

ESTIMATION OF PARENTS' OPINION HOW THE TIME SPENT IN FRONT OF A SCREEN FOR LEARNING AFFECTS THE LIKELIHOOD OF DEVELOPING CYBER-ADDICTION IN CHILDREN IN PRIMARY SCHOOL

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Abstract

The problem of cyber-addiction in primary school children has taken on new dimensions in the last few months in the context of the state of emergency, caused by the COVID-19 phenomenon. Not only children but also adults have to spend much more time in front of a screen (computers, laptops, tablets, phones, TVs, Play Stations, other game consoles, etc.) for various reasons: work, study, a lot of free time, communication, entertainment, information retrieval. It turned out that the threat of the ability of digital technologies and the Internet to flood the daily lives of children, in fact proved to be a salvation from the crisis and did not allow to cancel the school year, people to lose their jobs, not to go crazy from boredom and lack of social contacts during the weeks of isolation.

In this line of thinking, a study was conducted whose main task is to examine the opinion of parents whether the time spent in front of a screen for learning increases or decreases the likelihood of developing cyber-addiction in children in primary school. 120 parents were interviewed. The survey is author's and includes 20 questions, which are mainly related to: demographic aspect; the most used educational platforms; how much time the child spends in front of a screen in the conditions of online learning; if child is distracted in online hours; whether it gets fed up on screen or can't wait to leave the classroom and start playing games; does child play games, listen to music, chat with friends while he is in the classroom; does online learning help bring students closer together; whether it helps to improve students' computer skills; do they feel the benefits of digital devices and the Internet; do they recognize them as an educational environment, not just a means of entertainment. It is no coincidence that the parents of the children were interviewed, as in recent months they have the best opportunity to monitor the behavior of their children. The results obtained will be analyzed in this article.

Keywords: cyber-addiction, primary school, digital technologies, online learning.

1 INTRODUCTION

Cyber-addiction of primary school students is not a new topic for discussion. Many authors are interested in this topic and there are many researches, discussed in literature. Nowadays, a pandemic, has changed our lives and now we spent more and more time in front of a screen to be able to live a normal life: to study, to work, to speak with our relatives, to pay bills, to have fun and so on. It is the same way for our children. That's why it is a very interesting question if this situation increases or reduces cyber and Internet addiction between children and young people. Now, they have the legal possibility to spent more and more time online, but it is useful to be found if this situation makes them happy, sad, bored; do they still have huge appetite for Internet and digital devices or they are overloaded and prefer other activities.

Some authors are searching for the connection between parent's style in communication with children and their Internet usage, Internet attitude and Internet experience. Some surveys show that there is a real relation between both: "the highest child usage level is perceived when parents adopt a permissive parenting style; the lowest level is observed when parents adopt an authoritarian Internet parenting style. The variables Internet parenting style, parent Internet behaviour, and parent educational background significantly predict Internet usage of children at home" [1]. This is an interesting point of view if we accept that cyber-addiction is a result of parental influence and it is not caused by socio-psychological or other factors. In current research there is a statement in which parental impact regarding children's Internet overuse is explored as well.

Parents that control their children and the time spent online, are restricted parents. This is the reason for their significant success in reducing children's Internet interests. But in future, this parental approach could lead to a risky behaviour online – teenagers respect more their peer's opinion that their parent's

requests and behave in a way to get peer's approval. They start to lie about their actions online and parental control loses its strength [2]. According to the results of other studies, it is exactly the controlling parents that make the child feels lonely, regardless of his gender and age, and it seeks additional comfort and understanding in Internet. A direct link between authoritarian parents - loneliness - cyber addiction is revealed [3] Internet gaming disorder is a behaviour that is supposed to be controlled by parents as well in an earlier age [4]. "Internet gaming disorder [IGD] was introduced as new behavioural addiction in DSM-5, Section 3. Vulnerability to stress is a potential predisposing factor for IGD". Actually, it turns that Internet gaming brings more stress than pleasure [5].

