

Pre-Service Teachers' Views on Digital Addiction

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Article History:

Received 11.08.2022

Received in revised form 22.06.2024

Accepted

Available online

07.01.2024

The aim of this study is to show the views of pre-service teachers on digital addiction. The study group of the research consists of 90 pre-service teachers who study at Eskisehir Osmangazi University, Faculty of Education. The students participate in education to be social studies teacher, primary school mathematics teacher, English language teacher, science teacher, special education teacher, classroom teacher, preschool teacher and psychological counseling and guidance (PDR) in the spring term of 2021-2022 academic year studying at the 2nd, 3rd and 4th grades at the undergraduate level. Purposive sampling method is used while forming the study group of the research., Semi-structured interview form, which is collected via e-mail and the form shaped by taking expert opinion, is used as a data collection tool in the research. The pre-service teachers declare that they have had a number of attempts to reduce digital addiction and they concludes unsuccessful so many times. Findings of the research show that the students generally evaluates themselves as addicted. The students participated in the research states that they spend most of their time in the digital environment to do research, to do homework, to communicate, for social media, online shopping, watching TV series and movies, listening to music and playing games. The students participated in the study states that digital addiction causes them to disrupt their responsibilities and there have been a number of attempts by pre-service teachers to reduce digital addiction but they fail.

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Keywords: Literacy, curriculum literacy, teacher

INTRODUCTION

From the past to the present, human beings may exposed to a number of factors from the moment they are born. These factors can have different effects on people's psychology. People may seek ways to cope with these factors, which have different effects on them, and generally these ways cause harms on themselves and disturb leading a healthy life. Addiction is one of the biggest problems of the global world and it is one of the diseases that are increasingly spreading in today's world.

Addiction: It is the loss of control over a substance, alcohol, object or behavior (action) that a person has. Any substance or behavior performed uncontrollably carries the risk of addiction. People can become addicted to many things in life: drug, alcohol, cigarettes, gambling, technology, any item, or behavior (Ögel, 2018).

There are different reasons for the emergence of addiction. Addiction is a disease that has been increasing in recent years, in which psychosocial, genetic, and environmental factors play an important role in (Toker Uğurlu et al., 2012).

The addiction criteria in the DSM 5 Diagnostic Criteria Reference Manual (2013) are as follows:

1. Longer use than planned
2. Unsuccessful quit attempts in the past
3. Spending most of the time to find and use the drug
4. To Continue to use the substance despite the adverse effects and damages
5. Desire to use the substance
6. Tolerance (increasing gradually due to insufficient amount of substance used)
7. Withdrawal (American Psychological Association (2019). Digital guidelines: Promoting healthy technology use for children).

Addiction can vary according to the person's previous life, family situations, and sociocultural environment. Alcohol, gambling, drugs, technology and tobacco are the main types of addiction. There are many types of addiction. With the development of technology in today's world, people's dependence on technology has increased.

As a result of developments in technology, communication tools have also developed. Thanks to the developments in communication tools, people have been using the internet and social media more and more day by day. With the widespread use of internet access, people have started to spare more time to technology without a certain limit. The inability to spend time on the internet at the required level has also carried the addiction to technology to an advanced level (Güney, 2017). People use technology for their daily

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needs, and as a result they are dependent to the digital world. The developments in technology, along with the increase in interactions in this field, have presented a deceptive fantasy world to people. The fact that the world has been transferred to digital has necessitated the use of digital space for daily activities and needs. As a result, digital addicted individuals emerged (Yengin, 2019).

Technology addictions include television, mobile phone, computer, and internet addictions. With the use of the internet in every field, internet addiction has increased more than other communication and information technologies. Internet addiction increases as a result of people spending too much time on the Internet (Günüç & Kayri, 2010).

Technology addiction can be defined as a type of addiction that manifests itself with addictive sub-behaviors such as gaming disorder, gambling disorder, excessive use of social media and smartphones, which occur due to the unconscious and uncontrolled use of technology and the internet. Technology addiction can be seen as one of the most common addiction types in parallel with the rapid increase in internet and technology.

