

## Research Article

### Social Media Addiction of High School Students: Üsküdar District Sample in Turkey

Nevzat Tarhan<sup>1</sup>, Aylin Tutgun-Ünal<sup>2\*</sup>, Çiğdem Yektaş<sup>3</sup>, İbrahim Şahbaz<sup>4</sup>, Fehmi Gür<sup>5</sup> and Betül Belkis Okutan<sup>5</sup>

<sup>1</sup>Department of Psychiatry, Npistanbul Brain Hospital & Uskudar University, Istanbul, Turkey

<sup>2</sup>Scale Development Coordinatorship & Department of New Media and Journalism, Uskudar University, Istanbul, Turkey

<sup>3</sup>Child Adolescent Mental Health and Diseases Clinic, Npistanbul Brain Hospital & Uskudar University, Istanbul, Turkey

<sup>4</sup>Department of Eye Diseases, Acibadem Hospital, Istanbul, Turkey

<sup>5</sup>District Directorate of National Education, Uskudar, Istanbul, Turkey

#### Abstract

**Rationale:** The increasing use of social media on a global scale has brought with it some problems in the digital age we live in. With the reporting of many problems arising from the excessive use of social media and disrupting the daily life of the individual, the direction of research has shifted predominantly to psychological studies. One of these areas of investigation is social media addiction. It is reported in research that young people who use social media intensively are in danger, and studies conducted with students are especially important.

**Methodology:** In this research, social media addiction was examined within the scope of Üsküdar, a district of Istanbul Province in Turkey. 1453 students attending 8 different types of high schools in Üsküdar participated in the research. The comparative survey model was used in the study. The "Social Media Addiction Scale" developed by Tutgun-Ünal and Deniz (2015) and the demographic information form developed by the researchers were used as data collection tools, and the social media addiction of the students was examined according to various demographic characteristics. Furthermore, screen viewing, social media usage preferences, and the frequency of experiencing headaches and sleep disturbances were analyzed.

\*Corresponding author: Aylin Tutgun-Ünal, Scale Development Coordinatorship & Department of New Media and Journalism, Uskudar University, Istanbul, Turkey, Tel: +90 2164002222; E-mail: aylin.tutgununal@uskudar.edu.tr

**Citation:** Tarhan N, Tutgun-Ünal A, Yektaş Ç, Şahbaz İ, Gür F, et al. (2023) Social Media Addiction of High School Students: Üsküdar District Sample in Turkey. J Addict Addictv Disord 10: 125.

**Received:** June 07, 2023; **Accepted:** June 20, 2023; **Published:** June 27, 2023

**Copyright:** © 2023 Tarhan N, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

**Results:** In the study, students' social media addiction was found to be at a low level. In the sub-dimensions, moderate addiction on social media was found among students. Some of the other results reached in the research are as follows: (a) Social media addiction of female students is higher than that of male students, (b) Social media addiction of students who are in the lower grades is higher than students from higher grades, (c) Social media addiction differs from school to school, (d) As the daily social media usage time increases, social media addiction increases, (e) Students look at the screen 30-40 times per hour. In addition, it was revealed that variables such as headache sleep disturbance and perception of loneliness created a differentiation in social media addiction in high school students.

**Discussion:** Despite the low level of social media addiction in high school students in the study, the determination of a moderate level of addiction in the sub-dimensions showed that addiction should be examined in detail within the scope of the dimensions. Again, the difference in social media addiction from school to school revealed that it is important to conduct addiction studies with small groups and attention should be paid to generalizations. Based on the results, some suggestions were given at the end of the research.

