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The Problem of the Century: Brain Rot

Ayşe Müge Yazgan[1]

[1] Assoc. Prof. Dr., Marmara University, Communication Faculty, Department of Public Relations and Publicity, Istanbul/Türkiye
ORCID: 0000-0002-5909-5791
E-Mail: muge@marmara.edu.tr

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Abstract

The term "brain rot" has gained prominence recently, particularly in 2024, when it was named Oxford's Word of the Year. This study aims to reveal the causes of brain decay, the problem people face today The method of the research is systematic compilation (meta-synthesis). Within the scope of the research, a systematic scan of internationally valid clinical research and published studies on "brain decay" was conducted. The studies are limited due to the relatively new as subject. The studies were evaluated, and their results were synthesized and combined. Answers were sought to the question of whether people are exposed to the erosion of thought that is called "brain decay" while new communication systems offer life in better conditions besides the increase in information exchange. In this context, 11 studies were examined. The articles were evaluated according to the keywords determined by the researcher, the size of the data importance, and the basic empirical findings. According to the results obtained, social media use causes anxiety, depression, and loneliness, especially among adolescents, and eight of them seem appropriate. The importance of "like" numbers and the increased popularity competition cause adolescents to experience internal conflict regarding self-confidence. Being constantly compared to others in the media negatively affects health and cognitive structure. Perfectionism leads to a feeling of inadequacy and loss of self-confidence. It is considered that this research will contribute to the field due to its examined thoughts and ideas and due to its suggestions.

Keywords: *Brain Rot, Anxiety, Cognition, Loneliness, Systematic Review*

Öz

"Beyin çürümesi" terimi, özellikle 2024 yılında Oxford Yılın Kelimesi seçilmesiyle son yıllarda ön plana çıkmıştır. Bu çalışma, günümüz insanlarının içinde bulunduğu sorun olan beyin çürümesinin nedenlerini ortaya koymayı amaçlamaktadır. Araştırmanın yöntemi sistematik derlemedir (meta-sentez). Araştırmanın amacı kapsamında "beyin çürümesi" üzerine uluslararası geçerliliği olan klinik araştırmaların ve yayımlanmış çalışmaların sistemli taraması yapılmıştır. Çalışmalar, konunun oldukça yeni olması nedeni ile kısıtlıdır. Çalışmalar değerlendirilerek, sonuçları sentezlenerek birleştirilmiştir. Yeni iletişim sistemleri, bilgi alışverişinin artmasının yanı sıra daha iyi koşullarda yaşam sunarken, insanların "beyin çürümesi" olarak adlandırılan düşünce erozyonuna maruz kalıp kalmadıkları sorusuna cevap aranmıştır. Bu bağlamda 11 araştırma incelenmiştir. İncelenen çalışmalar araştırmacı tarafından belirlenen anahtar kelime, veri önem büyüklüğü, ampirik temel bulgulara göre değerlendirilmiştir. Bütün bu değerlere göre sekiz araştırma uygun görülmüştür. Elde edilen sonuçlara göre, sosyal medya kullanımı özellikle ergenlerde kaygı, depresyon ve yalnızlığa neden olmaktadır. "Beğeni" sayılarının önemi ve popülerlik rekabetinin artması, ergenlerin özgüven konusunda içsel çatışma yaşamasına neden olmaktadır. Medyada sürekli olarak başkalarıyla karşılaştırılmak, sağlığı ve bilişsel yapıyı olumsuz etkilemektedir. Mükemmeliyetçilik, yetersizlik duygusuna ve özgüven kaybına yol açmaktadır. Bu araştırmanın, incelenen düşünce ve fikirler ile öneriler getirmesi nedeniyle alana katkı sağlayacağı düşünülmektedir.

Anahtar Kelimeler: *Beyin Çürümesi, Kaygı, Biliş, Yalnızlık, Sistematik Derleme*

Introduction

The 21st century is a time when the importance of knowledge has increased. The limitlessness that comes with globalization causes the world to remain awake and variable 24 hours a day. While the East is sleeping, the West is awake. While the West is sleeping, the East is awake. This dynamic has increased the importance of accessing knowledge. Knowledge is a concept related to thoughts and data the human mind has grasped and internalized (Headrick, 2002). Information and skills acquired through experience or education, the theoretical or practical understanding of a subject realized, are facts.

