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THE EFFECT OF SOCIAL MEDIA ADDICTION ON LONELINESS AMONG SECONDARY SCHOOL STUDENTS

RESEARCH ARTICLE

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Abstract
Social media addiction is a psychological problem that causes problems in many areas of a person's life, including cognitive, behavioral, and emotional aspects. When the negative effects of social media use are investigated, insomnia, disruption of daily tasks, academic decline, family disruptions or divorce, decreased social interaction, and loneliness are among the most common. The purpose of this study is to determine the impact of social media addiction levels on loneliness among students from different types of secondary schools and the metaphors they use to express their thoughts about social media.
This study, designed using a mixed methodology, utilizes both qualitative and quantitative research methods. The research population consisted of students studying in the Palandöken and Yakutiye districts of Erzurum. A sample of 375 students was selected using simple random sampling. The data collection tools for the study were a six-question form exploring the demographic characteristics of the participants, the UCLA Loneliness Scale, and the Social Media Addiction Scale. Responses to the survey questions were analyzed using SPSS 22.0 statistical program to calculate frequencies, percentages, and arithmetic means, and content analysis was performed on the qualitative data obtained from open-ended questions. Since the data collected from the scales showed a normal distribution, parametric tests such as t-test, one-way ANOVA test, and post hoc Tukey test were used. Pearson correlation analysis was performed to determine the relationship between the Social Media Addiction Scale and the UCLA Loneliness Scale.

Keywords: Social media, student, metaphor, loneliness, secondary education.

Introduction

Social media addiction is a psychological issue that causes problems in many areas of a person's life, including cognitive, behavioral, and emotional aspects. When the negative effects of social media use are examined, the most common include insomnia, disruption of daily routines, academic decline, disturbances in family life or divorce, reduced social interaction, and loneliness. The purpose of this study is to determine the effect of social media addiction levels on loneliness among students attending different types of secondary schools, and to identify the metaphors they use to express their thoughts about social media.

Communication, which began with the random sounds people made, has evolved over time into systematic structures through words, writing, facial expressions, and gestures. These systematic structures, which have developed in every era, have contributed to human progress over the years. The reasons for the emergence of communication technologies stem from people's desire to communicate with one another, to pass on their experiences to future generations, and to seek knowledge. The invention of writing played a key role in the dawn of the ancient era, while the emergence of information technologies marked the beginning of the information age. While traditional communication tools included writing, the

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printing press, the telegraph, radio, and television, today computers, cell phones, and the internet are widely regarded as the primary means of communication (Güngör, 2011: 280). When examining definitions of communication, anthropologists define culture as communication. Psychologists, on the other hand, define communication as the bond between individuals or between a group and an individual. According to linguists, language consists of communicative symbols. Observations regarding communication across different fields have led to the emergence of various definitions. According to Durkheim, communication is defined as a network that determines what society does, how it does it, and what it will do. Marx, on the other hand, focused on the technology required for production and distribution as the subject of communication. According to Osgood, communication is a system in which a source addresses its target using symbols and transmits them through a channel (Cited by: Erdoğan, 2002: 18).

Throughout history, humankind has relied on technical tools to meet its needs and protect itself and those around it. Initially crafting necessary tools from stones and pieces of wood, people gradually came to require new techniques to make changes in their environment. Progress continued thanks to the products created using these new techniques. As a result of this rapid development, technology and science began to advance hand in hand. The joint advancement of science and technology has led to developments of an unimaginable scale in today's world (Solmaz et al., 2013: 31). The definition of technology, meanwhile, is the socialized knowledge of producing a service or good using tools. The word is derived from the Ancient Greek term "tekhne," meaning art or skill, combined with the suffix "logos," meaning reason or knowledge. Therefore, "technique" refers to the skill or knowledge of doing, producing, or obtaining something (Atabek, 2001: 109). According to Kiper (2014), technology is also defined as the key factor that creates innovation in production and products, increases production, efficiency, and profit, and provides a competitive advantage.

As a result of advances in computer and internet technology, a new concept—new communication technologies—has emerged. When considering the concept of new communication technologies, the first thing that comes to mind is all tools related to internet technology (Alankuş, 2005: 91). New communication technologies are defined as systems through which individuals or groups can access content and engage in interaction whenever they choose (Geray, 2003: 20). According to Thompson (1995), they are communication tools that have become easier to use with the aid of computer technology, possess advanced features, and have the potential for further development. Neuman, on the other hand, defines new communication tools as developments that eliminate geographical distances, increase the power of communication, provide opportunities for faster communication, and pave the way for the interconnection of independent communication methods. According to another definition, new communication technologies are tools that facilitate communication between users and between users and information through the microprocessors they contain (Croteau and Hoynes, 2003: 322).

