USE OF DIGITAL TECHNOLOGIES AND SOCIAL MEDIA AND THE SOCIAL RELATIONSHIPS OF TEENAGERS
Małgorzata Chmielewska¹, Mariusz Z. Jędrzejko²

Abstract

Polish pedagogical and psychological literature as well as mass media more and more often inform about disorders of competences and social relations of teenagers, as a result of abuse of digital technologies, especially smartphones. The authors analysed 31 cases of patients with cyberabuse and addictions at the Social Prevention Centre in terms of the occurrence, intensity and character of the disappearance of their real social contacts, as well as their behaviour in small natural peer groups. The obtained results were compared with 49 groups of adults and parents of patients. Research based on participatory observation and in-depth interviews showed that teenagers devote over 62% less time to personal social relations than their parents, their time of real social relations with parents is about 38 minutes per day, create atomistic attitudes towards family (e.g. refusal to participate in common meals), have shallow and narrow groups of friends, and prefer borrowed contacts (through social media). The average declared number of teenagers’ friends in social media exceeds 540, while their parents use smartphones in less than 140. Young respondents use smartphones in almost every social and life context (e.g. in toilets, in church, at school, during meals). The research confirmed the occurrence of digital technology abuse. The article ends with preventive delegations.

Keywords: digital(cyber) technologies, addiction, teenagers

Introduction

It has been more than 20 years since Kimberly Young (Young 1999) and Mark Griffis signalled and defined the problem of digital addiction. During this time, cyberaddiction is being studied on all continents by thousands of scientists representing social, medical and health sciences. This is a consequence of the increasing number of disorders occurring in teenagers and young adults, as a consequence of the abuse of digital tech-
nologies. The observed problem and its mechanisms were even defined as Addiction 2.0 (Alter 2017). Since the use of digital technologies and Internet activity is becoming one of the global characteristics and the role of digital technologies will grow, we are talking about a network society (Castells 2009). Assessing the problem from the Polish perspective and analysing numerous research reports (NASK 2017; Bąk 2015; Siuda & Stunża 2018) we can talk about six key phenomena:

• Almost 100% saturation with digital technologies (smartphones) of the generation of teenagers aged 13-18 - no other digital device is so popular in this group.³
• Smartphones are the most desirable device in the group of 8-18-year olds (Taper & Jędrzejko 2017).
• The digital skills of teenagers are many times higher than those of their parents.
• Teenagers protect their privacy online, and only a small proportion of parents have control over their online activities.
• Mobile digital devices are “sewn” onto children and teenagers and accompany them throughout their daily activities (at night they are most often within the physical reach of the child).
• A large part of teenagers, using mobile cyber technologies, do not pay attention to norms, rules and cultural requirements. They use them everywhere.

The depth of the observed problems and their current consequences encouraged the authors to diagnose the relationship between the network activity and the nature of direct social relations with peers and relatives (families).

Method

The key aim of the research is to determine social models of teenagers’ relations (in peer groups and with parents and other people close to them) and differences in methods and techniques of these contacts between respondents (12-18 years old) and their parents. The subject of the study were 31 children and teenagers reported to the Cyberabuse and Addiction Clinic of the Centre for Social Prevention (2018-2019) and 49 of their parents⁴ (mothers and fathers). The research was conducted with the use of original research tools: extended interviews with each of the respondents and a test questionnaire determining the scale and manner of using digital technologies. Participatory observation was also used in the research (by conducting observation sheets). We also used observation of children and teenagers in natural family environments (11 families agreed), as well as peer groups (observation in schools and social space). The respondents represented three socio-cultural areas: large urban centres - 15, smaller towns and cities - 10, rural centres - 7). In the research group there were 19 boys and 13 girls, while in the group of parents there were 29 women and 20 men (in 12 cases they were both parents)⁵. The specific character of the research, especially that related to observation in the natural environment, caused the research process to last 19 months, despite a small respondent group. The adopted research methods allowed for a thorough understanding of children’s and adolescents’ behaviours and ways of communication, social relations and behaviours. The following main research problems were assumed in the study:

• How do peer relationships work in children's youth groups, with particular emphasis on the model of mutual references - are they direct or through digital technologies?

---

³ New digital technologies have turned smartphones into a cent more often used multimedia than traditional computers. This was due to their mobility, multifunctionality and portability.
⁴ Some of the children are raised by only one parent.
⁵ The results of the tests are presented in rounded to the nearest whole %. The adopted method does not interfere with the evaluation of results.
• How do respondents behave in natural environmental, educational and family situations - can they function in them without using digital technologies (e.g. meals, toilet, homework, talking to parents, moving, free time, school breaks, lessons)?
• How do teenagers react to digital content when they are in social interaction with other people?
• What is the scale and time spent by respondents using digital technologies?

