Varhaiskasvatuksen Tiedelehti
Journal of Early Childhood Education Research
Volume 8 Issue 1 2019, pp. 59–73

jecer.

Exploring the Use of Electronic Media in Young Children's Lives and its Effects on Brain Development

Rafi Antar

DePaul University, e-mail: rafiantar@gmail.com

ABSTRACT: This paper examines the use of electronic media (television, computers, smartphones, tablets, and video games) in young children's lives. It also explores parental perspectives towards the use of electronic media by young children. Finally, this paper links the use of electronic media to brain development. Several studies have been noted in this document analysis paper. Ideally, this research will help in raising awareness regarding the frequency children consume electronic media. It will add to the literature around electronic media, children and brain development. It will also be beneficial to parents and early childhood educators, to understand certain behaviors by children, which might be associated to electronic media. To conclude, the use of electronic media by children is still a controversial topic, with a clear effect on brain development.

Keywords: *Electronic media, young children, parental perspectives, brain development*

Short papers

Introduction

There has been an explosion of electronic media targeted for use of children as young as 12 months (Vandewater et. al, 2007). As a result, children increasingly spend a large amount of their time consuming media (Comer et. al, 2008). In fact, children spend an average of 6.5 hours per day using various forms of media where the majority of time is spent on TV, music as well as Internet and computers (Dorey et. al, 2017). The use of TV,

Peer-review under responsibility of the editorial board of the journal ISSN 2323-7414; ISSN-L 2323-7414 online

Internet and video gaming has increased among children between the ages of 11–14 in the past decade (Duursma et al., 2017). Owning new technologies such as tablets and smart phones has increased in families, and so has the use of this media by young children (Pempek & McDaniel, 2016).

Since Television was introduced onto the homes of Americans in the early 1950s, its impact on children in the U.S had been of great debate and interest. Since that time several new technologies have been added, from video, DVD, DVR players to tablets and video games. This has led Americans to have a great deal of entertainment technology they can choose from (Vandewater & Jung Lee, 2009). According to the Kaiser Family Foundation, 99% of families with children own a TV, 97% own video or DVD players, more than 80% own a video game system and around 86 % own a computer. Even though many young children find difficulty using electronic devices, many are still motivated to continue to use and consume the device (Nikken & Schols, 2015). It is thus obvious that American children are growing up in an environment bombarded with electronic media (Vandewater & Jung Lee, 2009).

The American Academy of Pediatricians (AAP, 2001), advises parents not to expose their children who are less than 2 years of age to television viewing, and to limit TV viewing for kids who are above the age 2 to no more than 2 hours a day. They are as well advised to encourage their children to do more interactive activities, which help in promoting appropriate brain development, such as conversations, outdoor play, singing, and reading with their parents (Vandewater et al. , 2007). Reading and playing outdoors are two activities that are seen as crucial to healthy brain development in childhood. Yet the introduction of electronic media in children's lives has caused an interference with these two important activities (Vandewater et al., 2007). Unfortunately, children today, and most probably future children, are growing up in a media saturated environment where access to any form of electronic media has become an essential element of their daily lives (Vandewater et al., 2007). Marsh (2012) explains that contemporary digital culture has a great impact on children's lives including their playground activities. In other words, children's play from songs, rhymes and games is affected by media cultures in which children are engaged.

As part of writing my doctoral candidacy paper, I collected data related to the consumption of electronic media. I used my university's database to search for keywords related to my topic. The keywords used for my search were "electronic media and children", "effects of electronic media on children", "Parental perspectives towards the use of electronic media", and "children's perceptions and electronic media".

I only used recent peer-reviewed articles to explore this topic. All studies included in this paper, were conducted during the last decade, the oldest was in year 2007, and the most

recent study was in 2017. The articles reviewed were enough to write an in depth literature review, unpacking what has been said about the consumption of electronic media, and parental perspectives regarding the topic. From this standpoint, a research question was created. This paper tends to answer the following question:

> *What is the impact of the consumption of electronic media on brain development in children (young children and adolescents)?*

The following section presents relevant information I have collected, to understand how electronic media is used by young children and adolescents, how parents and caregivers view this consumption, and how electronic media can have an effect on brain development.