It is good that severe Internet addiction among children in primary school is not so common, but mild Internet addiction is more common. Levels of Internet addiction depends on gender, grade, family relationships and school atmosphere. It becomes clear that all pointed determinants of Internet addiction should be considered when preventive and corrective actions are designed [6]. There is data as per which boys (males) use digital device and Internet more for pleasure (games, music, films), and girls (female) – more for information and education. A relation has been searched between gender, depression and cyber addiction. Depression not only could be a reason for digital dependence, but it could be a result of it as long as social distance and isolation. Boys are more likely to meet online with friends (to chat, to play games) than girls which shows that they are potential loners [7]. "Students' overall positive youth development and general positive youth development qualities were negatively related to Internet addictive behaviours" [8]. Lack of emotional culture is a potential risk factor for Internet addiction, but social support (family, parents, relatives, friends, peers) is a protective factor that could save child, that could keep it in safe [9]. Problematic Internet Use is another concept that is popular in the area of cyber-addiction researches. It is pointed that "sensation of feeling lonely, the frequency of use, the number of hours of connection, and visiting pornographic websites were associated with the risk of problematic Internet use in both genders" [10].

Today digital devices and Internet are a part of our lives that is impossible to be replaced. People work in Internet, travel, do shopping, meet relatives and friends, watch films, seek for information, listen to music, live virtual lives, have rest, and so on. Internet has also started to be a very important part of students' life [11]. Its use for education is accepted by students easily, because of possibilities for interactivity, ease of use, availability and lots of information accessed online [12]. The increasing trends of online education request a specific preparation of teachers. They must support their students in academic success and to assist in preventive work regarding their Internet and cyber addiction. This is a fact that Internet is not really addictive, but specific applications (games, for example) could attract uncontrollably a child [13]. There are different definitions about online education that vary in years and with digital devices development. "In the research literature, online education is variously termed as "distance education" "eLearning," "online learning," "blended learning," "computer-based learning", "web-based learning," "virtual learning," "tele-education," "cyber learning," "Internet-based learning," "distributed learning," etc." [14]. Some other definitions are: "no more than a hodgepodge of ideas and practices taken from traditional classroom settings and imposed on learners who just happen to be separated physically from an instructor" [15]; "distance education is teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organization" [16]; "all forms of teaching and learning where the student and instructor are separated geographically and temporally" [17]. It is for sure that Internet will affect our lives more and more. Online education most probably will become some natural for human society in many countries. It is even possible for next generations online education to be the only they know. It is important to develop this resource in order to be useful for people and their children, to be positive for students' growth; to have competitiveness and quality. Other important question is about addiction, dependence and overuse of information communication technologies.

2 METHODOLOGY

The survey is author's and includes 20 questions, which are mainly related to: demographic aspect; the most used educational platforms; how much time the child spends in front of a screen in the conditions of online learning; if child is distracted in online classes; whether it gets fed up on screen or can't wait to leave the classroom and start playing games; does child play games, listen to music, chat with friends while he is in the E-classroom; does online learning help bring students closer together; whether it helps to improve students' computer skills; do they feel the benefits of digital devices and the Internet; do they recognize them as an educational environment, not just a means of entertainment. It is no coincidence that the parents of the children were interviewed, as in recent months they have the best opportunity to

monitor the behaviour of their children. 120 parents are surveyed, both males and females, of primary school students.

3 RESULTS

3.1 Demographic aspect

The respondents are 120 parents – 22,5% males and 77, 5% females. All of them live in the town of Burgas, Bulgaria. They are of different ages and work a variety of jobs. The sign that unites them is that they have one or more children in primary school, that’s why their opinion is very important for the aims of current research. As it has become clear all respondents have a child in primary school. Age of children (Table 1) is important to be pointed, because there is a serious tendency about cyber addiction to affect children of earlier age.

Table 1. Age distribution

<i>Respondents’ children distributed by age</i>				
7-years old	8-years old	9-years old	10-years old	11-years old
3.3%	18.3%	33.3%	29.2%	15.8%

3.2 The most used educational platforms

Some of the most popular educational platforms are Microsoft Teams, Google Classroom, Zoom and others. It turns out that exactly they are pointed as most used in conditions of online education during the months of state of emergency in Bulgaria, caused by pandemic, called Covid-19 (Figure 1). 95% of respondents marked Google Classroom as the most used educational platform, next is MS Teams (76,7%) and Zoom (12,5%). Many parents pointed social networks as Viber, Facebook and Messenger, but it must be clear that they were used more with informative function than with educational. The situation caused some tension and it was necessary for teachers and parents to communicate almost day and night. During the Covid-online learning the Ministry of Education in Bulgaria implemented at national level MS Teams platform. All teachers and students received accounts in @edu.mon.bg. This centralized decision was well accepted from most of the teachers all over the country.

