

The impact of the overuses of technology and digital devices (DD) on our children

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ECE 210

11/ 29/2020

## **Part 1: the advocacy project**

### **I. Abstract:**

We are living in a world where technology became the fundamental component in our life. As it becomes rare to see whether an adult or child without using digital devices. Technology is a wonderful tool that enhances our lifestyle and makes our life easier. However, recently the uses of digital devices had increasingly occurred, and people became addicted to it. This had created many issues especially among children who got affected by the overuses of these devices. Searches reported that the overuses of digital devices affect children's learning development as well as create a dilemma for parents and educators. Therefore, it is our responsibility as professionals and educators to find out how the overuses of digital devices could impact our children and what are the ways to cope with this issue encountered. I believe inappropriate uses of technology and digital devices decrease the level of learning, affect social interaction, and cause health issues for children and adolescents. In this paper, I will present the impact of technology on children and propose some strategies that could help to overcome the situation. Also, I am advocating for the effective uses of digital devices and spreading awareness for parents about the impact of this excessive tendency to these means on their children. In supporting

my ideas, I choose the article titled *Digital Devices Use and Language Skills in Children between 8 and 36 Month* realized by a group of researchers and professional and supervised by many health and educational organizations and centers. I selected this article because it is a paper that covered recent studies conducted on children to know whether or not the exposure for digital device affects the development of language skills and the result of these studies was significant and relevant for my topic.

**The key words:** digital devices, overuse, effective use, children, awareness

## **II. Background about the uses of digital devices among children.**

A national survey by Common Sense Media reported that nearly all-American children under age eight live in a home with a tablet or smartphone (Rideout 2017). In a study of children's use of different media and technologies, Rideout found that viewing television shows and movies remain the primary media for children younger than age six, although their playing of digital games on mobile devices has increased since earlier surveys conducted in 2011<sup>1</sup>. Also, according to a 2010 study by the Kaiser Family Foundation, in recent years the amount of time children and adolescents (ages 8–18) spend playing video games each day has increased dramatically. While in the late 1990s the average was 30 minutes a day, in 2009 the average playing time jumped to over an hour a day for youth. Average rates are even higher among boys and young teenagers (ages 11–14)<sup>2</sup>.

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1: Play in a Digital World How Interactive Digital Games Shape the Lives of Children by Rachel M. Flynn,

Rebekah A. Richert, and Ellen Wartella

2: Digital technology and youth: A developmental approach By Steven Barreto, Ph.D., and Sue K. Adams,

Ph.D.

**III. The negative impact of the overuses of digital devices on children's development and adolescent.****A. The impact of digital devices on Cognitive, language and social skills on children**

We learned that children develop their cognitive and social skill through play on its different traditional types and interaction. Also, we have learned that children develop their language skills during the three first year. Recently and by the boost of technology we noticed the occurrence of the phenomenon of digital play, as well as the exposure of children under the age of three for different digital devices. Although, some researchers believe that this exposure help children's learning development. Other, argue for the negative influences of the inappropriate and the overuses of the digital devices among children including smart phone, tablet, computer, and television. For example, Linebarger and Walker (2005) find that Programs that had a strong narrative, such as Dora had a positive impact on learning vocabulary and expressive language , whereas, programs that had little narrative structure and spoken language, such as Teletubbies, have a negative impact on learning vocabulary and expressive language. Moreover, the study conducted in the article I used in my paper, found that spending long time using digital devices was related to lower mimic-gestural skills in children from 8–17 months and to lower language skills in children between 18 and 36 months. The same study demonstrated that parents reported that their children did not respond their name when called or did not interact with other during DD use. Therefore, these results indicate that the ineffective uses of digital devices lead children to manifesting difficulties to develop language skills, social interactions, the increases of distraction and the lack of concentration. For this reason, parent

need to focus for what their children are watching and what they are doing with devices to support the learning of these skills in this age group.

**B. The impact of digital devices on physical health for children**

The exposure on devices for long time associated with various physical complaints, like obesity, backache and headache, neck-shoulder pain, eye strain and sleep disorders. The study conducted in the article I choose reported that 53% of parents (134/260) expressed concern about the health consequences of the DD use in their children, including difficulty falling asleep and/or frequent nighttime awakenings, although only 19% of the parents (47/260) had already asked their pediatrician for advice on this topic. In fact, parent should be aware of the unhealthy exposure for digital devices and they should not only guide their children for an effective use but also take actions in case noticing atypical reactions or/and appearance from their children. For example, parents could set up rules and routing that helps in organizing the consumption of their children for DD. Also, they could seek help from educators or other professional in case they are struggling to deal with the situation.

