

The Role of Covid-19 in Early Childhood Education: Evaluation of Children's Participation in Digital Environments

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Abstract

Human is born, lives, grows and dies. Yet, immortality is not a possible life process in the World. In that case, a person is part of an active learning and teaching process throughout this finite life. We can say that early childhood is the period when the most basic building blocks of learning are formed. It is a process that starts from the first years of development, from the moment we were born and continues until the school ages when we received our first education. The most basic definition of this period is that the child's mind is constantly recording in a video/voice recorder format. It is period that the most basic physical and mental developments and the basic habits that are held until the moment of death. The debate on whether internet-based technologies, which entered human life with the new millennium, should be used in the early childhood period has been on the agenda for many years. Many experts suggest that child should be kept away from technological devices as much as possible in early childhood. In order to create an effective learning process, transferring the right contents to the child as much as possible and the possible negative effects of digital device screens on the brain are known by everyone. However, 2020 has been the year of the most important pandemic outbreak of the new century. Due to the Covid-19 pandemic, some changes have been experienced in early childhood education in every area. Although attempts are made to keep them away, mobile screens and digital time, which children are actively exposed to, sometimes for educational purposes and sometimes for spending time, have increased during the pandemic period. The negative effects (curfews, prolonged staying at home, deprivation of social space etc) of the pandemic on human life have increased the rate of children's participation in digital environments. In this study, the reasons and consequences of children's exposure to digital platforms during the pandemic process are described descriptively.

Keywords: Early Childhood, Child and Digitization, Child and Pandemic

1. Introduction

Human beings are living, social and changeable creatures with a vital cycle of being born, growing, and dying. In this life cycle, the most important basic building block of the individual's journey to become an adult is undoubtedly the early childhood period. As is known, the fact that almost 80% of the mental development of an individual is completed in early childhood makes this period important in the long life span. Its importance is also due to the fact that it determines how human life is shaped and how an adult life will be. Since individuals have different cognitive and emotional intelligence during the development and growth periods, they develop differently. The most basic element of the development process is learning. An effective and successful learning process begins in early childhood and continues until the end of human life. Early childhood education, which is mostly used for children between the ages of 0 and 8 (Kamaraj & Kerem, 2004: 95), is one of the main elements that form the basis of pre-school human life (Ayan & Memiş, 2012: 143). Of course, not only the education received at school, but also the family, social environment and other stimulants have a great contribution in this education and learning process. The rich stimulating environment offered to children contributes to the development process by playing an important role in developing their imagination and senses of curiosity (Gönen et al., 2015: 77); therefore, the purpose of early childhood education focuses on providing an environment and support suitable for the growth and development of children.

It would be correct to mention not only the school education provided with a curriculum linked to an education system, but also the importance of many different stimuli in early childhood education because the smallest building block of the society is the family and the most basic education begins in the family. The importance of the home environment in which children have to spend their entire infancy periods, and the family and other stimulants that they maintain with school support in their development processes afterwards cannot be denied. As the child grows up, the number of stimuli increases because the child development process includes the changes that occur in the child in terms of being physically healthy, mentally alert, emotionally balanced, socially competent, and academically ready to learn (Turhan & Özbay, 2016: 54). In the early childhood period, which is a very sensitive period, the mind functions as a recording device. All factors experienced, observed and learned during this period shape the development and growth period. Therefore, with the understanding of the importance of early childhood and the increase in the importance given to education in this period, recent years have witnessed an increase on studies focusing on the evaluation of children, educational environments and programs (Tunçeli & Zembat, 2017: 3).

In the early childhood period, in which children mostly spend their times with their family members in a home environment, environmental stimuli are in the forms of home, mother, father or sibling. What these stimuli do, how they behave and the environment of the house should be carefully examined, and precautions should be taken regarding the detected defects. At this point, the pandemic, which has started to show its effects on all people equally as of December 2020, becomes remarkable. The COVID-19 virus, which spread in waves not long after the first case in China, brought about a new life order. In the new order, governments have taken measures such as cleaning, physical distancing, obligations to stay at home and curfews to protect against the effect of the disease caused by the virus. Among these measures, the obligation to stay at home and the obligation of working parents to work

