

Effects of Digital Media on Education

(Meta-Thematic Analysis)

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Abstract—This study aims to combine studies examining the effects of heavily contacted digital media on education in digital gaming, social media, and digital addiction and conduct related research. For this purpose, meta-thematic analysis was employed, one of the qualitative research methods. In the study, the question 'What are the effects of digital media according to parents, teachers, and students?' has been answered. The document analysis technique was adopted from qualitative methods as a data collection tool in the research. The data were analyzed according to the categories of 'parent, teacher, student, and socio-cultural reflections. It has been concluded that the tasks and responsibilities that students should perform in their daily lives reflect the negatives such as interaction, academic failure, waste of time, uncontrolled contact habits, perception disorder, and miscommunication in the educational process. According to the results obtained, the necessary precautions against the negativity of social media and digital games, digital literacy, and enhancing competencies of your family, individual students according to their degree of dependency on the type of digital media content and latent hazards be interfered with by experts on the implicit message to students which activities they will receive the satisfaction of daily living dependency oriented measures to the problem of design and digital boosting, etc. the recommendations are listed.

Keywords—social media, digital game, digital addiction, education, meta-thematic

1 Introduction

With the development of technology, developments and changes in many areas of our life manifest themselves in different directions. These developments affect the daily attitudes and behaviors of individuals dynamically. The fact that adults, especially children, and adolescents, are in constant contact, and individuals become too dependent to act independently of these devices affects all areas of social life, as well as negatively affects the environment of education. Our education life is always at the forefront, and it is known to consist of a knowledge community that has left its mark on human life [52]. The use of information and communication technology (ICT) has become a norm,

whether for personal, social, or official purposes. The rapid growth of ICT has been affected worldwide through various technologies, such as smartphones, tablets, mobile computers, and many other digital devices [39].

While today's societies are experiencing a period when modernization, industrialization, technological development, and changes are taking place at a rapid pace, unemployment, deterioration in values, family problems, economic problems, lack of social support, insecurity and moral corruption are being experienced at the same pace. Individuals faced with these problems can turn to different pursuits. It is known that in today's fast-changing and developing world, people of all ages are experiencing behavioral disorders that accompany a new digital sociological change. In this context, it is seen that besides the positive aspects of digitalization, it is becoming a major and important problem that is increasing every day, affecting not only the individual but also all segments of society, as stated in [2].

The replacement of Internet-based digital devices in our lives affects our social and educational life. Information is easily accessed by scanning different databases on the Internet and through different sites. Using visual, auditory, and different methods to transmit information tends to be more qualified and permanent through technological devices. In everyday life, technological devices offer great gains in terms of saving time to individuals such as online shopping, Internet banking, and instant communication. The development of technology has increased people's communication and instant interaction. From this point of view, the development of technology and devices looks extremely positive. On the other hand, it is possible to say that getting to the information quickly increases the quantity of the information and reduces its quality. It can even be said that students make special efforts 'not to learn' in schools because they can access information at any time through technological devices. Another example of the situations that technology adds to our lives is that face-to-face communication is decisively negatively affected, and the conversations that individuals have in person are replaced by conversations on social media networks. We can easily see that the way we speak, and our words have changed in a way that disrupts the structure of the language. The effects of technology, especially on children and adolescents, have left their mark on the field of education. It can be stated that students cannot demonstrate the expected participation in their classes due to gaming addiction, they have problems focusing due to physical and mental fatigue, students intend to immediately switch to the computer and surrender themselves to online games as soon as possible, rather than their priorities are their lessons, homework. Students who are under the influence of these situations prefer to get all their daily life needs on the Internet, rather than fulfilling their lessons and responsibilities.

One of the first things that come to mind when it comes to digital media is social media. According to the Cambridge dictionary (University Press, 2018), social media are computer programs and websites that allow people to share and communicate information over the Internet using a mobile phone and computer. In this context, social media is a tool that allows people to build social networks [44]. Social media includes sharing and interaction sites such as Instagram, Facebook, Twitter, and Youtube which allows sharing of information, photo and video, and so on [17]. Social networks can also be defined as a virtual communication network that embodies the applications,

technologies, and many different types of concepts that most people take at the center of their daily lives. Social media is one of the most important communication tools today and is among the most contacted applications of the internet environment. While the usage area and frequency of the Internet are increasing, contact with social media is at the beginning of this usage. Hazar (2011) stated his opinion that a very important part of the internet usage will be provided by social media shortly in his study about 11 years ago. With the development of computer technologies, tablets, and smartphones in today's Turkey, providing ease of access to the Internet has also increased the use of social media sites in parallel. According to the data of the Household Information Technology Usage Survey of the Turkish Statistical Institute [51], Internet usage increased by 2.4% compared to the previous year to 75.3% [51]. In addition, according to the 2016 report of the same research conducted by [51] social media use generates the first place for internet usage purposes with 82.4% as stated in [26]. According to the Turkish Statistical Institute, the age group with the highest Computer and Internet usage rates is 16-24. Children start using computers at the age of 8, the Internet at the age of 9, and the Internet at the age of 10 [11].