According to the results of the TUIK on August 26, 2021, 92.0 % of households have access to the internet from home in 2021. This rate was seen as 90.7% in the previous year. It is seen that children, adolescents, young and elderly population spend more time in the digital environment with the increasing use of the internet and the development of technological devices. Social media, online games, and virtual shopping environments, which young people are very interested in, unintentionally keep them from social life and push them to spend more time in the digital environment.

There has been an increase in digitalization thanks to the development of technology in every field and the opportunities it has created for people. People who want to both adapt to the digital world and take advantage of its opportunities have started to spend more time in virtual environments than they should.

Digital addiction can occur in many different types in virtual environments. One of these types is social media addiction. Social media addiction is increasing due to the reasons that compel people to be in this environment and the positive approach to social media (Babacan, 2016). Besides social media, another common example of digital addiction is gaming addiction. Gaming addiction can turn into a digital addiction, which is seen in individuals of all ages thanks to the internet.

In today's world, because of the developments in technology, urbanization and the decrease in playgrounds, traditional games have left their place to digital games. As a result of following technology closely, digital games have become one of the most important parts of popular culture among the young audience (Yalcin & Bertiz, 2019).

According to the World Health Organization (2021), the addictive disorder experienced at the point of gaming is defined by the following features:

1. The fact that playing games online or offline (including video games) has a priority in one's life, is more valuable than anything else.
2. Loss of control over one's digital gaming behavior.
3. The person's inability to stay away despite the presence of negative physical, mental and social consequences. Not being able to go to school or work, having problems at school, at work, and disrupting family life.

The specified features may occur depending on both online (on the internet) and offline game playing behaviors; It can lead to some remarkable deterioration in personal, social, family, educational, professional, and other vital areas. In order to be able to talk about the existence of a gaming disorder in a person, the mentioned behaviors must be continuous and repetitive and must be observed in the person for at least twelve months. However, if all the symptoms are seen and the observed symptoms are severe, the diagnosis of gaming disorder may be made in a shorter time (Yedam, 2022).

Digitally addicted people are dependent on technology in terms of behavior and they feel deprived. The number of individuals who do not have a social life other than the Internet, who think they are alone when they are separated from mobile devices, and who find themselves asocial and different without a digital life,

has increased in recent years. These people follow all kinds of innovations in the digital sense and provide a large part of their communication in digital environments (Yengin, 2019)

People of the digital age are in a way condemned to digital environments. Business life, daily life and communication environments have shifted to the digital world and being in this environment has often become a necessity for people. Education life and business life now exist in the digital world. People must devote some of their time to digital environments. So much so that people continue their lives in digital environments without being able to adjust the time and knowing that they are dependent on this environment.

In a study conducted by Yalcin & Bertiz (2019), the effects of game addiction in university students were investigated. With this study, it is aimed to reveal the effects of digital games on university students. As a result of the research, it was found that students associate digital games with real life, prefer digital games to other activities, and have the view that digital games are guiding in solving problems.

As a result of the literature review, it is seen that there are studies on addiction or digital addiction with students from different age levels. However, in most of these studies, it is concluded that questionnaires were applied to the study groups included in the research. It has been concluded that there are very few qualitative studies in which interview questions are applied and participants' views on the subject are discussed in detail in studies on addiction or digital addiction. This research is considered important in that it provides the opportunity to examine the views of the participants about digital addiction in detail, and at this point, it is thought that the research will contribute to the field.

The aim of this study is to determine the opinions of pre-service teachers about digital addiction. For this purpose, semi-structured interviews were conducted with the teacher candidates in the study. During the interview, questions were asked to the teacher candidates about addiction, the level of addiction, the effects of addiction and the traces of digital addiction on individuals. The questions asked during the interviews were added to the end of the research report.

METHOD

Qualitative research method was preferred in this study in which the views of pre-service teachers about digital addiction were examined. Qualitative research approaches human behavior from a different point of view. Accordingly, human behavior should be handled and analyzed with a flexible and more holistic approach. In research, the experiences of the participants and their opinions are very important. On the other hand, three different types of data are generally collected in qualitative research. The first two of these data are environmental and process data. The third data collection is data about perception. In the data on perception, what the participants of the research think is carefully considered (Yıldırım & Şimşek, 2018). Qualitative research is context-based. Everything that has to do with research needs to be carefully considered, with an emphasis on context at this point. One of the most important aspects in qualitative research, along with the context, is the interaction with the participants. This interaction with the participants in the research is seen as the basis of robust and rich data (Saban & Ersoy, 2019). In this study, a case study, which is one of the qualitative research designs, was preferred, which provides the opportunity to reveal the interaction with the participants in the best way.