**Keywords:** Addiction; High school students; Social media; Social media addiction; Turkey; Üsküdar

#### Introduction

The increasing use of social media on a global scale, which has gained the most widespread use of interactive applications that emerged with Web 2.0 technologies, has brought about important changes in people's lives. Social media impacted every aspect of life. It has been a matter of debate whether the intensive use of social media applications, which are easily accessed through mobile technologies, affects the sociological, psychological and personality traits of people. Global reach, becoming a way of doing business, communication, entertainment, education, socialization, meeting new people and providing collaborations are among the motivations for using social media [1,2]. Usage motivations vary from individual to individual. People use social media in a goal-oriented way and they get satisfaction from these uses. The uses and gratifications theory confirms this [3]. In other words, people tend to use the applications they enjoy more, as they feel pleasure. In cases of excessive use, people can stay connected to social media for 4 hours or more a day and this use can harm them and disrupt their daily lives [4,5].

It is possible to classify the impact power of social media under two headings: individual effects and social effects. Individual effects can be observed within the scope of the manifestation of social media posts on people's emotions, thoughts and behaviors. Sometimes, it can create mental preoccupation in cases where it cannot turn into behaviors. This issue is more related to social media psychology. The psychological effects of excessive use of social media can return to people with many negative effects such as preoccupation, emotional deformation, depression, anxiety disorder and narcissism [6,7].

When the literature is examined, many problems arising from the excessive use of social media are reported. As the duration of social

media use increases, life satisfaction decreases [8]. Again, studies indicate that the daily life of the individual is disrupted when social media use cannot be limited. It is found that insufficient and poor quality sleep, postponement of work, problems with people in social and private life, excessive mental preoccupation, inability to limit use, desire when not in access, repetitive thoughts about limiting internet use [9-16]. There is a need for determinants that will reveal these problems psychometrically, research with different samples and measurement tools. So, direction of the studies has shifted to social media addiction and its measurement [17-23].

Since social media applications are accessed over the internet, it is necessary to examine some concepts used to describe excessive internet use behavior in order to understand the subject. Accordingly, many studies conducted with the concepts of internet addiction [24-29], problematic internet use [30,31], pathological internet use [32,33], generalized problematic internet use [34,35]. The concept of internet addiction was first introduced by Goldberg in 1996. Since virtual addictions are not included in the DSM-IV diagnostic list, in which the American Psychiatric Association classifies impulse control disorders not elsewhere classified, such as substance abuse or “pathological gambling”, researchers first chose the adaptation method for diagnosis [36]. Based on the substance addiction criteria in the DSM-IV, Goldberg defines internet addiction as “inappropriate internet use that occurs at any time within a 12 month period, manifests with at least three of the symptoms, and causes clinically significant impairment or distress” Then Young [28] created an 8-item diagnostic list by adapting the diagnostic criteria of internet addiction to the criteria for pathological gambling that is not related to substance use in DSM-IV, and if the person meets 5 of the criteria, the diagnosis can be made. Later researchers expanded their diagnostic lists and formed the core of research on cyber addiction.

Today, as the symptoms of internet addiction or problematic internet use have started to be seen for widely used social media platforms, studies have emphasized first Facebook addiction [9,37-39] and then general social media addiction [40-42]. Nowadays, experts report that social media addiction is more harmful than alcohol and tobacco addiction, and they even emphasize that the desire to be on social networks is higher than the desire to sleep and rest, and this situation is a social disaster [43,44]. Considering that addiction is an attachment disorder, the function of social media is better understood. The increase in aimless and unhappy individuals who suffer from loneliness in close relationships and experiences has brought virtual reality to the forefront as an object of attachment. Today, when the support of family and social norms has decreased, digital technology has become an object of attachment. This study was planned to analyze the digital age that leads the person to false and temporary pleasure.

### Social media addiction

Social media addiction is defined as “a psychological problem that develops with cognitive, affective and behavioral processes and causes problems such as occupation, mood regulation, relapse and conflict in many areas of daily life such as private, work/academic and social areas” [22]. Based on this definition, the first social media addiction scale in Turkey was developed and it was aimed to examine the problems created by social media in all areas of life. It is a 5-point Likert-type measurement tool, consisting of 41 items and 4 factors, that is used to determine the levels of social media addiction [22]. After this study, many scales have been developed on social media in Turkey and internationally. These scales were produced by adapting

and developing scales previously developed using internet addiction and other concepts on this subject for social media addiction. When the literature is examined, it is seen that many research and thesis studies have been carried out by applying the developed measurement tools to different groups [45-49].