Social media sites that the Internet has added to our lives are preferred and contacted by a wider audience than games. According to Boyd and Ellison [8], even with some uses of the term social network in the literature, the term is not clear. Also, Boyd and Ellison [8] mentioned social media as the name given to all networks in which people provide information about themselves, share, and see other people's shares in web-based environments in their studies. In a study conducted by TÜİK [50], it was found that the most use of the Internet is for social media. Video surveillance and audio-video communication are the first goals of using social media. According to the data, 35.33% of the Internet is used for playing games. According to [51] research data, the age of starting information technologies is determined as 8, and usage rates are determined as 40.29% of men and 29.29% of women [51]. According to Chen [13], the spread of the Internet and the developing technical infrastructure of websites have a great impact on the increase of interaction over the Internet, the development of social media, and social networking sites.

Social media platforms are virtual networks that are usually built on communication with posts, photos, videos, sounds, and comments that indicate thoughts. In these networks, people use it to supplement their feelings of dues in everyday life or to feel freer themselves. People may be constantly on these networks to follow others instantly; they may prefer these networks to follow news from the geography and the world they live in; users may want to meet their 'liking' needs with photos or posts they share, or they may want to make new friends. For whatever reason, it seems that its effects cause many positive and mostly negative situations in our daily lives. Especially, users who are possessed with the perceptions created in social networks are affected by these perceptions too much in their real lives, disrupting their responsibilities and destroying their moral values. The educational environment is one of the areas that are indirectly most affected by the impact of social media, as well [53].

Social media sites today have a lot of variety according to their intended use. Social media sites are in high demand for many purposes such as sharing photos, sharing information, obtaining friendships, shopping, texting, and video talk, for a live broadcast,

a forum for the exchange of information on different topics to follow similar pages. Social media sites, which seem to be useful and fun in appearance, have a direct impact on community management and behavior changes with the perceptions created and the language with different sending power. Among the situations that are considered to be the main danger of social media addiction are that individuals spend too much time restraining their daily lives, social lives, and educational situations.

Social media addiction is defined as an official disease in the field of medicine as stated in [35]. In users who are addicted to social media, sleep disorders and physical disorders are observed. Furthermore, it has been seen that they have personal, family, and professional problems similar to other addictions. Yengin [57], defines a person who is addicted to social media as a digital dependent individual who spends most of his life on the internet, feels lonely, differentiated or asocial when exposed to mobile devices, wants to be instantly aware of mobile innovations, communicates with his friends on social media platforms and creates a new identity on social media.

Some of the indirect harms caused by social media addiction are marriage, friendship, and family relationships. If social media interferes with an individual's life, daily work, and actions, if an individual feels restless when social media accounts cannot be accessed/controlled if it affects an individual's academic achievement, causes problems in relationships, causes perception and/or distraction, causes feelings such as panic, attacks, stress, anger, the individual can be said to be a social media addict [15].

On the other hand, social media sites have become very popular from 7 to 70 and have become centers of different types of sharing and interaction. Social networking sites are micro-virtual spaces where users can send all kinds of content prepared by them to each other in an interactive way as stated in [55]. Social media networks are not just computer application; it is also a communication tool that affects individual interaction and how they establish a connection with each other and allows sending files such as text messages, video, and audio to each other [37].

As stated in [42] multiple interactions established through social networks show basically three common characteristics: Firstly, relationships on new media have micro-characteristics and do not have a specific center. Secondly, surveillance in social networks takes place between people; it is not intended for governments or organizations. The third is that surveillance is mutual; interaction develops and deepens considering the information that the parties share with each other. However, increasingly, these shares are becoming more commonplace and are taking their place in bilateral relations.

One of the important instruments of digital media is the problem of gaming and related behavior. It is possible to express the term digital game with different names such as 'video games, console games, computer games, online games in the expression of Vatandas (2020). Digital games that offer basically the same shape and content to users often serve the same purpose, collecting users per screen. The most visible of the common points of digital gaming tools; terms such as system unit, monitor, display, mouse, joystick, and video card have replaced the words such as rope, stone, ball, and marble used in street games.

The development of technological devices has ensured the convenience of constant access to the Internet. Due to their simple operation, most children of the youngest primary school age have already mastered the use of such devices [21]. The fact that

access cannot be limited to home or fixed connection environments has provided the individual with the opportunity to play anytime and anywhere. Digital games are becoming addictive to individuals due to the influence of components such as constant ease of access, the desire to get pleasure, feeling comfortable, and being in an environment without responsibility. Even people who come together on playgrounds have become connected to virtual games while they are side by side. Biely, Fisk, and Lieberman [6] stated that digital games lead individuals to violence and fear, make them emotionless and exhibit aggressive behaviors, and also cause situations such as depriving individuals of physical and social activities.

With the change of the new generation of game understanding, digital games have become the focus. Kuss [36], stated that digital games are a very popular source of entertainment among children, teenagers, and adults. Digital games and unified content have become increasingly common in societies around the world. Video game addiction among young people can be seen as the effect of a combination of factors such as societal influence, internal factors, family relationships, education, and the media. Firstly, the intrinsic motivation of someone who is addicted to video games is affected by mental health symptoms such as impulsivity, aggression, depression, low self-esteem, low self-control, and anxiety. In addition, digital game addiction may be caused by young and unstable family relationships, family attitudes (overload protection, excessive expectations, controlling attitudes, lack of commitment to family, and the shortcomings of family cohesion), incompatibility in school (bullying, violence, sex, stress, and negative relationships with teachers) [38].

