

Parental attitudes and mediation in children's use of digital media

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Abstract

Children today grow up using multifunctional technological devices from an early age. Parents play a vital role in mediating children's media use, especially at a young age. This is especially important in early childhood which is a crucial time for brain development. The general aim of this study is to reveal the attitudes, behaviors, controls and limitations of parents of children in early and middle childhood towards their children's use of digital media. The research was carried out using a questionnaire for parents. The sample was chosen randomly and consists of 785 parents of children in early and middle childhood. Families have an important role by considering how children learn from digital media, and how the use of digital media impacts children's development at different ages and developmental stages, while making decisions regarding early childhood education in informal environments.

Keywords: children, digital media, parent attitudes, parental mediation, values

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1. Introduction

Informatization of society has led to significant changes in certain segments of social life. Changes can be considered in positive and negative context. A positive context is mentioned in the work changes that led to the abandonment of certain manual and routine tasks jobs with automatic devices, which leaves more time for the individual engaging in creative activities and greater self-expression individuality, and on the other hand, the process of computerization leads to dehumanization and alienation of individuals, and over time to the loss of his identity. All this leads to physical inactivity (hypokinesia) and loss of incentive for proper growth and development. Today's generations use all the advantages provided by modern technology means of communication. It is only natural for them to control the flow information, to absorb many times more data than previous generations, to learn what they choose, to communicate simultaneously in several ways and to simultaneously perform several intellectually demanding actions. Therefore, children today grow up using multifunctional technological devices from an early age. Thanks to them, they have no problem keeping up with information flows, coping with information overload, engaging in virtual communication, communicating and collaborating via the Internet.

The meeting of children and young people with the media today occurs much earlier than ten years ago, and therefore it is necessary to develop awareness of the media's activities in time. It is precisely for this reason that it is necessary to introduce children to the good and bad sides of using digital media and to create good user habits in them. The application of modern information technologies and computer software intended for play and learning of children of early age carries certain risks. The virtual world can be confusing for the child, which can cause a failure to distinguish reality from imagination (Allington et al., 2010). Precisely because of physical inactivity, which significantly affects the growth and development of preschool children, children of this age should not use the computer for more than 20 minutes during the day (Armstrong & Casement, 2001). Experts claim that the body posture of young people is very bad, and recent research confirms the progression of postural status disorders. The main cause of its origin is attributed to the consequences of the modern way of life, such as insufficient movement where passive positions prevail, both sitting and standing, in which children generally occupy irregular body positions.

Physiatrists advise that it is necessary to limit the time spent in front of the computer to a maximum of one hour during the day, and that children spend the rest of the time engaging in various physical activities. The average preschooler spends three hours a day in front of a television screen and an additional two to three hours playing video games. It causes a range of linguistic, psychomotor and locomotor disorders. Physical activity is essential for long- and short-term physical and mental health, and it is associated with increased musculoskeletal and cardiovascular health and reduced anxiety and depression among young people (Strong et al., 2005). The use of computer games most often occurs when the child is bored, and the use of the computer is encouraged by the cognitive needs of the child.

The results of researches conducted around the world indicate a significant increase in children's addiction to computer games. The American Academy of Pediatrics and the Canadian Pediatric Association recommend that children not be exposed to technological devices at all in the earliest developmental period. It is recommended that a child aged 3-5 spend a maximum of half an hour to an hour a day playing games on the phone or computer or watching television. Research results show that this limit is exceeded up to five times. Many world scientists prove and warn about the disastrous impact of modern technological inventions, of course, if they use excessively, on the development of the child's brain. By the age of three, the child's brain forms the most synapses. In order to create those connections between nerve cells of the brain, which are otherwise required for the development of mental potential, stimulation from the environment is necessary. If it is absent,

brain development will not be satisfactory.