Operating systems that started with writing have reached their peak with digitalization. Information systems that enable social mass communication have gained momentum with the widespread use of computers. In the 21st century, the importance and ease of access to information is spreading to all of humanity, as Mc Luhan said (2001). The virtual reality created in this way leads the majority of society to the computer ahead. People wake up daily and deal with the dense digital information network throughout the day. The masters of new technology are holding the power and authority. The captivating world of the internet absorbs humanity inside. The communication network, which has become cheaper with the internet, is uncensored and is integrated with other communication media, appealing to newspaper, radio, and TV audiences (Güçdemir, 2015). Before the digital transformation, the transition to industrial society between 1760 and 1840 as Industry 1.0 increased productivity and caused rapid growth in living standards. Pre-industrial agricultural production and labor were intensive at that time. With the industrial revolution, the establishment of factories replaced manual labor with machines. From a social perspective, urbanization, poverty, child labor, and unemployment emerged (Jensen, 1993). The 1840s brought new inventions. The telephone, internal combustion engines, radio, telegraph, and light bulb were the inventions that came with high-speed consumer packaging (Günay, 2002). After the invention of TV and then internet, technological innovation in the 20th century passed so rapidly. The period that started in the mid-20th century continued until 2011, the beginning of the 21st. The early beginnings of the 21st century were the year of mobile phones, artificial intelligence, and electric cars (Ege Bölgesi Sanayi Odası, 2015). When the "4th Industrial Revolution" as a term was uttered by The Federal Ministry of Education and Research of the German Government in 2006, the idea made good sense. At the 2020 Action Plan conference (Lydon, 2014), the ignited idea was put forward by the Industry Science Research Alliance communication advocates group Under the "digital transformation" heading. The three factors and the link among them are important. The first of these is digitalization. The second is the integration of products and services. The last is the development of new models (Zezulka, 2016).

The Conceptual Framework

Digitalization represents the world. It records our ideas, thoughts, and information. A group of people performs these actions. The duty of the people who use the paradigms and techniques of digital media is to make others understand the transformation journey of the media. As Manovich (2007) said, examining the work of this group who use the paradigms and techniques of computer will enable us to understand the transformation journey of the media. Digitalization has dramatically expanded the comfort zones of producers and consumers. While media companies reach readers more easily and faster with digital books, consumers are able to listen to music, watch movies, and take photographs in any area they want by using the comfort of these places, which has made life much easier. Digital files, which Kay calls "magic paper," (Kay, 1990) are software. It provides the opportunity to work in different ways. That every new item that comes to the media improves the old one is a fact. Every new feature that designers put in leads to development. This process will continue until a new invention like electricity or artificial intelligence emerges. New media today provides humanity with one more step ahead of convenience. Nowadays, software is open to change in ways while industrially produced physical objects are not. This openness prevents the user from starting

over with every innovation, taking him one step further.

Horkheimer and Adorno's "Culture Industry" is a critical theory that takes society over through cultural ideas and by taking advantage of economic and political structures (Horkheimer, 1996). Imprisoning the individuals of society produces passive mass formations for the production of needs. Today, the media is ahead of us as "crop monopolies" that transform the individuals of society. Habermas (1989) defines this situation as an invasion of the living universe. While the media is being tried to be controlled on the one hand, the public is being controlled by using the entertainment element on the other. Chomsky (2005) approaches the issue with "control of public mind". He also places public control in the entertainment element. Tabloid news and other entertainment elements usually provide fire to the public. Sensational and fashion news are always on the agenda. Light is the neglected side because it brings illumination and provides integrity by informing the subjects.