The development of digital games first began with the participation of people individually and as a group through Internet cafes during periods when Internet access was not widespread. Especially, young people who want to keep their place in friend groups have had to be in such places with their friends before they could resist this situation. With the ease of Internet access, the connections owned in homes have started to increase the game addiction even more. The players met in virtual environments and continued to maintain their virtual relationships rather than physical one. So, virtual environments have become a complete escape zone for individuals who cannot express themselves comfortably while face to face or who are not very successful in communicating in bilateral relations, making them feel good about themselves. In this case, individuals have become addicted to digital games due to the junkies given by factors such as visual and audio provided by digitality in games.

Digital games have managed to attract attention with features such as their content, immersive structures, and sense of success. Hazar, K., Özpolat, Hazar, Z. [28], draw attention to the fact that the interest in digital games brings with it many individual and social problems, especially digital game addiction in the long term, especially in childhood. Nurmedov and Tarhan (2014) describe the physiological process of digital game addiction as that this dependency of the process that leads to a state of digital games in the kids achieving the goal of winning the race is based on factors such as Jun and both stimulate the brain's reward system of the brain is developing a program on the life of the award, repeat, repetitive, and hence refers to the emergence of the state in the process dependency as stated in [28]. It is seen that digital game addiction affects individuals' social lives, bilateral relations, homework and responsibility awareness, creativity

and entrepreneurship situations, time management, and self-control skills completely negatively. In particular, when we consider the age characteristics of individuals who are addicted to digital games, it is seen that more preschool children, adolescents, and young adults are addicted to games. While the priority should be education in individuals who are in this period, the focus of children and adolescents is on digital games. Therefore, individuals have become unable to cope with problems such as failure in educational activities and inability to fulfill their duties, lack of focus, reluctance.

These games, which attract the attention of individuals visually and audibly, are offered to individuals through electronic means with the development of multimedia. Fromme [24], states that interactive video and computer games belong to the new multimedia culture based on digital computer technology and that these games have gradually increased their popularity among young people, especially in the last 20-25 years.

Digital games, which collect their users intensively per screen, can directly affect the behavior of children with many ideological ideas and perceptions that hides within their structure. The unique story of each digital game is adopted by users and affects their lifestyle, social life, interaction with people, and educational situations, and these games also open the door to many question marks and scientific research. İnal and Kiraz [29], have stated that media and mass media are often used to penetrate ideology and idea movements into society and to be accepted by the individuals of the society. Because tools such as radio and television, which can reach a wide audience at the same time, are perhaps the most popular in this regard. As a result of the very large dec of the Internet among people, ideology and idea movements can easily reach large audiences through Internet technologies. According to age groups and the type of preferred media medium, ideologies are transmitted in different ways, covertly, and it can be said that they are transmitted to children through digital games and videos.

The game appears as a need in individuals from early childhood. By playing games, children develop their interests and needs, their personalities and characters, ideologies, strategic and creative thinking skills. With it, the development of children's fine and coarse muscles is supported by games. The development of cognitive, affective, and motor skills of children; the development of creativity, reasoning, problem-solving skills; language development, communication skills, and development of sociability skills are provided by play. Bulut and Yılmaz [10], stated that the game is the gamification of life; that it is an important tool for educating and teaching, but also that the game is a universal activity of children and is a way of expressing itself. According to them, the game contributes to the formation of society from both physically and spiritually healthy individuals in the future. For children, playing is a vital activity that is as important as eating, being able to shelter, and sleeping. Children can learn about competition, sharing, reflecting on their inner world, and creativity more easily through the game.

The game, as mentioned in Piaget's classification, is a mirror of the child's mental development. However, the game is not only a mirror, it plays an active role in the mental, physical and emotional development of the child [1]. According to Pilavcı [45], gaming is an activity that takes place in everyone's life. It can be said that the act of playing games is an internal action. The act of playing games does not depend on precise and procedural conditions to be planned, thought out, and decided in advance, and

there is always a curious ambiguity in it. Since the game action has an instinctive and ambiguous nature, it can be said that games in general have an irrational structure.

Rapidly growing cities also bring their security problems together. Vatandaş [54], notes that parents have high-security concerns and have become more likely to prefer their children to spend time at home rather than spending time on the street. In this process, television has become the main means of occupation. However, digital technology and the Internet have taken this situation to completely different dimensions. Screens have become almost the only playground for children. It seems that children who stay at home in a social structure that cannot support their children's energy discharge through play on the streets and their social development find themselves in a virtual world.

Although the types of games and their contents vary, it quickly influences individuals with the fun it makes them feel. A digital game is a product of the virtual entertainment industry, so it should be fun [33]. For individuals who do not have the opportunity to have fun in everyday life, those who have difficulty coping with stress, those who avoid taking responsibility, etc. such entertainment areas for people have become important venues.

