

A Qualitative Study with University Students on the Excessive Use of Social Media

Özlem ÇAKMAK TOLAN¹

Dicle University

Abstract

This study examines university students' social media usage from different perspectives. The participants consisted of 29 students, 17 female and 12 male, studying in different faculties and departments of Dicle University. The data were obtained through semi-structured interviews conducted by the researcher. The thematic analysis produced five meta-themes regarding university students' use of social media, which include interpersonal relationships, emotions, basic psychological needs, problems caused by social media use, and the impact of the use of social media on the self. Each meta-theme was divided into subthemes, categories, and codes; participant statement excerpts were presented. The qualitative findings were discussed in light of the literature, and recommendations were made.

Keywords: Excessive social media use, qualitative research, university students

DOI: 10.29329/epasr.2023.600.2

Submitted: 14 March 2023

Accepted: 20 July 2023

Published: 30 September 2023

¹Assist. Prof. Dr., Faculty of Literature, Dicle University, Diyarbakır, Türkiye, ORCID: 0000-0002-8128-6498

Correspondence: ozlemtolan@gmail.com

Introduction

Individuals use social media applications for many different purposes, such as staying connected with others; playing games; sharing photos, videos, and news; passing spare time; socializing; and creating posts (Ryan et al., 2014). Approximately 57% of the world's population use social media applications, and individuals between the ages of 18 and 34 are the most intensive users. A report suggests that users between the ages of 16 and 24 spend significant time on social media (We Are Social 2021). The concept of "social media addiction" has emerged to describe the excessive use of social media such that it causes emotional, behavioral, and interpersonal issues. Social media addiction is defined as an increased exposure to social media applications to the extent that it causes mental health-related, academic, and interpersonal problems (Andreassen & Pallesen, 2014).

Social media is defined as social interactions among people wherein they create, share, or exchange information and ideas in virtual communities and networks (Carlson et al., 2016). Social media addiction is defined as a subtype of Internet addiction wherein individuals have an excessive interest in social media networks (Starcevic, 2013). Individuals with social media addiction are overly concerned about what is happening on social media, which is driven by an uncontrollable urge to use these platforms (Andreassen & Pallesen, 2014). Social media addiction, a type of Internet addiction, is considered a behavioral addiction. Griffiths (2013) identified six key components that define a behavior as an addiction: salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse. Salience refers to social media use becoming one of the most important activities in individuals' lives and dominating their thoughts, feelings, and behaviors. Mood modification refers to social media serving as a coping strategy to "self-medicate." Tolerance refers to spending increasing amounts of time on social media to achieve a desired effect. Withdrawal refers to unpleasant feelings and physical effects that individuals experience when social media use is discontinued. Conflict refers to the issues addicts and individuals around them experience because of their addiction. Relapse refers to the failure of measures taken to overcome addiction and regression to earlier patterns of social media use.

It has been pointed out the fact that the term addiction has mostly been associated with drugs, alcohol, and gambling. In the mid-1990s, with the increasing prevalence of computer and Internet use, technology addiction began to appear as a social issue. Social media addiction or the excessive use of social media is an issue that leads to social and psychological damage due to the overuse of the Internet, negatively affecting not only academic achievements and personal lives but also the physical and mental health of university students (Shaw & Black, 2008). Individuals who use social media excessively have trouble taming their urge to log onto these platforms. Whether excessive social media use is an "excessiveness" or "addiction" is an ongoing topic of discussion. As both of these terms cover the aspects of the amount of time spent, posts shared, motivations for using, and

consequences, it is suggested that the term “problematic use” can be used to define the harmful effects of this phenomenon (Tang et al., 2016). Accordingly, this study, in which individuals who spend a lot of time on social media applications and feel uncomfortable with this situation were reached out to, uses the concept of “excessive use of social media” rather than “social media addiction.”

The use of smartphones, social media platforms, and other online applications has become increasingly prevalent in daily life. Studies show that the average daily use of mobile Internet has increased from 32 minutes in 2011 to 155 minutes in 2021. The time spent on social media platforms per day has also been reported to show an increasing trend, from 96 minutes in 2012 to approximately 135 minutes in 2018 (Statista, 2019). The excessive use of social media applications is a potential mental health issue (Al-Kandari & Al-Sejari, 2021). Social media addiction causes individuals to socialize less, which, in turn, deteriorates their existing social relationships (Savcı & Aysan, 2017). The literature shows that uncontrolled social media use decreases self-esteem (De Cock et al., 2014; Pelling & White, 2009), exacerbates feelings of loneliness (Sagioglou & Greitemeyer, 2014), negatively affects life satisfaction (Chan, 2014; Valenzuela et al., 2009), and leads to depression (Khattak et al., 2017; Steers et al., 2014). Further, different studies have found that individuals who spend a long time on social media have decreased academic performance (Junco, 2012; Karpinski et al., 2013). In addition, some studies have concluded that symptoms of social media addiction might appear as a part of issues such as reduced psychological well-being, emotional dysregulation, and interpersonal and psychological problems (Balakrishnan & Shamim, 2013; Błachnio et al., 2017; Tang et al., 2016; Zaremohzzabieh et al., 2014). Social media addiction affects approximately 12% of all users (Wolniczak et al., 2013; Wu et al., 2013). A large-scale study conducted with 23,592 social media users (Facebook, Instagram, and Twitter) found that addictive use of social media was associated with being female, having high narcissism, and having low self-esteem (Andreassen et al., 2016). Therefore, this qualitative study investigates how participants feel while using social media excessively and afterward, and when they are not on social media, and it explicates the psychological and social needs considered in their evaluation. Indeed, it is not possible to have a deeper understanding of participants’ self-evaluations without qualitative analysis.

There are various definitions of self-esteem in the literature. Smith et al. (2014) defined self-esteem as a positive or negative evaluation of the self. Branden (2001) states that self-esteem has two aspects: personal competence and worthiness. Taylor et al. (2007) defined self-esteem as the summation of beliefs regarding the individual’s self. Some studies have concluded that individuals with low self-esteem tend to use social media applications more frequently to improve their self-esteem and self-image (Gonzales & Hancock, 2011; Błachnio et al., 2016). Low self-esteem is one of the underlying causes of the negative effects of social media addiction. Gonzales and Hancock (2011) suggest that social media users are often exposed to other people’s optimized self-presentations. Accordingly, it is emphasized that if social media users do not know the people they interact with on

social media applications, they tend to see those people as happier and more successful than themselves (Chou & Edge, 2012). Vogel et al. (2014) argued that greater exposure to upward social comparisons on social media mediated poorer self-esteem. In contrast, some people use social media interactions to boost their self-esteem and self-confidence. Most studies examining the relationship between excessive social media use and self-esteem show that people with low self-esteem use social media applications to boost their self-image and confidence (Błachnio et al., 2016; Gonzales & Hancock, 2011; Steinfield et al., 2008).

The need to form relationships, interact with, and feel connected to others is an innate psychological need. Thus, it has been emphasized in the literature that some basic needs are natal and universal. Innate psychological needs include autonomy, competence, and relatedness. Competence encompasses feelings of success and self-confidence; autonomy refers to self-regulation and managing one's behavior; and relatedness points to a strong sense of connectedness with others and belongingness. It has been emphasized that meeting these three needs is of great importance for personal development and self-actualization (Deci & Ryan, 2000). Suler (1999) stated that individuals whose psychological needs are not met in real life spend more time in virtual environments. Some studies have found that adolescents meet their basic needs for autonomy, competence, and relatedness in virtual environments (Balkaya-Çetin, 2014; Ryan & Deci, 2006). In this context, it has been emphasized that individuals unable to meet their autonomy and competency needs in the real world are more prone to using the Internet and social media to meet these needs (Partala, 2011).

Individuals use social media applications for purposes such as interaction, relationship building, existing relationship maintenance, and self-promotion (Kietzmann et al., 2011). Social media applications have various functions that enable individuals to introduce themselves and access information about others. Social media platforms may offer emotional support to users, as well as opportunities for individuals to present themselves. It has been emphasized that individuals use social media platforms such as Facebook, Twitter, and Instagram to connect with new people and networks and to build, develop, and maintain relationships (Joinson, 2008). Messaging in various forms has been associated with increased interaction, connectedness, and social support and decreased loneliness. Social media applications also provide a platform for individuals to express themselves and present themselves. Indeed, individuals are interested in how others perceive themselves and try to present themselves with a positive image to influence others (Kim & Lee, 2011; Kim & Tussyadiah, 2013). The findings obtained in the aforementioned studies indicate that individuals use social media not only to present themselves but also to meet their need for friendship and social contact. In light of this, it was considered appropriate to ask participants open-ended questions about how excessive social media use affects their friendships and how it makes them feel.

