Young People in Cyberspace: Threats and Opportunities
Młodzież w cyberczasoprzestrzeni – zagrożenia i szanse

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Abstract: The article examines the presence of young people in cyberspace, presenting it as an environment of both multidimensional risks and developmental opportunities. The study aims to analyse the functions that the Internet fulfils in the lives of the young generation, with reference to its instrumental, socialization, and entertainment roles, as well as to identify problematic phenomena resulting from excessive (problematic) use of interactive media. The paper draws on a review of the literature and the findings of recent empirical research. The findings indicate that the Internet has become a natural environment for youth socialization and identity formation, enabling the development of passions, the broadening of horizons, the establishment and maintenance of relationships, and access to knowledge. Moreover, the virtual world has been primarily designed and adapted to meet the needs of young people in their pursuit of personal, social, psychological, and even physical well-being. At the same time, growing concerns are raised about Internet addiction, escapism, neglect of responsibilities, emotional and relational disturbances, as well as exposure to violent content, misinformation, disorganization, risky behaviours, and even self-destructive tendencies. Health and psychosocial consequences such as depression, social phobia, sleep disorders, and weakened family bonds are also emphasized. The conclusions highlight the need for preventive and therapeutic measures (cognitive-behavioural, pharmacological, and family-based) and for education on the safe and responsible use of the Internet. While the Internet has become an indispensable element of young people's everyday lives, its responsible use requires support from families, schools, and broader social institutions.

Keywords: youth, cyberspace, cyber threats, internet, teenagers, interactive media, prevention

Abstrakt: Artykuł podejmuje problem obecności młodzieży w cyberprzestrzeni, ukazując ją jako obszar zarówno wielowymiarowych zagrożeń, jak i szans rozwojowych. Celem opracowania jest analiza funkcji, jakie pełni Internet w życiu młodego pokolenia, z uwzględnieniem aspektów instrumentalnych, socjalizacyjnych i rozrywkowych, a także identyfikacja zjawisk problematycznych wynikających z nadmiernego (problematycznego) korzystania z mediów interaktywnych. W opracowaniu wykorzystano przegląd literatury przedmiotu oraz wyniki najnowszych badań empirycznych. Ustalenia wskazują, iż Internet stał się naturalnym środowiskiem socjalizacji i budowania tożsamości młodzieży, umożliwiając rozwój pasji, poszerzanie horyzontów, nawiązywanie i utrzymywanie relacji oraz dostęp do wiedzy. Ponadto, świat wirtualny został wykreowany i zasadniczo dostosowany do potrzeb młodzieży w zakresie poszukiwania dróg, sposobów i źródeł osiągania przez nich dobrostanu osobistego, społecznego, psychicznego, jak również fizycznego. Jednocześnie obserwuje się narastanie problemów związanych z uzależnieniem od sieci (zagrożeń wynikających z problematycznego korzystania z Internetu), eskapizmem, zaniedbywaniem obowiązków, zaburzeniami emocjonalnymi i relacyjnymi oraz narażeniem na treści przemocowe, dezinformację, dezorganizację,

dezintegrację, ryzykowne zachowania, a nawet tendencje autodestrukcyjne. Wskazano także na konsekwencje zdrowotne i psychospołeczne nadmiernego korzystania z Internetu, takie jak depresja, fobia społeczna, zaburzenia snu czy osłabienie więzi rodzinnych. Wnioski podkreślają konieczność podejmowania działań profilaktycznych i terapeutycznych (poznawczo-behawioralnych, farmakologicznych, rodzinnych), a także edukacji w zakresie świadomego i bezpiecznego korzystania z sieci. Internet jawi się jako niezbędny element codzienności młodzieży, jednak jego odpowiedzialne użytkowanie wymaga wsparcia ze strony rodziny, szkoły i instytucji społecznych.