One of the important effects of digital media on the educational process is the behavioral reflections of digital objects related to use disorder. It can move students to different points for time, content, and design that will interrupt the learning phenomenon. At this point, we are facing a new educational problem that we can call digital addiction. Many definitions related to the concept of digital dependence are possible. Addiction, which occurs when the mental state of a person temporarily changes under the influence of certain substances and he feels differently, is a very important bio-psycho-social problem. This problem in question is that sabotaging the real-life experiences of an individual, becomes aimless and irresistible [18]. As stated in [18] tried to interpret digital addiction inspired by other substance addictions. If the person's substance use addiction even though you tried to quit so many times, you cannot increase the dose increasingly used when he's not using it, the person emergence of withdrawal symptoms, time to procure this item describes a special form of a large portion of spending. Perhaps the most comprehensive definition expressing this state of dependence is as stated in [18] made as follows: Addiction is nothing more than a defense scheme created by the personality against the forces that it considers enemies, facts. Instead of overcoming them, it is a means of defense, a weapon that allows you to escape from them. Unfortunately, this weapon is also aimed at the person himself and is aimed at destroying him.

The individual, dependent on any substance or object, feels himself in an irreplaceable void. This situation affects the dependent individual in all areas. The dependent individual has difficulty making original decisions on his own, his sense of autonomy is greatly damaged, and he begins to exhibit other behaviors that were not present in him before. According to Çam [14], the individual who becomes dependent begins to experience incompatibility with his/her external world and begins to turn more towards his/her inner world.

This research aims to deconstruct the results obtained by combining the meta-thematic technique of studies examining the effects of social media, digital gaming, and

digital addiction on education in the triangle with in-depth analysis. It dec aimed to present the findings obtained from 14 qualitative studies included in the research sample and to present the effects of digital addiction on education with an inductive understanding of the literature from a broader perspective. There are many studies related to digital addiction. The effects of intensive digital life from the family, teacher, and student sides will be introduced to the literature as a whole.

In this context, the following questions were answered in the research:

1. How are children affected by digital media according to parents?
2. How are students affected by digital media according to teachers?
3. How do digital media affect them according to students?
4. What are the socio-cultural reflections of digital media?

2 Method

To reach a holistic result, the research was patterned with the meta-thematic technique, which is one of the qualitative research methods. The meta-thematic analysis is introduced as a process of re-combining codes and themes by examining the findings of qualitative studies on a topic in a field article. The main purpose of the meta-thematic analysis is to deconstruct the results of qualitative studies on a topic in a field article. In other words, it can be expressed as the process of obtaining general and similar qualified themes developed using the scanned literature as a result of collating and encoding the data in the relevant studies [4]. In this research, ‘social media, digital games and the impact of digital addiction on education’ has been discussed meta-thematically. Criteria have been determined to be included in the scope of the research and articles have been tried to be reached by these criteria. In the last 10 years (2011-2021) in Turkey, qualitative studies on the effects of digital addiction on education in the most general sense have been included in the research. To obtain data, a total of 67,948 articles were accessed from 2,401 journals with the keywords ‘Digital Addiction and Education’ in the DergiPark Academic database. Of the articles reached, 14 qualitative articles on the effects of social media and digital games on education were included in the review. Figure 1 shows the flow diagram of the articles included in the study and the data collection process.