A study examined social media addiction in individuals with other disorders such as ADHD [41]. Another study conducted with 473 high school students examined that the relationship between social media addiction and academic procrastination behavior and the results showed that, a moderate level of social media addiction was found in women and men, and academic procrastination behavior was higher in men due to social media use [50].

According to studies, some additional diagnoses are effective in determining social media addiction. Since the duration of daily use alone is not enough, different reasons affecting addiction may vary from person to person. For example, it is stated that young people with narcissistic personality traits are more prone to develop social media addiction [51]. On the other hand, many studies showed that there is a positive relationship between loneliness and social media addiction. As loneliness increases, social media addiction increases [52,53]. On the other hand, in a study reporting that social media has an egocentric structure, it is emphasized that this structure facilitates the formation of social media addiction and makes its excessive use attractive [15]. In addition, some researchers argue that a combination of biological, psychological and social factors, also referred to as a biopsychosocial approach, will contribute to the etiology of addiction and also to social media addiction. In this context, it is seen that social media addiction meets the etiological framework of other substance addictions and behavioral addictions. Thus, it is important to investigate the determinants and additional diagnoses of social media addiction. In addition, the factors that are effective in the formation of social media addiction symptoms are personality traits such as selfishness, introversion/extraversion, neuroticism, narcissism, and extreme conscientiousness, the experience of loneliness, the desire to be liked and demographic characteristics (age, gender, work/school status, private life, social life). By so, there is a need for current studies in which all factors are studied together.

Social media addiction research is carried out especially with young people. According to Erikson [54], the most basic developmental task of youth is to achieve close relationships with peers of the same or opposite sex. Today, the fact that young people meet this need through social media instead of using face-to-face communication skills has been effective in focusing researchers on young people. In this study, it is focused on the multidimensional examination of social media addiction of high school students.

### Purpose

The aim of the research is to examine the social media addictions of high school students in Üsküdar in terms of various variables. For this purpose, answers to the following research questions were sought.

- What are the social media addiction levels of high school students?
- Does social media addiction of high school students differ by gender?
- Does social media addiction of high school students differ by grade?

- Does social media addiction of high school students differ according to daily usage time?
- Does social media addiction of high school students differ by the most used social media application?
- Does social media addiction of high school students differ by their like preferences?
- Does social media addiction of high school students differ by their screen viewing habits?
- Does social media addiction of high school students differ by the frequency of sleep disturbances?
- Does social media addiction of high school students differ by the frequency of headaches?
- Does social media addiction of high school students differ by the perception of loneliness?
- What are the social media contents that high school students like/dislike?

## Materials and Methods

### Ethical approval

This study received ethical approval from the Uskudar University Non-Interventional Research Ethics Committee report number of 61351342/November 2021-22 (29 November 2021). This study was performed according to the principles set out by the Declaration of Helsinki for the use of humans in experimental research.

### Research model

The aim of the research is to examine the social media addictions of high school students in Üsküdar District of Istanbul in terms of various variables. Therefore, the comparative survey research model was used. According to Karasar, survey research is used to reveal the existing situation in a universe consisting of many elements without the aim of creating a situation change. In the comparative survey model, it is aimed to reveal whether there is a difference between the groups [55].