Słowa kluczowe: młodzież, cyberczasoprzestrzeń, cyberzagrożenia, Internet, nastolatkowie, media interaktywne, profilaktyka

INTRODUCTION

Cyberspace has become the domain of contemporary youth, defined by convenience, ease, flexibility, and technological proficiency acquired from the earliest years of life. Unlike previous generations, who had to adapt to digital progress, young people today have been using smartphones, smartwatches, computers, and the Internet almost since birth. The Internet itself has become the playground of their lives, and, to some extent, of their very existence. Although it is a virtual space, it has been inscribed into the fabric of everyday life as a real social world, where values, norms, and patterns of behaviour are acquired, identity is constructed, and personal channels of communication are created, maintained, and expanded. Moreover, it may be argued that this virtual world has been largely designed and adapted to the needs of young people in their pursuit of personal, social, psychological, and even physical well-being. At the same time, the satisfaction of these needs may be accompanied by individual risks, disorganisation, disintegration, misinformation, and even self-destructive tendencies.

Since the 1990s, the issue of youth in cyberspace has occupied a prominent place in both theoretical and practical reflection as well as in scientific research, owing to its significance for the development and functioning of the young generation. Early conclusions were predominantly negative. It was often assumed that young people's use of interactive media by led to their exclusion from real social interactions and adversely affected their mental health. Over time, however, scholars began to emphasize the complexity of the phenomenon and increasingly to highlight the benefits that adolescents may derive from online activity. Research has focused on the nature of the activities undertaken by young people in the digital

environment and the amount of time they spend in virtual reality (Valkenburg & Peter 2009, 1-5). It has been demonstrated, among other things, that Internet communication can support the maintenance of social relationships already existing in the offline world, foster the development of social skills, stimulate creativity and a willingness to learn, and nurture passions through participation in various virtual interest groups. It can also broaden horizons through real-time interactions with peers living in different parts of the world—a possibility particularly significant for young people from small towns—as well as provide support, resilience, and opportunities for building social relationships for adolescents who, for various reasons, experience ostracism and social stigmatisation. Furthermore, scholars have examined issues such as the formation of consumerist ideologies, the construction of new identities, the prevalence of risky behaviours facilitated by interactive media, and the circumstances under which adolescents become victims of the virtual world (McKeena 2008, 228-242; Ito et al. 2008, 5-18; Buckingham 2008, 153; Kowalski, Limber & Agatson 2010, 47-101; Cybal-Michalska 2007, 133; Pindel 2019, 83-90).

1. INSTRUMENTAL, SOCIALIZATION, AND ENTERTAINMENT ASPECTS OF DIGITAL MEDIA

The growing impact of the virtual environment on contemporary youth has made its influence a defining feature of a generational phenomenon. One may go further and argue that young people today can only be fully understood by examining their engagement with cyberspace and their participation in digital activities.

What, then, are today's teenagers immersed in online? An analysis of contemporary digital media makes it possible to distinguish a wide range of instrumental, socialization, and entertainment aspects (Smith 2013, 72). Instrumental aspects refer to various life needs of the individual, such as education, employment, and health (Gomes & Dias 2019, 67). Socialization aspects are primarily associated with social media (which, according to research, achieve 45% global penetration) and, through the formation of online bonds and social networks, involve the generation and distribution of information, opinions, interests, and ideas (Kemp 2019, 64; Beyens et al. 2020, 1-11). These encompass numerous domains, including careers and employment (e.g., LinkedIn), research (e.g., ResearchGate), romantic and/or sexual

relationships (e.g., Tinder), friendships (e.g., Facebook), and even political activism (e.g., Twitter). Entertainment aspects, in turn, encompass various digital platforms providing pleasure and amusement, such as digital games and audiovisual content (Chayko 2020, 43). Online games are often enriched with realistic animations and augmented reality features, which operate simultaneously in both online and offline environments, often in identical, real-world locations—for example, Pokémon Go (Hamari et al. 2019, 804-819). These may be designed for single players or allow multiplayer interaction (MMOs—massively multiplayer online games). Some, such as role-playing games (RPGs), require the development and enactment of a player's identity through an avatar (Jones et al. 2014, 73).