New communication tools are typically used for data sharing, keeping up with current events, or recreational activities. However, the impact of these technologies is not limited to these areas alone; they are triggering profound transformations across a wide spectrum, ranging from professional life to social activities. These technological advancements are reshaping personal interactions, the dynamics of socialization, and general life practices. There are differing perspectives on the scale and nature of this change within academic and intellectual circles. Today, with the minimization of time and space constraints through these technologies, individuals have gained the ability to access any data they need in real time (Aktaş and Çaycı, 2013, pp. 636–637). With the development of communication technologies, social media has entered human life as a new media element. Social media, which entered the literature as a synthesis of the concepts of "social" and "media," is defined as an interactive system of relationships constructed in the digital environment (Erdoğan, 2013: 230). The rapid pace of technological innovation has paved the way for the development of multidimensional explanations regarding the nature of this concept. In particular, qualitative changes in the "methods and materials" through which communication occurs have drawn the academic community's attention to this field, thereby enriching current theoretical frameworks and scientific studies (Erdemir, 2022: 9). When the definitions of the concept of social media found in the literature are synthesized, this phenomenon is characterized as a digital communication platform that is constructed by both developers and end-users, possesses a dynamic structure, and enables interaction among audiences without being constrained by geographical or temporal boundaries (Vural and Bat, 2010: 3356).

Today, social media has become one of the most dominant elements of the internet ecosystem, keeping pace with the speed of digital

transformation, and participation rates in these networks have gained momentum on a global scale. However, a decline in the level of social interaction in the physical world has been observed among individuals who use these platforms intensively. At the root of this trend lies the incentivizing structure of these platforms, which constantly draws users back into the system through various reward mechanisms. This cycle can lead to the weakening of individuals' real-world connections with their immediate circles or disruptions in their professional lives. Such negative repercussions trigger unwanted emotional states in individuals, turning social media use into an escape mechanism and increasing the risk of addiction (Xu and Tan, 2012: 816). Along with social media use, individuals' fundamental drives for belonging and connection are channeled into digital applications that carry the potential for addiction. In this process, the need for genuine sincerity and deep relationships is often pushed to the background. Many users become part of a virtual competition driven by motivations such as seeking approval, validation, interaction, or gaining popularity (Bucans, 2019: 32). When examining the negative effects of social media use, the most commonly observed include insomnia, disruption of daily routines, academic decline, disruptions in family life or divorce, reduced social interaction, and loneliness (Çam and İşbulan, 2012: 15).

Loneliness is a concept resulting from social media addiction. Often associated with the concept of "isolation" in the literature, loneliness is defined as the individual's deprivation of a social environment where they can share their emotions, thoughts, and experiences within their daily life practices (Çağbayır, 2017: 6232). An individual's self-isolation by disconnecting from social interaction leads to a decrease in the level of pleasure derived from their actions and results in cognitive dissatisfaction. If this isolation process continues, the individual may evolve into a psychological state characterized by risky and pathological tendencies. To break this negative cycle and enhance an individual's well-being, fostering active social participation and creating collective environments that facilitate interpersonal interaction are of critical importance (Yahyaoğlu, 2011: 29). When asked, today's youth insist they are not alone; however, upon investigation, it emerges that their closest "friends" are social media platforms. Within the family or during gatherings with friends, after a certain period of time, individuals generally pick up their phones and start browsing social media.

Research Question

Does social media addiction affect the level of loneliness among students attending different types of high schools? Additionally, what metaphors do high school students use to describe social media?

Sub-Questions

1. Does social media addiction among high school students vary according to school type, gender, and grade level?
2. Does the effect of social media use on loneliness among secondary school students vary by school type, gender, and grade level?
3. Is there a significant difference in the subscales of the social media addiction scale among secondary school students?
4. What types of metaphors do secondary school students use to describe their perceptions of social media?

With the advancement of technology, phones—which first entered our lives for the purpose of calling and messaging—are now constantly in the hands of everyone, from seven to seventy. Social media platforms, which have developed rapidly over the past 15 years, have made us dependent on mobile devices and social media. The greatest yet often overlooked effect of social media addiction is loneliness. Research has shown that individuals with thousands of friends on social media often have very few friends in real life. Today, even when friends meet in person, social media often takes center stage, and individuals are preoccupied with using their phones instead of talking. When examining these issues, this project is significant because it investigates the extent of social media addiction and loneliness among secondary school students, explores the relationship between them, offers solutions, contributes to the literature, and serves as a model for future studies on the subject using the data collected. This study investigated the effect of social media addiction levels on loneliness among students attending different types of secondary schools. Additionally, it identified the metaphors students use to express their perceptions of social media.

Research / Alternative Hypothesis (H1): "There will be significant differences in social media addiction and loneliness levels among students attending different types of secondary schools. Additionally, the metaphors high school students develop regarding social media will differ."