Excessive use of social media can lead to undesirable consequences, such as domestic problems, distraction, and decreased productivity and academic performance (Aslanbay et al., 2009; Kuss & Griffiths, 2012). Recently, the number of studies on the impact of social media use on academic performance has increased (Moqbel & Kock, 2018). It has been reported that excessive use of social media impairs students' focus as it causes distraction and decreased concentration caused by multitasking (Karpinski et al., 2013; Junco & Cotten, 2012; Gabre & Kumar, 2012). Indeed, for university students, excessive use of social media increases cognitive load, weakens the ability to focus and learn, and leads to reduced academic performance. Busalim et al. (2019) reported that social media use negatively impacts university students' academic performance regardless of whether they are addicted. An open-ended question about the negative consequences of excessive social media use posed to the participants of this study was created based on the findings presented above.

The phenomenon of social media use occupies a prominent place in the lives of individuals at different developmental stages. Recently, there has been a gradual increase in the use of social media applications worldwide. As mentioned above, studies conducted on subjects have predominantly addressed social media addiction. In the context of Türkiye, it is noteworthy that the relevant studies address social media addiction, and the data are collected through scales (e.g., Balcı & Baloğlu, 2018; Bilgili, 2018; Çömlekçi & Başol, 2019; Demir & Kumcağız, 2019). Addressing the issue from the viewpoint of an established criterion, i.e., social media addiction, makes important contributions to the literature; however, this method is thought to disregard the assessments of individuals on the use of social media. In this study, the issue was not addressed using scales, but rather open-ended questions. In addition, by replacing the term "addiction" with "excessive use" to make participants feel more comfortable talking about the subject without worrying about being labeled, a truly qualitative study was conducted. In contrast, some Turkish studies address the issue along with dimensions such as social media usage behaviors and habits rather than social media addiction, although they are few in number (Başoğlu & Yanar, 2017; Küçükali, 2016). However, it is noteworthy that these studies gathered data by using scales. Although the level of social media usage is especially high among university students (We Are Social, 2021), which requires that this issue be addressed in a more detailed fashion for this age group, the number of relevant Turkish qualitative studies is limited. Therefore, this study aimed to investigate how individuals in late adolescence and early adulthood evaluate the excessive use of social media to make unique contributions to the relevant literature.

Method

Research Design

This study employs a qualitative thematic analysis method. Thematic analysis is a method used to identify, analyze, organize, describe, and report themes found within a dataset and helps break the data into smaller, digestible chunks (Boyatzis, 1998). In the thematic analysis, the

participants' statements were verbatim rather than how they were interpreted by the researcher, which points to a realistic approach.

Study Group

The study group consisted of 17 female and 12 male students aged between 18 and 24 years who were studying in different faculties and departments at Dicle University in the 2022–2023 academic year. The participants were recruited voluntarily.

Table 1. *Information on Demographic Characteristics of the Participants*

Variable	N (29)	Percentage (%)
Gender		
Female	17	58.6
Male	12	41.4
Age		
18	3	10.3
19	5	17.2
20	5	17.2
21	8	27.6
22	6	20.7
23	1	3.4
24	1	3.4
Faculty		
Faculty of Literature	21	72.4
Faculty of Communication	2	6.9
Faculty of Economics and Administrative Sciences	6	20.7
Department		
Psychology	12	41.4
Sociology	5	17.2
Turkish Language and Literature	4	13.8
Public Relations	2	6.9
Business	6	20.7

Data Collection Tool

Data were collected through semi-structured interviews with participants. The participants were asked what social media applications they used, how much time they spent on social media, how they felt after using social media applications, when they were not on social media, how social media use affects their friendships, what problems social media use causes, what their self-evaluations (self-perceptions) are, and what psychological and social needs using social media meet.

Data Collection

Semi-structured interviews were conducted with participants to allow them more flexibility while answering. Accordingly, one-on-one interviews were conducted with participants. Announcements were made in the classrooms to recruit students. The target participants of the study

were students who used social media excessively and were uncomfortable with this situation. Students who met the inclusion criteria were included in this study. All interviews were conducted by the researcher. The interviews were mostly conducted in the seminar room of the Psychology Department. One-on-one interviews were conducted with each participant for 20–25 minutes (total interview time: 560 minutes). The interviews were recorded using a voice recorder. The data were collected between 04.01.2023 and 24.01.2023. After data collection, the transcripts of each interview were made by the researcher in a Word file. All the interviews were transcribed, resulting in 94 pages of data.

Data Analysis

Data analysis in qualitative research involves preparing and organizing the data into identifiable codes and themes and then presenting the data in the form of figures, tables, or a discussion (Creswell, 2018). The collected data were analyzed using the thematic analysis method. Thematic analysis is a method used to identify, analyze, organize, describe, and report themes found within a dataset, and it helps to break the data into smaller, digestible chunks (Boyatzis, 1998, pp. 100-103). Accordingly, the interviews were transcribed, the data were collected, and the first codes were created. In the next stage, codes were grouped under specific themes, each of which was clearly defined and named. In addition, striking parts of the interviews were selected, data were analyzed and associated with the research questions, and the analysis findings were reported.

First, audio recordings of the interviews were transcribed. The transcribed data were analyzed using MAXQDA 2022. MAXQDA, which offers an interface in Turkish, utilizes visual analysis tools intensively and is used to statistically analyze mixed methods data, in addition to performing basic statistical analyses. MAXQDA analyzes data more systematically than manual techniques (Kuckartz & Rädiker, 2019, pp. 8–9). An inductive approach was adopted in the analysis of the data using MAXQDA 2022 software. The data were repeatedly read and initial codes were created. During the coding process, a common coding language was developed with a faculty member in the field of developmental psychology, and then, the transcribed data were coded separately by both the researcher and the said faculty member. In the next stage, similarities between the codes and themes proposed by the experts were included in the reliability analysis. Miles and Huberman's (1994) formula $(\text{Agreement}/\text{Agreement} + \text{Disagreement}) \times 100$ was used to calculate the inter-coder reliability for the codes, themes, and subthemes identified by the two researchers. The calculation yields a result of 90%. Codes related to each other were grouped under themes, which were named. The identified themes were then explained in a language that readers could understand. Finally, the researcher interpreted the findings and supported them with various visuals to give meaning to them.

Findings

To clarify this research problem, the findings obtained from the interviews are presented here. A total of 29 students participated in the study. The participants were assigned codes P1 to P29. Participants' responses to questions about their social media use were grouped into five meta-themes and 16 subthemes. Each meta-theme and its subthemes and codes are presented in figures, along with excerpts from the participants' responses.

As seen in **Figure 1**, eight participants stated that they spent 3–4 hours, six spent 4–5 hours, eight spent 6–7 hours, and six spent 8 hours or more on social media per day.