### Participants

The age range of 1453 high school students participating in the research was between 14 and 18, with an average age of 15,5. 55,7% are women (809 people), 44,3% are men (644 people). 7% of the participants are in preparatory grade; 28,8% are in 1st grade, 30,1% are in 2nd grade, 26,2% are in 3rd grade, 7,9% are in 4th grade. The schools in Üsküdar included in the research are Haydarpaşa Anatolian High School, 15 July Veterans Anatolian High School, Çamlıca Girls High School; Kandilli Girls High School, Haydarpaşa Vocational and Technical Anatolian High School, Zeynep Kamil Vocational and Technical Anatolian High School, Ayşe Hümeysra Ökten Girls Anatolian Imam Hatip High School, Henza Akın Çolakoğlu Anatolian Imam Hatip High School.

### Data collection tools

The questionnaire which included the Social Media Addiction Scale (SMAS) and a demographic information form were used as data collection tools in the research.

**Demographic Information Form:** In the study, demographic characteristics (age, gender, school name), social media habits and preferences (daily usage time, the mostly used social media application, preferences, likes/dislikes, etc.), screen viewing habits, frequency of sleep disturbances, frequency of headaches and loneliness perception information were collected with a personal information form developed by the researchers.

**Social Media Addiction Scale (SMAS):** The Social Media Addiction Scale (SMAS) was developed by Tutgun-Ünal and Deniz in 2015 in order to measure people's social media addiction, and all validity and reliability studies were carried out. Consisting of 41 items and four factors (occupation, mood regulation, relapse, and conflict), SMAS is a 5-point Likert-type scale graded as "Always", "Often", "Sometimes", "Rarely" and "Never" [22]. All factors explained 59% of the total variance in SMAS. The Cronbach Alpha value of the scale was found to be .96. The highest score that can be obtained from the scale is 205, and the lowest score is 41. Sub-scales can be evaluated separately. Items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 in the measurement tool are related to the "Occupation" dimension and measure the effect of social media on cognitive engagement. Items 13, 14, 15, 16 and 17 in the measurement tool are related to the "Mood Modification" dimension and measure the emotional impact of social media. Items 18, 19, 20, 21 and 22 in the measurement tool are related to the "Relapse" dimension and measure whether the person wants to control social media use or not and continues to use it to the same extent. Items 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40 and 41 in the measurement tool are related to the "Conflict" dimension and measure the impact of the problems that social media causes in a person's life.

### Criteria for Inclusion/Exclusion

While creating the participants in the research, high school students studying in preparatory class and above were included. Students under 14 years of age and those who do not attend high school were not included in the study.

### Procedures

**Pilot Application:** The comprehensibility of the questions was tested by applying the online questionnaire, which was prepared as a data collection tool in the research, to 15 people for trial purposes. Firstly, a trial application was made to high school students. It was determined that no problem was encountered during the pilot application, and then the field application was started.

**Application of Survey:** The online questionnaire including Demographic Information Form and SMAS was applied to high school students on a voluntary basis on 1st of January-15th of June 2022, after the approval of the Ethics Committee dated 29 November 2021. For the participants, the questionnaire was shared on digital platforms, via e-mail and sms. Data were collected by applying the online survey on a PC under the supervision of a school administrator and teachers, on a voluntary basis.

### Data processing and statistical analysis

The interval obtained by considering the lowest score and the highest score that can be obtained from the SMAS was divided into 5. Thus, addiction levels were rated as "No Addiction", "Low Addiction", "Moderate Addiction", "High Addiction" and "Very High Addiction" [22]. The same procedure was done for the sub-scales. In

the statistical analysis of this research, addiction levels according to the scores in table 1 were used.

Level of Addiction	SMAS (Total Scale)	Occupation	Mood Modification	Relapse	Conflict
No Addiction	41-73	12-21	5-8	5-8	19-33
Low Addiction	74-106	22-31	9-12	9-12	34-48
Moderate Addiction	107-139	32-41	13-16	13-16	49-63
High Addiction	140-172	42-51	17-20	17-20	64-78
Very High Addiction	173-205	52-60	21-25	21-25	79-95

**Table 1:** Social media addiction scale & sub-scales score evaluation.

SPSS 26.0 statistical program was used in the analysis of the data, and techniques such as frequency analysis, t-test and variance analysis were used.