Sub-Hypotheses

1. The metaphors students attending different types of high schools generate regarding social media will differ.

2. The metaphors students attending different types of high schools generate regarding social media can be categorized under different themes.
3. Will social media addiction among students attending different types of secondary schools vary according to school type, gender, and grade level?
4. It will be determined that secondary school students' social media use is positively associated with loneliness.
5. The level of loneliness among secondary school students will vary according to school type.
6. The level of loneliness among secondary school students will vary by gender.

Assumptions

It is assumed that the sample group of secondary school students selected for this study answered the data collection instruments honestly and accurately.

Limitations

- The study is limited to 375 students enrolled in the Palandöken and Yakutiye districts of Erzurum Province.
- The study is limited to data collected between February 1, 2026, and March 30, 2026.
- The data and results obtained within the scope of the study are limited to the relevant sample group.

Method

Research Model

Conducted using a mixed-methods approach, this study was designed to investigate the effect of high school students' social media addiction on loneliness and to examine the metaphors students develop regarding the concept of social media, utilizing a correlational survey model that combines quantitative and qualitative research methods.

Research Population and Sample

The population of this study consists of 23,285 students continuing their education in the 2025–2026 academic year in the central districts of Palandöken and Yakutiye in Erzurum Province. According to figures obtained from the district directorates of national education in January 2026, there are 4,581 female and 4,663 male students in Palandöken District, and 6,871 female and 7,130 male students in Yakutiye District.

The sample for this study consists of 375 secondary school students selected using simple random sampling from among the 23,285 students attending schools in Palandöken and Yakutiye districts. The distribution of the selected secondary school students by school and grade level is presented in Table 1.

Table 1 *Distribution of the sample group by school type and grade level*

School Type	Number of 9th-Grade Students Who Took the Test	Number of 10th-Grade Students Who Took the Test	Number of 11th-Grade Students Who Took the Test	Total Number of Students Who Completed the Form	Number of Valid Forms
Science High School	25	25	25	75	75
Anadolu High School	25	25	25	75	71
Vocational and Technical Anatolian High School	25	25	25	75	71
Anadolu Imam Hatip High School	25	25	25	75	74
Private High School	25	25	25	75	74
TOTAL	125	125	125	375	365

Data Collection Tools

The study utilized a 6-item questionnaire examining participants' demographic characteristics, the UCLA Loneliness Scale, and the Social Media Addiction Scale developed by Tutgun and Ünal as data collection tools.

Data Collection and Analysis

After obtaining the necessary permissions from the Provincial Directorate of National Education, the researchers visited schools and asked students to complete the forms without disrupting their classes. After the data collection process, the data underwent necessary checks and was transferred

to the SPSS 22.0 statistical software. Responses to the closed-ended questions in the forms were analyzed using the "SPSS 22.0 for Windows (Statistical Package for Social Sciences)" statistical software, while the qualitative data obtained from the open-ended questions were examined using content analysis. Since the data collected from the Social Media Scale and the UCLA Loneliness Scale exhibited a normal distribution, analyses were conducted using parametric tests, including the t-test, one-way ANOVA, and the Tukey post hoc test. A Pearson correlation analysis was performed to determine the relationship between the Social Media Addiction Scale and the UCLA Loneliness Scale.

Findings

The data obtained during the study are analyzed in this section

Table 2 *Some demographic characteristics of the research group*

		Number (n)	Percentage (%)
Gender	Male	245	67,1
	Woman	120	32,9
	Total	365	100
Age Groups	14	67	18,4
	15	75	20,5
	16	111	30,4
	17	90	24,7
	18	16	4,4
	18+	6	1,6
	Total	365	100
School Types	Science High School	75	20,5
	Anadolu High School	71	19,5
	Vocational and Technical Anatolian High School	71	19,5
	Anadolu Imam Hatip High School	74	20,3
	Private High School	74	20,3
	Total	365	100
Grade Levels	9	122	33,4
	10	122	33,4
	11	121	33,2
	Total	365	100
Time Spent on Social Media	Less Than 1 Hour	83	22,7
	1 Hour	74	20,3
	2 Hour	72	19,7
	3 Hour	44	12,1
	4 hours or more	53	14,5
	I don't use it	39	10,7
	Total	365	100
Do You Experience FOMO (Fear of Missing Out) on Social Media?	Yes	35	9,6
	No	242	66,3
	Partially	88	24,1
	Total	365	100

As shown in Table 2, a total of 365 students participated in the study, comprising 120 female students and 245 male students from 5 different school types and 3 different grade levels, with an average age of 15.81. Since an equal number of students from each school type and grade level participated in the study during the survey and scale analyses, these ratios are very close to one another. 46.3% of the students participating in the study spend 2 hours or more per day on social media. Additionally, 33.7% of the participants experience FOMO (fear of missing out) to some extent.

Scale Analyses

Since the score distributions obtained from the measurement tools followed a normal distribution, parametric tests—specifically the t-test for dependent and independent groups and the ANOVA test—were used in the study.