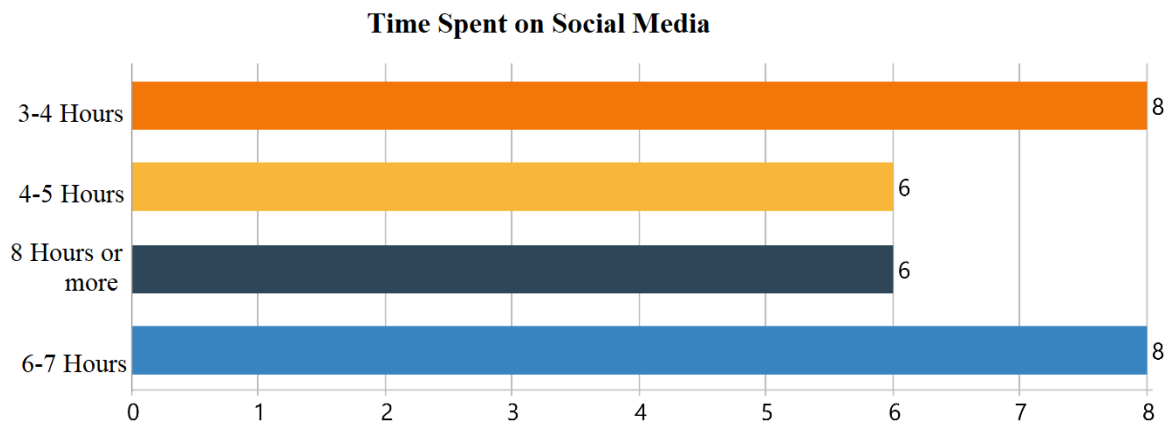


Table 2. Information on meta-themes, subthemes, and codes

Meta-theme	Subtheme	Category	Codes
1) Interpersonal Relationships	A Friendships in real life		- trust (14) - close friendships (7) -early attachment (4) - not having many friends (3) - wanting to be valued (4)
			-social media friendships (13) - hampering face-to-face interaction (8) - not making friends on social media (8)
2) Emotions	A Emotions after use	A1 Depressive (challenging) emotions	-regret (7) -feeling bad/unhappy (13) -anxiety/worry (5)
		A2 Positive emotions	-Enjoyment/happiness (4) -feeling good (3)

	B Emotions when offline	A FOMO	-curiosity (13) -the impulse to constantly refresh the page (5) -a feeling of absence (12) -Irritability/anxiety (4) -time passing slowly / boredom (3) -isolation (6)
		B Increase in the overall level of functioning (positive emotions)	-feeling fresh/dynamic (2) -socializing (1) -efficiency (1) -feeling happy (3) -not feeling an absence (3)
3) Basic psychological needs	A The need for competence		-increasing self-confidence (3) -feeling valued (10) -need to be liked (8) -ego satisfaction (3)
	B The need for relatedness		-meeting the need for interaction (12) - need to socialize (9) -loving/being loved (5)
4) Problems caused by social media use	A Problems related to academic achievement		-negative impact on academic achievement (22) -impaired focus (8)
	B Problems with socialization		-negative impact on socializing (12) -disconnection from real life (5) -backlash negatively affecting mood (5)
	C Addiction		-feeling dependent (7)
5) Impact on the self	A Self-presentation		-presenting/projecting personality differently (18)
	B Negative self-perception		-feeling inadequate (12) -a feeling of failure (10)
	B Positive self-perception		-feeling valued (10) -need to be liked (8)

Meta-theme 1: Interpersonal Relationships

The participants' responses regarding their interpersonal relationships were coded under the subthemes of *friendships in real life* and *friendships on social media*. Information on the codes and code frequencies for the meta-theme of interpersonal relationships and the subthemes of *friendships in real life* and *friendships on social media* are presented in Table 2.

Friendships in Real Life

Participants' responses regarding friendship relationships in their daily lives were collected under the subtheme of friendships in real life. In the category of friendships in daily life, the most frequently emphasized code was **trust**. Some participants stated that they acted cautiously in forming friendships, that it took a certain amount of time for them to establish close relationships, that they felt the need to protect themselves, and that they had trust issues. Excerpts from participant statements on the subject were as follows: *"Exactly, I have a trust issue. I mean, it takes a while until I trust a person and build a relationship with them, become close with them."* (P22; female, age 21) *"I do not want to open myself up to everyone. The thing is that I only want one or two people who are close to me. Other than those people, I do not share with other people, in any shape or form, anything regarding my life—not with my family, no one. I like my profile to porcelain. I think this is how I protect myself. I don't open up at all."* (P23; female, age 22)

Another code belonging to the subtheme of friendships in real life is **close friendships**. Some participants stated that they maintained close friendships. The excerpts from participant statements on the subject were as follows: *"Close friends. Of course, I have close friends but there are also distant friends. But, I have close friends. I usually form close friendships."* (P16; male, age 18)

Another code that belongs to the same subtheme is **early attachment**. Some participants stated that they became attached too early in their close relationships, which created problems for them. Excerpts from participant statements on the subject were as follows: *"I do not know why, but I become attached to people too early. For example, let us say if you and I had spent a lot of time together, I would develop a sense of commitment and become attached too early. I think this is a mistake."* (P5; male, age 22)

Another code under the subtheme of friendships in real life does not include **many friends**. Some participants stated that they had only a limited number of friends. Excerpts from participant statements on the subject were as follows: *"I am not an extremely social person. I mean, you may not end up on the same page as most people, even with the family. Opinions don't match. Therefore, when there is no common ground, there is confusion, which makes me feel uneasy. I just withdrew from most people. I don't have many friends."* (P12; female, age 20) *"I do not go around and make friends. For me, I met people in a setting and became friends. Or when I come across someone with the same interests, be it in my class or my dorm – that's how I establish friendships. I don't put in any extra effort to find friends."* (P25; female, age 21)

The last code belonging to this subtheme is **wanting to be valued**. Some participants expressed that they want to be valued in their social life and their friendships. Excerpts from participant statements on the subject are as follows: *"I expect everyone to value me the way I do them."*

I expect them to love me very much. And when they don't, I feel very bad and depressed. I want to see that love and value from everyone (P3; female, age 21).

Friendships on Social Media

Participants' statements about the impact of social media on their friendships were coded under this subtheme. In the context of the subtheme of friendships on social media, the code uttered by the participants the most was **social media friendships**. Below are excerpts from participants' statements regarding forming friendships through social media. *"When I was a teenager, I valued social media friendships too much. But recently, I've been blocking incoming messages. So that no one would write to me. Because I understood very well that it was not the right thing to do. You don't know them; you don't know if they're lying; I'm trying to protect myself from evil people."* (P12; female, age 20)

Another code under the subtheme of friendships on social media is the code of **hampering face-to-face interaction**. Participants stated that social media takes from them the ability to have face-to-face conversations. Excerpts from participants' statements on the subject are as follows: *"We are in constant communication on social media, and we always know what's happening in each other's lives – it makes us feel like we are next to each other all the time. That's why there is nothing left for us to talk about when we are face-to-face."* (P26; female, age,20)

Another code under this subtheme is **not making friends on social media**. Some participants stated that they prefer not to make friends on social media and that they have trust issues. Excerpts from participants' statements on the subject are as follows: *"I don't make friends through social media; people around me are mostly my circle of friends, people I've known for years, my childhood friends, or my friends from elementary school, and my coworkers, people like them."* (P10; male, age,23) *"I prefer not to make friends on social media. I only make friends with people in the social circles I'm a part of in my daily life. So, that's that. I do not prefer to be friends with people I do not know on social media."* (P11; male, age 18)

Meta-theme 2: Emotions

Participants' responses to the questions about the feelings they experience when they are not using social media and after using social media were coded under the meta-theme of **emotions**. Information on the subthemes/categories, codes, and code frequencies is given in Table 1. The subthemes of the "emotions" meta-theme are emotions after use (depressive (challenging) emotions and positive emotions) and emotions when offline (FOMO and increase in the overall level of functioning).

Emotions After Use

The participants' responses to the questions regarding the emotions they experience after using social media were collected under the category of depressive (challenging) emotions under the subtheme of *emotions after use*. Accordingly, the code most frequently uttered by the participants is **feeling bad/unhappy**. Some participants expressed that after using social media, they feel unhappy and that their time was wasted and cannot be brought back. Excerpts from participant statements on the subject are as follows: *"I feel like I killed my day, and frankly I feel bad and sad that I can't do anything when there are so many different things to do that day. I have tried to reduce this, and frankly, I am taking precautions. I am slowly implementing them. Because I know that I can't just suddenly break a long-standing habit. For example, I reduced it from nine hours to six, seven, five."* (P26; female, age,20) *"I feel especially unhappy when I think about how the lost time can't be gotten back and that it doesn't help me understand anything of importance. Because it's a waste of my time. So, when I think about this, it usually makes me feel unhappy. Because I think my time is wasted, stolen even."* (P11; male, age 18)

Another code under the category of depressive (challenging) emotions is **regret**. Participants expressed that they think that they have wasted their time after using social media applications for long periods, have difficulty reducing their usage time, and feel regret. Excerpts from participant statements on the subject are as follows: *"When I put the phone down, I look around. I realize that I spent too much time and I regret it. I tell myself that I shouldn't have spent so much time on social media. Then follows a feeling of emptiness."* (P25; female, age,21)