Capitalism operates more intensively in the digital environment. Those who use the digital environment contribute to the digital environment working area without being aware of it (Symthe, 2006, p.256). They receive program materials, watch and digest advertisements without paying anything. Nonetheless, they are sold to advertisers while creating their profiles in the digital environment, uploading their photos and videos, and commenting on social networks. The most important attribution that the digital environment provides is that the internet audience is active. They produce content. This makes them become different from other media audiences. Audiences that engage in multiple communications are commodified, exploited, and profited from (Fuchs, 2010, pp.190-196). This situation, which can be called colonialism, is the exploitation of the workforce in a different way (Andersson, 2012, pp.752-764).

Today, virtual reality has surrounded humanity. The virtual world looks and acts realistic. Sensory data is blocked (Witmer, 1998, p.225-240). Individuals are subject to intense information bombardment (Heim, 1993, p.7). Technology and society are getting integrated with each other. They live the past and the future at the same time. The adventure journey that started with TV has peaked with social media. People have become addicted to it. Although they are more active, stronger, and more decisive as viewers, technological access unfortunately brings more loneliness. Viewers who are active in new media channels are egoistic. Speed is important now. Being fast brings impatience. Sharing the news first, being ahead everywhere, doing things perfectly, and being different from others leads to loneliness. (Özsoy, 2011, p. 264).

Technology gets people to become dependent. Problematic interactive media use, PIMU is an international health problem worldwide. The uncontrolled use of the media affects people's cognition, especially the young. The time used up on the screen should be spent well. New skills should be acquired in the precious time-consuming. Time spent in front of the screen does not provide focusing. Excessive use of technology causes mental fatigue. If there is no concentration, it means time is wasted (Şirin, 2024, p.6). Those who have the technology today are the feudal lords of the past. Antoine Destutt de Tracy (1754-1836) (Wikipedia, 2024), who lived during the Napoleon era, had the idea of saving society from wrong beliefs and thoughts in his education system.

Technological developments have brought comfort to humanity. While optimists say that technology is taking humanity to a bright place, pessimists say that technology is destroying humanity and what belongs to them. Max Weber, who does not look favorably on positivist thought, talks about the need to interpret the world. With modernity, there is a loss of magic. With alienation, people feel like they are in an iron cage (Tükel, 2012).

Digital transformation has surrounded the person with a virtual world (Sherman, 2003, p. 7). This world responds to the reactions of the user (Brooks, 1999, p. 16-22). It is a situmilation that reacts to the inputs coming from the user. In this world where an unreal virtual environment surrounds individuals, it blocks sense.

The term “brain rot” has gained prominence in recent years, particularly in 2024 when it was named Oxford’s Word of the Year. It describes the perceived deterioration of mental and intellectual

hazards due to excessive consumption of online content (OUP, 2024).

The term brain rot was first used in 1854 in Henry David Thoreau's book "Walden" (Thoreau, 2009) The book is about the narrator's living in solitude in a cabin by a lake. He lived in a shack he built on the shores of Walden Pond near Boston for two years. He was concerned about European potato rot and expressed his concerns about rotting brains in his book. Henry David Thoreau recommends leading a simple, minimal life. He describes the beauty of nature; and is against invalid materialism. The main message to be taken from the book he wrote is that a person should live simply and wisely. According to Thoreau, spending money means spending life. He sees the return to nature as a hope.

In our age, brain decay is defined as mental fatigue. It is stated as getting lost in deep thinking in front of the screen, getting away from problem-solving. Research indicates that prolonged screen exposure, especially during nighttime, can adversely affect cognitive abilities. A study published in 2024 (Shalash, 2024, p.2093-2104) found that young adults with higher night screen exposure exhibited lower cognitive scores in areas such as information processing speed, working memory, calculation, and attention. The study emphasized the importance of establishing screen time guidelines to preserve cognitive function and reduce future risks of neurodegenerative diseases. The study emphasized the relationship between screen time and cognitive performance. Nearly 97% of the young have one electronic device in their bedroom. Children spend long hours in front of the screen. Screen time directly affects cognitive function. It adversely affects attention skills, memory functions, and analytical thinking abilities. The study explains the negative results of night-time screen exposure. This affects the sleep quality which is vital for learning, attention, and memory (Schoeni, 2015).