remotely have become extremely unusual for children in early childhood periods because a new order that has emerged suddenly in this learning period has affected children as well as adults. Alisinanoğlu et al. (2020: 562) have found that changes occurring in social life, especially situations, such as sudden pandemic and curfews, have negative effects on children's mental health. Günay (2020: 85) argues that home isolation caused by the new type of coronavirus can affect children and young people, who make up 28% of Turkey, more than adults. Günay (2020: 85), who argues that children may be impulsive and egocentric due to not fully understanding the danger of the pandemic and not meeting their play and entertainment needs, demonstrates the effects of the pandemic on children. Mart and Kecişioğlu (2020: 956) conclude that during the COVID-19 pandemic, the parents, who generally live in apartments, believe that the physical space of their homes sufficient enough for the children's playgrounds and the games they play support the social emotional developments of their children at the highest rate (Mart and Kecişioğlu, 2020: 956).

These results indicate that children generally stay in home environments during the pandemic and the role of parents and other family members in learning processes has increased. When the COVID-19 first appeared, infected child-case was first reported in the People's Republic of China on January 20, and Turkish Republic Ministry of Health announced that , less than 5% of the total cases consisted of children under the age of 15, and the infected child-case under the age of 5 was reported 2% in April 2020 (Çiftçi, 2020: 138). In other words, children have stayed at home, as adults have, to prevent the spread of the virus. In this process of staying at home and spending more time together than ever, the communication that adults establish with each other and with their children in the family contributes to the cognitive, social emotional and language development of the children, and the children acquire the life experiences they will show in the next process by taking their parents as role models, and they organize their own lives by internalizing these behaviors (Aral et al., 2020: 362).

This study mentions the increasing digital addiction, which is influenced by adults or due to other factors, of children who spend their early childhood periods mostly at home due to the pandemic, and discusses the issue of being a child during a pandemic.

2. Digital Addiction during the COVID-19 Pandemic

Technology changes almost every aspect of our evolving modern life and offers countless benefits. While these technological developments continue to change the way of life to a great extent, they also cause the development of abnormal behaviors which are often referred to as addiction. The negative effects of excessive technology use increase in the digital age (Scott et al., 2016: 605). In other words, technology, especially the internet which enables general communication and therefore rapidly develops, takes place in all areas of life, and as a result, the use of tools and equipment is rapidly increasing. In this vein, digital tools and equipment which are used with the help of the internet connection make people's lives easier. However, although digitalization offers positive aspects, it also offers various negative aspects as well. Among these negative aspects, one of the most discussed issues is digital addiction (Arslan, 2020: 87).

Digital addiction can be defined as behavioral technology addiction that occurs with the feeling of incomplete. Individuals who are dependent on digital technologies do not have a social life other than the internet, see themselves as lonely and asocial when away from mobile devices, desire to be aware of mobile innovations, follow various applications on their phones, communicate with their environment primarily through social media applications and are individuals who have new identities on social media. Individuals who actively use digital technology applications more than necessary separate themselves from real life and find a virtual reality for themselves (Yengin, 2019: 142). Instead of perceiving their real life actions directly, individuals lost in virtual reality by detaching from the context of reality become dependent on digital screens and stop their communications with their real environment (Büchi et al., 2019: 1).

Technology appears to be of great help in dealing with the COVID-19 pandemic, which has been affecting the world for more than a year. During the pandemic, technology provides access to remote working and education practices, increasing online commerce and information about the pandemic. With the increase of time spent at home, technology offers various relaxing opportunities such as video streaming, social environments and games. These are the positive aspects of technology during the COVID-19 pandemic. On the other hand, these technological facilities bring about some problems. Marabell et al. (2021: 1) discuss that some negative aspects of excessive time spent on technology and digital tools will continue after the pandemic is over. It is believed that COVID-19 will have great effects on the mental health and well-being of children and teenagers. Golberstein et al. (2020: 820) argue that timely action is necessary to minimize these effects.

As a result of implementations such as social isolation and quarantine, individuals have started to use internet, social media and phones since they cannot communicate with each other face to face. Thus, the use of these tools has increased. Koçyiğit and Aktaş Koç (2021: 316) have found an increase in individuals' levels of addiction as the use of these tools have increased. Diker (2020: 115) argues that during the COVID-19 pandemic, in addition to screen addiction, social media addiction, game addiction, stress, depression, loneliness and asocial personality, people may develop physical disorders. The relevant literature justifies Diker's concerns.