Another code under the category of positive emotions is **enjoyment and happiness**. Participants expressed that they feel entertained and happy after using social media. Excerpts from participant statements on the subject are as follows: *"I feel happy, I think, I have fun. But after realizing how much time has passed, I become aware of how that time was wasted. Like, I can't study much. Of course, I feel sad when I realize this."* (P14; female, age,20)

Emotions when offline

The participants' answers to questions regarding how they feel when they are not on social media were coded under the subtheme of **emotions when offline**. Under this subtheme, the code participants mentioned the most is *curiosity* under the category of **FOMO (fear of missing out)**. Participants expressed that when offline, they feel curious about what is happening on social media, they wonder whether there is anything they need to know, and they feel uneasy. Excerpts from participants' statements on the subject are as follows: *"When I'm not on social media, of course, it feels like something's missing. For example, I find myself thinking that I wish I had logged into Twitter and kept up with the latest developments or watched some videos on Instagram. I feel curious about what people shared, like, whether new stories were posted. I especially follow celebrities. I wonder*

which celebrity did what today. I feel curious about them sometimes as well." (P8; male, age,19) *"A sense of curiosity. I keep thinking, 'has something happened that I should know about?' I think that I must log in. I have this anxiety all the time. I want to know about things, I want to see what's going on. I want to keep up."* (P24; female, age,22)

Another code in the FOMO category under the subtheme of emotions when offline is **the feeling of absence**. Participants expressed that they experience a feeling of absence when not on social media and that they feel anxious about missing out on the latest developments. Excerpts from participant statements on the subject are as follows: *"It's like I'm missing something, really. Sometimes when my data runs out, I go somewhere and connect to the Wi-Fi, or I use my friends' data because I feel anxious to connect so that I can keep up with the latest developments, check if someone sent me a WhatsApp message, or see what people posted on Instagram"* (P6; male, age,21) *"I feel its absence, it has become a habit. When I don't use it, I feel like a part of me is missing. I know this is a bad thing."* (P18; male,20)

Another code in the FOMO category under the subtheme of emotions when offline is **the impulse to constantly refresh the page**. Some participants stated that when not on social media, they feel the need to constantly check or refresh the home pages of their social media accounts. Excerpts from participant statements on the subject are as follows: *"Well, it certainly happens but I can't say much about it. It's too much for me. I spend at least three hours a day. This is changing, of course. I have a constant impulse to refresh the main page. When I do, I expect to see something new but I don't, and I can't stop doing it."* (P9; male, age 19)

Among the codes belonging to the category of *increase in the overall level of functioning (positive emotions)* under the subtheme of "emotions when offline," the one most repeated by the participants is *feeling happy*. Some participants stated that they feel happy when not using social media. *"When I'm not on social media, I feel outgoing, sociable. After I leave social media platforms, I feel like I can take a breath and mentally relax."* (P11; male, age,18)

Meta-theme 3: Basic Psychological Needs

The participants' responses to questions regarding which psychological needs they seek to fulfill using social media applications were coded under the meta-theme of **Basic Psychological Needs**. Information on the Basic Psychological Needs meta-theme and its subthemes, codes, and code frequencies are given in Table 1. The subthemes of the meta-theme of Basic Psychological Needs are *the need for competence* and *the need for relatedness*.

The code belonging to the subtheme of the *need for competence* that was uttered most frequently by the participants is **feeling valued**. Some participants stated that they feel valued when they receive messages or get likes from people with whom they interact on social media. Excerpts

from participants' statements on the subject are as follows: *"I feel valuable. It gives me the feeling that one day I can be the person I want to be. I mean, it allows me to present myself like the person I can and want to become."* (P23; female, age,22) *"Yes, the more I communicate with people, the more I feel that I have a place in their lives and that I am valued. After all, they also make time for me, whether on social media or in my social life. I believe that if they spare time for me, they value me."* (P26; female, age 20)

Another code belonging to the subtheme of the *need for competence* is the **need to be liked**. Some participants stated that they feel happy when their social media posts get likes and positive comments, which meets their need to be liked. *"We all actually have one thing in common and that is the need to be liked. We actually try to look very different. You know, we use applications to doctor the photos before sharing. We fix ourselves somehow. I'm doing it too. I think it's actually about being liked. That's why use it mostly."* (P4; female, age,22) *"Maybe this is something negative. I always like to be admired, or hear people say things like 'you are beautiful', or 'you look beautiful'. I get them a lot, like when I post photos on Instagram. It fulfills my needs of being adored and valued."*(P5; male, age,22)

Another subtheme of the meta-theme of Basic Psychological Needs is *the need for relatedness*. The code belonging to this subtheme that was most frequently uttered by participants is **meeting the need for interaction**. Some participants stated that being in contact with other people on social media enabled them to be informed about some issues, which made them feel content. *"I think it's like being in interaction. Like being in a relationship. Social media applications allow me to interact with others and that makes me feel more satisfied"* (P27; female, age 24) *"I think social media is good for interaction. You get to stay informed about everything. You can keep up with the latest developments. You don't feel like, you know, uninformed. When there is a conversation about a topic, you can talk about the information you have, and show that you know, too. I think it's a good thing."* (P25; female, age 21)

Another subtheme of the meta-theme of Basic Psychological Needs is *the need for relatedness*. Another code belonging to the subtheme of the need for relatedness is **the need to socialize**. Some participants stated that being in contact with others on social media meets their need to socialize. *"Socialization, maybe. Since I am a bit of an introvert, I think social media helps me socialize a bit. There is interaction with different people, even foreign people, albeit a little. So, I think it's helpful in that sense. Other than that, it has no good aspects."* (P3; female, age,21) *"It mostly meets my need to socialize. I can catch up with what people are doing. We can't call people to ask how they are all the time, but at least we can very easily and conveniently learn about what they are up to."* (P11; male, age,18)

Meta-theme 4: Problems Caused by Social Media Use

Information on the meta-theme of **Problems Caused by Social Media Use** and its subthemes, codes, and code frequencies are given in Table 1. The subthemes of the meta-theme of **Problems Caused by Social Media Use** are *problems related to academic success, problems with socializing, and addiction*. The code belonging to the *problems related to academic success* subtheme under the meta-theme of **problems caused by social media use** that was repeated by the participants the most is *the negative impact on academic achievement*. Some participants stated that spending too much time on social media negatively affects their academic achievement and grades. *"It has a negative impact, of course. It's midterm week and I can't study. I'm always on the phone. I feel like watching a video, then I see a notification on Instagram and I can barely leave the application after an hour or two. I think it has a profoundly negative effect."* (P28; female, age,22) *It impacts my studies a lot. For example, let's say I am at the library, focused and studying. I get distracted by notifications. Sometimes that takes away from study time and it takes me around an hour to get back to it. It impacts my academic achievement deeply.*"(P5; male, age,22)

The code belonging to the subtheme of *problems with socializing* that was repeated most frequently by the participants is *the negative impact on socializing*. Some participants stated that spending a lot of time on social media weakens their relationships with their immediate social circles and that they spend less time with them. Excerpts from participant statements on the subject are as follows: *"I realized that I was becoming asocial. I realized that I allocated less time to my social circle, to my friends."* (P22; female, age,21) *"I mean, my relationship with my circle has weakened a lot. I am aware of it"* (P13; female, age 21)

Another code belonging to the subtheme of *problems with socializing* is **disconnection from real life**. Some participants stated that during periods of intensive use of social media, they unwittingly cut off communication with the people around them. Excerpts from participant statements on the subject are as follows: *"It's more like I'm disconnected from the real world. Sometimes I don't even hear the things said to me. I was told about it later on. I don't even realize it. That happens sometimes."*(P21; female, age,21)

The code belonging to the addiction subtheme most frequently uttered by the participants is *feeling dependent*. Some participants stated that they use social media excessively, that they cannot stay away from their phones, and that they feel as though they are addicted. Excerpts from participant statements on the subject are as follows: *"Of course, after a while it becomes overwhelming. When one realizes that social media is taking up so much time it became an addiction, they feel the need to withdraw themselves from these applications. I think I need to receive treatment or something to break this habit."* (P11; male, age,18) *"I feel bored, I mean, I can't do anything. I'm like an addict. It's because I have been using computers since I was six years old."*(P16; male, age,18)

Meta-theme 5: Impact on the Self

The participants' responses to questions regarding how using social media applications affected their perceptions of self-esteem were coded under the meta-theme of **Impact on the Self**. Information on the meta-theme and its subthemes, codes, and code frequencies is given in Table 1. The subthemes of the meta-theme of Impact on the Self are *self-presentation*, *negative self-perception*, and *positive self-perception*.