Further studies have linked excessive screen time to structural changes in the brain. For instance, research (Lejtenyi, 2021) has shown that individuals with internet addiction display structural brain changes. These alterations are associated with impairments in cognitive functions, including attention, and memory. Excessive internet usage causes abuse problems. Internet addiction leads to poor academic performance, anxiety, and depression. On the other hand, dopamine is released as a hormone. Dopamine is a hormone that gives a sense of pleasure (Wikipedia, 2025). The activation of reward in the brain through dopamine secretion increases motivation. It is the reward system of the brain. Playing video games, wasting long hours in front of screen increase dopamine release (Carrion, 2007).

Addiction Problems and Differences between Screen Addiction and Substance Addiction

On behalf of the rewards offered in the media, individuals who are more addicted to media content are looking for a sense of satisfaction, which means the act of fulfilling a need, desire, or appetite, or the feeling gained from such fulfillment (Vocabulary, 2025). It distinguishes itself from other addictions by not running out of content on the screen and constantly providing content. Screen addiction, often referred to as problematic screen use, involves excessive engagement with digital devices such as smartphones, computers, and televisions, leading to negative impacts on daily life, health, and relationships. It prevents the brain from being filled with more efficient information (Luker, 2022). After a while, the brain begins to decay. This form of behavioral addiction shares similarities with substance addictions, including the activation of the brain's reward system through the release of dopamine, which reinforces the compulsive behavior. Both can interfere with personal relationships, work, academic performance, and physical health. However, there are some differences between these two addictions (Donnison, 2023). Substance addictions often involve physical dependence, where the body adapts to the substance, leading to tolerance and withdrawal symptoms upon cessation. Screen addiction typically lacks this physical dependency component. While screen addiction can lead to issues like eye strain, sleep disturbances, and mental health concerns, substance addictions can result in severe physical health problems, including organ damage and an increased

risk of infectious diseases. Screens are integral to modern life, and used for work, education, and socialization, making it challenging to avoid or limit use.

The effort people put into tying us to the screen by spending billions of dollars is incredible. In the face of this effort, it is difficult for people who are in front of the screen as if they are separated from their atoms to cope with screen addiction without social unity (Dewey, 1954, p.97-98). The interactions between people have become more impersonal and indirect. Life is taken under the control of the unknown. By steam and electricity, no community could occur, only the Great Society appears. Dewey's view has been transferred to the mobile phone screen today. Living constantly on the phone and scrolling weaken human relationships. The most affected are adolescents. Spending too much time in front of the screen during adolescence causes them to be unable to maintain peer relationships.

Aim

This study aims to reveal the causes of brain decay, the problem people face today. The research conducted with systematic compilation (meta-synthesis) will be beneficial to the field since there is a limited number of studies. With systematic review, all relevant published studies, documents, statistical findings addressing the research question are comprehensively and systematically investigated. This study aims to make an integrated presentation through the characteristics of the research results and the findings obtained. The purpose of the research is to ensure that the evidence in the field is followed, to ensure evidence-based practice, and to produce stronger evidence (Yannoscoli & al., 2013). The study has reached the results through systematic review, discussions, and suggestions.

Problem Status

When the media and communication fields are examined, it is realized that the exploitation that comes through the media also causes the colonization of the world of life. As analyzing the literature, it becomes evident that there are very limited studies addressing brain rot problems. Document analysis to be done on the post-modern society that is being tried to be created by being stuck between reality and virtual reality can provide valuable insights for future research and practices. The research starts with the question of whether people are exposed to the erosion of thought that is called "brain decay" while new communication systems offer life in better conditions besides the increase in information exchange. The research also seeks answers to the following sub-questions:

- Are new skills acquired during the time spent in front of the screen to develop our cognition?
- In What way does the screen motivate us?
- Are the better living conditions offered by new communication systems dragging humanity into brain decay?