Research literature review

A controversial topic

Even though many electronic media devices were created by experts to help in the developmental stages of children with ages 3–6, not all digital media have been created with developmental expertise to help enhance and not hinder children's typical development. According to Lieberman, Bates and So (2009), several research reviews identified strengths and limitations when it comes to digital media's impact on children's development. For example, there is an ongoing discussion on how electronic media such as TV, game consoles, and computers affect children's social emotional development, and daily interactions (Plowman et. al, 2010). The topic of electronic media and technology has been seen as a controversial topic by many scholars. Where some regard it as developmentally appropriate for children, others believe it involves a potentially negative impact on development (e.g., social emotional development) (Vittrup et. al, 2016).

Durkin and Blades (2009), discuss some benefits of electronic media for children. For example appropriate use of computers has been linked to improving a child's executive function development, and stimulating their cognitive performance (Durkin & Blades, 2009). Lieberman et al. (2009) discuss that digital media helps in teaching mathematical and dynamic systems concepts, and helps in improving communication competence in children. In addition to that, digital media helps in collaborative learning in school settings, reasoning and problem solving activities. Lieberman et al. (2009) discuss that this sort of media helps in expanding a child's vocabulary skills and acquisition of new words, reading and early writing skills. They stress on how digital media offer more creativity for children and that it can also improve abstract thinking when there is a well-designed computer-based game. In support of Lieberman and colleagues, a more recent article by Vittrup et al. (2016) explains that some educational programs on TV, such as

Sesame Street, for preschool children improve their math skills, vocabulary, pro-social behaviors and school readiness. They add that informative electronic programs that were designed for children have the ability to increase children's academic skills. As well, video games, they believe, help in improving spatial skills, visual attention, and problem solving skills, fine motor coordination, computer literacy and academic performance in children (Vittrup et al., 2016). In a meta-analysis of 34 studies, Coyne et al. (2016) revealed that a child forms more positive attitudes, and behaves positively upon watching pro-social television content. According to Vittrup et al. (2016), the use of computer at home has been associated with increased cognitive test scores, as well as better performance in science and related areas. Ebbeck et al. (2016) explain that electronic technologies enhance children's productive capacities and help a child in creating social spaces for themselves through the use of the Internet. They add that technology helps children in communicating with each other, in turn taking, and in collaborative problem solving.

Although the above studies provide evidence regarding the benefit of technology in development and early education of children, electronic media has been viewed as a risk for children's development. For example, computers are considered as being damaging to a child's development, and learning (Ebbeck et al., 2016). Disney films, which have traditionally served as icons of childhood, are also considered to have more influence on a child's values and traditions than school, religious institutions and family (Bazzini et al., 2010). Bazzini et al. (2010) discuss how Disney characters have a great influence on the stereotype known as, "What is beautiful is good." They add that media contributes to the physical attractiveness stereotype. It encourages the association between "Beauty is good" and "Ugly is bad". In addition, mass media messages can play a role in child social development. In such a context, scholars suggest that heavy TV viewing results in distorted perceptions about what reality is, and tends to portray the world as far more threatening and dangerous creating beliefs of a "mean and scary world." (Comer et al., 2008). Some other possible negative outcomes of technology include "irregular sleep patterns, behavioral issues, focus and attention problems, decreased academic performance, negative impact on socialization and language development, and an increase in the amount of time young children spend in front of screens" (Ebbeck et al., 2016, p.128). Some other studies discussed that media such as TV, video, and film can create a cognitive limitation, in which young viewers would find it hard to understand others' mental perspectives (Durkin & Blades, 2009). Similarly, video games can cause the same cognitive challenges, such as mental perspectives, for young children, adolescents, and adults (Durkin & Blades, 2009). Children's use of electronic media has been linked to other negative effects, such as social isolation and obesity (Plowman et al., 2010). Plowman et al. (2010), divided the negative impact of television, computers and game consoles into three broad categories; (1) socio-cultural where children are at risk because they play alone; (2) cognitive in which children's imagination and linguistic development

are inhibited due to the passivity of such technology; and (3) well-being where children spend more time indoors, in addition to being possibly exposed to unsuitable content.

Such controversy around electronic media pushed me as a scholar to dig deeper into researching the kind of electronic media young children have been using today, and the reasons behind engaging with it.

Children's use of TV, computers and games

The following sections aim at exploring the kinds of electronic media children consume in addition to the reasons for why they consume it.