There are 3,3% of parents are not able to answer the question, because they are too busy and don’t have time to take after their children’s online education.

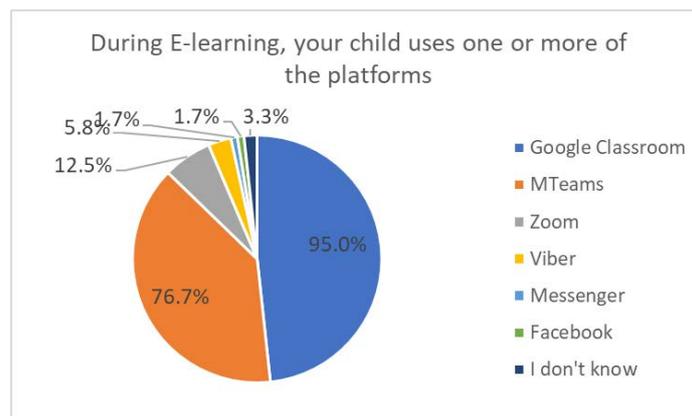


Figure 1. The most used platforms during online education

3.3 Online learning supposes more time, spent in front of a screen

Online education requests more time, spent in front of the screen of a digital device and this is one of the main patents’ anxieties, which has been discussed widely. 69% of respondents pointed that their children spend more than four hours every day doing online lessons, writing their homework, searching for additional information, making presentations and so on (Figure 2). 31% have opinion that it was 3-4 hours a day. In questionnaire there were other options, including less hours, but no one has chosen one

of them. Parents are really worried about, because after classes children “rest” again in front of the computers. So, it is a whole day spent there, especially when it is forbidden to go outside.

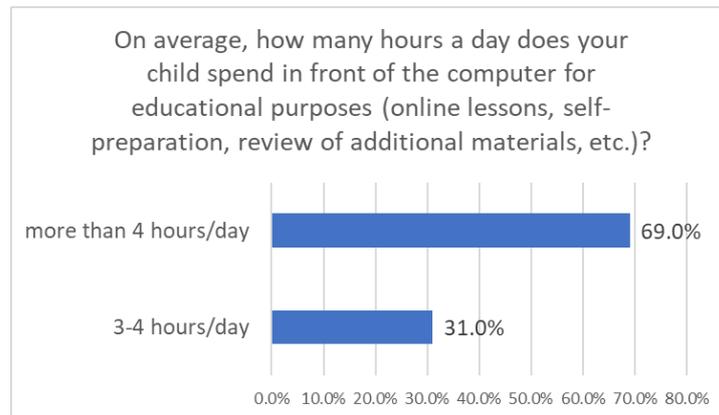


Figure 2. Time, spent in front of a screen with educational purpose

3.4 Student is fed up with screens – yes or no?!

It is supposed that after so much time in educational platform sitting in front of the digital device, a person should desire to stand up, to walk, to have a rest or other. But most of the parents (87,5% - Figure 3) share their point of view that children spent more and more time in Internet. That is because they are not saturated by screen. Students are bored by studying, that’s why they are in a hurry to switch over from educational to gaming window or other entertainment program (chatting, listening to music, watching films). Hence it follows that students have no limit of Internet usage – they want more and more – after the mandatory activities online, there come activities of interest in the net.

It’s worrying that 30% of parents pointed that their children are so hungry for Internet, that they are distracted even during the lessons and open other windows for pleasure. Only 5% of respondents declare that online learning is quite enough for their children and they have no need to spend more time with a tablet or smartphone in hand. Some students are too tired or have a headache – 8,33%. And there are 14,17% of parents that have no opinion in this question.

This information is not a reason to speak about cyber addiction in all children, but it is a serious question to be discussed about strong influence of Internet and digital devices over youth. The idea is that lack of control may lead to “swallowing” the child by screen, and later this may turn in overuse of Internet and digital devices.