Research conducted in Germany focused on current trends and reciprocal long-term relationships between children's use of electronic media and behavioral disorders, taking into account age, gender and socioeconomic status of preschool children. The research included 527 children between the ages of 2 and 6 whose parents provided information about how they use electronic media and the behavioral disorders they exhibit, on two occasions, with an interval of about 12 months. The results showed that older children and children from families of lower socioeconomic status use electronic media more often, according to their parents. Also, the use of mobile phones increased significantly between 2011 and 2016. It was found that the use of mobile phones is associated with behavioral problems and hyperactivity, as well as inattention. If there were problems in relations with peers during the first survey, the probability that the respondent will state that he uses computer/mobile phone and internet. All these results show that the use of electronic media by preschool children, especially new media such as the computer/internet and mobile phones, and the behavioral disorders that children develop over time become mutually related (Poulain et al., 2018). A longitudinal study conducted with elementary school-age children in Korea shows that time spent talking and playing games on mobile phones is associated with the appearance of attention deficit and hyperactivity disorder (Byun et al., 2013). Some studies indicate that increased smartphone use may be associated with sleep disorders and depression (Haug et al., 2015).

For children who are older than 24 months, parents should choose high-quality programs and apps that contain age-appropriate content, as children are better able to understand and learn from digital media this way. Ensuring that content being viewed by children on screen devices is especially designed for their age group. Parents must choose high-quality apps that are engaging but not too interactive. Parents should adopt a general practice of joint media engagement, as it not only promotes enhanced learning for children but also encourages social interactions. This means co-viewing, co-playing, and co-engaging with children while using digital media devices to make children's use of screen devices a shared, social, and interactive experience (Guernsey, 2012; Guernsey & Levine, 2015; Lerner & Barr, 2015).

2. Adult mediation in children's use of digital devices

The term parental mediation refers to the various ways in which parents influence how and for what purposes their children use digital media (Blum-Ross & Livingstone, 2016). Parental mediation is seen as a "new" or "specific" type of parenting. In the professional literature, several forms of parental mediation are discussed, depending on the age of the children. In almost all studies dealing with this topic, three types of mediation are discussed: active (parents actively participate in children's activities while using digital technology), restrictive (parents limit the use of digital technology in various ways) and parental supervision or monitoring (parents monitor and check what the child is doing on the Internet). It should be borne in mind that parents most often combine the mentioned types of mediation, but also that one type of mediation usually prevails (depending on the parents' educational style, characteristics of the child and parents, and some other contextual factors). It could be assumed that parents with a higher level of education possess more advanced digital skills, and therefore to foster more positive parenting practices and beliefs, i.e. to encourage children to use digital technology in more constructive ways, as well as to provide them with more support when using digital devices (especially when refers to younger children).

The results of foreign (Van Deursen & Van Dijk, 2013), as well as one domestic research (Kuzmanović, 2017) show the exact opposite: the level of education of parents negatively contributes to the use of digital technology by children. It is possible that parents with a higher level of education have a better insight into the potential risks of using digital technology, so in this way (with increased supervision) they try to protect their children. Or else, to encourage the involvement of children in various activities that are not related to the use of technology, so limiting the time for using the Internet is necessary. Regardless of the reason, it should be remembered that strict usage restrictions are not an appropriate measure for generations living in a time where many aspects of daily life depend on digital technology. Researchers of types of parental mediation in the digital

age found that parents differentiate according to whether and in what way they establish a balance between social and technical forms of mediation and whether their goal is primarily to enable or limit the child's use of digital technology (Blum-Ross & Livingstone, 2016). Active participation in the child's activities and setting rules for use are forms of social mediation, while monitoring and monitoring the child's use and parental control are forms of technical mediation.

3. Methodology of the research

Research objectives and tasks - the general aim of this study is to reveal the attitudes, behaviors, controls and limitations of parents of children in early childhood towards their children's use of digital media. The realization of this goal is done through the realization of the following tasks:

- Examining parents' views on the impact of digital media on their children's development.
- Examining the degree of control that parents have over the use of digital media in their children's everyday life.
- Examining children's time spend using digital media
- Examining the most common contents that children up to ten years of age prefer to watch on digital media.