**C. The negative impact of the overuse and inadequate use of digital devices on adolescent**

**1. Social media:**

Social media is the primary and common mean used by teenager. It helps them to communicate their concerns and express there feeling and intention freely. Practically, is the easiest and faster way for them. However, studies found that kids prefer face-to-face communication and phone conversations because it leads them to feeling more understood and intimate. In contrast social media are unsafe for them and lead to emotionally harmed. According

to the American Academy of Pediatrics, cyberbullying the willful and repeated harm inflicted using computers, cell phones, and other electronic devices is the most common online risk for all teens and can cause severe psychosocial outcomes such as depression, suicide, anxiety, and severe isolation. Moreover, Jeff Orlowski demonstrates in his documentary film social dilemma, how human's brain and behavior are controlled and manipulated by those platforms. As one of the employees said: "social media persuade you and it uses your psychology against you". It is an extreme addiction that lead to many problems in the society. Orlowski, highlighted the social interactions issue through dinner table, the problem of identity and self- esteem for kids where the young girls who shared her photos got infected by the comments received. Also, they stated huge potential of children aged ten-year-old committing suicide due to the multiple frustrations they experience through the exposure to social media. In fact, as we see all this danger threatening our children, we need as educators, professionals and parents to acknowledge the surrounding world of our children and strive to reinforce awareness in order to contributing in decreasing these issues and plant in their mind since the early age positive habits about the effective use of DD and social media.

#### **IV. The positive impact of the overuses of digital devices**

Even though, there are rang of negative impact of digital devices, several studies had proved the positive influences of it on learning process. For example, in a study conducted for Students in a school district in Maryland were given a computer-assisted instruction (CAI) supplemental literacy program the result was the Students who had usage of CAI for one year or two years performed better than students who did not use CAI. Students who used CAI for two years significantly outperformed students who did not use CAI on all five literacy strands. This

indicates that more years of CAI usage lead to higher literacy scores<sup>3</sup>. Also, there are many programs strive to optimize the impact of technology by creating spaces of learning through educative apps, digital play, and various means. For example, sesame street program which provide different courses through articles, video and many other means and tools whether to helping children to typical thrive or supporting parents and involve them in the educational system. Moreover, Fred roger center which is a creation of Fred roger who believe on the positive impact of technology on early learning and he made great and creative changes in perspectives of American about the impact of technology through his Television show and activities related to the educational field where he encourages professional, educators, parents and children to enhance and foster learning development. These different perspectives and effort are a strong proof that the effective uses of technology lead to positive outcome not only for who are concerned of the support of children's development but also for children them self.

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3: Technology in Early Childhood Education: Long-Term Effects Haya Shamir, Erik Yoder, David Pocklington and

Kathryn Feehan Waterford Research Institute

## **V. Small advocacy**

Based on the information explored in this research paper I notice that technology impacts children thrive depending on the effective and appropriate uses of the digital devices and social media. Therefore, I am advocating parents and educators to acknowledge that the more they control and guide their children to use the devices the better they are supporting the typical development of children. In fact, parents should guide their children on the uses of the DD depending on their age. For example, for infant and toddler they should avoid passive screen time in order to calm a fussy child by displaying video songs or cartoons because infants who cry need the care of an adult rather than device that calm them. Regarding preschooler, parents

should allow them to explore carefully digital devices by displaying educative play and songs or pictures with the respect of the accessible time. Concerning, Young children parents should allow them to explore digital devices by using different apps and videos that permit them to learn math, science concept, reading and writing. The main goal of my advocacy is that parents should allow their children to use the digital devices in the context of education and learning with guidance and with the respect of the time required for each age. Hence, they will gain a better support for their children during their learning development stages.

## **VI. Large advocacy**

Different professional and public health organizations and child advocacy groups who support child development and health issues have recommended the no uses of passive, and noninteractive technology in early childhood programs. In fact, toddler and enfant are not allowed to use screen time. Moreover, The American Academy of Pediatrics discourage any amount or type of screen media and screen time for children under 2 years of age and recommend no more than one to two hours of total screen time per day for children older than 2. Also, the Institute of Medicine of the National Academies (2011) recommend that child care settings limit screen time (including television, videos, digital media, video games, mobile media, cell phones, and the Internet) for preschoolers (age 2 through 5) to fewer than 30 minutes per day for children in half-day programs or less than one hour per day for those in full-day programs.<sup>4</sup>

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4: Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8

**VII. Conclusion**

I discussed in this paper the impact of technology on children. I emphasized the affect of the inappropriate or/and the overuses of the digital devices on child's learning process. I chose this topic for many reasons. First, we are in the technology era and I believe that the more technology fosters the more people especially children immerse them self on the uses of digital devices and social media which will lead to the addiction threatening the typical development and social interaction for our children. Therefore, many issues will explode in the society such as suicide, mental and physical health issue, and lack of social interaction. Second, many parents asked me, and I noticed their struggle with how to deal with this issue especially with this challenging time of the crises with the covid19 where children and parent are transmitted to remotely learning and they are more likely to use digital devices and it is hard for parents, educators and even children to control the exposure to the digital devices. Moreover, the complexity of this issue and the dilemma about the impact of technology had conducted me to learn more and inspire from other perspective and studies and gain a credible information that could help me in my career as educator in childhood education to better support children and parents. I found through this paper that this exposure on DD indeed has a significant impact on mental, psychological, and physical health and development. Therefore, it is important for parent professional and all who are concerned of the supporting children's development to know and be aware of it and thus they could setup rules, activities, and routines in daily life of children which encourage the effective an appropriate use of DD and thus provide typical thrive. As Catherine Steiner who is a clinical psychologist says that technology is an amazing and wonderful tool. However, parents and educators should work hard to protecting the quality of time and the better use of technology to keep children away from the harm of technology.