Method

The universe of this research consists of systematic review. Written documents containing information about the subject of the research were scanned in detail and a new integrity was created (Creswell, 2002). Since brain decay is a new concept, the data obtained in the data collection step was supported and verified by analyzing documents obtained from different sources. The facts obtained from many data have increased the validity and reliability of the findings. Eleven documents related to the subject were accessed and eight of them were examined with a qualitative analysis within the scope of the study. This study determines the research question, understands the inclusion and exclusion parameters, conducts a literature review, identifies the studies to be examined, collects and analyzes data, and interprets and writes the results (Gough, D., & al., 2012). This study were carried out by considering all steps by the researcher.

Restriction

Documents representing the views discussed within the scope of the research were examined

and analyzed. The results obtained from the eight research documents constitute data but also constitute a limitation for the entire research universe.

Procedure

Data Collection Process

In this section, the research study criteria provided ease in accessing the findings. The publication year, the keywords, study subjects, concept covered, sample type, research method, and basic findings, which were considered as the criteria for examining the studies, provided ease in concluding.

Data Analysis

The analysis of the studies is presented in tables. The tables prepared according to the distribution of studies by year, the distribution of studies by keywords, the distribution of studies by coding and categorization, the basic findings obtained in empirical studies and finally the basic findings obtained in non-empirical studies are presented below.

Distribution of studies by year

Table 1 demonstrates the distribution of studies by year. The publication year range of the articles is between 2019 and 2024. The highest number of studies was in 2024 with four publications. The lowest number of articles was in 2021 and 2023, with one publication. There were two studies in 2019.

Table 1. Distribution of studies by year

No	Resources	Year	Month / Day
1	(Ruder, 2019)	2019	June 19
2	(Moshel, 2024)	2023	September 1
3	(Firth, 2019)	2019	May 6
4	(Zhang, 2023)	2023	May 25
5	(Rich, 2024)	2024	December 3
6	(North, 2024)	2024	September 5
7	(Descourouez, 2024)	2024	May 30
8	(Bulut, 2021)	2021	January 28

Findings About Keywords Used in Studies

Table 2 gives the keywords and their repetition frequencies in the studies. It is seen that the words social media and addiction come to the fore. Five studies include addiction and social media.

Table 2. Findings About Keywords Used in Studies

No	Resources	Key Words
1	(Ruder, 2019)	Screen time Digital Devices Social Media
2	(Moshel, 2024)	Internet Addiction Disorder Attention and Focus Addiction gaming Order Internet Gaming Disorder Cognitive Testing Executive Function
3	(Firth, 2019)	Internet Memory Cognition Addiction Attention Memory Social Structures Social Media Virtuality Reality
4	(Zhang, 2023)	Social Media Addiction Sleep Quality Executive Functioning Emotional Disturbance Young Adults
5	(Rich, 2024)	Addiction Social Media Cyber Bullying Smart Phones
6	(North, 2024)	Phone Addiction Brain Rot
7	(Descourouez, 2024)	Screen Time Memory Harm Phone Scrolling
8	(Bulut, 2021)	Children and Television Children and Social Media Use of Social Media Harmful Effects of Social Media

Findings on Coding and Category in Studies

The time spent uncontrolled on the internet especially affects the cognitive structure of children and young people. Common categories in the documents examined are memory disorders, separation from social life, sleep problems, and eating disorders. As a result of these, anxiety, stress, and depression are experienced. Table 3 below describes categories within their coding.