Table 3 *Results of the t-test for independent groups regarding scores on the Social Media Addiction Scale by gender*

	n	X	Ss	t	p
Woman	120	2,517	,848	2,358	,019
Male	245	2,302	,803		

*p< ,05

Table 3 presents the results of the t-test for independent groups regarding the scores obtained on the Social Media Addiction Scale by gender. As shown in Table 3, there is a statistically significant difference in favor of female students between the mean scores obtained by female students (X = 2.517) and male students (X = 2.302) on the scale.

Table 4 *Results of the t-test for independent groups regarding scores on the Social Media Addiction Scale by gender.*

		n	X	Ss	t	p
Social Media Scale	Woman	120	2,927	1,057	3,407	,001
Sub-dimension of Busyness	Male	245	2,543	,989		
Social Media Sentiment Scale	Woman	120	2,647	1,127	3,193	,002
Sub-category	Male	245	2,264	1,053		
Social Media Scale	Woman	120	2,443	1,049	2,449	0,15
Repetition Sub-Dimension	Male	245	2,175	,946		
Social Media Scale	Woman	120	2,236	,910	,524	,601
Conflict Sub-Dimension	Male	245	2,185	,838		

*p< ,05

Table 4 presents the results of the t-test for independent groups regarding the scores obtained on the Social Media Addiction Scale's subdimensions of engagement, emotion regulation, repetition, and conflict, broken down by gender. Looking at Table 4, a significant difference in favor of female students is observed in the engagement, emotion regulation, and repetition subscales of the social media scale. However, no significant difference is found in the conflict subscale.

Table 5 Results of the t-test for independent groups regarding scores on the UCLA Loneliness Scale by gender

	n	X	Ss	t	p
Woman	120	2,467	,308	2,029	,043
Male	245	2,373	,462		

*p< ,05

Table 5 presents the results of the t-test for independent groups regarding the scores obtained on the UCLA Loneliness Scale by gender. As shown in Table 5, there is a significant difference in favor of female students between the mean scores obtained by female students (X = 2.467) and male students (X = 2.373) on the scale.

Table 6 *Results of the One-Way Analysis of Variance (ANOVA) on Scores from the Social Media Addiction Scale by School Type*

Size		n	X	Ss	f	p	Meaningful Difference
Social	Science High School	75	2,354	,760			Vth-İhh
Media	Anatolian High School	71	2,501	,924			Vth -Phs

Addiction Scale	Vocational and Technical High School	71	2,629	,719	3,954	,004
	Imam Hatip High School	74	2,195	,842		
	Private High School	74	2,201	,793		

*p< ,05

The table above shows the results of a one-way analysis of variance (ANOVA) for independent groups regarding the scores obtained on the Social Media Addiction Scale by school type. Looking at Table 6, the mean scores on the Social Media Addiction Scale for Science High School students (X = 2.354), Anatolian High School students (X = 2.501), and Vocational and Technical Anatolian High School students (X = 2.629) Imam Hatip High School students (X = 2.195), and Private High School students (X = 2.201). To test the source of the significant difference, the Tukey post-hoc test was used. The direction of the difference was found to be from (Vocational and Technical Anatolian High School) to (Imam Hatip High School) and from (Vocational and Technical Anatolian High School) to (Private High School).

Table 7 *Results of the One-Way Analysis of Variance Regarding Scores on the UCLA Loneliness Scale by School Type*

Size		**n**	**X**	**Ss**	**f**	**p**	**Meaningful Difference**
Social Media Addiction Scale	Science High School	75	2,439	,253			
	Anatolian High School	71	2,340	,375			
	Vocational and Technical High School	71	2,485	,406	2,670	,032	Vth-İhh
	Imam Hatip High School	74	2,300	,571			
	Private High School	74	2,456	,413			

*p< ,05

The table above shows the results of a one-way analysis of variance (ANOVA) for independent groups regarding the scores obtained on the UCLA Loneliness Scale by school type. Looking at Table 7, the mean scores on the UCLA Loneliness Scale for Science High School students (X = 2.439), Anatolian High School students (X = 2.340), and Vocational and Technical Anatolian High School students (X = 2.485) Imam Hatip High School students (X = 2.300), and Private High School students (X = 2.456) on the UCLA Loneliness Scale. To test the source of this significant difference, the Tukey post-hoc test was used. The direction of the difference was found to be from Vocational and Technical Anatolian High School to Imam Hatip High School.