Research Design

The case study is known as a case study in the literature and is accepted as a derivative of qualitative research. The case study is a research method based on why and how questions, which provides the opportunity to examine in detail a situation that the researcher himself cannot control (Yıldırım & Şimşek, 2018). This research on digital addictions of teacher candidates was conducted with a case study, one of the qualitative research methods. Case study: It is an empirical research method that (1) studies a current phenomenon in its real-life context (content), (2) the boundaries between the phenomenon and its context are not clear-cut, and (3) more than one source of evidence or data is available (Yin, 1984). The single case design was used in the study. Single-case designs, as the name suggests, have a single unit of analysis (an individual, an institution, a program, a school, etc.) (Yıldırım & Şimşek, 2013). The only analysis unit of the research is the views of pre-service teachers in a single university on digital addiction.

In qualitative research, three types of information are generally collected. These are environmental information, perceptions, and process information. While collecting information about perceptions, the ideas of the research group about a subject are revealed. In qualitative research, observations and interviews are made and written documents are examined to collect this information (Yıldırım, 1999). In this study, semi-structured interviews were conducted with the participants to reveal the perceptions of pre-service teachers about digital addiction.

Participants

Purposive sampling method was used while forming the study group of the research. In purposive sampling, researchers purposefully select individuals and research sites to learn about or understand the main phenomenon (Creswell, 2017).

While determining the study group of the research, the criterion sampling strategy, whose basic understanding is to study all cases that meet a predetermined set of criteria, was used (Yıldırım & Şimşek, 2013). Basically, two criteria were determined in the study. The first of these is that pre-service teachers participate in the study on a voluntary basis, and the second is that they regularly spend time in the digital environment.

The study group of the research consisted of Eskisehir Osmangazi University Education Faculty, social studies teacher, primary school mathematics teacher, English teacher, science teacher, special education teacher, classroom teacher, preschool teacher and psychological counseling and guidance (PDR) in the spring term of 2021-2022 academic year consists of 90 pre-service teachers studying at the 2nd, 3rd and 4th grades at the undergraduate level. 62 (69%) of the participants were female and 28 (31%) were male.

Pre-service teachers participating in the research are as shown; 12 students at the PCG department, 13 students at primary school mathematics, 12 students at science, 11 students at special education, 10 students at classroom teaching, 12 students at social studies, 10 students at preschool and 10 students at English departments. The range of the students according to the departments and the gender distribution of teacher candidates participating in the research is given in Table 1.

The pre-service teachers in the study group in which 56 students are 2nd grade, 26 students are 3rd grade and 10 students are 4th grade. The objects of the study are the forms filled in electronically by these pre-service teachers.

Table 1. Gender, Grade and Departments of the Participants

Gender	N	%
Female	28	69
Male	62	31
Total	90	100
Grade	N	%
2. Grade	56	61
3. Grade	26	28
4. Grade	10	11
Total	92	100
Department	N	%
English	10	11
Socialstudies	12	13
ClassroomTeaching	10	11
Science	12	13
Special Education	11	12
Maths	13	14
PCG	12	13
Pre-school	10	11
Total	90	100

Data Collection Tool

As a data collection tool in the research, a semi-structured interview form, which was collected by e-mail in the online environment and formed by taking expert opinion, was used.

In the semi-structured interview technique, the researcher prepares the interview protocol, which includes the questions he planned to ask beforehand. The most important convenience provided by the semi-structured interview technique to the researcher is that it provides more systematic and comparable information since the interview is carried out in accordance with the pre-prepared interview protocol (Yıldırım & Şimşek, 2013).