Such a constructed virtual world thus becomes for young people a sphere of fascination, aspiration, pursuit, and exploration—one that cannot simply be ignored.

2. Problematic use of the Internet—interactive media

In a situation where the majority of teenagers integrate the Internet fluently and appropriately into their everyday lives, it is nevertheless indisputable that a large proportion of young people struggle with Internet addiction.

In the literature, a multitude of terms are used to describe the problem of Internet abuse or misuse, often considering its social or psychological consequences. These include Internet addiction, problematic Internet use, gaming addiction, and problematic gaming. However, despite this multitude of terms, each of them has its own limitations, as they do not fully reflect the heterogeneity of problems experienced by teenagers in the context of their use of digital media. At the same time, they lack precision or consistency to capture the fluid, cross-cutting functionality of online activities. It therefore seems more appropriate to replace the commonly used term "Internet addiction" with the term "problematic use of interactive media." This formulation retains the conceptualisation of the Internet as an addictive medium while avoiding the stigmatising and overly restrictive connotations of existing terminology (Bickham 2021, 3-5).

The conceptualisation of the Internet as an addiction (understood as excessive time spent online, combined with an internal compulsion to remain connected) assumes that an

individual's interaction with digital media depends on factors that may "push" or "pull" the individual towards the online world (Kozak 2014, 126; Davis 2001, 187-195; Douglas et al. 2008, 3027-3044). Push factors (encouraging Internet use) include user characteristics such as personality traits or psychological symptoms, as well as environmental characteristics such as peers and family. Pull factors (encouraging Internet use) include the online environment and/or the way individuals experience themselves in virtual spaces. These factors interact to produce negative outcomes such as symptoms of Internet addiction, sleep disturbances, and decreased academic, relational/interpersonal, and overall performance (Stavropoulos, Motti-Stefanidi & Griffiths 2021, 5).

Possible determinants of Internet addiction among young people include individual, demographic, and psychosocial characteristics. The most common risk factors are as follows:

1) Male gender (up to 5 times higher percentage of Internet-addicted boys and young men than girls and young women).

2) Age (in early adolescence, Internet addiction increases with age, reaching its highest level around the age of 15-16).

3) Low socio-economic status (including lower maternal education and single-parent households).

4) Family dysfunction (including low family cohesion, poor parenting, more family conflicts and poorer family relationships, resulting in spending little time with parents, hostility from parents, and less affection from both mother and father).

5) Deficits in self-control (low self-control) and higher levels of impulsivity (dysfunctional impulsivity, including certain aspects of this trait, e.g. high levels of urgency).

6) Higher scores on scales of rule-breaking and aggressive behaviour, and behavioural traits associated with hostility.

7) Neuroticism (as a common element of internalising mood disorders, including anxiety and depression), tendency to feel nervous and worried (Yang et al. 2020, 81-92; Yang et al. 2018, 101-120; Karacic and Oreskovic 2017, 38-42; Bonnaire & Phan 2017, 104-110; Schneider, King & Delfabbro, 2017, 321–333; Kim et al. 2016, 32-39; Choi et al. 2014, 246-

253; Gervasi et al. 2017, 293-307; Müller et al. 2015, 565-574; Firat et al. 2018, 97-103; Wartberg et al. 2016, 272-277; Müller et al. 2014, 129-136; Griffith et al. 2010, 1125-1136).

Furthermore, when considering Internet addiction, particular attention should be paid to the results of American studies, which emphasise that people are not actually addicted to the substance or the behaviour itself, but to the brain's response to the drug or activity (Fauth-Bühler & Mann 2017, 349-356). Thus, mania focused on digital entertainment can be compared to the use of psychoactive substances and gambling disorders. Certain online activities, including gaming, release dopamine at a rapid rate, producing immediate gratification and a cyclical response that may include compulsive behaviour and increased tolerance (Sussman et al. 2018, 307-326).