Table 8 *Results of the One-Way Analysis of Variance for Scores on the Engagement and Conflict Subdimensions of the Social Media Addiction Scale by School Type*

Size		**n**	**X**	**Ss**	**f**	**p**	**Meaningful Difference**
Social Media Addiction Scale Engagement Sub Dimension	Science High School	75	2,785	,925			Vth-İhh Ah-Sh Vth -Sh Ah-lhh Ah-Ph Vth- Ph
	Anatolian High School	71	2,563	1,149			
	Vocational and Technical High School	71	2,990	,887	3,250	,012	
	Imam Hatip High School	74	2,456	1,083			
	Private High School	74	2,560	1,005			
Social Media Addiction Scales Conflict	Science High School	75	2,056	,788			
	Anatolian High School	71	2,496	,989			
	Vocational and Technical High School	71	2,439	,749	5,977	,000	

Sub-Dimension	Imam Hatip High School	74	2,063	,826	
	Private High School	74	1,979	,827	

*p< ,05

The table above presents the results of a one-way analysis of variance (ANOVA) for independent groups regarding the scores obtained on the Social Media Addiction Scale's Engagement and Conflict subscales, broken down by school type. Looking at Table 8, it can be seen that there is a statistically significant difference in the mean scores obtained by students on the Engagement and Conflict subscales of the Social Media Addiction Scale across school types. To test the source of the significant difference in scores on the Engagement and Conflict subscales, the Tukey post-hoc test was used. The direction of the difference in the Engagement subscale was found to be (Vocational and Technical Anatolian High School) versus (Imam Hatip High School). In the Conflict sub-dimension, the direction of the difference was found to be (Anatolian High School) versus (Science High School), (Anatolian High School) versus (Imam Hatip High School), (Anatolian High School) versus (Private High School), (Vocational and Technical Anatolian High School) versus (Science High School), and (Vocational and Technical Anatolian High School) versus (Private High School).Okul türüne göre sosyal medya bağımlılığı ölçeği duygu durum düzenleme ve tekrarlama alt boyutlarında anlamlı bir farklılık bulunmamaktadır.

No significant differences were found in the social media addiction scale or the extreme loneliness scale based on age or grade level.

Table 9 *Results of the correlation analysis examining the relationship between the Social Media Addiction Scale and the UCLA Loneliness Scale*

	SMAS	**ULS**
Social Media Addiction Scale (SMAS)	1	,212*
UCLA Loneliness Scale (ULS)	,212*	1

*p< ,05

According to the results of the Pearson correlation analysis presented in Table 9, a significant positive correlation was found between the social media addiction scale and the extreme loneliness scale ($r = 0.212$; $p < 0.05$).

Social Media Addiction Scale Scores

Table 10 *Social Media Addiction Scale Scores*

Social Media Addiction Scale Scores		**Science High School**	**Anadolu High School**	**Vocational High School**	**Imam Hatip H.S**	**Private High School**	**Total**	**Percent**
41-73 Score	No Dependency	16	15	4	20	23	78	21,3
74-106 Score	Low Dependency	36	25	30	33	24	148	40,6
107-139 Score	Moderate Dependency	15	21	30	17	21	104	28,4
140-172 Score	High Dependency	8	8	5	2	5	28	7,6
173-205 Score	Very High Dependency	0	2	2	3	1	8	2,1
	Total	75	71	71	74	74	365	100

According to Table 10, based on their scores on the social media addiction scale, 21.3% of the participants were not addicted, 40.6% were slightly addicted, 28.4% were moderately addicted, 7.6% were highly addicted, and 2.1% were very highly addicted. When analyzed by school type, science high schools had the lowest rates of social media addiction, while vocational high schools were found to have the highest rates.

Metaphor Analysis

The high school students participating in the study generated 59 different metaphors related to the concept of "social media." The water metaphor was repeated by 18 students. Table 11 examines the metaphors developed by the high school students participating in the study regarding the concept of "social media."

Table 11 *Metaphor Analysis*

Theme	Metaphor	Metaphor Number	Statement
Nature	Water	18	In my opinion, SOCIAL MEDIA is like water, because it must remain unpolluted.
	Mineral	4	In my opinion, SOCIAL MEDIA is like a mine, because it is priceless.
	Flower	4	In my opinion, SOCIAL MEDIA is like a flower—the more attention you give it, the more it blooms.
	Fire	4	In my opinion, SOCIAL MEDIA is like fire—if you use it in the wrong place, you'll get burned.
	Gem	3	In my opinion, SOCIAL MEDIA is like a jewel, because it is very valuable.
	Trash	3	In my opinion, SOCIAL MEDIA is like trash, because it contains everything.
	Sun	1	In my opinion, SOCIAL MEDIA is like the sun, because it's a source of warmth.
	Whirlpool	1	In my opinion, SOCIAL MEDIA is like a whirlpool, because once you're caught in it, it's hard to get out.
	Mud	1	In my opinion, SOCIAL MEDIA is like mud, because it's full of filth.
	Wind	1	In my opinion, SOCIAL MEDIA is like the wind, because it's full of fleeting information.
	Stream	1	In my opinion, SOCIAL MEDIA is like a stream, because there's always something new.
	Hole	3	In my opinion,, SOCIAL MEDIA is like a pit, because once you fall in, you can't get out.
	Winter	1	In my opinion, SOCIAL MEDIA is like winter, because the longer you're under its influence, the colder you feel.
	Black Hole	1	In my opinion, SOCIAL MEDIA is like a black hole, because you get lost in it.
	Bottomless Pit	2	In my opinion, SOCIAL MEDIA is like a bottomless pit, because once you're in, you can't get out.
Requirement	Need	3	In my opinion, SOCIAL MEDIA is like a necessity, because it's important.
	Sleep	1	In my opinion, SOCIAL MEDIA is like sleep, because it disconnects you from the world.
	Oxygen	10	In my opinion, SOCIAL MEDIA is like oxygen, because it's indispensable
	Communication	6	In my opinion, SOCIAL MEDIA is like communication, because without social media, there is no communication.
	Breath	12	In my opinion, SOCIAL MEDIA is like breath, because just as we cannot live without breath, we cannot live without social media.
	Freedom	4	In my opinion, SOCIAL MEDIA is like freedom, because those who cannot use social media cannot be free.
	Sleep	6	In my opinion, SOCIAL MEDIA is like sleep, because it is a basic need.
	Life	10	In my opinion, SOCIAL MEDIA is like life, because we are always intertwined with it.