## Results

The data collected from 1453 high school students to whom SMAS was applied are explained in this section with statistical findings within the scope of research questions. While determining the addiction levels of the students, the score distributions in Table 1 were taken into account.

### Findings regarding the social media addiction levels of high school students

In this section, analyzes on the level of social media addiction of students studying at high schools in Üsküdar were made in line with the scores obtained from the SMAS total and sub-scales. The results are given in table 2.

Sub-Scales/Scale	n	$\bar{X}$	sd
Occupation	1453	31.91	11.44
Mood modification	1453	12.94	6.10
Relapse	1453	10.27	5.39
Conflict	1453	37.55	17.07
Social media addiction	1453	92.43	35.15

**Table 2:** Levels of social media addiction.

When table 2 is examined, it is seen that the average score obtained from the SMAS total is 92.43. Accordingly, low addiction on social media was found among high school students. The average score obtained from the 2-item occupation sub-scale was 31.91, indicating that high school students are moderately dependent on social media in the dimension of occupation. The score obtained from the 5-item mood modification sub-scale was 12.94, indicating that high school students are moderately dependent on social media in mood regulation. The score obtained from the 5-item relapse sub-scale was 10.27, indicating that high school students were less dependent on social media in the relapse dimension. The score obtained from the 19-item conflict sub-scale was 37.55, indicating that high school students were less dependent on social media in the conflict dimension.

### Findings regarding the differentiation of social media addiction of high school students by gender

In order to determine whether the social media addictions of high school students differ according to gender, the scores obtained from the social media addiction scale and sub-scales were analyzed with the independent group t-test. The results are given in table 3.

Sub-Scales/Scale	Gender	n	$\bar{X}$	sd	df	t	p
Occupation	Female	809	34.03	11.36	1451	8.09	0.00
	Male	644	29.25	10.99			
Mood modification	Female	809	13.80	6.21	1451	6.11	0.00
	Male	644	11.85	5.78			
Relapse	Female	809	11.00	5.52	1451	5.78	0.00
	Male	644	9.37	5.09			
Conflict	Female	809	39.44	17.38	1451	4.78	0.00
	Male	644	35.16	16.39			
Social media addiction	Female	809	98.25	35.13	1451	7.19	0.00
	Male	644	85.12	33.80			
Total		1453					

**Table 3:** T-test results for the differentiation of social media addiction by gender.

When table 3 is examined, it has been revealed that high school students' social media addiction differ ( $p < 0.05$ ) by gender. Accordingly, social media addiction levels among female students were found to be higher than males in both the total scale and sub-scales.

### Findings regarding the differentiation of social media addiction of high school students by grade

In order to determine whether the social media addictions of high school students differ according to the grade, the data were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups. The results are given in table 4.

Scale/Sub-Scales	Grade	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	Prepatory	102	31.17	11.14	2.45	0.044	Grade 1 > Grade 3
	Grade 1	418	33.07	11.79			
	Grade 2	438	32.04	11.82			
	Grade 3	380	30.61	10.66			
	Grade 4	115	32.19	11.17			
Mood modification	Prepatory	102	11.49	5.96	4.82	0.001	Grade 1 > Grade 3
	Grade 1	418	13.78	6.35			
	Grade 2	438	12.97	6.14			
	Grade 3	380	12.25	5.69			
	Grade 4	115	13.35	6.05			



Social media addiction	Preparatory	102	87.78	33.38	2.97	0.019	Grade 1>Preparatory Grade 1>Grade 3
	Grade 1	418	96.62	37.26			
	Grade 2	438	92.44	35.51			
	Grade 3	380	88.81	32.05			
	Grade 4	115	93.24	35.91			
Total	1453						

**Table 4:** Variance analysis results for the differentiation of social media addiction by grade.

When table 4 is examined, it has been revealed that high school students' social media addiction does not differ ( $p < 0.05$ ) by grade. Average scores and LSD scores showed that the group with the highest social media addiction is the 1st grade high school students and there is a difference compared to the 3rd grade students. On the other hand, it is seen that the social media addiction of those who go to the preparatory grade differs in the total scale and is at a lower level than those who go to the 1st year. Addiction level increases in the 1st grade ( $p < 0.05$ ). No differentiation was found according to the grade in the Relapse and Conflict sub-scales ( $p > 0.05$ ).