Behavioural and EEG studies ofreward processing and inhibitory control indicate that young people addicted to the Internet exhibit abnormalities in these areas. At the same time, magnetic resonance imaging results confirmed, with neurobiological evidence, that Internet-addicted individuals, like those with gambling disorders, have dysregulation of the reward system, reduced impulse control and other maladaptive behavioural and cognitive patterns (Li et al. 2020, 28).

The brains of young people addicted to the Internet, similar to those with psychoactive substance use disorders, show reduced orbitofrontal cortex thickness, which is a structural abnormality. In addition, neuroimaging studies have shown similarities in neural functioning and specific brain structures between Internet addiction and both compulsive behaviour and substance-use disordersuse (Hong et al. 2013, 1-5).

Nevertheless, in view of the above, compulsive, excessive Internet use should not be definitively classified as a behavioural addiction. It may instead represent maladaptive coping or a manifestation of existing self-regulation problems. Behaviours indicative of Internet addiction may also be symptoms of existing psychiatric disorders expressed through the digital environment (Starcevic 2017, 110-113; Przybylski, Weinstein & Murayama 2017, 230-236).

A worrying phenomenon observed among teenagers is indulging in gaming or other online social activities in order to escape from everyday problems or reality, as well as seeking solace from a difficult social and family life in a world of illusions, fantasies and virtual

friendships (the phenomenon of escapism as a motive for being online) (Beranuy, Carbonell & Griffiths 2013, 149-161). Young people frequently pursue a "new life" online when their "normal" life does not meet their expectations.

As a result, the time they spend online is increasing year by year. Many adolescents also multitask while connected, for example, eating meals while online or falling asleep with the Internet on. Data from the "Teenagers 3.0" study (Teenagers 3.0, 2023, 7-12) indicate that young people spend on average 5 hours and 36 minutes online per weekday. For comparison, this figure was 4 hours and 50 minutes in 2020, and 3 hours and 40 minutes in 2014 (Teenagers 3.0, 2021, 10). On weekends, young people use the Internet for an average of 6 hours and 16 minutes per day (Teenagers 3.0, 2023, 7-12). American studies report even higher levels—up to 8 hours daily on weekdays (Bickham 2021, 2).

Young people spend their time online primarily on the entertainment aspects of the virtual world, i.e. listening to music (75%), watching films and series (59%), playing online games (46%) and socialising, which translates into establishing and maintaining social interactions through the use of social media (42%) and contact with friends (64%) (Stavropoulos, Motti-Stefanidi & Griffiths 2021, 20).

The presence of the younger generation on social media is also becoming problematic. Teenagers claim that they cannot go an hour without access to it. Furthermore, they treat their activity on social media as a morning ritual, a habit, a daily practice, a way to start the day, immediately after waking up. One in four teenagers is unable to think about anything other than social media platforms. As a result, they often neglect their household and school responsibilities. Teenagers also use social media to feel better about themselves. Yet, paradoxically, most of them experience high and above-average levels of loneliness on social media (Teenagers 3.0, 2023, 7, 25-26, 233-238).

The incorporation of social media into everyday life exposes young people not only to the diverse content it offers, but also to pressure to share aspects of their own lives. Alarmingly, almost half of teenager's report being bombarded with antisocial content online and feel compelled to share images and personal details of their daily lives and surroundings step by step (Bickham 2021, 7).

Young people have different motives for posting their photos, videos or live streams. Girls prioritise the attractiveness of people, places and personal physical appearance, while boys refer to elements related to a sense of humour. Instagram, Facebook, Snapchat, TikTok, Pinterest and Messenger are the social media platforms preferred by girls. Boys, on the other hand, choose YouTube and Twitch (Teenagers 3.0, 2023, 38).

Despite the minimum age requirement of 13 for most social media platforms, increasingly younger children are using them, often registering with fictitious data. This sometimes occurs with the knowledge or even consent of parents and guardians. Unfortunately, the content shared on social media platforms is often inappropriate or unsuitable for the emotional, intellectual, and cognitive development of young people, who may accept it uncritically and lack the ability to distinguish between genuine and false information.