## Part 2: The Advocacy Message



How many of you did not give the phone, tablet, computer or any other digital device for your children in order to calm them? probably most of you do quiet your fussy child by plying songs, cartoon or game on any device. You know that the American Academy of Pediatrics discourage any amount or type of screen media and screen time for children under 2 years of age and recommend no more than one to two hours of total screen time per day for children older than 2.

The uses of technology and digital devices are limited for children because of the harm it may cause for them. studies reported that the amount of spending time behind the screen had dramatically increased and this exposure could have a negative impact not only on their cognitive, and social interaction skills but on their physical abilities as well. For example, you might call your child while using Digital Device and she will not response because her attention is seized with the device which could lead to distraction and lack of social interaction. Also, you could notice that your child playing well on the device and when you ask him to do something by his own beside manipulating Digital Devices, he probably will wait for you to help him because he became dependent for the device where certain games gives him the rapid answer which prevent him to deeply explore his inner skills. Hance, slowing the development of his creativity.

Catherine Steiner, who is a clinical psychologist, believes that children who are inappropriately manipulating Digital Devices are more likely to have lack of empathy, creativity, and social emotional development.



Moreover, did you notice the hysterical tendency of our youth to the various social media Facebook, snapshot, Tik Tok and so on. It became

inseparable and it is an integral part of their daily life. Studies have shown that the potential rate of suicide among teenagers between the age 10 and 15 years old are tremendously increased because of the range of the frustration, anxiety, and the decrease of self-esteems that kids experiences through social media. In addition, inappropriate use of Digital Device could lead children to suffering from many physical issues such as obesity, headache, eye strain, backache and more. In fact, a great danger which threatening the development and the safety of our children will explode. For this reason, parent, educators, and all of those who are considered of the children's development support should be awake and aware of this danger and should strive to overcoming it by encouraging more control and guidance for children and make their devices more designed with educative apps that will ensure for them to leave in a protected and safe environment.



To conclude, I would like to say that technology is a blessing for us, and it is a wonderful tool that has made our life easier and meaningful. However, the ineffective uses of it

could be a great danger that threatening the safety of our children as well as it prevents them from a

typical thrive. Therefore, it is extremely important for professional, educators and families to work in collaboration in order to provide whether in school or at home an appropriate use for Digital Devices by setting up rules and organizing activities in daily routine that helps to control the situation because as adult we are responsible to guide children's lives in an adequate pathway to ensure for them a better future. In the end, I am soliciting parents and all of who calm children with devices to wave this attitude from their daily routine because children are obviously need more care to thrive rather than stuck their abilities with those devices.

Thank you

## VIII. References

Barry A. Farber, Gavin Shafron, Jaleh Hamadani, Emily Wald, and George Nitzburg, Children, Technology, Problems, and Preferences, *Teachers College, Columbia University*.

[children and technology problem and preferences.pdf](#)

Catherine Steiner-Adair: Clinical psychologist, How Technology Affects Child Development,

YouTube video, 2016. [Catherine Steiner-Adair: How Technology Affects Child Development - YouTube](#)

Jeff Orlowski, film documentary: social dilemma, Netflix 2020

Haya Shamir, Erik Yoder, David Pocklington and Kathryn Feehan Technology in Early

Childhood Education: Long-Term Effects, *Waterford Research Institute, MAC-ETeL*  
2018. [\\*ContentServer \(1\).pdf](#)

Nesrin Isikoglu Erdogan<sup>1</sup> · James E. Johnson<sup>2</sup> · Pool Ip Dong<sup>3</sup> · Zhihui Qiu<sup>4</sup>, Do Parents Prefer Digital Play? Examination of Parental Preferences and Beliefs in Four Nations, Published online: 28 May 2018 © *Springer Science+Business Media, LLC, part of Springer Nature* 2018

Rachel M. Flynn, Rebekah A. Richert, and Ellen Wartella, play in a Digital World How

Interactive Digital Games Shape the Lives of Children. *American Journal of Play*, volume 12, number 1 © The Strong Contact Rachel M. Flynn at  
rachel.flynn@northwestern.edu [EJ1238560.pdf \(ed.gov\)](#)

Steven Barreto, Ph.D., and Sue K. Adams, Ph.D., Digital technology and youth: A developmental approach.

Selected Examples of Effective Classroom Practice Involving Technology Tools and Interactive Media by *the National Association for the Education of Young Children and the Fred*

*Rogers Center for Early Learning and Children's Media at Saint Vincent College. 2012.*

[PS technology Examples.pdf](#)

Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8. *A joint position statement of the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College*, 2012. [PS technology WEB.pdf \(naeyc.org\)](#)

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