

# Negative aspects of the information society development

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**Abstract:** The development of an information society leads to a shift from material civilization towards an invisible civilization which should properly be called an information civilization. The information civilization creates enormous opportunities for society and economy. Internet-based functions, such as teleworking, tele-education or tele-information have their social and economic implications.

*Goal of the article:* The goal of the study is to draw attention to the social consequences of the fast development of the information society with a presentation of selected threats to children and young people in cyberspace.

*Methodology:* The study uses the research method based on the literature analysis of the phenomenon of threats to children and adolescents in cyberspace, results of research conducted among others by the Nobody's Children Foundation and the Central Statistical Office of Poland.

*Conclusions:* Wide perception of the cyberbullying problem is needed as this issue concerns children and young people as well as parents and teachers.

**Keywords:** information society, cyberbullying, sexting, grooming

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## 1. Introduction

The development of an information society leads to a shift from the material civilization towards the invisible civilization which should precisely be called an information civilization. Cyberspace poses many threats, especially for school children and youth, not only as behaviours

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occurring in computer games involving violence. These threats have a wider background because they come from Internet users, as well as from published content and available related tools.

## **2. The essence of the information society**

The revolution in information and communications system has brought the world into an online era, in which electronic media have become the primary tool of work, information and education. However, it may also create various types of threats and be a tool for manipulation.

At present, thanks to the Internet we can enter the entirely new world, where one can get any information. The Internet can replace almost every other independent medium: from the radio, through the TV to newspapers. The fact that the Internet is almost unlimited makes it an unstructured and even chaotic medium. The Internet offers a very new experience which was previously unavailable, such as online gaming networks, where thousands of people are involved in real-time and, with their mobile devices, can be present on non-stop networks.

The global network, as a kind of meta-medium creates a new social structure, which is an "information society", also referred to as a "network society", "media society" or "third wave" in the literature of the subject and in popular science journalism. The common and basic characteristic of all these terms is that the main method of transmission is not a direct contact, but an indirect one, through the Internet and the media (Koczy, 2013: 81).

The development of an information society leads to the departure of the material civilization as we know it towards the invisible civilization, which should precisely be called an information civilization.

Functions of information societies mainly refer to the role of teleinformatics and the Internet as a multi-tasking medium. From the angle of economy and society's demand, the Internet has many functions, including teleworking, tele-education or tele-information. The implementation of these purposes has its specific social, economic, ecological or cultural implications (Castells, 2007: 35).

The development of the information society has led to an increase in anonymity and thus has liberated the sphere of self-reliance or self-interest. Social bonds are now more and more often based on symbolism.

## NEGATIVE ASPECTS OF THE INFORMATION SOCIETY DEVELOPMENT

In most of the developed countries, the vast majority of population has developed resources for producing, processing and transmitting information as well as communicating. More and more societies have become capable of using the information and communication technologies, e.g. computer or the Internet.

Practical use of information technology has a significant impact on the level of national income. The share of industrial sector and telecoms services have been growing steadily, in the national income of the country as well as in the manufactured global product, in comparison to other types of services and sectors of the national economy.

The use of information technology is also associated with a shift in social preferences as regards ways of entertainment. The cinema, theatre, reading are now being replaced by their electronic media counterparts (Castells, 2007: 37). Thus, information civilization creates tremendous opportunities for society and the economy, but it also triggers a wide range of negative phenomena regarding cyber security threats for the youth. We observe currently the dynamic development of the Internet. In 2008, more than a half (61%) of households with children in Poland had access to global networks. In 2012, this number amounted to 93%. In 2016, nearly every household (98%) with children had access to the global web (Central Statistical Office of Poland, Statistical Research 2012-2016, GUS, Warsaw, 2016).

### **3. Selected threats to youth in cyberspace**

Today's children and youth are generations brought up in the age of universal access to the Internet. Searching for information and communicating with others via the Internet have become a daily routine for young people and an important part of their social life. Networking is now a natural environment for them, often more than the real world. The perception of this "virtuality" causes everything that is downloaded and posted online to be treated as something unreal, as harmless fun (Andrzejewska, 2013: 39, 46). Violent behaviours in computer games, for instance, are interpreted by children as something normal, not as evil, because during the game children do not feel pain and are not aware of wrong-doing. It is obvious that those children who spend a lot of time playing combat, violent computer games are more aggressive and that they present lower moral standards (Andrzejewska and Bednarek, 2011: 4).

Initially, the problem of cybersecurity was limited to computer games involving violence and malicious messages. Currently it regards mainly the social networking and discussion

forums, bullying through network communicators, and by posting photos taken with smartphones.