Nikken and Schols' (2015) study on Dutch children (N=896) ages 0–7 revealed that children are likely to use TV sets, game devices, computers, and touch screens when their parents use electronic media more often. Nikken and Schols' (2015) study also revealed that older children have more media devices in their bedrooms than younger children; hence they spend more time watching television, playing video games and using the computer. The findings also showed that computers and touch screens are used to a lesser extent than other devices. However, boys spend more time on gaming than girls (Nikken & Schols, 2015; Duursma et al., 2017). Some studies indicate that boys watch TV, use the Internet and play video games more than girls do (Nikken & Schols, 2015). Girls use the computer for communication purposes (Duursma et al., 2017). Other studies; however, suggest that there is absolutely no gender differences in using electronic media, and both genders spend the same amount of time in, for example, using the internet (Duursma et al., 2017). Duursma and other's (2017) study was conducted on a large group (N= 1464) of Dutch children ranging between the ages of 7–12. Ninety seven percent of their participants had a computer, an iPad/tablet, or laptop at home. Sixty one percent had their own TV, 72% had their own cell phone or Smartphone, and 80% had a gaming console or a gaming computer. They found that 44% watched TV between 1-3 hours a day, 57% watched movies on the internet for less than an hour, 40% played computer games for less than an hour, and 55% did not spend any time reading stories on the internet. Most children reported that they did not play video games with only 29% playing sports games, and 28% playing party games. In contrast to video games, 75% used a computer in school, while 92% used it at home with 59% using a computer to download games, and 66% used it for social media. Finally, it appeared that using a cell phone was not that popular among this sample, where only 24% used it daily, and 15% using it weekly. In this study, however, there were some gender differences, in that girls used their cell phones for texting, social media, downloading music, and making movies, while boys used it for playing games.

In a study, Vandewater et al. (2007) with a large sample (N=1051) of children from birth to age 6, found that per day 63% of 0–2 years old children, 82% of 3–4 years old children, and 78% of 5–6 years old, watched television. The results also revealed that one-third children in this study watched videos or DVDs, spending an average of an hour and 18 minutes watching. In contrast to the percentages above, fewer children played video games (Console or hand-held) per day. Statistics showed that only 2% of the children aged between 0–2, 13% of the children aged 3–4 and 16% of children between the ages of 5 and 6 played video games per day. When it came to using a computer, the results were not as high as watching television, in that only 4% of 0–2 years of age, 20% of children between the ages of 3–4, and 27% of children between ages of 5–6 used a computer respectively. What was seen as a major finding in this study was that television remains the most popular form of electronic media that young children still use. According to Vandewater et al. (2007), this can be contributed to the fact that young children find it more comfortable using television on their own. In other words it is easier for them to turn on the television by themselves.

Similar to Vandewater et al.(2007), it has been illustrated that 68% of infants view TV on a daily basis (Bazzinni et al., 2010). Additionally, more than 50% of 0–2 years aged children, and over 80% of 3–6 years old are able to turn on the TV by themselves (Bazzini et al., 2010). Vandewater and other's (2007) study revealed that one fifth of the children aged 0–2 had a TV in their bedroom and one third of the children aged 3–6 also had a TV in their bedroom. Similarly, Nikken and Schols (2015) study on Dutch children revealed that TV sets are the most used devices by children where they watch about 52 minutes per day. Despite the inclusion of new technologies, television remains one of the most popular electronic media in children's lives (Duursma et al., 2017).

Electronic media use by children appears in their play and is not only limited to watching/listening to programs and playing video games. Children's play includes traditional media such as TV and radio as well as contemporary media such as computer games and virtual worlds (Marsh, 2012). As an example, in a study done in the U.K by Marsh (2012) to examine the relationship between traditional playground games and children's media cultures, children aged 5–11 were asked about the activities they engaged in on the playground. It appeared that children learn actions and gestures from cartoon characters and films they watch in addition to video games they play. Children in this study explained how they play "Pokémon," with each other on the playground. Some other children expressed how they model their own pretend play fighting on the playground, based on video games such as "Power Rangers".

Children's use of mobile phone

Another electronic device used by children today is the mobile phone. Mobile phones have become an essential part in children's lives. They are used in supporting relationships, and offering security. Yet simultaneously, a mobile phone is also viewed as an element that creates anxiety and insecurity. It is perceived that mobile phones are a double-edged sword of modernity (Bond, 2010). In her qualitative study of the UK children ages, 11–17, Bond (2010) found how mobile phones were essential for maintaining relationships in the group of children she studied. She found that without this medium it is less likely that children would find friends. She also found that if a child's phone is not working, or if they do not have enough credit to reply to someone, it would create a state of anxiety and stress in the child. Bond (2010) also found that reciprocating was important in phone messaging. For example, not responding to someone through a text message was seen as a form of punishment. Finally, she found that mobile phone was used for bullying, in particular among girls.

