český Těšín

#### Resumen

Internet tiene hoy en día infinitas posibilidades. Se utiliza prácticamente en todas las actividades humanas. El objetivo de este artículo no es demonizar Internet, sino explorar las distintas dimensiones del funcionamiento de los jóvenes en el mundo virtual. También pretende identificar qué aspectos negativos afrontan los estudiantes y qué aspectos positivos se derivan del uso de esta tecnología.

La primera parte consistirá en una presentación de las noticias más importantes sobre los nuevos medios de comunicación y, en particular, las características de Internet. Se debatirán cuestiones relacionadas con diversos aspectos del uso de Internet: desde los mecanismos psicológicos del uso de Internet por parte de los jóvenes, pasando por la educación mediática y las amenazas derivadas de diversos tipos de actividades en línea, hasta los fenómenos socioprácticos que se producen en el mundo digital.

Los conocimientos adquiridos a través de la parte teórica constituirán la base de la investigación empírica. El objetivo de la investigación será determinar la importancia del uso del ordenador y de Internet en la vida de los jóvenes en edad de cursar la enseñanza secundaria. Los resultados de esta investigación, junto con su elaboración y presentación de formas de contrarrestar las amenazas y métodos de uso positivo de Internet, pueden constituir una valiosa fuente de conocimiento útil tanto en la labor pedagógica de los implicados en la educación como para los padres, ya que son los principales responsables de educar a sus hijos en el uso de los medios de comunicación.

Palabras clave: Internet, uso del ordenador, ciberacoso, uso de los medios por los jóvenes

Наталья М. Руман, Зденек Мрузек

#### Вызовы для молодежи от использования Интернета. Размышления на примере двух средних школ: в Пщине и в Ческим-Тешине

#### Аннотация

Интернет в наши дни обладает безграничными возможностями. Он используется практически во всех сферах человеческой деятельности. Цель данной статьи - не демонизировать Интернет, а изучить различные аспекты функционирования молодых людей в виртуальном мире. Она также призвана определить, с какими негативными и какими позитивными моментами сталкиваются студенты при использовании этой технологии.

В первой части будут представлены наиболее важные новости о новых медиа и, в частности, об особенностях Интернета. В ней будут рассмотрены вопросы, связанные с различными аспектами использования Интернета - от психологических механизмов его использования молодыми людьми, медиаобразования и опасностей, связанных с различными видами деятельности в сети, до социально-практических явлений, происходящих в цифровом мире. Знания, полученные в ходе теоретической части, станут основой для проведения эмпирического исследования. Целью исследования будет определение значимости использования компьютера и Интернета в жизни молодых людей среднего школьного возраста. Результаты этого исследования, а также разработка и представление способов противодействия угрозам и методов позитивного использования Интернета могут стать ценным источником знаний, полезных как в педагогической деятельности тех, кто занимается образованием, так и для родителей, поскольку именно они несут наибольшую ответственность за просвещение своих детей в области использования средств массовой информации.

К л ю ч е в ы е с л о в а: Интернет, использование компьютеров, кибербуллинг, использование СМИ мололежью