Of the codes belonging to the *self-presentation* subtheme under the meta-theme of **the impact of the self**, the one most frequently uttered by the participants is **presenting/projecting personality differently**. Some participants stated that they present their identities and personalities differently on social media, avoid expressing their opinions, or share written posts and comments containing sentences they would not voice in real life. *"We try to make ourselves look different or lie a lot on social media to satisfy our ego. Such users try to show their personalities differently than how they actually are to influence others. (P11; male, age,18) "When I make comments, I perceive the other person as a social media character rather than a social being and my comments can be cruel sometimes. Like, in real life, I adjust my tone of voice in line with the gestures and facial expressions of others. But I don't have such considerations on social media. I can be harsher and more ruthless." (P26; female, age,20) "I can express myself better on social media. But I find face-to-face communication much more difficult. So, I'm not the same as when I'm on social media. While I can express all my emotions virtually, I cannot do it that well face-to-face." (P22; female, age,21)*

The code belonging to the sub-theme of *negative self-perception* that was repeated most frequently by the participants is *feeling inadequate*. Some participants stated that they usually feel incomplete and inadequate, that they question themselves about this situation, and that they want to make changes to their social media habits. *"I feel inadequate with regard to where I am now. I perceive myself as unsuccessful and inadequate both in terms of academic achievement and general culture."(P8; male, age,19) "I've always felt so incompetent, so useless. I always regard myself as inadequate. I question myself all the time. I wonder why? I want to change things, I want to change my personality, and I want to change my behavior."(P28; female, age,22)*

The most repeated code belonging to the sub-theme of *positive self-perception* under the meta-theme of *impact on the self* is *feeling valuable*. Some participants stated that they feel as though they are valued when they receive messages or get likes from people with whom they interact on social media. Excerpts from participants' statements on the subject are as follows: *"I feel valuable. It gives me the feeling that one day I can be the person I want to be. I mean, it allows me to present myself as the person I can and want to become. Maybe it is all the beautiful things I see that make me feel more comfortable seeing other beautiful things. It elicits positive emotions, relaxes me, and helps me to blow off some steam in a way." (P23; female, age,22)*

"Yes, the more I communicate with people, the more I feel that I have a place in their lives and that I am valued. After all, they also make time for me, whether on social media or in my social life. I believe that if they spare time for me, they value me." (P26; female, age,20)

Discussion, Conclusion, and Recommendations

This study examined how excessive use of social media affected university students and how they evaluate this situation. In this qualitative study, five meta-themes were identified. The findings grouped under these themes showed that excessive use of social media impacts university students' lives and their general functioning.

The first meta-theme identified within the scope of the study was "interpersonal relationships." The subthemes of this meta-theme that were identified in light of the obtained qualitative data are "friendships in real life" and "friendship on social media." It was seen in the statements grouped under this theme that the participants act cautiously in their friendships, that they feel the need to protect themselves, that they prefer not to make friends on social media, and that they have trust problems. Changes in technology enable young individuals to shape their social environment according to their needs. It was argued that face-to-face friendships are richer in terms of emotion, affection, and relationship security but that friendships established through social media lack real trust, depth, and originality and incite doubt (Fröding & Peterson, 2012). Valkenburg and Peter (2009) suggested that Internet use increases psychological well-being when used to interact with existing friends. Indeed, this study found that the participants need to feel trust and have simplicity in their real-life (face-to-face) friendships but that they tend to approach the relationships established through social media cautiously and distantly.

Another meta-theme identified by the researcher was "emotions." The statements grouped under this theme provided insight into the feelings participants experience after using social media and when offline. Participants expressed that they feel unhappy, sad, and regretful upon using social media excessively. One of the most frequently repeated codes in the relevant statements was the fear of missing out (FOMO), which points to the belief that something exciting or interesting is happening elsewhere. Participants stated that when not on social media, they experience feelings such as curiosity, absence, nervousness, and anxiety. The study found that the participants used these platforms to check other people's posts, inform themselves, and keep abreast of the latest developments. In the related literature, FOMO is considered a new type of addiction that causes individuals to spend much longer periods on social media. It was reported that individuals spend more time on social networks because they are afraid of missing the latest developments and being left out of the loop. It was also reported that FOMO increases the use of social media among young people. (Alt, 2015; Przybylski et al., 2013; Buglass et al., 2017). FOMO was defined as a new type of addiction that causes individuals to spend much longer periods on social platforms as they are anxious

about missing out on and being uninformed of the developments unfolding on social media. It was argued that this situation increases the time young people spend on social media and triggers social media addiction (Buglass et al., 2017; Oberst et al., 2017). In a study conducted by Gökler et al. (2016) with university students, a positive relationship was detected between FOMO levels and the use of social media applications. Gezgin et al. (2017) found in their study carried out with the participation of pre-service teachers that those who use social media applications for more than 7 hours a day had higher levels of FOMO. As can be inferred from the statements grouped under the FOMO subtheme, the excessive use of social media and the consequent isolation from social circles and people, in addition to ease of access to social media platforms using smartphones, may have contributed to this fear. However, when examined through the prism of self-determination theory, this fear may be based on the three basic needs for psychological well-being, namely, autonomy, competence, and relatedness (Przybylski et al., 2013). Of these needs, the need for relatedness, in particular, can be associated with FOMO on the developments in other individuals' lives. In addition, it was suggested that individuals who see other people's posts on social media compare their lives with the lives of the people they follow; those with higher levels of FOMO experience the consequent feelings of anxiety and inadequacy more intensely (Riordan et al., 2015).

Another meta-theme identified in this study is "basic psychological needs." The subthemes belonging to this meta-theme identified in light of the qualitative data are "the need for competence" and "the need for relatedness." In the statements grouped under this meta-theme, the participants expressed that they regard social media interactions as a need, that they feel valued when others keep in touch with them, that they are happy when their posts receive positive comments, and that social media meets their need to be liked. Participants also stated that they use social media to keep in contact with others and that they satisfy their need for socialization through these platforms. Today, Internet use serves to meet many needs of individuals, including psychological needs, and excessive Internet use occurs when the needs for autonomy, competence, and relatedness are not adequately met. Indeed, it was suggested that if the basic psychological needs of young people are not met, they develop maladaptive behaviors and tend to use social media applications more frequently (Ryan & Brown, 2003). It is thought that the likes and positive comments received on social media posts help users feel valued and loved. In addition, excessive use of social media strengthens young people's sense of belonging and meets their need for socialization and connection.

The next meta-theme identified in the study is "problems caused by social media use." The subthemes belonging to this meta-theme identified in light of the qualitative data are "problems related to academic achievement," "problems with socialization," and "addiction." It can be seen in the participant statements grouped under this meta-theme that when they spent too much time on social media, their academic achievement is negatively affected, their grades drop, their interpersonal relationships deteriorate, and they feel as though they are addicted. Different studies indicated that

young individuals' excessive use of social media is a potential mental health problem and leads to addiction (Al-Kandari & Al-Sejari, 2021; Stankovska et al., 2016). Addiction can lead to less socialization and disruption of social relationships. Different studies found that excessive use of social media increases loneliness (Sagioglou & Greitemeyer, 2014), decreases life satisfaction (Chan, 2014; Valenzuela et al., 2009), and leads to depression (Blachino et al., 2016; Khattak et al., 2017). Another study concluded that individuals who spend a long time on social media exhibit poor academic performance (Junco, 2012; Karpinski et al., 2013). Hence, it can be seen that the qualitative data obtained in this study show coherency with the literature. Busalim et al. (2019) found that the risk of developing an addiction is directly proportional to the intensity of social media use. University students use social media both for academic and for non-academic purposes (Lau, 2017). However, it is known that regardless of the purpose, social media use is time-consuming. It was reported that non-addicted users use social media at 143.48 minutes per day on average, while addicted users use social media at 223.32 minutes per day on average (Hormes et al., 2014). Excessive use of social media causes university students to lose a lot of time, which results in distraction from academic work, problems related to learning, and decreased academic achievement (Masood et al., 2020; Paul et al., 2012). Rouis (2012) suggested that the time university students spend on social media use creates a cognitive load and weakens their ability to focus. Indeed, the decline in academic achievement resulting from excessive use of social media emerges as an important problem. In addition, social media addiction causes individuals to socialize less and leads to the deterioration of their existing relationships (Savcı & Aysan, 2017). Coherently, participants of this study stated that they spend less time with their friends, that their social relations have weakened, and that they feel disconnected from the real world. Spending too much time on social media reduces the time to be devoted to close relationships, which, in turn, damages these relationships.