Another trend concerns education. Using websites such as Sciaga.pl, Bryk.pl, Brainly.pl, and KLP.pl, they search for ready-made solutions to various types of tasks, summaries, and book reviews (Teenagers 3.0, 2023, 152-156, 287). Problematic Internet use carries significant risks of psychological, social, and physiological consequences. Due to the problematic use of the Internet by young people, there is a real danger in the form of psychological, social and physiological consequences of this activity.

The psychological consequences include social phobia manifested by avoidance of face-to-face contact, disruption of non-verbal communication, anxiety, depression caused by the inability to be online (even temporarily), reformulation of the hierarchy of needs by redirecting attention and activity to constant use of the network, loss of motivation and energy for purposeful action, abandonment of previous goals and plans, cognitive deprivation, narrowing of the world to a smartphone or computer monitor, circadian rhythm disruption (leading to irritability, tension, anxiety, discomfort, nervousness, and reduced mental performance), and reorganisation of sleep and activity patterns. These processes are further linked to abnormal fluctuations in blood levels of hormones, glucose, and other substances essential for proper bodily functioning.

The social effects include weakening or loss of emotional ties with previously close people such as family and friends, neglect of interpersonal relationships, frequent conflicts,

social isolation, and the organisation of daily life around the computer, often leading to neglect or abandonment of responsibilities (Kozak 2014, 129-130).

Problematic Internet use can have a very negative impact on the health and well-being of young people. For example, in terms of mental health, the DQ Institute reports that young people who are victims of cyberbullying are up to 160% more likely to attempt suicide or engage in other self-harming behaviours. Excessive screen time may also correlate with risky behaviours, increased exposure to crime, low academic achievement, and physical health problems such as weight gain, obesity, failure to meet basic physical fitness guidelines, and even chronic conditions including weakened back muscle strength (Stavropoulos, Motti-Stefanidi & Griffiths 2021, 14).

In terms of cultural illustration, the Polish film *Suicide Room* (2011, dir. Jan Komasa) vividly portrays the tragic consequences of problematic Internet use. In real life, the main character has everything he needs—many friends, the prettiest girl in school, rich parents, money for clothes, gadgets and parties. Nevertheless, in line with the statement that "often the people who hate life the most are those we would never suspect," in the face of failures and a lack of understanding from others, he grows weary of everyday life and escapes from reality into a virtual world where he loses himself. This world, although initially giving him a sense of security, eventually reveals itself to be only an illusion as relationships limited to cameras, games and all-day conversations are worthless and, like any other, it becomes imperfect. However, it is too late to escape from the trap of his own feelings, thoughts and the web of virtual intrigue, and for help from his loved ones, who realise too late the problem associated with the physical and psychological consequences of Internet addiction. As a result, the protagonist of the film loses what is most precious—his life—and commits suicide. The most disturbing aspect of this striking image of the tragic consequences of problematic Internet use and losing oneself in the web is that it mirrors more than one true story that unfolds every day around the world.

Due to its advantages, unlimited possibilities and diverse offerings, the Internet has become a source of satisfaction for human needs, including an attractive form of leisure activity, and is therefore irreplaceable and necessary for everyday human functioning. Nevertheless,

improper, unconscious, irrational and irresponsible use of the global network creates dangers in various areas of its exploitation and poses a threat to users within its sphere of influence (Kozak 2014, 132-134).

3. TREATMENT OF PROBLEMATIC USE OF THE INTERNET AND INTERACTIVE MEDIA

At the current stage of research into the treatment of problematic use of the Internet and interactive media, including its effectiveness, three approaches (application and adaptation to recipients) have been adopted:

1. Cognitive-behavioural therapy.
2. Pharmacological therapy.
3. Group/family therapy (Zajac et al. 2017, 979-994).

With regard to the first approach, dialectical behaviour therapy, which builds on cognitive-behavioural therapy but addresses emotions as well as thoughts and behaviours, appears highly promising.