Table 3. Findings on Coding and Category in Studies

No	Resources	Analyzed Insights	Coding	Category
1	(Ruder, 2019)	The study highlights that there is a high connection between neural system and digital media use. Digital platforms activate the brain's reward system.	Sleep problems Memory disorders Dopamin	Stress Anxiety Depression
2	(Moshel, 2024)	A meta-analysis study found a clear link between disordered screen use and lower cognitive functioning. These findings suggest caution before advocating for increased screen time, especially in contexts that introduce screens into more aspects of daily life.	Separation from social life Poor cognitive performance	Stress Anxiety Depression
3	(Firth, 2019)	Research has demonstrated the accurate alterations in cognition related to attention and memory.	Memory disorders	Stress Anxiety Depression Reduced attention
4	(Zhang, 2023)	This study researched 1,051 young adults between 18 and 27 years old. The study has found out that excessive use of social media harms memory disorders, decision-making, organization, and analytical thinking.	Memory disorders	Stress Anxiety Depression Reduced attention
5	(Rich, 2024)	The interview is about the cognitive decline due to excessive zombie scrolling, video gaming, doom-scrolling, following social media platforms	Memory disorders	Stress Anxiety Depression Reduced attention
6	(North, 2024)	The study tells that brain rot is effective on kids born between 2010 and 2024. Teachers of these pupils complain about their lack of attention and their inability to read and write.	Memory disorders	Stress Anxiety Depression Reduced attention
7	(Descourouez, 2024)	This study highlighted that adults who watched television for five hours or more per day had an increased risk of developing brain-related diseases such as dementia, stroke, or Parkinson's. This underscores the potential long-term cognitive risks associated with excessive screen exposure.	Memory disorders Separation from social life	Anxiety Stress Depression
8	(Bulut, 2021)	The study mentions the widespread use of social media and its addiction as a result of the use of mobile phones at a young age. It focuses on the negative effects of violent scenes in TV series and movies on young people and perception management.	Sleep problems Eating disorders	Anxiety Stress Depression

Main Findings Obtained in the Studies

There are general explanations and evaluations made based on the studies. In the document review, studies on excessive media use were taken as a starting point, and findings were collected. Table 4 presents the basic findings obtained in these studies in detail.

Table 4. Main Findings Obtained in the Studies

No	Resources	Main Findings
1	(Ruder, 2019)	People who use technology need to take control of technological devices and play a rational role in their choices. It is better to find answers to questions about cognition, social life, and emotional development. The Growing up Digital Study (GUD) still continues in Canada. The study will enlarge all six continents over 10 years to find out the impact of digital technology on youth's physical development, mental improvement, and social well-being.
2	(Moshel, 2024)	In the study, the results obtained from systematic review and meta analysis inform about the negative results of cognitive abilities. Attention is the one which is affected adversely.
3	(Firth, 2019)	Excessive use of internet use over 3 years in Children is adversely effective on verbal intelligence. However, for older adults, it is a new source of positive stimulation. It is helpful to get rid of the negative effects of isolation.
4	(Zhang, 2023)	According to the study, a higher level of Social Media Addiction, which is related to emotional disturbance, poorer sleep quality, and poorer executive functioning, affects mental health and cognitive functions adversely. These negative results lead to a loss of self-control resources.
5	(Rich, 2024)	Rich, director of the Center on Media and Child Health at Boston Children's Hospital, associate professor of pediatrics at HMS, and associate professor of social and behavioral sciences at the Harvard T.H. Chan School of Public Health, says the growing brain during childhood is not developed well due to overexposure to the screen. Blue light-emitting screens prevent children from sleeping well due to suppressing the secretion of the hormone melatonin. People, especially children, need regular sleep for their brain development.
6	(North, 2024)	North, senior correspondent for Vox tells that the study on Gen Alphas in nursing homes demonstrates their inability to read and write. The survey result is worrying. 38 percent of teens deal with their smart phones, think nothing else.
7	(Descourouez, 2024)	Descourouez, M.G. from Stanford University, as a Lifestyle Medicine team member, says that the negative effects of excessive use of phones damage learning, memory, and mental health. It has a potential risk of neurodegeneration. The study she performed shows that the students aged between 18 and 25, who spend excessive time in front of the screen, have excessively thinner cerebral cortexes than the others.

8	(Bulut, 2021)	As a result of research by the American Pediatric Association, it was determined that children between the ages of 8 and 10 spend 8 hours on different media platforms, and even older adolescents spend 11 hours on social media. Research continues on how excessive media use leads children to aggression, excessive weight gain, and substance abuse.