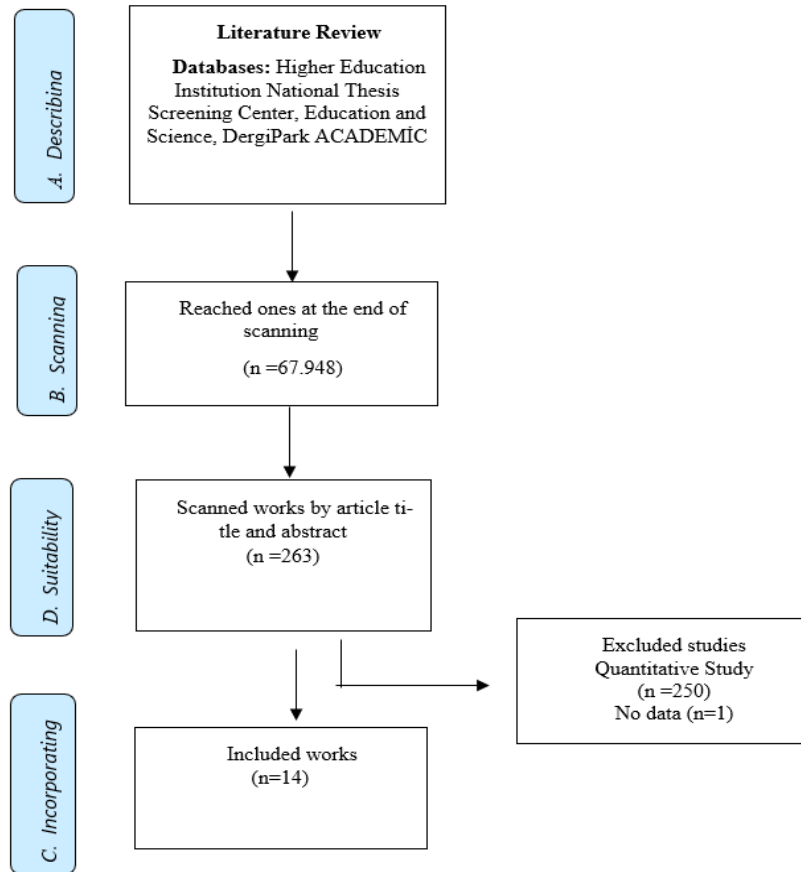


Fig. 1. The data diagram included in the meta-thematic review

As shown in Figure 1, the databases of the National Dissertation Center, ERIC, Education & Science, and DergiPark were scanned, and the titles, abstracts, and findings of the studies were included in the study examined. As a result of the screening, within the scope of Digital Addiction and its Effects on Education, a qualitative study on the subject has not been achieved in the ERIC, Education-Science, and National Dissertation Center databases. 67,948 articles were accessed through 2,401 journals via the DergiPark database. Among the studies, many articles related to digital addiction and not have been presented together. 263 articles related to the subject were examined through the article titles. A total of 15 articles, which are qualitative among the articles examined, were recorded for inclusion in the research. Since one of these 15 articles was a compilation study, it was excluded from the study due to lack of data, and the remaining 14 articles were included in the study.

In the research, data analysis was performed using the descriptive analysis technique. In qualitative research, the data obtained are described, explained, and interpreted by thematization. The data included in the meta-thematic study were organized and

interpreted within the framework of themes compatible with the research questions. The articles included in the study were coded as M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14.

3 Findings

The article information included in the scope of the research is as indicated in Table 1. during the identification of the findings, the articles will be represented by code numbers.

Table 1. Articles, authors, years, and codes taken into the study sample

Code	Year	Author	Title	Ref.
M1	2019	FATMA AVCI, HASAN ER	INVESTIGATION OF VIEWS ON DIGITAL ADDICTION AND SUGGESTIONS FOR SOLUTION	[3]
M2	2018	RÜSTEM MUSTAFAOĞLU ZEYNEL YASACI	DIJITAL OYUN OYNAMANIN ÇOCUKLARIN RUHSAL VE FİZİKSEL SAĞLIĞI ÜZERINE OLUMSUZ ETKİLERİ	[40]
M3	2017	MEHMET AKIF INCI ÜMMÜHAN AKPINAR ADALET KANDIR	DIJITAL KÜLTÜR VE EĞİTİM	[30]
M4	2020	DEMET ÖNER	ERKEN ÇOCUKLUK DÖNEMİNDE TEKNOLOJİ KULLANIMI VE DIJITAL OYUNLAR: OKUL ÖNCESİ ÖĞRETMEN GÖRÜŞLERİNİN İNCELENMESİ	[41]
M5	2018	ARZU ÖZYÜREK	OKUL ÖNCESİ ÇOCUKLARIN BILGISAYAR TEKNOLOJİLERİ KULLANIMININ ANNELERİN GÖRÜŞLERİNE GÖRE İNCELENMESİ	[43]
M6	2016	AHMET NACI ÇOKLAR FEYZA UZUN	ORTAOKUL ÖĞRENCİLERİNİN DIJITAL AŞIRMACILIK YAPMA ŞEKİL VE NEDENLERİNİN BELİRLENMESİ	[16]
M7	2019	SEDA YALÇIN YASEMIN BERTİZ	ÜNİVERSİTE ÖĞRENCİLERİNDE OYUN BAĞIMLILIĞININ ETKİLERİ ÜZERİNE NİTEL BİR ARAŞTIRMA	[56]
M8	2019	MURAT SAĞLAM FÜSUN TOPSÜMER	ÜNİVERSİTE ÖĞRENCİLERİNİN DIJITAL OYUN OYNAMA NEDENLERİNE İLİŞKİN NİTEL BİR ÇALIŞMA	[46]
M9	2020	FATİH SÖĞÜT	DIJITAL EBEVEYNLERİN DIJITAL OYUNLAR VE ŞİDDET İLİŞKİSİNE YÖNELİK ALGILARI	[48]
M10	2018	FATMA YİĞİT AÇIKGÖZ AYŞEN YALMAN	DIJITAL OYUNLARIN ÇOCUKLARIN KİŞİLİK VE DAVRANIŞLARI ÜZERİNDE ETKİSİ: GTA 5 OYUNU ÖRNEĞİ	[58]
M11	2020	GÖKHAN CANTÜRK İBRAHİM YÜKSEL	DIJITAL MEDYANIN ORTAÖĞRETİM ÇAĞINDAKİ GENÇLERİN DÜŞÜNME BİÇİMLERİ ÜZERİNDEKİ ETKİLERİ	[12]
M12	2019	PINAR ERTEN	Z KUŞAĞININ DIJITAL TEKNOLOJİYE YÖNELİK TUTUMLARI	[23]
M13	2017	ONAY BUDAK	DIJITAL ÇOCUK OYUNLARINA ÇOCUK GELİŞİMİ VE OKUL ÖNCESİ ÖĞRETMENLERİN VE ANNELERİN BAKIŞ AÇISI	[9]
M14	2021	ALP EREN ERBAY	İLETİŞİM BİÇİMİNDE DIJITAL OYUNLAR ÜZERİNE YAPILAN ÇALIŞMALARIN BETİMSSEL ANALIZI	[22]

The articles included in the study consist of articles published in the fields of health, communication, and education. Current articles made in the last 10 years have been included in the scope of the study. The articles were examined according to the categories 'parent, teacher, student, document review', and themes were created. As a result of the examinations carried out in the M2, M5, M9, and M13 studies, the findings obtained in the parent category are indicated in Table 2.