Pharmacological treatment, on the other hand, involves the use of drugs targeted at comorbidities or underlying abnormalities, dysfunctions, disorders that are responsible for, or exacerbate, problematic internet use (including obsessive-compulsive disorder, ADHD, and depression). Among the drugs noted as effective in reducing problematic Internet use (both directly and indirectly, i.e. by treating other conditions whose management also leads to improvement in this area) are antidepressants such as escitalopram and bupropion. The latter is also beneficial for inattention, impulsivity, as well as mood problems, i.e. features typical of ADHD. In addition, the stimulant methylphenidate and the non-stimulant atomoxetine (both used to treat ADHD) are considered potentially effective due to their ability to regulate impulsivity (Han & Renshaw 2012, 689-696; Song et al. 2016, 527-535; Park et al. 2016, 427-432; Kuss & Lopez-Fernandez 2016, 143-176).

With regard to the third approach—group/family therapy—it has been observed that group therapies lasting eight weeks or more and involving 9-12 participants are particularly effective. These include single-family groups, multi-family groups and school groups. Therapy sessions are based on the cognitive-behavioural model, considering innovative

psychotherapeutic methods and strategies designed specifically for people with problematic Internet use, as well as traditional family therapy. In one study, 20 out of 21 adolescent participants, supported by cooperation with their families, were no longer classified as Internet addicts after six two-hour sessions. Such results suggest that group/family therapy represents an encouraging method of treatment for problematic Internet and interactive media use (Kuss & Lopez-Fernandez 2016, 143-176; Chun, Hyeonsuk & Sunhee 2017, 225-231; Lindenberg, Halasy & Schoenmaekers 2017, 64-71; Liu et al. 2015, 1-8).

Nevertheless, in order to gain a more comprehensive clinical picture and broaden treatment options, further research is required into the general and specific behaviours that define Internet addiction, as well as clearer explanations of key concepts, including the terminology of the disorder itself (Bickham 2021, 8).

It should also be emphasised that all treatment methods must be supported by the family environment—the parents and guardians of those affected. Parents possess preventive tools that can shape a positive home environment, strengthen relationships and family bonds, and enhance overall family functioning, which are protective factors against the adverse consequences of problematic Internet use.

4. PRIVACY ON THE INTERNET

Every day, more and more young Internet users are discovering the extent to which relative anonymity online can pose a serious problem. Even if individuals believe they are anonymous and take measures to protect this status, it does not mean they cannot be traced online. Frequently, users themselves—sometimes unknowingly in the face of hidden e-threats, and at other times willingly and with their explicit consent—post (or allow others to post) a wide range of information about themselves and their surroundings. This includes personal data, addresses, images, dietary preferences, hobbies, views, emotional states, activities, and locations, as well as information about places they have visited or events in which they participate regularly. A clear example of such practices can be observed on Facebook and Instagram, where posts are further enriched with photos, videos, and live streams (Kozak 2014, 133).

At the same time, every second teenager reports that although they wish to remain anonymous in cyberspace, their parents or guardians prevent this by constantly posting photos on social media accounts that make their image public. This practice, known as "sharenting," often causes embarrassment, disappointment, and frustration among adolescents (Teenagers 3.0, 2021, 7; Teenagers 3.0, 2023, 181-189).

Furthermore, when young people engage in online activities—such as, communicating with strangers, accepting invitations to join groups of friends, participating in forums and groups, subscribing to various social media accounts, adopting new identities, and sharing them with others—they rarely verify the authenticity of recipients, authors, or profile owners, nor do they assess the credibility or sources of the content (Górka 2017, 234-243).