Sultana et al. (2021) put emphasis on the changing screen usage times in addition to the physical and mental health of individuals due to the restrictions imposed to control the COVID-19 outbreak. Many people confirm that their screen usage times have increased compared to their pre-pandemic situations. They have found that an increase in screen usage times is associated with diseases such as obesity, hypertension, depression and sleep disorders. Lin (2020) emphasizes that the COVID-19 pandemic significantly disrupts normal activities and emphasizes that internet and social media addictions have become serious problems, especially among young people and children. Aktaş and Daştan (2021) have observed that during the COVID-19 pandemic, young people's digital game play times and digital game addiction levels have increased. Erol and Erol (2020) have examined the experiences of primary school students during the COVID-19 pandemic through the eyes of their parents. Their results indicate that parents and students have felt fearful and anxious during the COVID-19 pandemic. With the temporary closure of schools, students have started using digital tools to spend their time and have fun.

An international study has examined the media consumption at home during the COVID-19 pandemic and has reported that 67% of individuals have watched more news broadcasts, 45% of them have spent more time on messaging services, 44% of them have spent more time on social media, and 36% of them have spent more time on computer and video games (Statista, 2020, as cited in Gökler & Turan, 2020: 110). In addition, the study has observed that Generation Z (62%) has spent more time on home messaging services during the pandemic compared to Generation Y (45%) and Generation X (40%). The results of the study concludes that Generation Z has experienced the highest increase in social media usage regarding the social media types (Statista, 2020, as cited in Gökler & Turan, 2020: 110). Balhara et al. (2020) have conducted a study in China and have reported that in the immediate aftermath of the Covid-19 pandemic, more than 50% of the participants have reported the overall psychological impact of the outbreak as moderate or severe, approximately 16.5% and 28.8% have reported that they have felt moderately to severely depressed, and the most striking result is that the game behaviors of especially young people and university students have increased during the pandemic.

Before the COVID-19 pandemic, many parents were concerned about the increasing screen usage time of their children. However, with the implementation of measures such as social distance, quarantine and school closures to reduce the spread of the COVID-19 pandemic, concerns about problematic internet use and technology addiction in children are also increasing. The transformations of the learning paradigm and classrooms into online also create a dilemma between kids and parents about shortening screen usage times or keeping up with the flow. Over time, some parents have escaped this dilemma by putting emphasis on online learning and digital entertainment for their children by taking the risk and benefit ratio of the COVID-19 pandemic into account. However, Gupta et al. (2020: 19) discuss that by allowing this situation, some parents may ignore increases in children's levels of digital addiction and game addiction in the future (Gupta et al., 2020: 19). Today, with the development of communication technology, the electronic world has a determining role in the social environment of the child (Çukur, 2011: 70), and the increase in the level of digital addiction during the pandemic process is an extremely concerning issue.

2.1. Being a Child during the COVID-19 Pandemic

The COVID-19 pandemic, which causes radical changes and new regulations in the daily lives of people, restricts all activities. Curfew restrictions in accordance with the taken measures cause a number of differences in meeting the need for socialization. The tendency of all adults and children, who have to stay at home, to socialize on the internet has increased significantly. It is possible to say that this situation was quite difficult for children in the early childhood period who continue their schools. The life adventures of children starting with birth are based on 'learning', a process of systematic development from simple primitive life skills to more complex and advanced vital skills (Tuğrul, 2002: 142), and early childhood pre-school education affects advanced scientific process skills in advanced ages (Ekici et al., 2018: 55). Despite these scientifically known facts, the gap created by the time spent at home instead of school, along with the increasing screen time and digital addiction, in the development process is alarming. Children, whose learning and development processes continue in social life outside of school, can learn to use their cognitive skills while acquiring many different concepts as a result of the experiences they have gained in their vital areas by

using their natural curiosities (Taştepe & Temel, 2013: 1626). Unfortunately, these cognitive skills cannot develop through the help of digital socializing devices. Because, most of the learning of children take place in the in early childhood due to the establishment of a large part of the synaptic connection networks in the brain (Polat & Bardak, 2019: 33), and the change experienced today due to the pandemic creates negative effects. During the pre-pandemic period, the evaluation of children was made for the following purposes (Snow & Van Hemel, 2008, as cited in Tunçeli & Zembat, 2017: 3):

1. Parents and teachers determine the developmental process and current situation of children,
2. Educators evaluate the level of achievement of their aims after implementing the educational work they have planned,
3. Continuous regulation and updating of educational programs according to the needs by evaluating situations of children and aims of educators,
4. Arranging educational environments according to the needs of children.