Methods, techniques, and sample of research - The research was conducted with a descriptive - analytical method that is adequate and by the nature and character of the set goals of the research. The analytical method analyzed the views and opinions of the respondents covered in the sample of the research. The research was carried out using a questionnaire for parents. Questionnaires contained a combination of closed and open type question and Likert Scales.

The sample was chosen randomly and consists of 785 parents of children in early childhood.

Data processing - The data were processed quantitatively using the EXCEL and STATISTICS computer programs. They were grouped according to the number of matching in certain categories and then placed into tables. The data were calculated with frequencies for which a percentage was calculated.

4. Results and discussion

One of the aims of the research was to investigate the time children spend during the day using digital media.

Table 1

How many hours a day the child spends in front of digital media

How many hours a day the child spends in front of digital media?	%
more than three hours	19.2
from 2 to 3 hours	27.9
less than 2 hours	31.5
don't use every day	20.8
I don't know	0.6

The obtained results show that most of the children use digital media every day, in the largest percentage 31.5%, less than 2 hours and 27.9% between 2 and 3 hours a day. Only 20.8% of the parents answered that their children don't use digital media every day. American Academy of Pediatrics has established recommendations for children's media use. The current recommendations advise:

- For children under 18 months, avoid screen-based media except video chatting.

- For children 18 months to 24 months, parents should choose high-quality programming and watch with their children.
- For children 2 to 5, limit screen time to one hour per day of high-quality programming.
- For children 6 and up, establish consistent limits on the time spent using media and the types of media.

Screen-time limits don't go far enough in providing guidance for parents. Instead of focusing on how much time a child spends on digital media, it is also very important for parents to consider the content of that media and the context in which they're using it. The impact of technology depends on the type of technology and what it is used for. It is thus important to better understand how and why technology is used, and the variety of devices children choose. Young people use the Internet for gaming, chatting and social networking.

Table 2

The influence of digital media on child behavior

	Very often %	Often %	Sometimes %	Rarely %	Never %	Total %
How often children replace free play with digital media?	45	26.9	17.8	9.8	0.5	100
Does your child get bored after going away from digital media?	8.7	12.7	38.1	22.9	17.6	100
How often parents notice aggressive content on digital media?	41.5	25.6	20.9	8.3	3.7	100

353 respondents, or 45%, answered that their children very often replace the free game with the use of digital devices, often 26.9%, while, only 9.8 % answered rarely. The obtained results should worry us, both as parents and as professionals, knowing that free, unstructured play promotes interactions that boost vocabulary, nurture parent-child relationships, and encourage social skills and creativity. Play helps young brains develop. Most of the parents 38.5% answered that their children sometimes get bored after being removed from the digital device, 12.7% often, 8.7% very often, and only 17.6% answered that the child does not get bored after being removed from the digital device.

One question gives us an answer about the aggressive contents of digital media and digital games. Most of the parents 326 or 41.5% answered that very often notice aggressive content, 25.6% often and 20.9% of parents sometimes notice aggressive content. Only 3.7% never notice aggressive content on digital media. Young kids are easily frightened by violent images. Because they don't yet understand what is real and what is make believe, simply telling them that violence isn't real won't help.

Table 3

Family set rules for the use of digital media by the child

Has your family set rules for the use of digital media by the child?	%
Yes, with limited access to some content	12.5
Yes, with limited digital media usage time	18.1
Yes, with limited access to some content and limited time on digital media	63.6
I don't limit the child in the use of digital media	5.8

Table 3 shows us rules that parents have set for their children's use of digital media. Most of the parents 63.6% answered that they have set rules relating to limited access to some content and limited time on digital media on same time, a smaller percentage of parents 12.5% only limit content and 18.1% only time spent on digital media. Only 5.8% answered that they have not set any rules and limitations.