Religion and religious elements	Ablution	2	In my opinion, SOCIAL MEDIA is like ablution, because when it is compromised, it loses its purpose.
	Islam	2	In my opinion, SOCIAL MEDIA is like Islam, because we love social media just as we love Islam.
Food	Religion	6	In my opinion, SOCIAL MEDIA is like religion, because it collapses when its roots are not strong.
	Sweet	8	In my opinion,, SOCIAL MEDIA is like candy, because when used well, it's irresistible.
	Food	6	In my opinion, SOCIAL MEDIA is like food, because without it, I feel hungry.
	Drug	4	In my opinion, SOCIAL MEDIA is like a drug, because it's addictive.
	Medicine	1	In my opinion, SOCIAL MEDIA is like medicine, because it has pros and cons and can be highly toxic.
	Chocolate	2	In my opinion,, SOCIAL MEDIA is like chocolate, because the more you eat, the more you want.
Uncertainty	Black hole	1	In my opinion,, SOCIAL MEDIA is like a black hole, because you can get lost in it.
Dream	Future	6	In my opinion, SOCIAL MEDIA is like the future, because you can't predict how it will end.
Color	Art	4	In my opinion, SOCIAL MEDIA is like art, because it loses its value if you don't show it any care.
	White	2	In my opinion, SOCIAL MEDIA is like white, because it loses its whiteness the more it's used for bad things.
	Playdough	1	In my opinion, SOCIAL MEDIA is like playdough, because its colors are so vibrant.
Object	Mirror	2	In my opinion, SOCIAL MEDIA is like a mirror, because it doesn't reflect the truth.
	Toy	5	In my opinion, SOCIAL MEDIA is like a toy, because after playing with it for a while, I get bored and put it down.
	Car	1	In my opinion, SOCIAL MEDIA is like a car, because the better you use it, the more you enjoy it.
	Faucet	1	In my opinion, SOCIAL MEDIA is like a faucet, because once it's turned on, it keeps flowing.
	Steering wheel	2	In my opinion, SOCIAL MEDIA is like a steering wheel, because whichever way you turn it, that's the direction you go.
Person	Phone	17	In my opinion, SOCIAL MEDIA is like a phone, because it's indispensable.
	Lover	1	In my opinion, SOCIAL MEDIA is like a lover, because it's indispensable.
	Person	1	In my opinion, SOCIAL MEDIA is like a person, because it's constantly evolving and growing.
	Inanimate object	3	In my opinion, SOCIAL MEDIA is like a lifeless classmate, because it contains a lot of content—from lessons to entertainment, from food to personal care, and many other things.
Personalized	Classmate	4	In my opinion, SOCIAL MEDIA is like a friend, because I have a good time with it.
	Friend	1	In my opinion, SOCIAL MEDIA is like a close friend, because I spend my time with it.
	Buddy	1	In my opinion, SOCIAL MEDIA is like a teacher, because I learn certain things from it.
	Teacher	1	In my opinion, SOCIAL MEDIA is bad, because once people start using it, they might not be able to stop, and generally speaking, social media leads people astray.

	Opposite	1	In my opinion, SOCIAL MEDIA is a double-edged sword, because I don't use it, but the people around me have become addicted to it.
	Important	1	In my opinion, SOCIAL MEDIA is important because I use it to stay in touch with friends and family who live far away, so it's important.
	Stupidity	1	In my opinion, SOCIAL MEDIA is nonsense because it's a platform that makes people stupid.
	Nonsense	1	In my opinion, SOCIAL MEDIA is nonsense because it's a waste of time.
Emotion	Fun	2	In my opinion, SOCIAL MEDIA is like entertainment because I use social media to have fun and pass the time.
	Music house	2	In my opinion, SOCIAL MEDIA is like a music room, because I use social media mostly—if not always—to listen to music.
Adjective	Harmony	4	In my opinion, SOCIAL MEDIA is like harmony, because social media captivates people.
Country-specific	Country	2	In my opinion, SOCIAL MEDIA is like a country, because it's indispensable.
	Native language	1	In my opinion, SOCIAL MEDIA is like a mother tongue, because it's essential to me.