Discussion, Result, and Suggestions

The research aims to conceptually examine whether people are exposed to the erosion of thought that is called "brain decay" while new communication systems offer life in better conditions besides the increase in information exchange. At the end of the research, adult and youth group output connections were seen to be different in terms of cognitive, social and emotional development. While excessive use of the internet harms little kids, it is helpful for the old since they do not feel isolated. Every new invention has brought convenience to humanity. The comfort it has brought has also been the beginning of other problems for humanity. Electricity was a great discovery for the sake of the public. It has given a big comfort, and it is the starting point of technological innovations. However, it is also very dangerous since it can hurt or kill as well.

Brain decay is the popular name for a general picture that develops due to the decline of intellectual functions and human relations as a result of excessive use of social media along with constant scrolling.

The answer to the hypothesis was received both quantitatively and qualitatively. Social media use causes anxiety, depression, and loneliness, especially among adolescents. The importance of "like" numbers and the increase in popularity competition cause adolescents to experience internal conflict regarding self-confidence. Being constantly compared to others in the media negatively affects health and cognitive structure. Perfectionism leads to a feeling of inadequacy and loss of self-confidence.

It is a fact that social media is not good for real-life relationships. As face-to-face communication decreases, people have difficulty empathizing with each other. This situation increases the feeling of loneliness even more. It traps people in an isolated life (Uludüz, 2024). According to the (Genç Aslan, 2023) research, the intensive use of social media in adolescents highlights the desire to achieve unrealistic goals. Since the development of self-perception and identity is incomplete, the young person develops a negative self-perception. Demirtürk (2024) determines that there should be an age limit on social media. This is an important limit for developmental needs and digital skill level. Hastürk (2024) observes brain decay as excessive use of social media which results in memory confusion and a decline in interpersonal relationships. Many countries have been taking precautions to protect their future generations from the bad effects of screen. In Norway, the government wants to raise the age limit for social media use to 15. In France, in 2023 a law was passed requiring parental consent for people under the age of 15 to use social media. In Germany, kids are allowed to use social media only if their parents give permission. In Italy, smartphones are not allowed to use at schools. In Ireland, there is a public debate about using phones under the age of 16. In Greece, pupils are not allowed to take their phones out of their bags at school (Dolma, 2024).

This study as a document analysis of many thoughts and ideas, provides a conceptual framework for brain decay as a problem of the century. This study has scanned the general status of studies on brain decay in national and international literature. Quantitative and qualitative methods were used in the studies according to the analysis findings of the research method used. The results obtained from a systematic review and meta-analysis inform about the negative results of cognitive abilities. Attention is the one that is affected adversely. Common findings include that social media addiction negatively affects brain development due to insomnia that begins in childhood, causes memory impairment, and leads to stress, anxiety, and depression. Consequently, anxiety, stress, depression, and reduced attention are diagnostic results. With digitalization, the online environment has become an integral part of daily life, and in particular, the long hours spent in this environment have led to cognitive problems. One problem is explained by the concept of 'brain rot'. This study addresses a recent and important issue in this regard. Although the sample size is not sufficient, given the novelty of the concept and the quantitative lack

of studies in the literature, the study is considered an important contribution to the literature.

As a suggestion, there must be an age limit for mobile phone use. Screen-free meals are recommended. Planning how to spend time and making organizations on different activities seem wonderful. Discussion about things watched can be helpful for analytical thinking. Limiting screen time makes a person feel better after some time. Following positive content can inspire a person. Some spare times can be filled with activities such as; playing an instrument, writing in a journal, exercising, practicing yoga, or meditating. Sharpening the mind is vital. Doing puzzles is helpful in this context. Doing a digital detox can be helpful for mental well-being. In this way, it is easy to be aware of the thoughts, perceptions, and habits.

Future research could build upon these findings by exploring several avenues: Long-term Effects: Examine the long-term effects of brain decay on social, emotional, and moral development by following up with the youth over several years. Family Dynamics: Examine the role of family dynamics, including parental education levels, socioeconomic status, and home environment in moderating or increasing the impact on children's social development. Realizing how family factors contribute to technological devices can support the target. As a result, technological developments will improve or deteriorate social skills and emotional development either positively or negatively, depending on the time spent on the screen.

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