The last meta-theme identified in the study is "impact on the self." In light of the qualitative data, subthemes of this meta-theme were identified as "self-presentation" (presenting/projecting personality differently) and negative and positive self-perception. In statements grouped under this meta-theme, participants expressed that they showcase their identities and personalities differently on social media, avoid expressing their own opinions, and easily make comments in the virtual environment that they would not be able to in real-life relationships. Therefore, as Deci and Ryan (2000) argued, social media platforms may be used to meet the need for autonomy, one of the three innate and universal needs of individuals. Some participants mentioned that they can display uncensored attitudes on social media (mostly through anonymous accounts), free from the normative pressure present in real-life social settings, which can be interpreted to be within the domain of behavioral autonomy. In addition, some participants stated that they felt incomplete and inadequate in general terms and some others expressed that they feel valued when they get messages or likes from

the people with whom they are in contact on social media. Hence, these findings point to the power of social media use in meeting the need for competence (Deci & Ryan, 2000).

Messaging with peers and receiving peer feedback through social media applications can affect a young adult's self-esteem (Pempek & Lauricella, 2017). Frequent use of social media may increase the perception of not being able to keep up with the nearly unlimited information that social networks make available. Social media also provides a platform for self-expression and self-presentation. Self-esteem is defined as "an individual's positive or negative evaluation of oneself" (Smith et al., 2014). Studies investigating the relationship between social media use and self-esteem found that individuals with low levels of self-esteem use social media applications more to improve their self-image and self-confidence (Błachnio et al., 2016; Gonzales & Hancock, 2011). Social media users are interested in how others perceive them, may tend to manage personal information such that they earn the approval of others, and give positive impressions about themselves (Kim & Tussyadiah, 2013). The qualitative finding of this study that the participants exhibit their identities and personality traits differently on social media is coherent with the relevant literature.

Thus, what individuals present on social media platforms is actually a touched-up version of real life. It was observed that individuals who compare their lives with those of other social media users believe that those others lead happier, more successful, and emotionally rewarding lives than they actually do. Consequently, individuals with high FOMO who excessively use social media to follow what others are doing often experience feelings of anxiety, low self-esteem, and inadequacy (Stead & Bibby, 2017).

This study found that participants use social media applications for entertainment, socializing, and filling their spare time. This qualitative finding is similar to results found in similar studies in the literature. The literature shows that university students use social media platforms mostly for posting videos and photos, checking others' posts, communicating, filling their spare time, chatting online, exchanging opinions, and entertainment (Akçay, 2011; Biçer, 2014; Cheung et al., 2011; Lenhart & Madden, 2007). Çömlekçi and Başol (2019) investigated the relationship between youths' social media usage motives and social media addiction. In that study, participants who spend approximately 4 hours on social media stated that they use social media mostly for entertainment, communication and keeping up to date, reaching people, self-presentation, information sharing, and getting to know people better. In the study, a positive relationship was detected between these motives and social media addiction. In a qualitative study conducted by Aksoy (2018) with 25 university students who defined themselves as social media addicts, the participants stated that they use social media excessively due to the lack of friends, for socialization, and because of FOMO. Thus, individuals use social media for stimulating online conversations and receiving feedback about their activities, interests, and opinions. Because social media use is so interactive, it tends to be reinforcing, and

therefore, it may lead to habitual, or addictive, posting and monitoring behavior (Carlson et al., 2016). In this context, individuals can use social media for communicating and interacting, spending free time, and entertainment.

Due to the limited number of qualitative studies on social media overuse, it is thought that the results of the present study will contribute significantly to the literature. The findings provide important information about the factors that trigger the excessive use of social media by university students and their possible consequences, especially to experts working in the field of preventive mental health and education. The researcher have several recommendations based on the findings of the study. This study was conducted with individuals in early adulthood. Future studies can be carried out with participants from different age groups, such as adolescents and adults. It is thought that it will yield positive results if universities' psychological counseling centers organize training programs and seminars that address the negative impact of social media addiction. In addition, informative training programs on how to use social media functionally can be organized. It is of great importance to take preventive mental health measures to increase the academic achievement and psychological well-being of university students. In addition to the contributions and strengths of the results obtained from the research to the literature, there are some limitations. First of all, the current research was conducted with university students who found the use of social media excessive. In future studies, the results obtained by conducting qualitative studies on similar open-ended questions with a clinical group (such as those with social media addiction) can be compared. In addition, the results obtained from the research can be integrated into the content of intervention programs (such as cognitive behavioral interventions, mindfulness-based practices) to be carried out, taking into account the factors that trigger people's excessive use of social media.

Policy Implications

There are important dimensions to be considered in the context of education policies to prevent excessive use of social media. In this context, it is thought that it is important to carry out educational activities on social media addiction in educational institutions and to inform students about the negative effects of social media addiction. It is predicted that creating alternative options for students to reduce their social media usage time and creating educational activities for them to use social media more functionally will have beneficial results. It would be beneficial to conduct informative seminars by school guidance services about the controlled use of social media for primary, secondary, and high school students. Children should be directed to areas such as sports, music, psychodrama, and art. One of the main objectives of the curriculum of the Ministry of National Education is to equip individuals with basic life skills starting in the preschool period. In this context, awareness studies and follow-up plans can be made for students to use the Internet consciously by education specialists and school counselors. In this context, it is considered important to provide

training for students on issues such as coping with problems, anger control, communication skills, emotion regulation, coping with stress, empathy, self-control, and time management to prevent excessive use of social media.

In the context of education policies, parents also have important duties to prevent social media addiction. Family training should be organized to ensure that family members spend effective time together, and the quality and duration of the time members spend together should be increased. To prevent the use of the internet and social media by families and students from becoming addictive, they can be informed about the correct use of the internet and social media and media literacy, and they can be supported to prevent the harm that may occur from excessive use of the internet and social media, activities to increase face-to-face communication can be provided.

Conflict of interest

No conflict of interest has been declared by the author.

Funding details

No funding or grant was received from any institution or organization for this research.

Credit Author Statement

The author confirms that she had all responsibilities for the following: conceptualization of the study and design, data collection, data analysis and interpretation of the findings, and preparation of the manuscript.

Ethical Statement

Ethics committee approval has been obtained from Dicle University Social and Human Sciences Ethics Committee with the decision numbered 422624 on 03.01.2023.

Acknowledgments

We would like to thank Assist. Prof. Dr. Fatma Zeynep Saylık for her valuable contributions in the coding process of the data obtained in the study.

References

- Akçay, H. (2011). Kullanımlar ve Doyumlar Yaklaşımı Bağlamında Sosyal Medya Kullanımı: Gümüşhane Üniversitesi Üzerine Bir Araştırma, *İletişim Kuram ve Araştırma Dergisi*, 33, 137-162.
- Aksoy, M. E. (2018). A qualitative study on the reasons for social media addiction. *European Journal of Educational Research*, 7(4), 861-865.