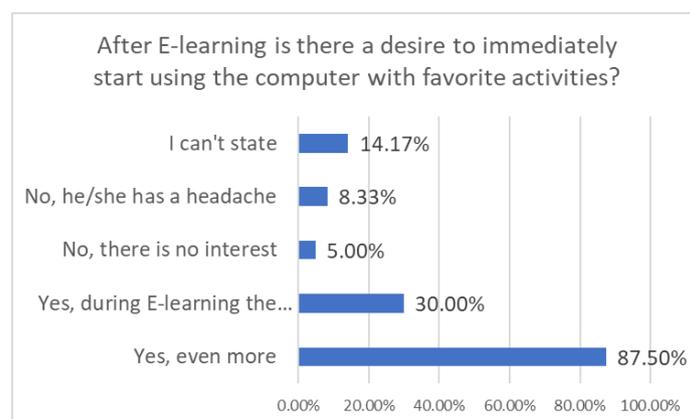


Figure 3. Students’ behaviour after online learning

The result from another question confirm the conclusion that there is no dependency between more time spent in front of computer and the desire not to use digital technologies and Internet (Figure 4). Even opposite – almost 60% of respondents think that the formula “the more time spent in front of screen, the less desire for digital technologies and Internet” is not valid.

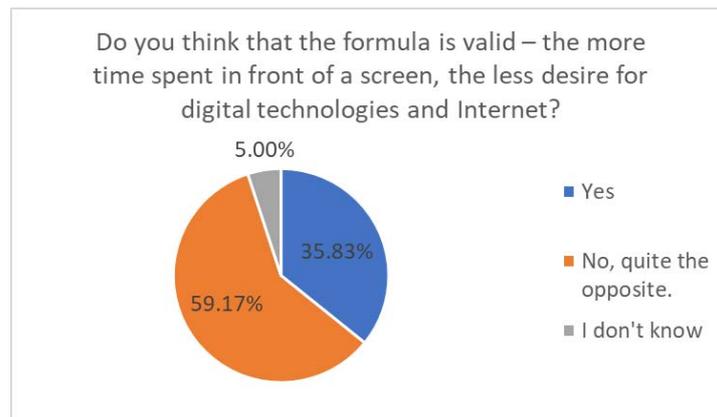


Figure 4. Dependency between the time spent during online lessons and the desire to use digital technologies

3.5 Child is too busy with other online activities and he/she is late for lesson

46,7% of respondents have no idea if their children are concentrated enough when they are in online classes (Figure 5). The reason is that parents are at work at the same time and have no possibility to control the process. 45% confess that their children are distracted, especially when they know that the teacher couldn't see them. Then students allowed themselves to be late for class or even to leave the virtual classroom earlier. 22,5% of respondents think that this happens very often, and only 28,3% believe that this never could happen, that this is impossible and unallowable.

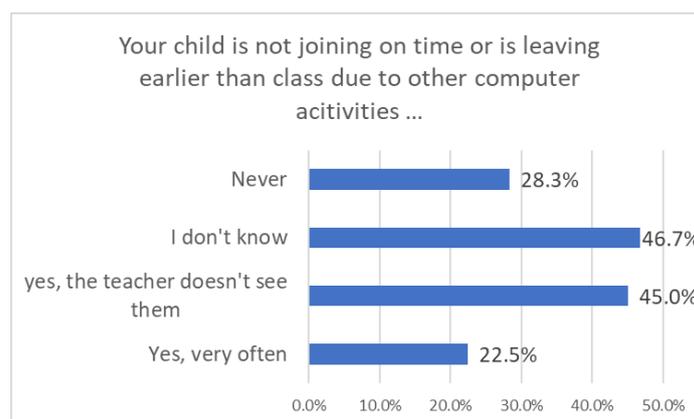


Figure 5. Situations in which student is late for lesson or leave earlier, because of his/her other digital interests

3.6 Student is distracted

Besides the situations when students are late or they leave earlier the classes, so to be able to play electronic games, to chat with friends or to surf in Internet, there is another sign that some of them prefer using the online area more for pleasure than for studying. The point here is if the online learning increase or decrease the willing to be in virtual space. This means that if we talk about cyber addiction in primary school students, education in virtual space give them the perfect opportunity to spend more and more time in Internet, doing their favourite activities. It couldn't be said that this is some like cyber addiction legislation, but it is very easy for a student to switch from educational window to site for fun.