In addition, young people frequently assume different roles on the Internet and and experiment with various versions of the "self" without the fear of pejorative criticism or peer rejection they might encounter offline. A significant proportion of teenagers present themselves online as someone other than who they truly are, falsifying, among other things, their gender, age, skin colour, views or sexual orientation, and using multiple email addresses and online nicknames. While this perspective is appealing to those in the process of self-discovery, it is also dangerous, as pretending to be someone else may lead to online interactions spilling into the offline world, where those they meet may not be who they claim to be (Kowalski, Limber & Agatson 2010, 9).

Furthermore, anonymity on the internet (often referred to by young people as an "invisibility cloak") encourages behaviours that would be unlikely to occur in real life. Teenagers may say or do things online that they would never attempt offline, due to their sense of reduced identifiability. This phenomenon, known as "online disinhibition," is well documented. For example, adolescents who are physically smaller or weaker than their peers, have lower self-esteem, and are not perpetrators of offline school violence are often found to engage in cyberbullying (Kowalski, Limber & Agatson 2010, 73-74, 202).

5. Cyber threats: cyberbullying—cybercrime—exposure to risky behaviour

Currently, the issue of youth safety online focuses primarily on the risks of sexual exploitation and cyberbullying. However, the scope of cyber threats extends far beyond these two areas.

The Organisation for Economic Co-operation and Development (OECD) has developed a framework for categorising cyber threats, which has been widely adopted, including by UNICEF and many other organisations. This framework consists of the following categories:

1. Content—including exposure to illegal and age-inappropriate material, embedded marketing and online gambling.

2. Contact—including ideological persuasion, exploitation (e.g. sexual exploitation and human trafficking), harassment, drug addiction, and the violation and misuse of personal data;

3. Behaviour—including cyberbullying and the effects of excessive screen time and digital device ownership on children.

4. Consumer—including marketing, commercial profiling, financial risks and security risks (Wójcik 2020, 174-175; Livingston et al. 2011, 13; Pyżalski 2012, 89-92).

In addition, privacy violations are also highlighted, which permeate all of the above categories.

Cyberbullying is an extremely dangerous phenomenon circulating on the internet. It includes intimidation, blackmail, slander, harassment, dissemination of compromising material, mocking others, impersonation, and stalking, all of which can result in serious harm (Kozak 2014, 133-134; Teenagers 3.0, 2021, 79-90; Kowalski, Limber & Agatson 2010, 53-59).

The Internet is flooded with hate speech—verbal attacks, name-calling, ridicule and humiliation are everyday occurrences, and teenagers are aware that people who insult others online often go unpunished. It is also important to note that freedom of speech on the Internet is unlimited and often treated as more important than combating hatred. What is more, the prevalence of violent situations faced by young people causes a kind of numbness, as many teenagers display a passive attitude by not reacting to these situations and not reporting them to anyone. The reasons for this situation can be found in the still insufficient education on how to properly recognise and understand the various categories of online threats, as well as how to

respond to them appropriately and responsibly, and in the fear of speaking about the perpetrator or the situation itself (Teenagers 3.0, 2021, 88).

The virtual world is moreover an area which, on the one hand, can foster self-confidence and self-expression, but on the other hand, can also have the opposite effect. For instance, the website doyoulookgood.com allowed users to create an account, post information and photos, and then be rated by others for attractiveness, with comments attached. Negative evaluations often left young people feeling wronged and humiliated, triggering a cascade of negative psychological consequences (Kowalski, Limber & Agatson 2010, 10).

Other cyber threats experienced by adolescents include hacking into social media accounts, messengers or email, theft of virtual goods (e.g. game items, app points), hacker attacks, spam attacks, data theft, online transaction fraud, extortion attempts, threats of physical violence (including death threats), body-shaming, disclosure/acquisition of secrets, trolling, exclusion from the online communities, offers to purchase pirated versions of films or music, offers to purchase illegal substances such as drugs, designer drugs, anabolic steroids, coercion into sexual contact, paedophilia, grooming, flaming, "happy slapping", deepfakes, dissemination of inappropriate images and content (including sexting and pathostreams often broadcast live, on YouTube or Twitch), bombardment with unwanted advertising, secret meetings with adults encountered online, and the use of websites and applications intended for adults, especially pornographic sites such as Pornhub (Pyżalski 2012, 126-129; Teenagers 3.0, 2021, 92-103; Teenagers 3.0, 2023, 91-93; Pospiszyl 2023, 236-237; Rywczyńska & Wójcik 2018, 21-82).

