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EVALUATION OF THE EFFECTS OF SMARTPHONE USE ON CHILDREN

Annotation. In addition to providing communication and messaging in the historical process, mobile phones serve as a computer rather than their existing function in terms of providing large-scale multimedia. With the increase in the frequency of mobile internet usage which has become an indispensable part of daily life, it has become inevitable to investigate the effects of children on mental and physical health. Today, mobile phones are widely used in technological means such as voice and video communication, online messaging, gaming, video watching, listening to music, being active in social media, and doing research. This study aims to give general information about the use of smartphones of children, to examine the research, to focus on the physical, social and psychological problems that can be caused by the use of smartphones and to make some suggestions to the families, teachers and administrators.

Key words: smartphones, mobile internet, telephone addiction, cyberbullying, growth retardation

Introduction. The number of people with smartphones is increasing day by day. While the number of people using smartphones in the world in 2016 was 4.3 billion, making up 58.7% of the world's population, it is thought that this number will reach 4.78 billion in 2020 (Global Mobile Landscape, 2016). While the conveniences of smartphones make them attractive and increase their usage rates, they have been questioned especially because of their harmful effects on children and adolescents. When the literature is examined, the unconscious use of smartphones in children and

adolescents brings many problems and risks. Among these risks and problems is internet addiction, communicating with unfamiliar people, being exposed to visual and audio materials containing violence or fear, encountering online pornography, talking to people older and malicious, communicating with illegal criminal organizations, visiting racist or hateful sites[10]. In addition, it is thought that health problems such as attention deficit, physical inactivity, obesity, insomnia will occur due to the frequent use of smartphones in children. According to a study, it has been shown that the use of digital technology such as smartphones in Early Childhood is a condition associated with regression and delay in social, emotional, mental, linguistic and motor development [20]. In addition, it was concluded that children using smartphones face more internet risks and need new skills for safe internet use [19]. For this reason, it is seen that children's mobile internet experiences worry parents and cause them to experience tension with their children [18]. With the widespread use of mobile internet by children, how they use mobile devices and the Internet, and the positive and negative effects of their use, is an issue that needs to be investigated and emphasized [2].

Smartphones and risk factors. It has been observed that children in Turkey have smartphones from an early age, and they mostly provide internet access with mobile devices such as smartphones and tablets. It has been observed that the first places where children access the internet are their homes and their rooms in their homes. While it is seen that children have a mobile device and basic internet usage skills, it has been revealed that their skills for safe internet use are insufficient. However, it has been observed that the use of social networks among children has become popular. It has been revealed that when children face risks on the internet, they mostly try to cope with themselves and they refer to their parents and friends when they need help from the people around them [21].

Phone addiction. It can be defined as the excessive use of the phone in a way that neglects the daily life activities and responsibilities and needs of the individual. Smartphones, which are designed by combining mobile phones and palm computer

technologies, are the most used technological tools today. Excessive use of these technological tools causes the problem of smartphone addiction [1].

Repetitive behavioral disorders, which disrupt interpersonal relationships and harm human beings as social beings, should be considered as addictions. Symptoms such as exerting too much effort towards a certain action or behavior, continuing the behavior that gives pleasure to the individual by getting away from real-life problems, developing tolerance as the behaviors are repeated, difficulty in controlling the behaviors and tension when the behavior is prevented from being repeated are considered as addiction [27]. The rate of those who fell asleep while using their smartphones was 25 percent (Bank of America, 2015). All these data are an indication that smartphones create an incredible addiction in our lives, that they have become indispensable in daily life, that they carry a great risk especially for children, and that they cause significant psychological and physical disorders.

Physical, Psychological and Social Ailments. While smartphones can perform activities that can be considered very useful in our daily lives when used consciously, they can have serious physical and psychological negative effects in case of unconscious or excessive use. Physical health problems such as headaches, eye-watering, eye strain due to constantly looking at the screen are among the physical and psychological disorders that occur with the use of smartphones and trigger other problems and with the widespread use of social media and messaging applications, asociality can be caused by talking on a smartphone rather than meeting in real life. There are problems such as the formation of a personality [24]. Due to the possibility of establishing communication with all people in the virtual environment, there may be unrest due to the risk of being drawn to healthy and illegal environments. It was stated that smartphone addiction causes psychological disorders such as anxiety, social phobia, hyperactivity, attention deficit, and depression. It is known that the increase in the frequency of smartphone use causes physical problems as well as psychological and social problems [23]. Complaints such as structural deterioration in the fingers, pain and decreased squeezing power, called wrist syndrome, are very common, especially in people who use computers or mobile phones frequently [8].