Vittrup et al. (2016) found a group of children between the ages of 3–6, whom they studied, were mostly familiar with cell phones, and other digital devices. For example, they found that 92% knew how to use cell phones; 86 % knew how to use digital cameras, 85% could play with video game consoles, around 64 % were able to play hand held video games and LeapPads, and 52% could work with laptop computers. Several children explained that a laptop is solely used for playing games, whereas others identified its purpose as for working or typing.

Rideout, cited in Pempek et al. (2016), has compared the use of digital devices between the years 2011 and 2013. He found the use of devices like Smart phones, iPods, and iPads among many young children has increased by almost 20% and the time spent using them increased from an average of 5 minutes to 15 minutes per day.

Shaping perceptions through media

Media is one of the primary sources of information for most people (Dorey & McCool, 2009). Media can be seen as a way to shape one's beliefs and perceptions especially that the role of active image processing might include image preferences, representations and meaning construction (Dorey & McCool, 2009). In a study about eating habits and nutrition, Dorey and McCool (2009) found children's knowledge and perceptions regarding eating and eating habits came from media messages and images. Children thought that healthy eaters were "skinny" and not popular. Similarly, they viewed unhealthy eaters negatively, perceiving them to be more vulnerable to bullying, more likely to be socially isolated, and being unattractive and overweight. Other studies; however, suggested that media has no effect on children's body image. For example, Coyne et al. (2016) found that the physical appearance of Disney princess had no significance on how either boys, or girls perceive their body image.

Children's understanding of life, is similarly associated with on-screen and media characters (Richert, Robb, & Smith, 2011). In a study, Bazzini et al. (2010) found children showed preference for attractive rather than unattractive peers, because they thought that attractive peers were less likely to get into trouble, as well as being nicer. Television could play a role in children's attitudes regarding gender stereotypes (Coyne et al., 2016). "Research has found that boys can learn gender stereotypes from watching female heroines in the media and vice versa" (Coyne et al., 2016, p. 1910). In Coyne and other's (2016) study to understand gender stereotypical behavior, girls were more likely to identify with Disney princesses media/products.

Research on children from age 0–3 suggests that young children view characters and people on the television screen differently than the characters they see in real life interactions. In the preschool years many children assume that what happens on the screen is just pretend (Richert et al., 2011). Other studies; however, revealed that children who watch news on TV are affected by what they watch. Comer et al. (2008), found children between the ages of 7 and 13 reported personal threat perceptions due to news watching. Comer et al. (2008), explain that such personal threat perceptions are a product of television usage, and the level of anxiety child already has. In contrast, Internet usage had no significant results on personal threat.

After the examination of multiple studies revolving around the consumption of electronic media by children, I will turn my focus to the role parents, guardians, caregivers play in their children's use of electronic media. I believe it is important to look at this topic from a parental perspective in order to understand whether parents, guardians, and caregivers serve as a reinforcer of electronic media consumption by children.

Parental attitudes toward children's use of electronic media and TV

In some of the literature that was reviewed, researchers found that parents were not aware of the complexity of the media use, the amount of time children spend with electronic media, or of the content their children are exposed to (Vittrup et al., 2016). Parents may think of media use by their child as a break for themselves or as a way for their children to remain calm (Nikken & Schols, 2015). For example, parents seem to put a television in a child's room for two major reasons; first, so that they (parents) or other family members can watch their own shows on the 'main' TV and second, to keep the child occupied while the parents can do things around the house (Vandewater et al., 2007). While some parents limit the time their children spend on electronic screens, favoring other activities, such as free play and creative activities; others favor media platforms, due to their educational value. Some parents use media for their children as a means of relaxation for themselves, or keeping the child occupied, or even helping the child fall asleep, or gaining time for themselves (Nikken & Schols, 2015). Research shows that

parents, who find media devices as a tool to sooth their children, are more likely to let their young children watch TV or DVDs for longer periods of time per day.