Cyberspace contains many threats to young people, not only coming from the violent computer games. These threats have a broader background as they emanate from active actors, users of the Internet, as well as from the content, sources and tools already available there (see Table 1.).

**Table 1. Online threat typology**

	<b>Sex</b>	<b>Aggression</b>	<b>Other threats</b>	<b>Commercialism</b>
<b>Content- child as addresser</b>	Pornography	Violence	Other dangerous content	Dishonest marketing, spam
<b>Contact-child as participant</b>	Grooming	Electronic aggression	Ideological or anti-health persuasion	Personal data phishing
<b>Conduct- child as perpetrator</b>	Sexting	Electronic aggression offender	Release of harmful content	Hacking, piracy

Source: Sz. Wójcik, 2017: Vol 16, No. 1

It is also worth noting that in view of the enormous diversity of the Internet as a medium, attention should be paid to the abuse of specific applications. This refers to the abuse of online games, social networking sites and network communicators, online porn sites and online sex services, as well as online gambling.

According to Polish Internet survey data, the most popular websites in the age group of 7-14 years are (by Google), YouTube, Facebook, Onet, Interia and NK, formerly Our Class (Gemius/PBI, 2011).

The vast majority of Polish teenagers have become active users of social networking sites, blogs and discussion forums, where they express their opinions and focus the activity of other Internet users. The seeming anonymity of the Internet has also increased unethical behaviour. More and more often adolescents use hate speech which is described as an unjustified insult and

vulgar and aggressive comment. This can be easily seen at any discussion or comments on Facebook or other forums. Hate speech usually concerns public figures, but sometimes also ordinary young people. Such comments can be very severe (Polak, 2014: 97).

A study by the Nobody's Children Foundation found that 4 out of 10 young people aged 14 to 17 years encountered this phenomenon. Every fifth Polish teenager has been the victim of hate speech and other forms of violence. Youth contact with harmful content is shown in Table 2.

**Table 2. Contact of youth with harmful content**

	<b>Pornography (%)</b>	<b>Self-harming ways</b>	<b>Ways of committing suicide</b>	<b>Ways to extreme slimming</b>	<b>Hate speech (%)</b>	<b>Experience with using drugs (%)</b>
<b>In all</b>	67.3	22.3	15.6	28.6	40.1	24.1
<b>Girls</b>	60.1	28.2	19.2	41.5	40.6	26.3
<b>Boys</b>	75.2	15.7	11.6	14.3	39.5	21.7

Source: Włodarczyk, 2013: 97

Pornography is the most frequent dangerous content on the web that children and young people are exposed to. According to a recent study carried out by the Orange Foundation in partnership with the Children's Health Foundation in 2016 in a group of younger children (10-18 years CAPI, N = 500), 19% of the children entered sites destined only for adults. Sex and pornography sites were the most often visited, but children entered also sites containing vulgar speech and violence. The overwhelming majority of young people surveyed (89%) admitted that they entered these web sites accidentally. More than a third of young people (32%) aged 7-18 years were exposed to eroticism and Internet pornography only in the month preceding the survey. According to research, this problem grows with age: more than a quarter (27%) of children aged 7-12 years have been exposed to eroticism and pornography. This number grew to 33% regarding children aged 13-15 years, and, as for children aged 16-18 years, the number was 45% (Wójcik, 2016: 283).

### **3.1. Sexting**

Sexting is uploading or publishing intimate photos via the Internet or mobile networks. Such messages may be sent as a "proof of love" but may also be forwarded, stocked, or used to blackmail or discredit the person presented. The threat of sexting was not discussed in Poland until recently. Only in 2014 the Nobody's Children Foundation conducted a survey of the issue among Polish youth. The study carried out among adolescents aged 15-19 years (CAWI, N = 503) showed that this is a large-sized problem. All of the 45% respondents admitted that their friends send this type of messages but 55% did not know anyone who did it. A little above 1/3 admitted that they received sexting messages, and every tenth admitted that he sent them himself (Warsaw Nobody's Children Foundation: 2014).

### **3.2. Grooming**

Child grooming is establishing an emotional connection between an adult and a child to lower the child's inhibitions with the object of sexual abuse (Palmer, 2016: 6). A very few studies addressed directly issues of grooming children online. Polish nationwide diagnosis of violence against children conducted in 2013 on a representative sample of children aged 11-17 years (CAPI, N = 1005) by the Empowering Children Foundation (then: Nobody's Children Foundation) shows that 5.1% of children got the sexual proposal and were proposed to make acquaintance on the Internet (Włodarczyk, 2013: 97).

Most of the research conducted on young Internet users, does not explicitly ask about attempts to seduce online, but rather about cases of meeting web friends in the real world. This is due to the sensitivity of the issue in question and its still rather small sample sized character. However, the above-mentioned research shows that there is a high risk of grooming.