Data Collection and Analysis

In the interview protocol prepared, the candidates' class, department and gender information were first requested. Then there is the interview form consisting of questions and probes to get in-depth information. While two of the 5 questions in the interview form question the emotional aspect of digital addiction, one questions the definition of digital addiction, the other questions what is mostly done in the digital environment, and the last question questions what can be done to quit digital addiction.

The semi-structured interview form prepared was presented to the field expert, corrections were made with the feedback received, and the form was given its final shape. The 5-question interview form prepared for the digital addiction of teacher candidates was shared with the teacher candidates via e-mail and the opinions of the candidates were collected. Content analysis was used in the analysis of the data. The basic process in content analysis is to gather similar data within the framework of certain concepts and themes and to interpret them in a way that the reader can understand (Yıldırım & Şimşek, 2013).

Validity and Reliability

In qualitative research, the concepts of credibility instead of internal validity, transferability instead of external validity, consistency instead of internal reliability and confirmability instead of external reliability are used (Yıldırım & Şimşek, 2018):

1. **Credibility:** In research, the process and results should be clear, understandable and consistent. Otherwise, the research loses its credibility. Therefore, the researcher should present evidence of the validity of the findings, the consistency of the research process, and the fact that the data are collected in an objective way and again produce results with an objective approach. It must have a long-term interaction with data sources to ensure credibility. The collected data should be collected in detail and in depth. Data collection tools should be diversified. The research should be examined by an expert with all its processes and expert opinion should be taken. On the other hand, the data obtained should be confirmed by the data sources (participants).

2. **Transferability:** Generalization in quantitative research appears as transferability in qualitative research. There is no generalization in qualitative research, but there is a transfer for similar situations by the readers of the research. Thus, individuals have an awareness of their own situation and can approach this situation more experienced. For transferability, the data should be adequately described, and purposive sampling should be preferred.

3. **Consistency:** In qualitative research, the concept of consistency is preferred over the concept of reliability. Since the events and phenomena handled by qualitative research will change over time, they cannot be repeated over time. If this variability is accepted and consistently reflected in the research, the reliability of the research will increase.

4. **Confirmability:** In qualitative research, complete objectivity is not in question since it is not possible for the researcher to have no influence on the process. However, if the results obtained in the research are constantly confirmed by the collected data, the reliability of the research will be revealed.

In this study, how the process was carried out in terms of validity and reliability and what kind of results were achieved were explained in accordance with the dimensions of credibility, transferability, confirmability, and consistency.

FINDINGS

In this section, the findings of the study are presented. The findings regarding the teachers' perception of curriculum literacy are given in Table 2.

The data obtained through the semi-structured interview form applied were listed under 6 different themes because of the content analysis, and the participants' views on digital addiction were revealed.

Pre-service teachers' views on digital addiction

The views of the pre-service teachers participating in the research about the definitions of addiction, the time they spent in the digital environment and the level of digital addiction vary with rates close to each other. While 55 prospective teachers define themselves as digital addicts, 35 do not see their time spent in the digital environment as an addiction. Most teacher candidates see themselves as digital addicts. Some opinions on the subject are as follows:

S-1: Addiction is the event of not being able to pass the time without a certain thing, feeling bad in its absence without that thing. I spend 8-10 hours a day in digital environment. I can call myself a digital addict because I have a phone, computer, etc. I can't live my day without it, I'm so bored.

S-64: Addiction is a negative concept. It's definition for me is to give up other things for what is addicted. Since there is a screen time part on my phone, I see that I spend an average of six hours a day on the phone screen, besides, I can say that I spend an average of 2 hours on my laptop. Currently, I see myself as a digital addict because I spend a third of my day in front of technological devices. While doing this, I keep myself from some other activities such as sports, study, social activities with your friends.

S-44: I think addiction is that state of being unable to stand the deprivation of any substance, emotion, or behavior. I spend an average of eight hours a day digitally. I'm addicted to digital yes. Being away from the digital environment makes me feel bad and when I stay away, I always want to spend time there.

S-64: It is addiction to always want to do that behavior without being able to control one's behavior against something. Nowadays, we cannot leave the house without a phone or live without the Internet. We can't even spend half an hour without looking at our phone, we can't stop ourselves from using digital devices.