Parents are positive that when are in front of the screen, their children may use it for other purposes, but not only for learning, as follows (Figure 6): 46,8% – only in some classes that don't require much attention from students; 23,8% – yes, all the time (in some cases student listen to the teacher, but plays at Play Station at the same time). 24,8% of respondents pointed that this never could happen, because they hold strong parental control over situation, and 2,9% don't know, because they are at work.

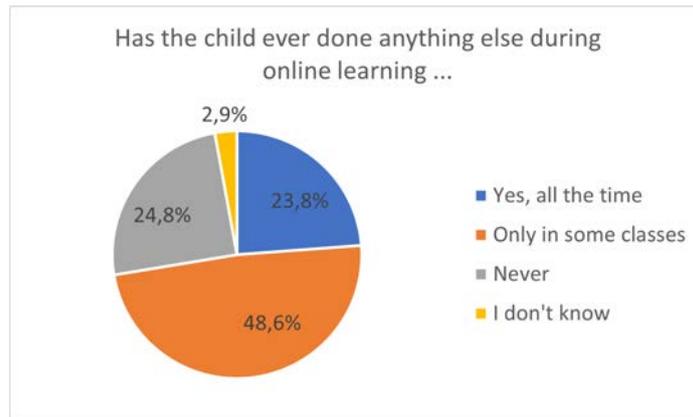


Figure 6. In front of the screen for learning, for pleasure or both

3.7 E-learning and students' computer skills

Many researchers share the idea that improving students' computer skills is a successful prevention against cyber addiction. Only 23,3% (Figure 7) of questioned parents are positive that online learning has helped children to recognize digital devices as something more than a game set. 27,5% are negative: their opinion is that nothing has changed. Most of the respondents have no opinion – they just can't state which could be read as a sign that they hardly supervise their children's behavior online.

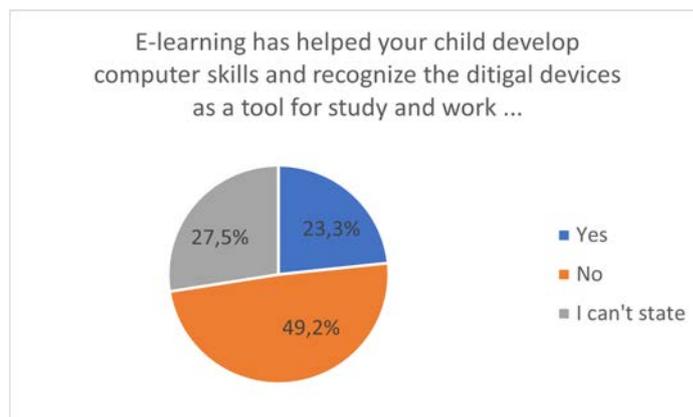


Figure 7. Parents' opinion about effect of e-learning on their children's computer skills

3.8 More time for learning means less time for computer games

Parents confess that their children get tired by learning, but not by computer games. Most of them – 55% (Figure 8) are categorical that e-learning is not at the expense of computer games. Only 35,8% share opinion that due to online studying a child has free time not enough to play games after classes. Although the lower percent, it is a prove that using information technologies with educational purposes is a sure step forward to cyber addiction neutralizing. As per 35,9% of parents (Figure 8) their children get off from the screen as soon as lesson has finished, 37,6% - go to play outside. But most of respondents declare that child: 49,6% - stay in front of the screen; 29,1% - keep playing computer games.

This means that the screen attracts like a magnet and it is difficult for a child to save itself. It is for sure that such kind of behaviour is typical for a cyber-addicted person. It should be controlled in this primary school age, so not to become an Internet overuse later.