Standing in the same position for hours sometimes causes the neck muscles to contract, numb and harden [8]. Aslan and Aylaz stated that individuals who are exposed to the phone light in bed until late with the advantage of mobile internet experience sleep problems. Although the redness and turbidity in the eyes are seen as a temporary problem, they can cause important eye disease in the future. According to the findings obtained from the study conducted by [16], it has been observed that individuals who fail to communicate effectively in social life have a higher risk of smartphone addiction. It has been stated that psychological disorders such as depression, anxiety disorders and stress have symptoms parallel to the use of smartphones [16]. In nobophobic people, smartphones become a limb of those people, and these devices cause people to experience panic and stress when they are not near them.

Cyberbullying. Mobile internet is a virtual communication tool that is frequently used among children and adolescents to perform activities such as sending files, using social media, online messaging, watching movies or videos, researching and reviewing [25]. Chat rooms, blogs, e-mail and other internet sites are among the most preferred usage areas [11]. Such virtual environments make nonverbal messages' real characteristics, age and gender impossible, and this way of conveying also causes misinterpretation and understanding [9]. Physical bullying that occurs in social life has the same characteristics as bullying in the virtual environment. The obvious difference between them is that cyberbullying is through information and communication technologies. Children and youth who are exposed to cyberbullying behave obsessively, depression, low self-esteem, anxiety, fear, disappointment, shame, etc. such feelings arise [14]. They act bully through the characters created by using their imagination in virtual environments, they are seen as a game and they do not take responsibility for these behaviors. According to Willard (2006), they accept bullying behaviors as games through the characters they create with the influence of their imaginations in the virtual environment among their peers and they do not take responsibility for these behaviors. Looking at the results of a study, it was revealed that 60% of children and adolescents who were exposed to cyberbullying were girls.

It is also among the results determined in the study that 52 percent of the students who perpetrate this bullying in the virtual environment are male. According to the data of another study, 69 percent of students in Canada stated that they had witnessed cyber harassment, and 21 percent stated that they had been exposed to cyber harassment [25].

Results. In this study, three main themes were reached as a result of the compilation of the negative consequences of the use of smartphones in children. These; smart cell phone usage rates in children, activities performed with smartphones in children and risk factors related to smart cell phone use. The historical process of smartphones in children and their usage rates in adults, children and adolescents were examined.

Children in Turkey are introduced to smart mobile phones at a very early age. While it is seen that children have a mobile device and basic internet usage skills, it has been revealed that their skills for safe internet use are insufficient. There are many risk factors in case of overuse of these devices and lack of secure internet skills. At the beginning of these risks is phone addiction, seeing immoral pictures, playing violent games, exposure to cyberbullying, physical, psychological and social problems [21].

In our country, which has a young and dynamic population, the most used mobile communication tool is smart mobile phones. These devices allow us to easily perform many operations in our daily life. Excessive use of smartphones by children brings many physical, psychological and social problems. Physical health problems occur such as headaches, eye-watering, eye strain due to constantly looking at the screen, and the spread of social media and messaging applications, and problems such as the formation of an asocial personality due to talking on a smartphone rather than meeting in real life [24]. With phone addiction, the risk of problems such as social anxiety, restlessness, social phobia, loneliness, lack of concentration and hyperactivity increases [23].

Exposure of children to cyberbullying via smartphones is another risk factor.

Recommendatıons. In this section, some suggestions were made to parents, teachers and educational institution administrators.

*In educational institutions, seminars can be given to parents and prospective parents on the harmful effects of smartphone use in children.

* Developmentally, the 0-2 age range has a very critical period in the individual. This is the time when the child needs parents the most. For this reason, the child should be prevented from using a smartphone at this age.

* The age of children to meet these devices should be delayed as much as possible. *Parents should spend quality time with their children, activities should be carried out.

*Parents should not use smartphones as a tool for reasons such as ensuring that children are not eating meat and preventing crying children from crying.

*Parents should act consistently against the rules they set, and other family members should be ensured to behave sensitively in this regard.

* During the preschool education period, children should be encouraged to move more, have social interactions with their peers, play games suitable for their developmental characteristics, and participate in activities such as painting, drama, music and sports.

*In social media accounts, it should be checked with whom children and young people make friends and whether they share their personal information.

*Parents, teachers and school principals can organize joint meetings on issues such as cyberbullying, mobile games, and phone addiction.

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