At the same time, teenagers participate in various online challenges, ranging from humorous to irrational or even life-threatening, endangering their own or others' lives or physical and/or mental health. They also use websites (including STS.pl and Betclic.pl) that draw them into the world of gambling, e.g. sports betting (Teenagers 3.0, 2023, 263-274).

Overall, cyber threats in the youth environment are constantly evolving and expanding, both in frequency and in scope. This is linked to the many hours adolescents spend online each day watching films, videos, or streamed television, gaming, and using social media. At the same time, this is complemented by the rapid technological progress that has been observed for years

in relation to the Internet of Things or devices operating online, cloud-based devices—wearable devices, household appliances (small and large), toys and robots, through which cyber threats can be expected, including the misuse of personal data, e.g. location and usage patterns (Kwiatkowska 2014, 7-11).

6. YOUTH AS AN OPPORTUNITY FOR REAL VIS-À-VIS THE VIRTUAL WORLD

Today's teenagers have well-established skills and a remarkable ability to use digital tools, which means they can become guides in the area of cybersecurity challenges. They can also be advocates for reliable measures to protect the virtual world from threats, as well as for policies aimed at protecting individuals and communities. Young people are the generation that can effectively deal with cyber threats. It is they, more than anyone else, who point out and experience situations that violate the well-being and security of the Internet. At the same time, they develop a conviction about the far-reaching consequences of such circumstances, which affect many areas of social and economic life, and may even reach the national level. They can, and indeed must, be involved as leaders in activities related to raising awareness and educating their peers and the wider community about online safety, for example through various platforms, including social media.

Furthermore, when observing coding competitions, tech start-ups or design marathons, makes it clear that many young people are active participants, including initiators and creators of innovative strategies, technologies and IT tools. As a society, we must decisively and constructively transform this potential, which is within our reach, into support for solving problems, and for expanding and improving the world, both real and virtual.

Finally, in the face of rapid advances in artificial intelligence, it is worth emphasising the important role of young people in its ethical development, implementation and integration. It is young people who see the potential, opportunities and many positive aspects of artificial intelligence, but also the fundamental, though manageable, risks and areas that remain insufficiently known and understood. Based on this, the younger generation should be provided with reliable knowledge and enabled to acquire skills so that they can use this technology in

ways that ensure the well-being and protection of themselves and others, while alsopromoting a safer digital world (Stavropoulos, Motti-Stefanidi & Griffiths 2021, 18).

CONCLUSION

Cyberspace for young people is a modern fairy tale, a place of unlimited social, creative and entertainment possibilities. Through the world of interactive media, teenagers can change the areas of their lives with which they are dissatisfied, restart and begin anew. They can reconfigure aspects of their identity, make friends, be beautiful, "travel, have adventures without leaving home, live in a palace they build themselves," be rich and wise. "And with all this, it is a world so universal, universally accepted, useful, almost 'real' that it is harder to leave this Matrix than to stay in it" (Pospiszyl 2021, 307). Just as the benefits of young people being online are indisputable (e.g. for developmental, educational, pro-social and affiliative purposes), so too are the dangers that lurk there. Therefore, in the context of the important issues concerning young people described in this article, there is a need not to leave them alone online, nor to reinforce their physical and mental exhibitionism or digital slavery (Kozak 2014, 267-292). There is also a need to shape appropriate attitudes among young people towards interactive media and the positive phenomena in cyberspace, to create a safe online environment, to expand knowledge about the digital world, and to ensure proper supervision of online activity, e.g. through parental control using dedicated programmes or applications, or through measures to expose and combat cybercrime by establishing special units and organisations for this purpose.

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