- Al-Kandari, Y. Y., & Al-Sejari, M. M. (2021). Social isolation, social support and their relationship with smartphone addiction. *Information, Communication & Society* 1–19. <http://dx.doi.org/10.1080/1369118X.2020.1749698>
- Alt, D. (2015). College students' academic motivation, media engagement and fear of missing out. *Computers in Human Behavior*, 49, 111-119.
- Andreassen, C. S. & Pallesen, S. (2014) Social network site addiction- An overview. *Current Pharmaceutical Design*, 20, 4053-4061 <https://doi.org/10.2174/13816128113199990616>
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2016). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*. 64, 287-293. <https://doi.org/10.1016/j.addbeh.2016.03.006>
- Aslanbay, Y., Aslanbay, M., & Çobanoğlu, E. (2009). Internet addiction among Turkish young consumers. *Young Consumers*.10(1), 60-70. <http://dx.doi.org/10.1108/17473610910940792>
- Balcı, Ş., & Baloğlu, E. (2018). Sosyal Medya Bağımlılığı ile Depresyon Arasındaki İlişki:" Üniversite Gençliği Üzerine Bir Saha Araştırması". *Galatasaray Üniversitesi İletişim Dergisi*, 29, 209 - 234, <https://doi.org/10.16878/gsuilet.500860>
- Başoğlu, U. D., & Yanar, Ş. (2017). Üniversite öğrencilerinin sosyal medya kullanım amaçları ve alışkanlıklarının belirlenmesi. *Kilis 7 Aralık Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, 1(2), 6-13.
- Biçer, S. (2014). Akademisyenlerin Sosyal Ağlarda Bulunma Motivasyonları: Facebook Örneği, *Dumlupınar Üniversitesi Sosyal Bilimler Dergisi*, 40, 59-80.
- Bilgili, H. A. S. (2018). Sosyal medya kullanımı ile sosyal medya bağımlılık düzeylerinin belirlenmesine yönelik bir araştırma: *Ege Üniversitesi örneği*. *Erciyes İletişim Dergisi*, 5(4), 351-369. <https://doi.org/10.17680/erciyesiletisim.420632>
- Błachnio, A., Przepiorka, A., & Rudnicka, P. (2016). Narcissism and self-esteem as predictors of dimensions of Facebook use. *Personality and Individual Differences*, 90, 296–301. <https://doi.org/10.1016/j.paid.2015.11.018>
- Balakrishnan, V., & Shamim, A. (2013). Malaysian Facebookers: Motives and addictive behaviours unraveled. *Computers in Human Behavior*, 29, 1342–1349. <https://doi.org/10.1016/j.chb.2013.01.010>
- Błachnio, A., Przepiorka, A., Senol-Durak, E., Durak, M., & Sherstyuk, L. (2017). The role of personality traits in Facebook and Internet addictions: A study on Polish, Turkish, and Ukrainian samples. *Computers in Human Behavior*. 68, 269-275. <https://doi.org/10.1016/j.chb.2016.11.037>

- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. Sage Publications, Inc.
- Buglass, S. L., Binder, J. F., Betts, L. R., & Underwood, J. D. (2017). Motivators of online vulnerability: The impact of social network site use and FOMO. *Computers in Human Behavior*, *66*, 248-255.
- Busalim, A. H., Masrom, M., & Zakaria, W. N. B. W. (2019). The impact of Facebook addiction and self-esteem on students' academic performance: A multi-group analysis. *Computers & Education*, *142*, 103651. <https://doi.org/10.1016/j.compedu.2019.103651>
- Branden, N. (2001). *The psychology of self-esteem: A revolutionary approach to self-understanding that launched a new era in modern psychology*. Jossey-Bass.
- Carlson, J. R., Zivnuska, S., Carlson, D. S., Harris, R., & Harris, K. J. (2016). Social media use in the workplace: A study of dual effects. *Journal of Organizational and End User Computing*, *28*(1), 15–28. <http://dx.doi.org/10.4018/JOEUC.2016010102>
- Chan, T. H. (2014). Facebook and its effects on users' empathic social skills and life satisfaction: A double-edged sword effect. *Cyberpsychology, Behavior, and Social Networking*, *17*(5), 276–280. <https://doi.org/10.1089/cyber.2013.0466>
- Cheung, C. M., Chiu, P. Y., & Lee, M. K. (2011). Online social networks: Why do students use facebook?. *Computers in Human Behavior*, *27*(4), 1337-1343.
- Chou, H. T. G., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior, and Social Networking*, *15*, 117–121. <https://doi.org/10.1089/cyber.2011.0324>
- Creswell J. W. (2018). Nitel Araştırma Yöntemleri: Beş Yaklaşımına Göre Nitel Araştırma ve Araştırma Deseni. M. Bütün & S.B. Demir (Çev.) (4. baskı). Ankara: Siyasal Kitabevi.
- Çömlekçi, M. F., & Başol, O. (2019). Gençlerin sosyal medya kullanım amaçları ile sosyal medya bağımlılığı ilişkisinin incelenmesi. *Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, *17*(4), 173-188. <https://doi.org/10.18026/cbayarsos.525652>
- De Cock, R., Vangeel, J., Klein, A., Minotte, P., Rosas, O., & Meerkerk, G. (2014). Compulsive use of social networking sites in Belgium: Prevalence, profile, and the role of attitude toward work and school. *Cyberpsychology, Behavior and Social Networking*, *17*(3), 166–171. <https://doi.org/10.1089/cyber.2013.0029>
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268.

- Demir, Y., & Kumcağız, H. (2019). Üniversite öğrencilerinin sosyal medya bağımlılığının farklı değişkenler açısından incelenmesi. *Turkish Psychological Counseling and Guidance Journal*, 9(52), 23-42.
- Fröding, B., & Peterson, M. (2012). Why virtual friendship is no genuine friendship. *Ethics and Information Technology*, 14, 201-207.
- Gabre, H., & Kumar, G. (2012). The effects of perceived stress and Facebook on accounting students' academic performance. *Accounting and Finance Research*, 1(2), 87-100. <http://dx.doi.org/10.5430/afr.v1n2p87>
- Gezgin, D. M., Hamutoglu, N. B., Gemikonakli, O., & Raman, I. (2017). Social networks users: fear of missing out in preservice teachers. *Journal of Education and Practice*, 8(17), 156-168.
- Gonzales, A. L., & Hancock, J. T. (2011). Mirror, mirror on my Facebook wall: Effects of exposure to Facebook on self-esteem. *Cyberpsychology, Behavior, and Social Networking*, 14(1-2), 79–83. <https://doi.org/10.1089/cyber.2009.0411>
- Gökler, M. E., Aydın, R., Ünal, E., & Metintaş, S. (2016). Sosyal ortamlarda gelişmeleri kaçırma korkusu ölçeğinin Türkçe sürümünün geçerlilik ve güvenilirliğinin değerlendirilmesi. *Anadolu Psikiyatri Dergisi*, 17(1), 52-59.
- Griffiths, M.D. (2013). Social networking addiction: Emerging themes and issues. *Journal of Addiction Research & Therapy*, 4(5). <http://dx.doi.org/10.4172/2155-6105.1000e118>
- Hormes, J. M., Kearns, B., & Timko, C. A. (2014). Craving Facebook? Behavioral addiction to online social networking and its association with emotion regulation deficits. *Addiction*, 109(12), 2079-2088.
- Joinson, A. N. (2008, April). Looking at, looking up or keeping up with people? Motives and use of Facebook. *CHI '08: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, April 2008, 1027–1036. <https://doi.org/10.1145/1357054.1357213>
- Junco, R., & Cotten, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. *Computers & Education*, 59(2), 505-514. <https://psycnet.apa.org/doi/10.1016/j.compedu.2011.12.023>
- Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58, 162–171. <https://doi.org/10.1016/j.compedu.2011.08.004>
- Karpinski, A. C., Kirschner, P. A., Ozer, I., Mellott, J. A., & Ochwo, P. (2013). An exploration of social networking site use, multitasking, and academic performance among United States and