We also examined the psychophysical reactions of respondents to the stimulated switch-off of digital technologies (smartphones) in 12 cases. This part of the study was conducted in two ways: in natural family situations, in the place of residence of the respondents and in the clinic, using the so-called Venetian mirror. In the article we present selected aspects of the research - the whole article will be presented in the publication “The digital world of teenagers” (ASPRA Publishing House, Warsaw 2020).

Phenomenon and its conditions in the light of the literature on the subject and research

The use of digital technologies by children and adolescents is the subject of hundreds of studies in the field of social sciences. The growth of this problem in Poland was noticed already at the end of the last century (Lepa 1998), and in the following years several hundred scientific publications and reports containing a description of the problem and attempts at preventive delegations were published (Andrzejewska 2014; Bębas 2014; Goban-Klas 2005; Izdebska 2003; Jędrzejko 2013, Jędrzejko & Taper 2017; Siemieniecki 2002). The discussed issue is particularly interesting for pedagogy and psychology, with the emphasis on three problems: (1) ways to prepare children for activity in the digital world; (2) cyber threats; (3) parents’ awareness of the impact of digital technologies on their children (abuse, access to content that exceeds their child’s cognitive and emotional abilities).

This issue seems to be particularly important in view of the fact that the Internet and the key tool for using the so-called large network - the smartphone - have become more and more extensive. Polish research conducted by, among others, NASK and the Nobody’s Children Foundation shows that smartphones are almost 100% saturated with smartphones in the generation of 15-18-year olds and nearly 90% in the group of 12-14-year olds. Our recent surveys conducted in two districts: Grodzisk Mazowiecki and Radom (Jędrzejko, Kasprzak & Taper 2019) indicate that over 54% of pupils aged 10-12 have independent smartphones, and only 18% of them have installed parental control programs. Polish research also suggests several clear trends in the use of these devices by the young generation. We can talk about: The Polish research also suggests: prolonging the time of active participation in the Internet, up to late night hours; teenagers protecting Internet life from parents (passwords, fast deletion of content, lack of consent for parents’ access to Facebook, Messenger and other communicators); low awareness of digital risks on the part of young Internet users (Andrzejewska 2016; Szewczyk 2008).

We therefore assume that digital media are an integral part of the development process of the young generation (Bąk 2015), and rarely a child has no contact with them as a recipient and user. This is accompanied by the process of strong market pressure to attract children as independent consumers of electronic media, including in this area as independent buyers. At the same time, it is obvious that the very idea of digital technologies is unambiguously pro-developmental, and their possession and use by teenagers is conducive to expanding knowledge, skills and competences. It is equally obvious that cutting children off from the digital world is an upbringing, social and educational error. As shown by research, digital media and their devices increase the attractiveness of the educational process, foster better understanding of the content (e.g.: combining image and verbal message), and allow teachers and students to quickly update their knowl-
edge (Jędryczkowski, 2008). Another important sphere of their use is communication between the school (teacher) and parents and students, thanks to which the former have full knowledge about the educational process and the results of the child.

In this perspective, our research does not aim at shaping the belief that it is necessary to reduce children’s digital activity, but at shaping it in such a way that it is conducive to the child’s development.

Undoubtedly, using the interest of children and teenagers in information and communication technology devices, and more broadly the whole world of the Internet, we can (from the position of a parent, teacher, trainer, educator, etc.).

We can not only support the child’s cognitive abilities, educational and intellectual development, but also increase his or her future career opportunities. This is particularly important from the perspective of the progressive digitalization of economic, communication and information processes. These tendencies, however, reveal an important pedagogical obligation related to the necessity (and even the need) of teaching a child how to use media safely and responsibly. As indicated by research, the key dangers associated with the use of these technologies result primarily from excessive (time) or improper (content, methods) use. Also noteworthy are those studies that point to the relationship between the abuse of digital technologies and the decline in educational results and the risk of socially undesirable behaviors (Gentile at al 2014; Bębas & Jędrzejko 2019). An interesting part of the discussion is also the problem of the relationship between the abuse of digital technologies and their dependence (cyberabuse) (Alter 2018).