A breakdown of the prevalence of these strategies is illustrated in Figures 1. Regarding active mediation, the most popular strategies were talking to children about what should or should not be shared on the internet (69.5%) and explaining why digital technology is either good or bad (61.8%). The least popular active mediation

strategy among parents was recommending good digital content to their children (55.9%). Regarding restrictive mediation, the most popular strategy was limiting the time that children spent using digital technology (76.1%), followed by allowing children to use digital technology only after designated tasks such as homework or household chores had been completed (78.1%). The least popular strategy was to limit the child's sharing of personal information or communication with others online (52.2%). Regarding monitoring, the most popular strategy was asking the child what he or she was doing (81.4%), followed by keeping an eye on the device's screen (54.5%). Only two to three out of every ten parents reported that they sat with their child (31.4%), stayed in the same room with the child (27.8%), or checked the digital devices later (27.2%) to monitor the child's digital technology use.

Overall, it appears that parents prefer simpler and more straightforward forms of parental mediation. Many of the parental mediation strategies popular among parents in this study (e.g., talking to children about good and bad aspects of digital technology, imposing time restrictions, asking children what they do with digital devices, and keeping an eye on them) seem to be relatively easier to implement than less popular types (e.g., recommending good digital content, limiting communication and information sharing, and checking digital technology activities). In fact, it appears that implementing the less popular strategies would require more time and effort, as well as extensive knowledge of digital technology.

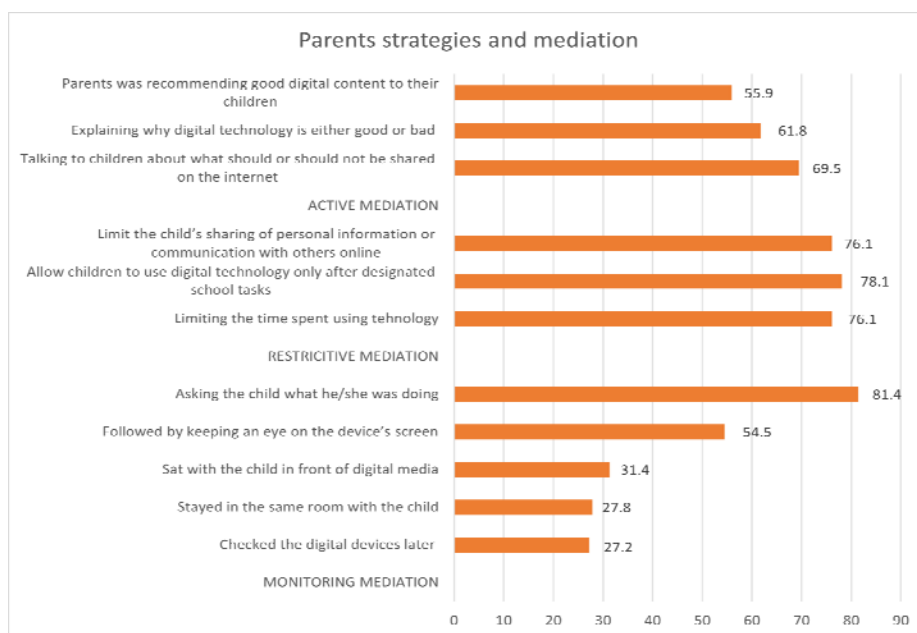


Figure 1. Parents strategies and mediation

Preventive actions can be drawn considering the results of the present study. For example, schools can promote educational programs on the safe use of ICTs, adapted to each age, as well as programs for parents specifically addressing internet parenting styles. On the other hand, these results also provide insight into the diversity of eventual problems related to the excessive use of digital technologies in families seeking professional help. Because parents of young children are often faced with a dilemma in the exercise of parenting without a reference model to the use of technologies it seems fundamental to help them open communicating about the risks and potentials, (re)negotiating rules about their use, and managing limits with their children (specifically the time of digital technologies use according to its purpose and context). Family therapists can specially help parents thinking about specific questions about the impact of digital technologies on family processes and to empower parents to adopt effective strategies of internet parental mediation (e.g., recommending websites, co-using) and enhance the positive influence of these technologies on families.