S-76: In my opinion, addiction is the state of not being able to live without that thing, and it is the worst thing a person can do to himself. Material or spiritual dependence is both harmful. A person who does not want to suffer should not live dependent on anything. I spend about five hours a day digitally. I made a self-criticism and I can say that this time is too much and I am almost addicted.

S-83: Addiction is not being able to give up on something. I spend 10-12 hours, so I can call myself a digital addict.

S-89: I spend more than 6-7 hours a day in the digital environment. I would definitely call myself a digital addict.

S-91: In my opinion, addiction is feeling distressed and uncomfortable in the absence of anything. I can call myself a digital addict.

Pre-service teachers' views on the effect of digital addiction on daily routine

During the time spent in the digital environment, pre-service teachers stated that they often neglected or skipped the responsibilities they had to do. The beginnings of these responsibilities are generally; doing homework, studying, spending time with family, spending time with friends. The opinions of the pre-service teachers on the subject are as follows:

S-3: Social media often affects my school life. Since it is the last year of my school life, I have to study KPSS. But I can't find time to leave social media and study. I spend most of my study time on the phone.

S-26: I can say that digital addiction has a role in delaying my responsibilities. For example, when I want to take a 10-minute break while studying and browse social media, I dive into social media, and this break sometimes takes 1 hour.

S-73: Digital addiction caused me to disrupt my responsibilities, that is, domestic duties such as school and social life. Most of the time I had to leave my homework to the last day and do it incompletely or incorrectly, I continue to be in the digital environment even during the visa final weeks, it comes back to me with low grades. Although my friends invite me to an activity on a nice day, I often prefer to be in the digital environment. I can't do what I need to do at home to spend more time in the digital environment.

S-82: Social media causes me to neglect my responsibilities. Sometimes I can spend hours in the digital environment without realizing it, and this causes me to skip my homework and spend less time with the people I care about around me.

Pre-service teachers' views on the attempt to reduce digital addiction

Pre-service teachers, who think that the time they spend in the digital environment is more than necessary, has taken some initiatives to reduce this time. While some of the pre-service teachers were successful in doing this, some of them stated that they could not minimize the time they spent in the digital environment. The opinions of the pre-service teachers on the subject are as follows:

S-4: I have attempted to reduce digital addiction. I put a time limit on our social media accounts. Thinking that 1 time zone is enough, I put a reminder. After spending 1 hour during the day on my social media accounts such as Instagram and Twitter, the warning came. In this process, I did not pick up the phone for two 3 hours after the warning in the first days. But the next days, he turns off the reminder directly and continues to look at social media again. The reason why I failed in my attempt to reduce digital addiction is because I was not stable and willed.

S-5: Digital was my attempt to reduce this. I've tried reducing the time I spend on social media. However, there were times when I was bored. Normally, I wouldn't spend time in front of the TV. But because I was bored in that process, I got into the habit of watching TV without realizing it. While trying to use social media less, I unwittingly gained a new addict.

S-57: I have attempted to reduce digital addiction. I struggled to use less phone using the phone's screen limitation time. I had to terminate this process unsuccessfully. The irresistible desire to use social media negatively affected my attempt to reduce my digital addiction.

S-68: With the reopening of schools this year, I came to Eskisehir to study again. Later, my school life here was more intense, and my digital addiction such as internship, group work and KPSS process decreased by half. Right now, I've been spending the same amount of time on digital media for six months on average.

S-83: I freeze my social media accounts from time to time. I don't have much difficulty as I do this on my own will. But then I turn it back on and it's back to the beginning.

Opinions of pre-service teachers about the practices they spend time in digital environment

The pre-service teachers who participated in the research expressed their opinions about the applications they spent time in the digital environment. The most prominent applications on the internet, which they generally use for communication, research, homework, watching movies or videos, shopping online, social media, crypto money and entertainment; They are "Instagram", "WhatsApp", "YouTube", "Spotify", "Twitter", "Telegram", "TikTok" and "Netflix". Some of the opinions on the subject are as follows:

S-1: I use applications such as WhatsApp, IMO, ICQ to stay in touch with people. Apps like Telegram and Twitter help me follow the news. I use Spotify and YouTube apps to spend my spare time watching or listening to something. I use apps like Instagram and VK to see people or things I follow.

