



New Trends
in Psychology

Impact of Modern Communication Technologies on Preschool Children

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Abstract: The use of modern technologies by preschoolers is a complex and current topic. In an increasingly digitized society, children are exposed to electronic devices from an early age. Modern communication technologies have become an integral part of everyday life, profoundly influencing the way preschool children interact and learn. While technology can provide opportunities for learning and development, there are also concerns about its overuse, impact on social-emotional skills, and potential health risks. This paper examines the benefits and risks associated with early exposure to technology and proposes strategies, effective educational practices, and recommended methods to effectively manage technology use and to promote the healthy and balanced development of preschool children.

Keywords: information and communication technologies; Internet; pre-schoolers; online security; preschool children; computer; benefits of technology; risks associated with early exposure to technology; use of technology; children's development; education; free time; limiting children's screen time; family time; human interaction

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1. Introduction

The development of Information and Communication Technologies (ICT) in the last two decades has generated significant changes at the level of society, including regarding the family, kindergarten and school, which are decisive factors in the education of the members of society. In this context, terms as children of the information age, children of the digital generation, children of the Y generation, etc. are used more and more often in the specialized scientific literature. This fact is due to the effects of the development of technology on children, who are members of the society where the computer is part of the daily routine. Accordingly, there have been changes in the way of growing up, spending free time, learning and educating children.

The role and priorities of parents can be affected by essential changes, transferring some educational responsibilities to the computer or other modern technologies. Most parents note, with regret, that their children spend a lot of time in front of the computer (Pavel, 2017, p. 76).

2. Benefits of Using Technology

The Internet, a very widespread phenomenon in recent decades, represents an effective means of communication, information and collaboration in real time, which has influenced the facilitation of activities that were impossible until a few years ago.

The use of digital technologies in daily life, but also in the educational process, has become a necessity of today's society. Digital technologies should be fully integrated into the teaching-learning-assessment process at all levels of the education system. They help the teacher, but also the students to enrich their knowledge and adapt to the demands of a society that is in continuous development. The computer was once considered a luxury item and its practicality was questioned until a few years ago.

The development of information and communication technology (ICT), as well as the change in people's mentality over time, have made this tool a real help in the teaching-learning process. As young children become more and more interested in using technology, the field of education must become more flexible and responsive to the dynamic changes caused by this rapid technological growth (Kutasi, R., & Mureş, 2022). However, there are some issues that need to be considered regarding the use, integration and impact of digital technology especially at preschool level.

3. Risks and Concerns

In addition to countless benefits, the Internet also brings a number of disadvantages and even dangers. The mass use of the Internet has implicitly led to the emergence of topics related to online security and safety.

At European Union level, a special day was established to celebrate Internet Safety Day, an event that takes place annually, under the auspices of the European network "INSAFE" - European Safer Internet Network, within the Safer Internet Plus program co-financed by the European Commission. (Pavel, 2017, p. 76)

Specialists in the field recommend some solutions that would lead to the safety of use, such as: monitoring the child's activity online, use of the computer and television by parents together with the child, children's education about Internet security, ensuring private settings and controlling sharing on the Internet (consulting an IT specialist), setting up an access password and informing about the danger of contacting unknown people in virtual life, etc. (Pavel, 2017, p. 83)

The problem of using information technologies by children has been studied by several researchers from all over the world, due to its actuality and extent (Gheorghe, Criveanu & Drăgulinescu, 2008). In their research it is mentioned that the uncontrolled, abusive use of information technologies by children has serious effects on their harmonious development.

Therefore, deficits in attention, concentration, mental capacities, judgment and motivation are problems that concern the researchers (Bennett, 2007).

Mass media frequently report various extreme cases of aggressive behaviour of children and young people addicted to computers and the Internet.

The basis of mental processes and their development takes place in the preschool period, when children prepare for the next stage, in which the main activity goes from playing to learning. The most important acquisitions of the pre-schooler are: special development of sensory and motor capacities; enrichment of cognitive-logical processes; verbalization of creative capacities, artistic competences; developing self-awareness, autonomy and adaptability. At mental processes and faculties level of pre-schoolers, the development of thinking, language, memory, attention and imagination can be noted.

Of particular importance in the intellectual development of preschool children is the acquisition of knowledge and the formation of skills, abilities and skills through

mathematical activities, intensive communication with adults, drawing, modelling, construction, etc.

Disturbance in the development of all these processes in children leads to serious consequences, in view of the importance they have in their harmonious development. As a result, it is very important that during this period children benefit from increased attention from their parents.

Unfortunately, the intense technology of everyday life has a major impact on the relationship between child and adult. A series of studies and researches have revealed that from an early age, children already have experience in using information technologies, given the fact that they are part of the life of modern families. Especially in the urban environment, but not only, in most households there are televisions, personal computers, as well as other technologies such as digital devices, smart-phones, accessible to children. Some children are left in front of the TV from the age of 6 months - 1 year.