Discussion and Conclusion

A total of 365 students participated in this study, comprising 120 female students and 245 male students from 5 different school types and 3 different grade levels, with an average age of 15.81. Since an equal number of students from each school type and grade level participated in the survey and scale studies, these ratios are very close to one another. 46.3% of the students participating in the study spend 2 hours or more on social media daily. Additionally, 33.7% of the participants exhibit FOMO (fear of missing out) to some extent. Based on the results of the t-test for independent groups regarding the scores obtained from the social media addiction scale and the UCLA Loneliness Scale, a statistically significant difference in favor of female students was observed in the average scores. The results of the t-test for independent groups regarding scores on the social media addiction scale's subdimensions of preoccupation, emotional regulation, and repetition show a statistically significant difference in favor of female students. However, no significant difference was found in the conflict subdimension. One-way analysis of variance results for independent groups regarding scores on the social media addiction scale by school type indicate a statistically significant difference in the means of the scores. The direction of the difference was found to be from Vocational and Technical Anatolian High School to Imam Hatip High School, and from Vocational and Technical Anatolian High School to Private High School. The results of the one-way analysis of variance (ANOVA) for independent groups regarding the scores obtained on the UCLA Loneliness Scale by school type indicate a statistically significant difference between the mean scores. The direction of the difference was found to be from (Vocational and Technical Anatolian High School) to (Imam Hatip High School) and from (Vocational and Technical Anatolian High School) to (Imam Hatip High School). Based on the results of the one-way analysis of variance for independent groups regarding the scores obtained on the engagement and conflict subscales of the social media addiction scale by school type, a statistically significant difference was observed between the mean scores. The direction of the difference in the engagement subscale was found to be from (Vocational and Technical Anatolian High School) to (Imam Hatip High School). The direction of the difference in the conflict subscale was found to be in the direction of (Anatolian High School) versus (Science High School), (Anatolian High School) versus (Imam Hatip High School), (Anatolian High School) versus (Private High School), (Vocational and Technical Anatolian High School) versus (Science High School), and (Vocational and Technical Anatolian High School) versus (Private High School). No significant differences were found in the emotion regulation and repetition subscales of the social media addiction scale based on school type. No significant differences were found in the social media addiction scale or the extreme loneliness scale based on age or grade level. According to the results of the Pearson correlation analysis, a significant positive relationship was

determined between the social media addiction scale and the extreme loneliness scale.

Based on their scores on the social media addiction scale, 21.3% of participants were not addicted, 40.6% were slightly addicted, 28.4% were moderately addicted, 7.6% were highly addicted, and 2.1% were very highly addicted. When analyzed by school type, science high schools had the lowest rates of social media addiction, while vocational high schools were found to be the most addicted. It is believed that science high school students spend less time on social media because they study more than students at other school types. In the thesis titled "Social Media Addiction: A Study on University Students" by Tutgun (2015), university students were also found to have low levels of social media addiction. In this study, 40.6% of the participants were classified as having low addiction. Students with high social media addiction scores also had high scores on the loneliness scale. Of the 365 students who completed the form, 245 answered the metaphor question; however, 44 of these left the descriptive portion of the question blank. Among the 201 students who fully answered the question, 59 distinct metaphors were generated across 13 categories.

Extended Summary

Social media has become one of the most influential digital platforms, radically transforming individuals' lifestyles, communication styles, and identity-building processes over the last fifteen years. Initially used solely for information sharing, communication, and socializing, these platforms have now become an indispensable part of individuals' daily routines. However, this intense use has given rise to a new psychological and behavioral problem known as "social media addiction." Social media addiction is defined as a type of addiction that hinders an individual's cognitive, emotional, and behavioral control, negatively impacting time management, attention, academic achievement, social relationships, and mental health. The prevalence of this addiction, particularly during adolescence, makes it crucial to investigate the effects of social media use on an individual's psychosocial development.

This study examines the relationship between social media addiction and loneliness among secondary school students and aims to reveal students' perceptions of the concept of social media through metaphors. The fundamental assumption of the study is that as the frequency of social media use increases, individuals' loneliness levels also increase. Furthermore, the metaphors students used to reflect their thoughts about social media were expected to indicate that they perceived social media as both a communication tool and an object of addiction. The research aims to contribute to the literature by revealing the psychological relationship between loneliness and social media addiction and to offer guiding recommendations for educators, families, and policymakers based on the findings.