5. Conclusion

Research on parents' knowledge and attitudes about their children's digital habits conducted in this research, it shows that parents have basic information about use digital technologies of their children. They know what technologies their children use, how much time they spend with them and for what purposes they use them. Parents attach importance to parenting mediation and state that they advise their children when using them. Media education consider important, especially for children under the age of nine, for whom they believe they should not independently access digital technology. The greatest educational role in that sphere is attributed to themselves, a then to employees of educational institutions. Contrary to that, they believe that the advice that children get from their peers have negative outcomes. Parents restrict usage digital technologies of their children, and such boundaries are most often set in the form of time. Parental attitudes, when it comes to the digital habits of their children in relation to attitudes related to children's digital habits in general, are biased. These heavily depend on what parents know about the ways in which children learn from any kind of digital media, and how the use of digital media impacts children's development at different ages and developmental stages. More attention should be paid to the education of parents about ways media education of children and the consequences of using different parenting styles mediation.

Adults who understand online safety and are able to use technology are more successful in guiding children's digital use. Therefore, it is crucial that parents and teachers receive information on online safety, and advice on how to help children manage online risks. The use of digital media as a parenting tool should be limited, as it is unsupervised. When parents give their children digital media devices to calm or distract them, children become dependent on these devices, denying their internal mechanisms the chance to self-regulate. Instead, parents should use other strategies that do not interfere with children's social-emotional development. Digital media are an integral part of our lives, but parents should not feel pressured to introduce the use of digital media to their children too early in their lives. The use of digital media has its potential benefits in terms of higher cognition, language, and literacy skills, but it has its potential risks in terms of lower executive functioning and social-emotional skills due to a lack of social interactions. Spending too much time using digital media takes time away from real-life exploration and playful activities that are essential for early childhood development.

5.1 Implications and suggestions for further research

Media literacy and media pedagogy as interdisciplinary fields are important in forming a critical attitude towards media discourse at an early age. Their inclusion in educational systems will contribute to the development of democratic values in society and the fight against developed stereotypes. Bearing in mind the complexity of the media environment in which children grow up, parents and experts from different fields who work with children need help and support to ensure enjoyment of children's rights and maximally used the positive potential of media and ICT for child development, but at the same time ensure adequate protection of the child from potential risks. We suggest some guidelines for media literacy of children in the context of curricular and extracurricular activities:

- Media literacy should include all types of media - visual, auditory and written - as well as different media platforms and new media technologies.
- Media education refers to teaching and learning about media and does not need it mix with teaching through or with the help of media. So, media education should be distinguished from educational media and educational technology.
- Teaching about the media and for the media should be based on the children's existing knowledge and experience with the media. It is necessary to avoid imposing the way of reading i understanding media from the perspective of educational goals and imperatives; it's worth having on remember that young

people often know some aspects of media culture better than adults.

- Teaching about the media and for the media should be adapted to the children's age and level of mental, emotional and social development and should take place during the whole the process of upbringing and education at all levels.
- Media literacy can be part of different teaching subjects or separate subject, but interdisciplinary and cross-subject orientation are desirable.

Parents' educational competences and parental mediation are important factors in protecting children from the risks they face on digital platforms. Of the numerous types of parental mediation in controlling children's access to digital media and the use of various applications and tools for these purposes, a discussion about the dangers of using different media content and the joint use of digital media is recommended as a highly effective method, the risks and benefits of using digital media, but also to point out the importance of media literacy and the educational competence of parents in the area of protecting children from the harmful consequences of using digital media. The risks of use are not only related to the time spent with digital media, but also to the quality of the content that children choose.

It is necessary to continue research on how digital technology affects the family as a system in order to find the most appropriate counseling techniques and approaches that would help families function better. Our understanding of parental mediation of media use will maintain a slow progression until parenting and communications scholars collaborate, recognizing this as a serious developmental issue; increased detail among the various parental mediation of media measures are created; and longitudinal methodology, especially across childhood and adolescence, is utilized to discern the adapting strategies parents use for different developmental periods.

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