Table 2. The findings on the effects of gaming, social media, and digital addiction on children according to parent category

(M2, M5, M9, M13)
Themes
Anxiety and aggressive attitude because of violent games
Depression, asocialization and decreased communication in the family
Musculoskeletal problems and stance disorders
Dryness, redness and pain in the eyes
Spend more time than necessary
Sleeping late, waking up late and sleep disturbance
Physical activity disorder and obesity
Distraction and concentration
Headache
Language development disorder
Desensitization to violence

When Table 2 is examined, it is seen that the games are violent and reflect the game content of the players in their real lives, and the situations of being aggressive and angry are observed a lot by the parents. It is observed that excessive time spent with technological devices causes both physical, behavioral, and mental problems in individuals. Considering the educational and social tasks of students, it can be interpreted that they cannot fulfil their responsibilities by looking at the table. It is known that irregular sleep and time spent with technological devices will lead to disruption, postponement, and non-performance of tasks. Other popular effects observed by parents have been depression, asocialization and decreased communication. A nerdy and uncommunicative lifestyle can lead to the fact that the achievements that need to be transferred to individuals will fail. The appearance of language development disorders with gradually decreasing social communication is also a negative situation that can naturally be observed with it. It is seen that the situation when the body that remains motionless is faced with the problem of obesity is popular among the problems provided by technological devices. According to the findings obtained according to the opinions of the parents, the students are faced with physical, mental, and behavioral problems.

The themes obtained from the studies M1, M4, and M13, which examined the views of teachers, they are indicated in Table 3.

Table 3. Findings on the effects of gaming, social media, and digital addiction on children according to teacher category

(M1, M4, M13)
TEMALAR
Spend more time than necessary
Not being able to stay separate from technological devices
Abstraction from real life
Displaying aggressive/aggressive behavior
Blunting of the imagination
Lack of attention and inability to focus
Communication disorder
Retardation of language development
Lack of motivation
Constant desire to be online
Hand-eye coordination disorder
Being constantly on the move
The detection problem
Quick boredom and dissatisfaction
Modeling digital media characters
Rejecting the rules
Emptiness in the gaze, expressionlessness
Junkiness about using technological devices
Eating disorder
Low academic achievement
Depressive and melancholic behaviors
The desire to have the latest model devices
Insomnia
Avoiding responsibility, acting irresponsibly

When Table 3 is examined, it is seen that there are similar answers that correspond to the parents' opinions one-on-one. Among these opinions, the most repeated answer has been 'students spend too much time with devices such as computers and tablets. The most common answer has been 'students spend too much time at the beginning of devices such as computers and tablets. It is observed that the time spent in virtual environments is inversely proportional to the time allocated to the real social environment. Teachers, like parents, have often repeated the opinion that students isolate themselves. We can reach the interpretation that students exhibit aggressive attitudes, have depressive attitudes, lack of motivation, and their creativity is affected by the visual and perceptual effects exposed in the virtual environment. The answer of the students who are considered to have spent a lot of time in digital environments 'blankness and expressionlessness in their gaze' indicates that the students have problems with perception and thought generation. Sharing and images exposed in virtual environments cause students to exhibit behaviors that disrupt the order of society, such as not recognizing rules.

Along with the negative attitudes and behaviors exhibited, it has also been inevitable that academic failure will come together.

The themes obtained from the studies M6, M7, M8, M11, and M12, which examined the opinions of the students, are indicated in Table 4.

Table 4. The findings on the effects of gaming, social media, and digital addiction on children according to student opinions

(M6, M7, M8, M11, M12)
THEMES
3-15 hours playing time
Inability to perform basic and academic tasks along with daily tasks
Getting more pleasure from real jun in a virtual environment
Creating a virtual circle of friends
Aggressive, stressful and irritable attitude
Finding himself in the virtual world despite trying to stay away
Finding the environment created in a virtual environment more intimate than the real environment
The feeling of winning obtained in the games makes you feel satisfied and comfortable
Viewing digital games as modern toys
Ability to access information in a short time
Friendships that are established and broken in a short time
Impatient, bored, unable to achieve a sense of satisfaction in real life
Disconnection from the social environment
Love, respect, sharing, etc. loss of values
Social escape, entertainment
Laziness
Copy- paste the tendency to prepare homework
Using a ready-made assignment
Modifying and exporting content
Trying to find the answer key from the Internet

It is clearly understood from the students' opinions that digital games and social media affect the attitudes and behaviors of students. The finding of the time spent with technological devices immediately led to the conclusion that the daily duties and responsibilities could not be fulfilled. It is seen that creating a circle of friends, gaining knowledge, gaining experience and a sense of satisfaction that students should do in real environments is sought in virtual environments, but it is seen that this search causes results such as impatience, boredom, inability to reach a feeling of satisfaction in real life. The interaction experienced in everyday life brings with it some values. It is stated by the students that these values are not formed in virtual environments or even that these values are beginning to disappear in everyday life. Among the answers given by the students, it has been seen that there are efforts to stay away from the virtual world, but they somehow find themselves in virtual environments. Another situation that has been found is that information is accessed quickly in virtual environments. It is seen that this situation causes students to develop a negative attitude. It is seen that the

expectation that technology will provide convenience to our lives results in negative behaviors such as theft and digital theft on the student front.