- European university students. *Computers in Human Behavior*, 29, 1182–1192.
<https://psycnet.apa.org/doi/10.1016/j.chb.2012.10.011>
- Khattak, F. A., Ahmad, S., & Mohammad, H. (2017). Facebook addiction and depression: A comparative study of gender differences. *PUTAJ- Humanities and Social Sciences*, 25(1–2), 55–62.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, 54(3), 241–251. <https://doi.org/10.1016/j.bushor.2011.01.005>
- Kim, J., & Lee, J. E. R. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. *Cyberpsychology, Behavior, and Social Networking*, 14, 359–364. <https://doi.org/10.1089/cyber.2010.0374>
- Kim, J., & Tussyadiah, I. P. (2013). Social networking and social support in tourism experience: The moderating role of online self-presentation strategies *Journal of Travel & Tourism Marketing*, 30, 78–92. <https://doi.org/10.1080/10548408.2013.751220>
- Kuckartz, U., & Rädiker, S. (2019). *Analyzing Qualitative Data with MAXQDA: Text, Audio, and Video*. The USA: Springer.
- Kuss, D. & Griffiths, M. (2012). Internet gaming addiction: a systematic review of empirical research. *International Journal of Mental Health Addiction*, 10, 278-296.
<https://doi.org/10.3390%2Fbrainsci2030347>
- Küçükali, A., (2016). Üniversite Öğrencilerinin Sosyal Medya Kullanımı Atatürk Üniversitesi Örneği. *Bartın Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, vol.7, 531-546.
- Lau, W. W. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in Human Behavior*, 68, 286-291.
- Lenhart, A., & Madden, M. (2007). Social networking websites and teens: An overview.
- Masood, A., Luqman, A., Feng, Y., & Ali, A. (2020). Adverse consequences of excessive social networking site use on academic performance: Explaining underlying mechanism from stress perspective. *Computers in Human Behavior*, 113, 106476.
- Moqbel, M., & Kock, N. (2018). Unveiling the dark side of social networking sites: Personal and work-related consequences of social networking site addiction. *Information & Management*, 55(1), 109-119. <https://doi.org/10.1016/j.im.2017.05.001>

- Oberst, U., Wegmann, E., Stodt, B., Brand, M., & Chamarro, A. (2017). Negative consequences from heavy social networking in adolescents: The mediating role of fear of missing out. *Journal of Adolescence*, 55, 51-60.
- Partala, T. (2011). Psychological needs and virtual worlds: Case second life. *International Journal of Human-Computer Studies*, 69(12), 787-800. <http://dx.doi.org/10.1016/j.ijhcs.2011.07.004>
- Paul, J. A., Baker, H. M., & Cochran, J. D. (2012). Effect of online social networking on student academic performance. *Computers in Human Behavior*, 28(6), 2117-2127.
- Pelling, E. L., & White, K. M. (2009). The theory of planned behavior applied to young people's use of social networking web sites. *CyberPsychology & Behavior*, 12(6), 755-759. <https://doi.org/10.1089/cpb.2009.0109>
- Pempek, T. A., & Lauricella, A. R. (2017). The effects of parent-child interaction and media use on cognitive development in infants, toddlers, and preschoolers. *In Cognitive Development in Digital Contexts*, 53-74. <http://dx.doi.org/10.1016/B978-0-12-809481-5.00003-1>
- Przybylski, A. K., Murayama, K., DeHaan, C. R., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841-1848.
- Riordan, B. C., Flett, J. A., Hunter, J. A., Scarf, D., & Conner, T. S. (2015). Fear of missing out (FoMO): The relationship between FoMO, alcohol use, and alcohol-related consequences in college students. *Annals of Neuroscience and Psychology*, 2(7), 1-7.
- Rouis, S. (2012). Impact of cognitive absorption on Facebook on students' achievement. *Cyberpsychology, Behavior, and Social Networking*, 15(6), 296-303.
- Ryan, R. M., & Brown, K. W. (2003). Why we don't need self-esteem: On fundamental needs, contingent love, and mindfulness. *Psychological inquiry*, 14(1), 71-76.
- Ryan, T., Chester, A., Reece, J., & Xenos, S. (2014). The uses and abuses of Facebook: A review of Facebook addiction. *Journal of behavioral addictions*, 3(3), 133-148. <https://doi.org/10.1556%2FJBA.3.2014.016>
- Ryan, R. M., & Deci, E. L. (2006). Self-regulation and the problem of human autonomy: Does psychology need choice, self-determination, and will?. *Journal of Personality*, 74(6), 1557-1586. <https://doi.org/10.1111/j.1467-6494.2006.00420.x>
- Sagioglou, C., & Greitemeyer, T. (2014). Facebook's emotional consequences: Why Facebook causes a decrease in mood and why people still use it. *Computers in Human Behavior*, 35, 359-363. <https://doi.org/10.1016/j.chb.2014.03.003>

- Savcı, M., & Aysan, F. (2017). Teknolojik bağımlılıklar ve sosyal bağıllık: İnternet bağımlılığı, sosyal medya bağımlılığı, dijital oyun bağımlılığı ve akıllı telefon bağımlılığının sosyal bağıllığı yordayıcı etkisi. *Düşünen Adam the Journal of Psychiatry and Neurological Sciences*, 30(3),202–216. <https://doi.org/10.5350/DAJPN2017300304>
- Shaw, M., & Black, D. W. (2008). Internet Addiction: Definition, Assessment, Epidemiology and Clinical Managemen. *CNS drugs*, 22, 353-365. <https://doi.org/10.2165/00023210-200822050-00001>
- Smith, E. R., Mackie, D. M., & Claypool, H. M. (2014). *Social psychology*. New York, NY: Psychology Press.
- Stankovska, G., Angelkovska, S., & Grncarovska, S. P. (2016). Social Networks Use, Loneliness and Academic Performance among University Students. *Bulgarian Comparative Education Society*, 4, 255-261.
- Starcevic, V. (2013). Is Internet addiction a useful concept? *Australian and New Zealand Journal of Psychiatry*, 47, 16–19. <https://doi.org/10.1177/0004867412461693>
- Stead, H., & Bibby, P. A. (2017). Personality, fear of missing out and problematic internet use and their relationship to subjective well-being. *Computers in Human Behavior*, 76, 534-540. <https://psycnet.apa.org/doi/10.1016/j.chb.2017.08.016>
- Steinfeld, C., Ellison, N. B., & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, 29(6), 434–445. <https://psycnet.apa.org/doi/10.1016/j.appdev.2008.07.002>
- Steers, M. N., Wickham, R. E., & Acitelli, L. K. (2014). Seeing Everyone Else’s HighlightReels: How Facebook Usage is Linked To Depressive Symptoms. *Journal of Social and Clinical Psychology*, 33(8), 701–731. <https://doi.org/10.1521/jscp.2014.33.8.701>
- Suler, J. (1999). To get what you need: Healthy and pathological internet use. *CyberPsychology & Behavior*, 2(5), 385-393. <http://dx.doi.org/10.1089/cpb.1999.2.385>
- Tang, J. H., Chen, M. C., Yang, C. Y., Chung, T. Y., & Lee, Y. A. (2016). Personality traits, interpersonal relationships, online social support, and Facebook addiction. *Telematics and Informatics*, 33, 102–108. <https://doi.org/10.1016/j.tele.2015.06.003>
- Taylor, S. E., Peplau, L. A., & Sears, D. O. (2007). *Social psychology* (A. Donmez, Trans.). Imge Bookstore.
- Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site?: Facebook use and college students’ life satisfaction, trust, and participation. *Journal of*

Computer Mediated Communication, 14, 875–901. <https://doi.org/10.1111/j.1083-6101.2009.01474.x>

Valkenburg, P. M., & Peter, J. (2009). Social consequences of the Internet for adolescents: A decade of research. *Current Directions in Psychological Science*, 18(1), 1-5.

Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3, 206–222. <https://doi.org/10.1037/ppm0000047>

We Are Social. (2021). Digital 2021: Global overview report. Accessed on October 2, 2021, from: <https://wearesocial.com/digital-2021>

Wolniczak, I., Caceres-DelAguila, J. A., Palma-Ardiles, G., Arroyo, K. J., Solís-Visscher, R., Paredes-Yauri, S., & Bernabe-Ortiz, A. (2013). Association between Facebook dependence and poor sleep quality: A study in a sample of undergraduate students in Peru. *PLoS One*, 8, e59087. <https://doi.org/10.1371/journal.pone.0059087>

Wu, A. M., Cheung, V. I., Ku, L., & Hung, E. P. (2013). Psychological risk factors of addiction to social networking sites among Chinese smartphone users. *Journal of Behavioral Addictions*, 2, 160–166. <https://doi.org/10.1556/JBA.2.2013.006>

Zaremohzzabieh, Z., Samah, B. A., Omar, S. Z., Bolong, J., & Kamarudin, N. A. (2014). Addictive Facebook use among university students. *Asian Social Science*, 10, 107. <https://doi.org/10.5539/ass.v10n6p107>