S-4: I spend time looking at people's posts on Instagram. I talk to my friends and family on WhatsApp. I prefer to talk by text, since speaking on the phone is more challenging. Due to the pandemic, I started shopping from various shopping sites most of the time.

S-5: I spend my time watching YouTube and TV series. I am completing my missing lessons on YouTube and trying new recipes. I prefer watching TV series because I think that it will have a positive effect on my life and make use of my spare time.

S-64: Instagram and watching TV series are digital environments that take my time the most. When I started watching the series, especially if it caught my attention, I wonder about the continuation of the series and I can't stop watching it. In my opinion, it is not clear how time passes from the constantly changing short videos, including the media interests, where Instagram is the fastest consumed content today.

S-86: WhatsApp, Instagram, communication, chat, research, watching movies or TV series, shopping, etc. I mostly use digital media for communication and homework. If I'm going to spend time in digital environment for pleasure, I watch TV series or movies.

Pre-service teachers' views on feelings about time spent in the digital environment

The pre-service teachers interviewed stated that they could not control the time other than the time they spent doing homework, doing research and communicating in the digital environment, and that they could not limit themselves in this regard. In general, pre-service teachers feel regret, stress and restlessness about unnecessary time spent in the digital environment. The opinions of the pre-service teachers on this subject are as follows:

S-4: I regret it. Because I spend my whole day wasting time on the phone. I suffer from my conscience.

S-10: Sometimes it creates a feeling of regret because time is not something we can get back, and when we spend more time than our intentions without realizing it, it causes regret.

S-11: After a stressful day, I get more stressed than the game I play to relieve stress. I get angry when I can't achieve the desired success in games (especially if I play a competitive game). When I spend too much time on games, I feel uneasy, albeit unintentionally.

S-22: Most of the time, it is good to get away from the real world, but after a while, when I spend a lot of time, I feel uneasy.

S-28: I see myself as having done nothing during the day and I regret it because I feel uneasy because of being restricted to only one area when I have other things to do during the day.

S-44: I feel nervous when I spend about 10 hours. The games I play and the negative posts I encounter may be making me feel nervous.

Suggestions of teacher candidates to reduce digital addiction

Pre-service teachers think that taking a hobby, limiting social media, spending more time outdoors and meeting with friends will be effective in reducing digital addiction. Some of the participants' views on the subject are as follows:

S-1: A person should love life so much that he even knows how to take time for himself. At the same time, he needs to have good financial opportunities so that he can focus on his own social life and his own development. In today's life conditions, it is very difficult not to be digitally dependent.

S-10: As a suggestion, we can acquire hobbies that will enrich our lives. In this way, we can use our time qualitatively and live a quality life and get rid of the feeling of regret.

S-27: We can spend our time more productively by discovering different hobbies and interests. For this, first of all, we need to discover ourselves, our interests, personal characteristics, and competencies. We can share our time use proportionally by producing alternatives instead of addiction to digital devices.

S-44: We should spare more time for ourselves. We can read books, visit new places, go for a walk, meet up with friends. If we spend a day to the fullest, we won't be able to look at the phone or the TV when the day is over.

S-47: I determined what to do this year to avoid digital addiction, and if I were to say it in terms of items, I can say the following: an evening walk with a technology detox, a short morning walk if you wake up early in the morning, a concentration lesson video for more useful things if you don't stay away from technological devices,

a question. Participating in social activities with friends, such as solving videos, educational videos, setting certain time limits with applications using technological devices, for example, I use it in social media applications.

S-57: I struggled to use less phone by using the screen limitation time of the phone, and I had to end this process unsuccessfully.

RESULT and DISCUSSION

In this study, which aimed to determine the views of prospective teachers on digital addiction, it was determined that the students generally evaluated themselves as addicted.