### **3.3. Cyberbullying**

Legal definition of cyberbullying, widely described as violence with the use of information and communication technologies (the Internet and mobile phones) still has not been established either in Poland or under European Union law. As far as particular EU Member States are concerned, only some of them provide an official definition of this phenomenon (European Parliament, 2016: 25). Academics attempt to describe this crime by its features (Razza, 2015: 193).

## NEGATIVE ASPECTS OF THE INFORMATION SOCIETY DEVELOPMENT

According to Shariff, the well-known British theorist of the subject, the most adequate definitions were given by Belsey or Willard (Sharif, 2008: 29). In the opinion of Belsey (2015: 2), "cyberbullying involves the use of information and communication technologies to support deliberate, repeated, and hostile behaviour by an individual or group, which is intended to harm others." As reported by Willard (2003: 65), the language used by the perpetrator is "defamatory, constitutes bullying, harassment, or discrimination, discloses personal information, or contains offensive, vulgar or derogatory comments." What is worth remarking, the European Union legislation also calls for a common definition of "cyber harassment" (European Parliament, 2017: 7).

Until now, more than half of young Internet users have been cyberbullied in Poland. The first campaign was carried out by the Nobody's Children Foundation in 2008 (now: Empowering Children Foundation). While cyberbullying is constantly present in Polish schools, its scale has not yet been properly measured due to the extremely complex nature of the problem.

The basic forms of cyberbullying include: trolling, harassment, threatening, tracking by network, catfishing, exclusion, for example by removing someone from the group of friends of the social network. Although cyber bullying is virtual, it hurts as a physical assault.

Rapid development of the Internet, constantly changing nature of the cyber-threat landscape with the unlimited infiltration of young people present all stakeholders with serious legal challenges. At present, in Poland the legislation is not sufficiently correlated with the seriousness of cyber-bullying. There are many regulatory gaps. Only the most important crimes have been introduced into Polish Penal and Civil Codes: the insult (Article 216 of the Penal Code), defamation (Article 212 of the Penal Code), and IT hacking (267, 268 of the Penal Code), threat (Article 190 and 191 of the Penal Code), harassment (Article 190a of the Penal Code) and violation of the personal goods, (Articles 23 and 24 of the Civil Code) (Pyżalski 2014: 96).

The study of bullying shows serious discrepancies in the scale of the problem. The size of the problem depends on the form of aggression. The large survey conducted among secondary school students in 2010 showed that the most common forms of electronic aggression were: chat insult (44% of respondents) or online game insult (37%), unpleasant comment on forum (38%) or on social network (28%). These were simple forms that offenders were capable of using spontaneously. The cases of sending unwanted photos (12%), stealing private messages (12%), creating a fake profile (16%) or offensive website (6%) were the rarest (Pyżalski, 2014: 96).

The victims of cyber-attacks are individuals, groups of people and sometimes entire communities. It should be stressed that the biggest group of victims are children and young people.

*Features of cyberbullying:*

- Unlike traditional violence, the phenomenon of cyberbullying is characterized by a high level of anonymity. In addition, the significance of "strength", as measured by the physical characteristics of the offending individual, is of lesser importance. More significant is the ability to exploit the opportunities offered by electronic media;
- The information is transmitted with a high speed and it is not possible to remove all files that had been posted on the Internet because reaching every addresser is unfeasible. Discrediting images could appear to many people in a matter of seconds, and remain on the network forever, even after resolving possible conflicts (Czesławiak, 2007: 8);
- Victims of cyberbullying are permanently exposed to the attack, regardless of location or time of day or night;
- Society can control the behaviours in question only to some extent. The risks to children from electronic media are often difficult to notice by parents or teachers, especially if they have limited knowledge and experience in the use of electronic media.

The scale of dangerous online contacts and related crimes committed in the real world is difficult to estimate. Due to the sensitivity of the problem and its limited scale, such information is difficult to obtain in the course of sociological research.

#### **4. How to fight cyberbullying among children and youth?**

Wide perception of the cyberbullying problem is of great importance as it concerns children and young people as well as parents and teachers.

##### **4.1. Youth**

Young people are not always aware of the dangers of participation in the network, nor what behaviours could in fact signify violence. They are convinced of the anonymity of the web. The sense of anonymity makes young people too often forget the basic moral laws, and because of the fact that no one knows who they really are, they indulge themselves in far more than in the real world. There is no shortage of ideas for virtual slander among young people. This



anonymous character is extremely painful. Despite the idea that home should be a safe place, messages penetrate into there, as well.