The themes obtained from the document review articles (M3, M10, and M14) are indicated in Table 5 accordingly.

Table 5. Findings on socio-cultural reflections of the effects of gaming, social media, and digital addiction on children

(M3, M10, M14)
THEMES
Digital games and social networks alienate people
Transforming the traditional structure
Affecting the focus on individuals, reduces the level of attention
Causing material, academic, professional, and psycho-social problems
Reducing success in social relations
Imposing the perception that violence is necessary to perform tasks, and violence=money
Imposing those illegal actions can be resorted to without discomfort, even murder can be committed
Reflection of violence in games on real life
Encouraging the use of abusive and vulgar language
Creating a perception of racism, social status, and lifestyle
Efforts to add meaning to the sexes
Showing the female gender as a sexual object
Neo-orientalism
Imposing perceptions aimed at desensitization

When Table 5 is examined, it is seen that virtual environments have negative effects on both the individual and society. It is seen that some digital games and social media shares are efforts to change behavior in people with perceptions of individuals and society. It is seen that digital environments create material, academic, professional, and psycho-social problems in individuals that will affect almost all their lives. It can be interpreted that digital environments affect the focus and attention levels of individuals and may bring other problems with them. It can be interpreted that the exposure of individuals to violent games and shares leads people to use abusive language and act aggressively. Among the effects of digital environments on society; deconstruction of traditional structure, alienation, racism, meanings placed on gender and neo-orientalism findings have been observed. In addition, it is seen that virtual environments push individuals to the understanding of power is equal to money. It can be interpreted as a perception of the money power possessed and the determination of social status.

According to the parent, teacher, student, and document reviews, it has been observed from the data obtained that too much time has been spent in virtual environments than necessary. The interpretation is reached that according to the perceptions created in virtual environments, especially according to the intensity of use, students experience physical, mental, and behavioral problems; the problems are individualized, or even socialized. According to the study, it is seen that virtual environments have many direct and indirect effects on education.

4 Conclusion discussion and suggestion

This research has been patterned as a qualitative dimension, and the meta-thematic analysis method has been put to work. To determine the impact of intensive digitalization on education within the meta-thematic framework, the data obtained by the criteria were interpreted at the end of the research conducted in certain databases.

When the data of 14 articles obtained within the framework of meta-thematic analysis were examined, it was understood that intensive digitalization has many effects on slope-teaching that can be described as negative. As the result of intensive digitalization, it has been concluded that digitalization causes behavioral changes in people, negative learnings, self-control skills backwardness, propensity for violence, a sense of inferiority in earning power, and failure in real life against the success in the virtual, communication problems, physical-mental-mental health problems, academic failure, the virtual theft trends, a decline in language skills, rustiness of creativity, and dyslexia.

It is important to note that we are witnessing the growing use of Information and Communication Technologies (ICT), both in daily life and in the educational context [5]. Digital game culture is increasing its popularity every day and is progressing. At the same time, the spread of smartphones and therefore also mobile apps has been growing for years [60]. Every individual born into the digital world and people living under the intense influence of digitality want to spend most of their time at the screen without realizing that digital games are playing with the individual themselves to fluff their feelings of fun and accomplishment. Yalçın and Bertiz (2019) stated that one of the most important reasons that make children addicted to games is that they experience failures or have little success in the environments they live in and the actions they do. When people are generally unable to struggle with life, they release themselves into the world of the games with demoralization and psychological disorders.

Soyöz-Semerci and Balcı [47] stated that as the digitalization of adolescents, they saw their leisure activity with digital games, they are working to fix fatigue in virtual environments, they try to relieve stress with games; digital games are fun. Games have become an important leisure activity in the life of students due to the entertainment and socialization opportunities it provides [59]. While children think that gaming will provide useful elements such as the development of foreign language, it contains violent elements in its content and makes violence commonplace. In addition, they stated that adolescents can adopt them by replacing the characters representing themselves in the games they play and that they can easily be influenced by the elements of violence in the message given by the games.

While negative effects are usually mentioned of digital game addiction, some studies suggest that positive skills add to the individual. Dinç [20], mentioned the effects of digital games as to fulfill the tasks, to take responsibility and ability to follow, the development of problem-solving ability and analytical thinking skills, motor skills and coordination in the development of skills, the development of research skills welding, to be able to do more than one job simultaneously, lead and follow, to be able to move more decisively to the development of practical intelligence, strategic thinking skills to be able to speculate on the development of the pattern, to be able to recognize the development of skills, the development of inductive reasoning skills, map literacy

development, the development of navigational skills, being able to establish a cause-effect relationship about events, developing the ability to adapt to team activities, increasing digital literacy, increasing self-confidence due to creative thinking skills, and physical mobility due to games that require movement.