The students participating in the research stated that they spend most of their time in the digital environment for research, doing homework, communicating, following social media, shopping online, watching TV series and movies, listening to music and playing games. Prospective teachers generally reported that they spend an average of 6-7 hours in the digital environment. Dinç (2015) states addiction as; "It is when a person loses control over an object they use or an action they do, and they cannot live without it. In use and behavior, the will will be lifted, and the addict will continue the use or behavior whether they want it or not. In addition, this use and behavior will take up a serious part of his life, and the person will invest all his time and physical energy on the substance or action to which he is dependent, except for the jobs and relationships that he has to do. Based on this definition, it can be said that the majority of students are digitally addicted by looking at their definition of addiction, the duration of using the digital environment, the inability to control the time allocated to the digital environment, and the fact that they feel guilty and restless because they cannot provide self-control.

The students participating in the study stated that digital addiction caused them to disrupt their responsibilities such as doing homework, eating, and social relations. Individuals who postponed or skipped their responsibilities reported that they felt restless, stressed and regretful as a result. If the excessive use of the Internet is increasing day by day, if this desire cannot be prevented, if the time spent without being connected to the Internet loses its importance, if distress, restlessness and aggression occur when deprived, daily functions, social life, school and family life are gradually deteriorating, we can talk about internet addiction (Alyanak, 2016). It has been observed that digital addiction affects the daily routine and as a result, negative emotions arise.

In the research, it was seen that students mostly use social media applications such as Instagram, Twitter, TikTok, WhatsApp, Telegram to communicate, Spotify to listen to music, Netflix and YouTube applications to watch movies-series, videos. These applications are among the most popular applications all over the world. Data.ai (formerly App Annie), which shares analyzes related to the use of social media platforms, has examined three areas according to the first report of 2022: the number of downloads of applications, customer expenditures and monthly active users. According to the review, Facebook is in the first place, WhatsApp is in the second place, and Instagram is in the third place. On the other hand, TikTok, which has more than 1 billion monthly users, entered Data.ai's list in fifth place; followed by Amazon, Telegram, Twitter, Spotify and Netflix. Prospective teachers also closely follow popular practices in the world.

There have been a number of attempts by pre-service teachers to reduce digital addiction and they have often been unsuccessful. In order to avoid spending too much time in the digital environment, the students tried to close their social media accounts, but after a short time, they were unsuccessful in their attempts, both because of the situations they contacted through their social media accounts and because they could not find a more enjoyable activity to replace the time they spent there. Students, who aim to shorten the time in the digital environment by using the time limit feature of smart phones or setting an alarm, stated that they often spend a lot of time in the digital environment, although they sometimes succeed. Nowadays, when it is easier to access TV series, movies or videos on social platforms, it is concluded that students cannot limit watching activities and are not aware of the elapsed time.

Although we see the benefits of technology in every aspect of life, with the whole world stepping into the digital environment, we also see its harms day by day. Although the correct use of technology affects our lives positively, its wrong and excessive use causes negative consequences and creates addiction. It is necessary to prevent digital addiction and take related measures.

-Young people should be warned and informed about addictive digital environments.

-Young people should be encouraged to socialize and family.

-It is essential to investigate digital addiction comprehensively, to identify the factors that cause addiction and to determine the necessary treatment methods.

-To prevent digital addiction, it is necessary to limit the applications and to work on shortening the usage times.

-In addition to the current effects of digital addiction, the consequences that may arise in the future should be considered, and research on this issue should be intensified.

Declarations

Conflict of Interest

No potential conflicts of interest were disclosed by the author(s) with respect to the research, authorship, or publication of this article.

Ethics Approval

Official ethics approval was given by Eskişehir Osmangazi University Social and Human Sciences Human Research Ethics Committee.

Funding

No specific grant was given to this research by funding organizations in the public, commercial, or not-for-profit sectors.

Research and Publication Ethics Statement

The study was approved by the research team's university ethics committee of Eskişehir Osmangazi University (Approval Number/ID: 07/06/2022/11). Hereby, we as the authors consciously assure that for the manuscript the following is fulfilled:

- This material is the authors' own original work, which has not been previously published elsewhere.
- The paper reflects the authors' own research and analysis in a truthful and complete manner.
- The results are appropriately placed in the context of prior and existing research.
- All sources used are properly disclosed.

Contribution Rates of Authors to the Article

1st author contributed 50%, 2nd author 40%, 3rd author 10%.

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