**Results and analysis of studies**

There is no doubt that the net is a kind of “element” for the young generation. This parallel - to natural relations face to face - space is becoming increasingly important for young people, even to the extent that the number of contacts borrowed (by digital technologies) may be greater and more frequent than real contacts. This applies especially to peer relations. The importance of social relations has already been highlighted by the outstanding sociologist of upbringing Florian Znaniecki. He emphasized their role in shaping a mature personality and their necessity for understanding current and future social roles (Znaniecki 2011). The consequence of creating proper social relations and adjusting social roles to the stage of maturation (Oleszkowicz & Senejko 2011) are, among others, social competences, future social and professional opportunities, as well as the ability to function in the family environment (Przygoda 2011), as well as awareness of the diversity of attitudes and views, which seems to be particularly important in an increasingly multicultural environment. Our research suggests a profound change in the types and models of social contact between teenagers and their parents. We have studied this by declaring it in surveys and from smartphone readings and comparing numerous real contacts. The results are presented in the first graphic.

| Average number of declared contacts on Facebook |
|-----------------------------------------------|
| 545                                           |
| 136                                           |

**Parent-to-Parent** and Child Networking

*Facebook is used by 27 adult respondents and from Messenger 39. All the teenagers surveyed had social media accounts. Facebook was chosen for the analysis.

Authors’ own elaboration.
Therefore, we are talking not only about a significant disproportion, but also about accompanying phenomena: the area of social interest of teenagers (what does he do, where has he been, what he writes about) is incomparably larger than the generation of parents, who, because of my knowledge, have - what is natural - deeper social relations. It is also interesting to note that there is a difference in the respondents’ readiness to limit network contacts by removing them. Only 7 adult respondents were ready to do it, while in the group of teenagers as many as 27. Moreover, 14 of them - during extended interviews - indicated the possibility of removing more than 50 contacts on the Internet. This leads to a conclusion that these contacts are highly random, resulting not from real needs but rather from curiosity.

- Kasia, 14 years old, 8th grade primary school student: I don’t know why I have so many contacts. When I signed in, I didn’t want to remove myself anymore. I never thought about it.
- Konrad, 17 years old, student of Mechanical Engineering: Because I think that’s how everyone does it. I don’t know.

A similar diversity can be observed in the materialization of real contacts through social networks. For a group of teenagers (with a wider range of possibilities - 545) it is not more than 50 contacts per week, and for adults - 63 contacts per week (with a range of possibilities - 136). Therefore, we can talk about specific forms of maintaining network contacts among teenagers, whose scope does not translate into real needs.

We think it is also interesting to compare the amount of time that adults and their children spend on personal relationships - face to face. Looking for a field to compare, we chose two forms: for adults, lunch breaks at work and school breaks for children. We asked for a description of these breaks. For children, all breaks during one school day (preceding the interview) were considered, and for their parents - lunch on the previous day.

### The course of the school breaks and lunch breaks

|                        | Teenagers | Parents |
|------------------------|-----------|---------|
| I spent most of my break time with to talk to your friends | 33%       | 70%     |
| I spent most of my break time with to the activity on the network | 63%       | 30%     |

### Real and Networked Parent-child relationships

Authors’ own elaboration.

In this case, we can talk about different cultures of leisure activities. What is more, 1/3 of teenagers contact their peers from the same school with the help of network tools during breaks. We observed, among others, such phenomena as sending text mes-
sages or information via a social networking site by friends standing no more than 3-4 meters away. This is evidence of the changes in peer contact models, some of which are in borrowed form, despite the possibility of direct contacts. This thesis would also be confirmed by the answer to the question: Do you need an important contact requiring exchange of opinions and sentences with your peer or another person, do you call them more often or do you contact them using network tools? Over 80% of teenagers indicated contact via SMS or Facebook and only 18% indicated personal contact, while among parents almost 50% indicated face-to-face contact. Another aspect of the research in this problem area is presented by another graphic.

Research into the digital activities of teenagers shows that smartphones are an “integral part” of teenagers, meaning that they do not part with them in any type of everyday life. They not only take them to school, but also accompany them during meals, lessons and physiological activities. The functioning of children in the so-called mobile culture (Urry 2009) has its psychological, social and functional consequences (e.g.: they make attempts to contact through digital devices even in situations where it may endanger their health or even life - crossing the road, riding a bicycle, on a scooter. This underlines, on the one hand, the high status of digital technologies in the eyes of children and, on the other hand, their low level of competence in the safe use of these technologies. We have therefore compared the contexts in which adults (parents) and their children often use digital technologies.
Prevention and education

The digital world of children is an element of their permanent social functioning, and multimedia are treated by them as a natural part of life, without which it would be “ruined”:

• Antonina’s mother, 13, a primary school student: My daughter told me, “If you take my phone away from me again, I’ll kill myself”. At first, I started to laugh, but then I just got scared.