But as most studies mention, the few hours children spend daily in front of the TV and computer from the first years of life can have a defining influence on how the brain will respond to the challenges of the real world in the future. Over time, learning ability, reading, concentration, attention, etc. can be affected.

The American Academy of Paediatrics recommends that up to the age of two children should not be allowed to watch television, and after this age, throughout the school-age period, their screen time should be limited to one or no more than two hours a day (Riesenberg, 1998). Some authors are of the opinion that until 5-6 years, when the first essential period in brain development ends, children should be kept away from television and computers (Chele, 2010).

With Internet access in every family, the risk to children's safety also increases.

According to Romanian doctors, the time a child spends on the computer should be 15-30 minutes daily, depending on their age, and should be involved by the parents in all kinds of activities that capture the interest.

Therefore, the time children spend in front of screens (TV, computer, tablet, smartphone, etc.) plays an essential role on children, especially of preschool age. In order for these children to grow up in a healthy living environment, parents should be informed about the danger of excessive use of modern technologies (Pavel, 2017, p. 83).

4. Redressing the Balance between the Use of Technology and Human Interaction

The balance between technology use and human interaction is crucial especially for preschool children, as this stage of their development is fundamental to forming interpersonal relationships and learning essential social and emotional skills.

For pre-schoolers, there are several recommendations and suggestions regarding the balance between technology use and interaction with other people, such as:

- *limiting time spent in front of screens*: it is important to set clear boundaries and follow these rules to ensure that children spend enough time in direct interaction with adults and other children. Time spent outdoors and family activities create excellent opportunities to build and strengthen emotional bonds.
- *encouraging offline and outdoor activities*: outdoor playing and sports, and even a simple walk in the park, involve movement and physical activity, essential for overall health. These activities encourage an active and healthy lifestyle, counteracting the sedentary lifestyle associated with excessive use of the computer or television. Spending time outdoors also provides opportunities to explore and connect with nature. Children, especially at a young age, learn about nature, animals, plants and enjoy the benefits of spending time outdoors. Games and activities with family and friends often involve collaboration, communication and team problem solving. These experiences contribute to the development of children's social and emotional skills, as well as improving self-esteem and self-confidence.
- *Promoting human interaction and social play*: human interaction is vital to preschool children's development. Children should be encouraged to play together, share their toys, express their emotions and communicate with others. Social games teach children to collaborate, develop communication skills, and help them understand and regulate their emotions.
- *Modelling healthy behaviour*: parents and caregivers are important role models for preschool children's behaviour. If parents limit their own technology use and spend time actively interacting with their children instead of screens, they will be more likely to follow and spend their time similarly.
- *Cultivating a stimulating and creative environment*: through a stimulating and creative environment, preschool children are encouraged to explore, discover and learn in an interactive way. This can include various toys, arts and crafts materials, as well as engaging in reading, singing and story-telling activities. In this context, handmade, creative or foreign language workshops are preferable, where children learn mainly through free expression and interaction with other children.

5. Conclusions and Recommendations

The impact of modern communication technologies on pre-schoolers is a complex topic that requires increased attention from researchers, parents, and educators. Future research should explore in more detail ways to maximize the benefits of technology while minimizing potential risks, thus ensuring the healthy and balanced development of pre-schoolers in the contemporary digital context.

In conclusion, in addition to the safety that must be ensured during the use of technology, especially in the case of young children, time spent with the family and outdoor playing offer a series of physical, mental and emotional benefits, significant for general health and well-being of the individual and the family as a whole.

These activities are healthy and fun alternatives to time spent in front of the computer or TV and should be encouraged and regularly integrated into the family's daily routine.

In an era where technology is becoming more ubiquitous in everyday life, it is important to maintain a healthy balance between the use of digital devices and human interaction, valuing interpersonal relationships and activities in nature.

References

- Bennett W. L. (2007). *Changing Citizenship in the Digital Age*, in Bennett, L. W. Civic Life Online. Cambridge, MIT Press, MA.
- Chele G. E. (2010). *Utilizarea îndelungată a calculatorului la copii și adolescenți: factor de risc sau condiție premorbidă/ Prolonged computer use in children and adolescents: risk factor or premorbid condition*. Rezumat. Iasi.
- Gheorghe, Virgiliu; Criveanu, Nicoleta & Drăgulinescu, Andrei (2008). *Efectele micului ecran asupra minții copilului, Asociația Pentru Apărarea Familiei și Copilului/ The Effects of the Small Screen on the Child's Mind, Family and Child Defense Association*. Bucharest: Editura Prodromos p. 128.
- Kutasi, R. & Mureș, U. T. (2022). The Use of Digital Technology in Early Childhood Education. *Section: Communication, Journalism, Education Sciences. Psychology and Sociology*, p. 80.
- Pavel, Maria (2017). Utilizarea tehnologiilor moderne de comunicație de către preșcolari. *Acta et commentationes (Științe ale Educației)*, nr. 1(10), pp. 76-84.
- Riesenberg Lisa (1998, March 25). *Personal Communication*. American Academy of Pediatrics.