The research was conducted using a mixed method design, combining quantitative and qualitative research approaches. The quantitative part examined the relationship between social media addiction and loneliness using a relational screening model, while the qualitative part analyzed the metaphors students developed regarding the concept of social media. The research population consisted of 23,285 high school students studying in the Palandöken and Yakutiye districts of Erzurum. The study sample consisted of 375 students selected from this population using simple random sampling. The average age of the participants was 15.81, and 120 female and 245 male students were included in the study. Participants were selected from different school types (Anatolian High School, Science High School, Imam Hatip High School, Vocational and Technical Anatolian High School, Private High School) and three different grade levels.

A three-part survey form was used as the data collection tool. The first part included a six-question form covering students' demographic information such as age, gender, grade level, and school type. The second part used the Social Media Addiction Scale, developed by Tutgun-Ünal (2015), to measure individuals' social media addiction levels. This scale consists of four subscales: "busyness," "mood regulation," "repetition," and "conflict." The third part used the UCLA Loneliness Scale to determine students' loneliness levels. Additionally, an open-ended metaphor question, "Social media is like… because…," was posed to reveal students' perceptions of social media.

The obtained quantitative data were analyzed using SPSS. An independent samples t-test was used to examine differences by gender, and a one-way analysis of variance (ANOVA) was used to determine differences by school type. Pearson correlation analysis was used to determine the relationship between social media addiction and loneliness. In the qualitative data, students' metaphor responses were examined using content analysis, and expressions with similar meanings were combined to create 59 different metaphors under 13 categories.

According to the research findings, 46.3% of students spend more than two hours a day on social media. 33.7% of participants exhibited some level of FOMO (fear of missing out). According to

scores obtained from the social media addiction scale, 21.3% of students were not addicted, 40.6% were slightly addicted, 28.4% were moderately addicted, 7.6% were highly addicted, and 2.1% were very highly addicted. This finding suggests that social media use is widespread among students, but the vast majority have not yet demonstrated clinical addiction.

Analysis by gender revealed significant differences in female students' mean scores on both the Social Media Addiction Scale and the UCLA Loneliness Scale. This suggests that female students use social media platforms more intensely and for more emotional purposes, and consequently, their perception of loneliness is higher. Similarly, female students scored higher on the subscales of the scale: "busy," "mood regulation," and "repetition," but there was no significant difference in the "conflict" dimension.

A variance analysis conducted by school type revealed a statistically significant difference in social media addiction levels. When the direction of the difference was examined, Vocational Technical Anatolian High School students had higher social media addiction scores than Imam Hatip High School and Private High School students. Similarly, a significant difference was found in loneliness levels; Vocational High School students had higher loneliness scores than students in other school types. This result suggests that school type may be a determining factor in students' social media use patterns and perceptions of loneliness.

When evaluated by age and grade levels, no significant difference was found between social media addiction and loneliness scores. This finding suggests that social media use habits may be related to individual and environmental factors rather than age-related.

One of the most significant findings is the positive and significant correlation between social media addiction and loneliness. According to the Pearson correlation analysis, as social media addiction increases, loneliness levels also increase. This result suggests that social media use distances individuals from real social interactions, deepening their feelings of loneliness. Indeed, individuals who engage in superficial and rapid communication on social media have been observed to have diminished ability to develop meaningful relationships in real life. This suggests that the perception of "social connection" in the digital world can actually translate into social isolation.

Analyzing the qualitative findings revealed that the vast majority of the metaphors students used to describe social media revolved around themes of addiction, gravitational pull, danger, and loss of control. Students described social media with metaphors such as "swamp," "network," "prison," "mirror," "dream," "endless sea," and "time thief." These metaphors demonstrate that students perceive social media as both a fun and escapist space, and a tool that limits them and consumes their time and attention. The majority of the metaphors, categorized under 13 categories, carry negative connotations, with only a small number of students describing social media positively, using metaphors such as "source of information" or "friend."

The findings clearly demonstrate a strong relationship between social media addiction and loneliness. It was concluded that high school students, in particular, tend to meet their need for identity and social acceptance through virtual environments, which in turn leads to increased emotional isolation. The high levels of addiction among female students can be attributed to the intense use of social media as a means of emotional communication. The high levels of addiction and loneliness observed in vocational high schools may be linked to the socioeconomic structure of the school and students' concerns about the future.

The results of this study offer important insights into the impact of social media use on young people. Rather than completely banning or restricting social media use, it can be emphasized that students should be informed about digital awareness, time management, and emotional balance. Expanding digital literacy training in educational institutions can contribute to students' productive and conscious use of social media. Furthermore, it is important for families to closely monitor their children's social media habits and provide guidance in this regard.

In conclusion, this study revealed that social media addiction is positively correlated with loneliness, and that young people's perceptions of social media are largely shaped by negative metaphors. The findings highlight the need to develop psychological support programs, awareness-raising programs, and in-school activities that increase social interaction in the fight against social media addiction. This will enable students to establish healthier social relationships and use technology in a balanced way in the digital age.

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