• Edyta, a Polish language teacher, mother of 14-year-old Mateusz and 18-year-old Ola: They go everywhere with telephones, even to meet physiological needs. Recently, my husband threatened to turn off their smartphones if it happened again. [...] Receiving text messages or communicating during morning breakfast and dinner is normal in our country.

• Katarzyna, an English teacher, the mother of 11-year-old Dominika: I am a teacher in the fourth grade of primary school. A month ago, I pointed out to my parents that their son notoriously uses the telephone in his classroom. The mother’s answer was uncere-

monious: “What is it that bothers you, I need to be in touch with him”.

The universality of children’s digital relations and their realization in a way different from natural social relations and interpersonal contacts (Jędrzejko & Taper 2017) directs our attention to the need to implement in the universal educational system (we believe that from the 3rd to the 4th grade of primary school) the subject Media Education (Education to the media).

Such projects have been suggested by media experts for many years (e.g. Siemie-

niecki, 2002 and 2004). However, they are not supported by decision-making and political bodies. Perhaps a preliminary solution could be educational programmes implemented within the framework of preventive classes, considering the following thematic areas:

• Students: knowledge about the impact of digital technologies on health and social relationships; culture of using digital technologies in everyday life; safety online;

• Parents: introducing a child into the world of modern digital technologies - modelling the child’s relations with new digital technologies; child’s safety on the Internet and monitoring its activity;

• Teachers: expanding competences in the scope of using digital technologies in ed-
ucation.
We also believe that a digital school, a project that is still in its infancy despite many years of investment and projects, will contribute to changing the behaviour of teenagers online.

The status of new technologies is very high in the eyes of teenagers. In fact, research indicates their necessity in the eyes of children. In economic terms, most parents have the opportunity to equip their child with the latest developments in the digital world. Unfortunately, this is not followed by pedagogical reflections and specific patterns and rules of conduct. One of the victims of such models of using mobile technologies is school, especially when the teaching community does not find support in parents for creating reasonable models of using them in educational institutions.

REFERENCES:
ALTER, A. (2018). Addictions 2.0, Jagiellonian University Publishing House, Krakow.
ANDRZEJEWSKA, A. (2016). Lost Youth in Cyberspace, in: World Journal of Theoretical and Applied Sciences.
BAK, A. (2015). How do young children use mobile devices? Report based on data collected from parents. Child abused. Theory, research, practice, vol. 14 no. 3.
BEBAŚ, S., BEBAŚ, A., JĘDRZEJKO, M. (2019). Characteristics and properties of adolescence and participation of children and adolescents in cyberspace. Threatened maturation, vol. 1, ed. Szwedzik, M., Jędrzejko, M. ASPRA Publishing House, Warsaw.
CASTELLS, M. (2007). Network Society. PWN Publishing House, Warsaw.
GENTILE, D., REIMER, R. A., NATHANSON, A. I., WALSH, D. A., EISENMANN, J. C. (2014). Protective Effects of Parental Monitoring of Children’s Media Use. A Prospective Study, JAMA Pediatrics, 168 (5), 479-484, [online: December 7, 2019], http://archpedi.jamanetwork.com/article.aspx?articleID=1852609.
GOBAN – KLAS, T. (2005). Media Civilization, Warsaw.
JĘDRZEJKO, M., TAPER, A. (2017). Cyber Kids, ASPRA Publishing House, Warsaw.
JĘDRYCKOWSKI, J. (2008). Multimedia presentations in teacher’s work. Zielona Góra University Publishing House, Zielona Góra.
NASK (2017), Teenage Survey Report 3.0, Warsaw.
OLESZKOWICZ A., SENEJKO, A. Adolescence. Human developmental psychology. PWN, Warsaw.
PRZYGODA, A. (2011). Mechanisms of socialisation in a family. Family Pedagogy, 1/1/2011, 109-118.
SIEMIENIECKI, B. (2002), Information Technology in Contemporary Education. Marszałek Publishing House, Toruń.
SIUDA, P., STUŃZA, G. (2012). Children of the Network. Research Report, Ministry of Culture and National Heritage, Warsaw.
SZEWCZYK, A. (2008). Moral problems in the world of information, Warsaw.
URRY, J. (2000). Sociology Beyond Societies. Mobilities for the Twenty-First Century, Routledge, London.
ZNANIECKI, F. (2011). Social relations and social roles. PWN Scientific Publishing House, Warsaw.