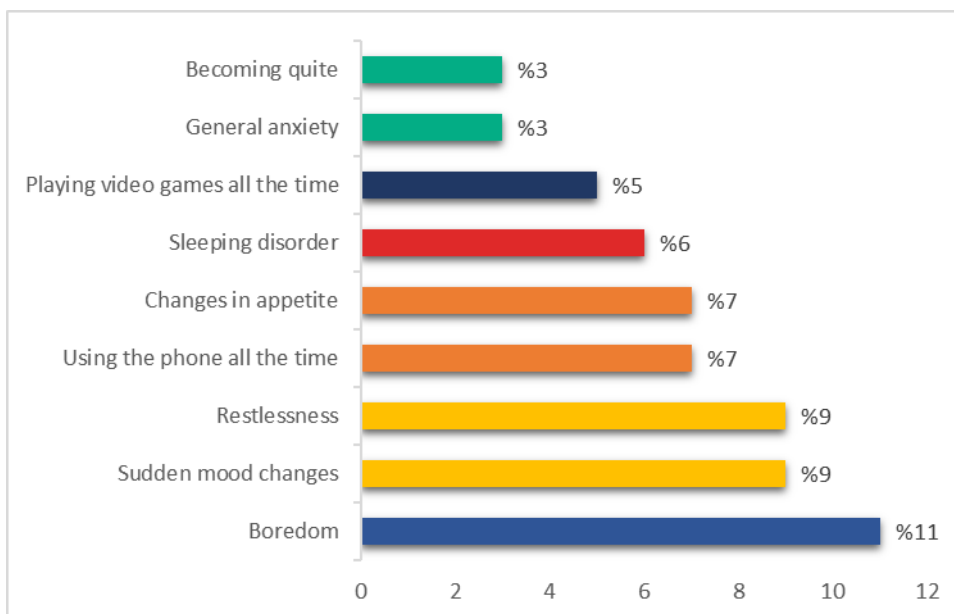
However, the pandemic conditions have changed the situation. The relevant literature points out the negative effects experienced. Bulut et al. (2020: 71) list a few examples of emotional and behavioral changes that show signs of mental distress in children during the pandemic as follows:

- Worries about themselves and/or their loved ones contracting the virus,
- Longing for friends and loved ones that they cannot see,
- Longing for open space, difficulties in distraction and boredom, which become evident during the social isolation periods,
- Missed opportunities and life experiences due to staying at home,
- Difficulties in adapting to the new lifestyle,
- Anxiety that life will never "be the same again".

In addition to all these negative effects, many studies indicate that adults spend time on social media and digital platforms during the pandemic. Yıldız and Bektaş (2021: 120) have investigated the changes caused by the COVID-19 in children's leisure activities. Their results indicate that before the COVID-19 pandemic, children often spent their free time outdoors with friends, and these leisure time activities often included sports activities. Participants have mentioned that even before the pandemic, children spent time at home engaging with screened devices. After the emergence of COVID-19, children who had spent time outside cannot leave their homes due to the imposed restrictions, and have to change their socialization patterns. Their results also indicate that after the COVID-19 have caused school closures, children have to spend a serious leisure time, children who cannot throw their energy out are physically and mentally bored, and their relationships with their families are strained due to fear of illness and restrictions. Biçer and İlhan (2020) state that spending a long time with their families during the pandemic process can cause different effects that may endanger their health. Low exposure to sunlight, physical inactivity, weight gain, mental and behavioral addiction disorders, violence and social isolation are some of these effects.