### **4.2. Parents and carers**

Parents and carers who place too much trust in children may fall into a trap. Internet gives children the possibility to decide what to do when and how to do it. In order to create the right child safety system on the Internet parents and carers have to escape from this trap. Their knowledge in this area is very important for the safety of the young Internet users. Let us not forget that electronic media are in general not dangerous. What is dangerous is our ignorance about electronic media and our false belief that a child should be allowed to enter the cyberworld on its own (Wuszt, 2013: 141).

Parental ignorance has been confirmed by research and interviews with children and adolescents. However, their knowledge of creating a right child safety system on the Internet should be the most important because most cyberbullying acts appear when children are at home, where as many as 70% of teenagers receive insult messages (Wolk - Karaczewska 2012: 6).

Meanwhile, as many as 18% of parents and carers indicate that they rather do not possess such knowledge, and 5% - that they do not possess it at all. All of 77% parents talk with children about children's safety in the network. However, the most common discussions are about online chatting (57%), contact with dangerous content (51%), and private data publishing (43%). Only slightly more than half of the parents (53%) establish together with children principles of using the Internet. In cases where these rules are set, the most common rule is only the time limit spent on the network (57%). Much less common is the communication with strangers (38%) and the services that the child has the right to use (36%) (Wójcik 2016: 283).

### **4.3. School**

The school has an important role to play in fighting cyberbullying. However, teachers and especially school headteachers often, like parents, are unaware of the scale of the problem and frequently have no idea of its existence. As a result, the problem is disregarded. This is also the reason for the lack of a properly built relationship with the pupils. Victims of cyberbullying do not trust teachers either. Often, teachers will only come to the rescue when the incident happens.

The lack of both knowledge of cyberbullying prevention and the proper response to this phenomenon constitute an additional problem. As a consequence, the problem of cyberbullying is discussed with pupils in schools very rarely. In most cases, the issue of cyberbullying is not included in school curricula.

The cyberbullying phenomenon is one of the dangers we have to remember. We have to be aware of its complexity and possibility of occurrence. There is an urgent need to prepare and apply solutions. This includes the needs and the circumstances of schools. The emergence of cyberbullying requires specific preventive and intervention measures to be taken at school (Grądzki 2013: 283). Pupils need to know how to use the media so they do not become a tool of aggression and coeval violence. Children have to be aware of the possible consequences of risky actions on the web.

## **5. Conclusion**

Cyberspace contains many dangers especially for children and school youth. These threats have been developing dynamically. It was pointed out that research, which so far has been focused primarily on the frequency and forms of these threats, should be expanded so that the collected information material could be used to develop systemic prevention actions. Hitherto, most of the research has been focused on questionnaires. Large differences cause inaccuracies in the scale and diversity of the problem. However, there is no doubt that the size of the problem is disturbingly high and the consequences are serious.

The most frequent dangerous content on the web that children and young people are exposed to is pornography. However, sexting materials, grooming and cyber bullying are no less harmful.

Owing to the importance of the problem and the tardiness of many institutions in systemic prevention as far as the fight against cyber threats is concerned, there is a need that national legislation triggers introduction of such actions.

The group that is most difficult to reach effectively are the parents. This is related to the fact that there is still a lack of information for parents from schools, and that there is also a poor response from parents to the limited information that is provided. Regrettably, parents tend to transfer educational duties for the schools and diminish their parental responsibility.

Therefore, an attractive campaign encouraging parents to take precautionary measures should be urgently launched.

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### *Negatywne aspekty rozwoju społeczeństwa informacyjnego*

#### *Streszczenie*

Rozwój społeczeństwa informacyjnego prowadzi do odchodzenia od cywilizacji materialnej w kierunku cywilizacji niewidocznej, którą precyzyjnie powinno się nazywać cywilizacją informacyjną. Cywilizacja informacyjna stwarza ogromne szanse dla społeczeństwa i gospodarki. Realizacja przez Internet takich funkcji, jak: telepraca, tele-edukacja czy tele-informacja ma swoje określone skutki społeczne i gospodarcze. Cel artykułu: Celem opracowania jest zwrócenie uwagi na skutki społeczne szybkiego rozwoju społeczeństwa informacyjnego ze wskazaniem wybranych zagrożeń dla dzieci i młodzieży w cyberprzestrzeni. Metodologia: W opracowaniu wykorzystano metodę badawczą w postaci analizy literatury badanego zjawiska, wyników badań przeprowadzonych m.in. przez Fundację Dzieci Niczyje oraz danych Głównego Urzędu Statystycznego. Wnioski: Na zagrożenia w cyberprzestrzeni dla młodzieży należy spojrzeć szeroko uwzględniając zarówno dzieci i młodzież, jak i rodziców oraz nauczycieli.

**Słowa kluczowe:** społeczeństwo informacyjne, cyberprzemoc, seksting, grooming