Dilci [18], states in his study that as with all technological addictions, game addiction also has negative effects on both the child and the family. A new generation of children and teenagers spends most of their days playing computer games, and although families complain a lot about this situation, they can't do anything about it. Digital game addiction negatively affects an individual's physical health, mental health, social life, and academic achievement. Individuals who immerse themselves in the mysterious world of games sometimes fail to realize these negatives.

Although it seems that there are positive skills that digital games add to the individual, their negative effects and dangers on children are increasing. Taşdemir and Aslan [49] has stated that he wants to treat the negative effects of digital games as a character by identifying himself with a character from the game he is playing. The fact that violent actions that need to be done in the game have to be done is reflected in real life. It can be said that the fact that the player performs all the stages of a task in the game causes the individual to act with instructions such as a robot. Rewarding violent behaviors in digital games causes aggressive feelings, thoughts and behaviors on children. It has been seen that children become asocial due to spending too much time at the beginning of the game, they cannot devote the necessary time to activities such as studying, playing sports, and reading. There are incorrect value judgments that some games form on children. Children are unable to distinguish between reality and virtuality by being too immersed in virtual environments. As a result of devoting more time to virtual environments than to classes, it has been inevitable that there will be an increase in educational failure. Physical problems are experienced due to constant immobility at the screen. Constant exposure to slang language and abusive language in games in virtual environments damages ethical values. After becoming addicted to virtual environments, a person experiences nervous disorders, constant tension and stress, and these behaviors bring various negatives with them. There are focus problems that occur as a result of virtual environment addiction.

As seen in different studies, many negative behavioral changes are observed in individuals with digital addiction, including physical, mental, and social. Especially, users who have studied from primary school to university and have a gaming addiction have become academically unable to perform their duties given the time they have devoted to digital games. As they spend long periods in front of the screen, they have focus problems, cannot do their homework, and remain uninterested-reluctant in classes. Kelleci [32], stated in his study that Internet use and computer games significantly affect the daily lives, academic achievements, and mental health of children and young people and that this aspect is a current issue that attracts the attention of researchers. Kelleci [32], describes today's young people as both victims and criminals in their relations with technology.

According to the information obtained from the findings, if it is necessary to take into account the period allocated by individuals to technological devices and social media, it is possible to qualify users as dependent or dependent candidates with their

intensive digital use. According to Kıvanç [34], when both social media and the definition of addiction are combined, it can be said that in social media addiction; individuals spend time on a social networking site and this action for a long time (several hours) and almost all day, every day, the majority of the time that the action for failure to keep up can't stand back spiritually, and physically uncomfortable, become linked to social media so that means.

In the literature, it has been observed that social media has more disadvantages than advantages in studies on the effects of education. Gür, Bakırcı, Karakaş, Bayoğlu and Atlı [27], conducted a study on a total of 453 students, 251 of whom were girls and 202 were boys, at Inonu University and found that there was a significant level of relationship between students' academic procrastination levels according to their social media use. Çiftçi [15], stated that students are likely to encounter and be affected by negative content when they use social media without parental or teacher supervision. Bayraktutan as stated in [15], stated that social media offers equal opportunities to its participants but has negative effects in terms of commercialization, an increase in cybercrime, and immensity in privacy. In a study conducted in India, Bhandarkar, Pandey, Nayak, Pujary & Kumar [7] stated that most of the students who use social media sites for more than 3 hours a day fail their courses academically.

Gökdemir and Uğur [25], stated in their review on the effects of social media use on education that university students should use social media less to be successful in their courses. Dilci [19], mentioned the situations that support these research findings as a result of digital contact in his book *Guide to Combating Digital Addiction*.

Technology, with its good or bad sides, is a phenomenon that takes place in our lives and will continue to do so [31]. At the end of the research, the findings and results obtained by meta-thematic analyses show that intensive digitalization has numerous effects on individuals. It seems that these effects, especially those related to education, are quite harmful. To be minimally affected by these damages, the following recommendations can be focused on the use of digital media and the Internet:

For parents to be the right example in the home environment, parents should be aware of and receive training and practice on the correct use of these media.

To make students at all levels aware of the use of digital media and the Internet, starting from preschool age, experts should provide regular and compulsory education in schools.

- Students can partially access these media in schools and close their rooms in a home environment and spend a lot of their time in these environments. It should be ensured that students spend time outside the school with art and sports activities. Social facilities and facilities should be recognized.
- Conscious methods should be used from infancy to create an awareness of responsibility.
- In urban environments, municipalities should create social spaces that are suitable for age groups and easy to reach.
- Group work should be kept at the forefront in schools and face-to-face communication and cooperation should be organized at the forefront.
- The number of art classes and sporting events in schools should be increased.

To raise awareness of all members of society about not being caught up in the perceptions made on social media, units should be created where experts can provide continuous support.

- Since it can be harmful to stay away completely as well as harmful to intensive use today when the digital media and the Internet are very developed, all studies should be designed to teach proper use.

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