Many studies have revealed that behavioral changes occur in children during the COVID-19 pandemic. A study conducted in Turkey has evaluated the general situation of distance education based on the experiences of children and parents during the distance education process, which has started with the closure of schools during the COVID-19 period. This study has investigated the emotional and psychological adjustment processes of children by examining the observations of mothers on behavioral changes in their children during this period. The observations of the parent participants have revealed that 20% of the children have experienced behavioral changes during this period. The parent participants have observed one or more behavioral changes in their children. The participants have observed "changes in appetite and sleeping disorder, and watching television all the time, playing video games and using the phone" often together in their children. The table below shows the behavioral changes in children during this period (TEGV, 2020):

Table 1. Behavioral Changes



Source: TEGV (2020), accessed on 26.03.2021 from <https://tegv.org/dosyalar/covid-19-donemi-uzaktan-egitim-durum-degerlendirme-raporu.pdf>

Along with all these negative effects and wrong habits, undesirable situations occur in the development and growth processes of children. As is known, the child development areas are classified in four main groups, namely motor development, language development, adaptive or cognitive development, and personal or social development (Demirci & Kartal, 2009: 2), and these are affected by the pandemic. In these developmental processes, children have a tendency to imitate every behavior of adults since they are in a "receptive" position and are open to all positive and negative effects of the environment (Çukur & Delice, 2011: 31). Töret and Özmen (2014: 53) believe that determining the functions that imitation serves in relation to the field of language and communication, and social interaction and cognitive development in the early period is important to better understand the role of imitation in the development process. Therefore, the behaviors that adults exhibit during the long periods spent in home environments have become new learning styles for their children. In early

childhood, Kıldan and Pektaş (2009: 114) have observed that children develop the process of learning their immediate environment by touching, tasting, hearing and seeing, and asking questions and observing over time. Observation and imitation tendencies have caused digital addiction to become a learned behavior. Just like other technological devices, television and video games have taken over the lives of children (Aksoy & Dere, 2014: 5), and as television is available in almost every home and is an easily accessible tool, the importance of this issue becomes apparent when considering the social development of children in early childhood and the role of the transmission of national and moral values (Erdoğan, 2010: 765).

3. Conclusion

Individuals benefit from the affordances of the internet and technological devices in areas such as accessibility to information, communication, education and entertainment. Individuals, who soon become dependent on the various opportunities offered to them by the digital world, can transfer this preparedness and convenience to their children when they become parents. In this age, children, who are born around these innovations, are introduced to the digital world from early ages, even before they learn to read and write. After the closure of schools as a measure during the COVID-19 pandemic, children have to spend more time at home. Children born into the real life and the digital life are more accustomed to meeting their needs such as communication, education and games through the digital world during the COVID-19 pandemic.

Early ages (0-6 years) forms the basis of other periods of human life, and preschool period, which constitutes the first step of all periods of human life, is defined as the period in which the personality and other developmental areas of the child (cognitive, language, social, emotional and physical) are the fastest. Since the early ages is the period when children are most exposed to external influences, it is one of the critical periods of life. During this period, children need protection the most, and development and growth occur faster compared to other periods. The aim of early childhood education is to provide an environment and support suitable for the growth and development of children (Güven & Azkeskin, 2010: 5). In this context, educators need to prepare and implement activities which can develop the thinking and reasoning skills of young children (Dağlıoğlu & Çakır, 2010: 30). This is of vital importance, especially at the point of compensation for losses and damages caused by the pandemic.

The pandemic, which has become a common problem of all children of the world, treats all of them equally and causes them to be deprived of many social activities, especially education. Lack of certainty about how long this process, which has been going on for the last year, will continue makes the process much more difficult. In this context, governments need to provide full support to families and children in many social issues, especially educational opportunities, during the normalization process. These supports, which are required to raise the awareness of families and naturally, to free children from all the negative effects of this difficult process, should be the main duty of the relevant institution responsible for the education of each country.

The current study has tried to draw attention to the issue of digital addiction among the negativities brought about by the pandemic. The necessity and restrictions imposed by pandemic measures have resulted in a serious internet addiction, especially for children and

teenagers. Combating this situation will be possible through increasing the importance given to media and social media literacy. Changing these addictive habits acquired during the childhood and puberty periods and gaining new habits will be possible through education and awareness.

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