Parental perceptions

Some parents seem to be aware about the risks of technology, than its creative potential (Plowman et al., 2010). However, they may view their children's interaction with the computer as an essential part of a child's education. Some families may even take pride in their children's knowledge and interaction with technologies such as computer, electronic games, webcams, and Internet sites (Plowman et al., 2010). Others may encourage outdoor and traditional play, waiting for their children to get older, or interested to use media. Parents may show some concern about their children's use of technology, yet they may believe that it is not of a major risk as long as it is used moderately (Plowman et al., 2010).

Some parents do not let their children have access to a computer in their bedrooms. Others do not allow their children to have their own television in their bedrooms (Vittrup et al., 2016). Some parents argue that age 6 is the most appropriate age for a child to have a television in their bedroom, and have access to a regular phone. Parents view that age 12 is the best age for a child to own their own cell phone (Vittrup et al., 2016). Parents believe that media exposure is not important for children's brain development; thereafter they are fine with children under the age of 2 to be exposed to television, video games, or computers. It seems that they disagree that computers may promote long term physical, emotional, or intellectual damages (Vittrup et al., 2016).

Singaporean parents believe that touch screen devices have the most damaging effects on children, in which touch screen devices, such as tablets and similar smart devices, can put the child at risk of vision deterioration, and media addiction (Ebbeck et al., 2016). In a study of American mothers, Pempek and Daniel (2016) found that the well-being of mothers, who owned a tablet with child access, was negatively affected. They found that these mothers suffered from problems such as role overload, which is handling more than they can, and depression.

The controversy around the use of electronic media is not only limited to children, but it also expanded to parents. Some think it is appropriate for their children's development, while others seem to be concerned. Based on the reviewed literature, it appears that some parents found electronic media as a means of "positive" distraction, while some others are still confused about this topic.

Findings

Thematic analysis was used to understand the findings of this paper. The themes created were *brain development, brain development, electronic media and children, and brain development, electronic media and adolescents.* The following section answers the initial research question of how electronic media might impact brain development in children and adolescents.

Brain development

Since the 1990s, research in neuroscience increased significantly with a focus on brain development (O'Connor & Joffe, 2013). From this standpoint, neuroscience research targeted young children as well. According to O'Connor and Joffe, there is an explicit claim that children's brains are affected by early experiences that move forward with them into adulthood. In support of this claim, Taki and Kawashima (2012), explain that brain development continues throughout adolescence throughout early adulthood, in which this development is a complex linear, and nonlinear process. Thus, understanding neuroscience is essential in promoting cognitive, emotional and social outcomes in children (O'Connor & Joffe, 2013). As an example, Taki and Kawashima (2012), conclude that gray matter volume increases with age and then decreases. This fluctuation in gray matter volume occurs during the first and second decade of life. According to the authors, it is worth noting that gray matter area includes the regions of the brain responsible for muscle control and sensory perception (seeing, hearing, memory, emotions, speech, decision making, and self control). Taki and Kawashima (2012), examined the influence of lifestyle on brain development, and found that sleeping habits affect brain maturation in terms of gray matter volume. The authors also found that a healthy diet, especially breakfast, affects the cognitive function of a brain; such as intelligent quotient. Even though Taki and Kawashima's (2012) findings seem to be unrelated to media and brain development, it is essential to note that their findings might be indirectly related to media's influences on brain development.

Brain development, electronic media and children

Knowing that media has become part of our lifestyle, and gray matter development is affected by lifestyle, then it is logical to assume that media can influence gray matter development (muscle control and sensory perception). The authors (O'Connor & Joffe, 2013; Taki & Kawashima, 2012) agree that early experiences influence brain development on the long run. This means that young children's brain development will be affected later on in life if media was part of their lifestyle.

One way to understand brain development in children is through neuro-imaging methods (Hummer, 2015). Hummer continues by explaining that neuro-imaging helps us understand how exposure to violent media affects children's brain development. It appears that exposure to television, film, and computer/video game violence results in an increase in aggressive thoughts, feelings and behaviors (Hummer, 2015). In support of O'Connor and Joffe's (2013), and Taki and Kawashima's (2012) claim that early experiences influence brain development on the long run, Hummer (2015) believes that exposure to media violence causes relevant brain regions to influence individual characteristics and behaviors for many years to come. To add, delayed neurodevelopment throughout childhood leads to executive dysfunction such as attention deficit hyperactivity disorder (Hummer, 2015). Hummer also notes that the development of brain regions responsible for motivation, emotion, and reward sensitivity mature earlier than neural regions in the prefrontal cortex. The development of the prefrontal cortex continues into the mid of the second decade, where attention, inhibitory control and emotion or behavior regulation are most vulnerable during adolescence (Hummer, 2015).