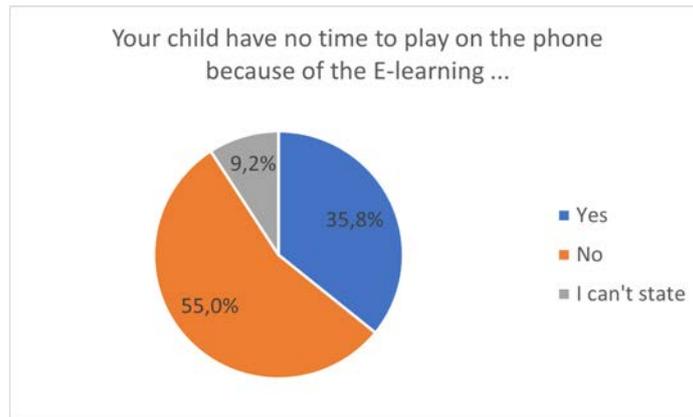


Figure 8. E-learning against computer games

3.9 Future of education and parents' preference

Concerning online versus traditional form of teaching and learning it is obvious that only one minor part of parents prefers the online learning. Most of the parents if could chose would point to traditional present at school education (68.1% – Figure 9). 35% from parents prefer traditional and hybrid form of school education.

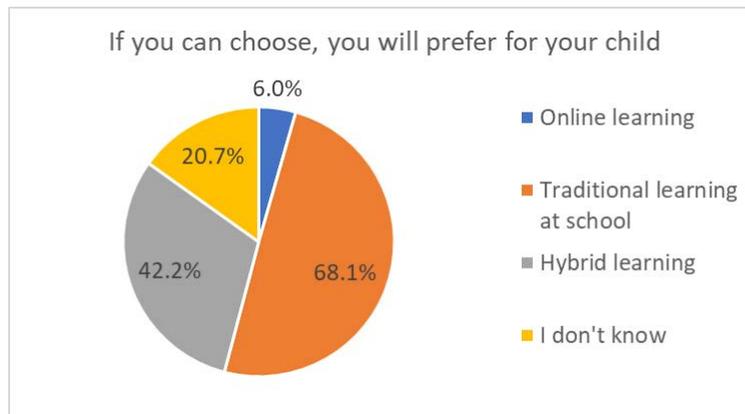


Figure 9. Parents' preferences about form of teaching and learning at school age

Most of the parents realize the future of education is impossible without digital technologies and Internet (86.7% – Figure 10). But most of the adult are worried about so long time spent in front of the screens and most of parents believe that there should be a balance between E-learning and traditional school teaching and learning.

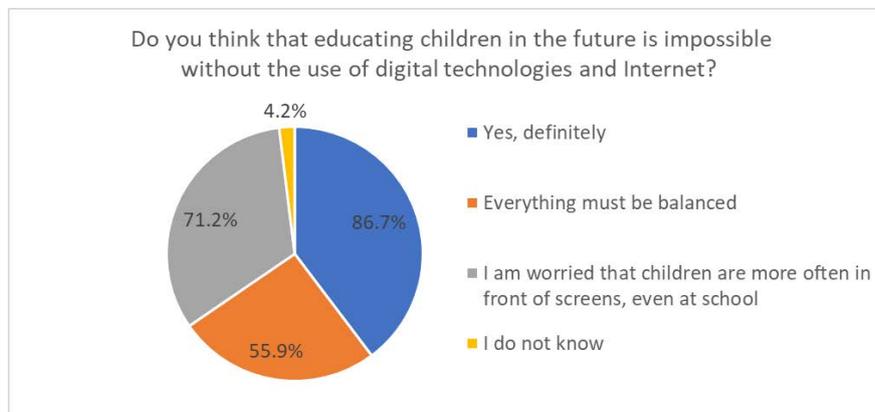


Figure 10. The future of education concerning ICT and Internet integration

4 CONCLUSIONS

The results, received from authors' research, are a good base to make some conclusions.

- 1 There is not a direct connection between e-learning and cyber addiction in primary school age.
- 2 Online education gives a good opportunity to students to spend more time in front of the screen.
- 3 Some of the children get fed up from digital devices and Internet, but for others it is very difficult to get outside virtual space.
- 4 Parental and teachers' control is very important about student's behavior, about time, spent online and about overuse of information communication technologies. But not every parent has the opportunity to supervise his/her child's stay with PC, because people are often at work.
- 5 Improving digital skills of children and using ICT in education is an successful prevention against cyber addiction.

Finally, all parents clearly state that ICT and Internet are inseparable part from their child's educational processes. It is important to keep this techno-reality in balance with natural human way of everyday life – full of communications, meetings, interactions and social life.

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