Brain development, electronic media and adolescents

The presence of disruptive behavior is related to past violent media exposure, which in turn alters brain activity. For example, in one study on adolescents, the group that played a violent video game had higher amygdala activity to aggressive words in comparison to the group who played a non-violent game (Hummer, 2015). According to Hummer (2015), the amygdala is the part of the brain, which responds strongly to emotionally arousing stimuli. Therefore, violent game play altered the amygdala response to negative stimuli. In another study, teenagers who played a violent video game for 30 minutes had lower medial prefrontal cortex control over the amygdala when they were presented by aggressive words. This means that appropriate control over the amygdala limits overly impulsive and emotional responses when there is any sort of provocation. Since the prefrontal cortex, which provides connections to the amygdala, has not reached full maturity in adolescence, extensive media violence exposure might have effects on emotional regulation in adulthood (Hummer, 2015).

Research has shown that cognitive and socio-affective development in adolescence goes through structural and functional brain changes where synaptic density is at its peak in early childhood (Crone & Konijn, 2018). However, synaptic pruning (synaptic elimination) increases in adolescence resulting in a decrease of synaptic density in late childhood, therefore exposure to media is seen as a factor in the changes the brain undergoes (Crone & Konijn, 2018). In a study that aimed at excluding adolescents from an online cyberball computer game, brain activity was witnessed in the regions responsible for salient emotions, thus a connection between online rejection and brain development (Crone & Konijn, 2018). This takes us back to Hummer's (2015) explanation

of how the amygdala had a higher activity in adolescents when presented with emotionally arousing stimuli. To add, children, adolescents and adults who felt accepted on social media had an activity in their ventral striatum, the area of the brain responsible for the reward system, similar to pleasant taste and receiving money (Crone & Konijn, 2018). Crone and Konijn (2018) continue to explain that more activity in the anterior cingulate cortex, the area of the brain responsible for emotions and cognition, was associated with receiving online peer feedback and viewing oneself; self-esteem. Another finding by Crone and Konijn (2018) was that social brain activity in young adolescents (12–13 years) was more active when they donated money online suggesting that this age is a critical period for social media risk perception and pro-social directions. Finally, it appeared that the dorsolateral prefrontal cortex region, a region in the brain involved in self control, was active when adolescents were exposed to fictional emotional media content; even though they were told the footage is not real, they still reacted the way they may react to a real condition (Crone & Konijn, 2018).

Discussion and conclusion

Crucial questions remain on how children interact with the ever-changing media technology on a daily basis. In this paper electronic media use by children and adolescents was explored based on what previous studies have discussed and found with respect to the topic. Researchers' understanding of media exposure by children is still limited. Even though many studies have focused on the amount of television watching on a typical day, or the amount a child consumes a certain type of electronic media per day, expository measures, content and context, are seen to be inherently inaccurate and might lead to biasing the results (Christakis & Zimmerman, 2009). Some researchers categorized the use of electronic media, such as for educational and non-educational purposes. Yet there is still no agreed upon categorization criteria in research (Christakis & Zimmerman, 2009).

In this context, it is fair to assume that since there is still a controversy regarding the use of electronic media, then it is essential for neuroscience research about the effects of media to be written in a much simpler way. In other words, there is a fair amount of research about media, and brain development, however, and arguably speaking, some parents, caregivers, educators, and even scholars might choose not to read it, due to the complexity of the terms used in neuroscience.

As the results of this paper show, electronic media exposure alters several parts of the brain, which in turn affect the behavioral, cognitive, and socio-affective development in children. When parents, caregivers, or guardians take pride in their children's use of

electronic media, do they think about what parts of the brain are being affected, and how this exposure/interaction might cause long term 'problems' for the child? When we use electronic media as a baby sitter for our children, do we even know the effects of what we are doing? Such questions are exactly what made me say, that neuroscience language can be a little bit less complex, so that we can all understand the effects of electronic media on brain development.

As a final thought, this paper is not an attempt to attack the benefits of electronic media, or neuroscience language. This paper is just an attempt for all of us, including me, to start looking at this topic from a different perspective. We all use electronic media devices, we are all exposed to electronic media, and we all admit that it made our lives easier; however, many of us are unaware of how risky it can be. We use electronic media with good intentions, yet, and as a personal opinion, it is electronic media which is using/controlling us.

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