### Findings regarding the differentiation of social media addiction of high school students by daily usage time

In order to determine whether the social media addictions of high school students differ according to the daily usage time, the data were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups. The results are given in table 5.

When table 5 is examined, it has been revealed that high school students' social media addiction differs significantly ( $p < 0.01$ ) according to daily usage time. The results of the LSD analysis showed that as the duration of daily social media use increased, social media addiction also increased. Thus, considering the average scores, it can be said that those who use social media for more than 7 hours a day are more dependent on social media (Moderate addiction) than those who use less than 1 hour, 1-3 hours or 4-6 hours a day ( $X = 120.46$ ).

### Findings regarding the differentiation of social media addiction of high school students by the most used social media application

In order to determine whether the social media addictions of high school students differ according to the most used social media application, the data were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups (Table 6).

When table 6 is examined, it has been revealed that high school students' social media addiction differ ( $p < 0.05$ ) by the most used social media application. According to the results of the intergroup difference test, social media addiction in the total and sub-scales of the social media addiction scale was mostly seen in high school students using TikTok ( $X = 101.55$ ). Instagram was observed in second place ( $X = 94.55$ ), followed by YouTube in third place ( $X = 84.87$ ). On the other hand, those who use other social media applications were not included in the comparison test because the number of groups was less than 30. Accordingly, the use of Facebook ( $n = 8$ ), Snap Chat ( $n = 27$ ), Pinterest ( $n = 29$ ) is low among high school students in terms of first-order usage.

Scale/ Sub-Scales	Daily Use (Hour)	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	Less than 1 hour	127	22.95	8.92	87.80	0.000	Less than 1 hour<1-3 hours<4-6 hours<More than 7 hours
	1-3 hours	736	29.66	9.76			
	4-6 hours	480	35.75	11.42			
	More than 7 hours	110	40.58	12.95			
Mood modification	Less than 1 hour	127	9.27	4.82	58.27	0.000	
	1-3 hours	736	11.91	5.65			
	4-6 hours	480	14.44	6.05			
	More than 7 hours	110	17.48	6.23			
Relapse	Less than 1 hour	127	8.25	4.76	20.81	0.000	
	1-3 hours	736	9.63	4.84			
	4-6 hours	480	11.50	5.82			
	More than 7 hours	110	11.62	6.16			
Conflict	Less than 1 hour	127	29.11	13.95	66.74	0.000	
	1-3 hours	736	33.72	13.63			
	4-6 hours	480	42.62	18.50			
	More than 7 hours	110	50.77	20.77			
Social media addiction	More than 1 hour	127	68.99	28.21	83.67	0.000	
	1-3 hours	736	84.71	28.96			
	4-6 hours	480	104.05	36.38			
	More than 7 hours	110	120.46	40.42			
Total		1453					

**Table 5:** Variance analysis results for the differentiation of social media addiction by daily.

### Findings regarding the differentiation of social media addiction of high school students by like preference

In order to determine whether the social media addictions of high school students differ according to their like preferences, the data were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups. The results are given in table 7.

When table 7 is examined, it has been revealed that high school students' social media addiction differ ( $p < 0.05$ ) by their like preferences. As a result of the comparison between the groups, the social media addiction of the students who liked by the person was found to be significantly higher than the other groups both in the total scale and in the sub-scales ( $X = 102.08$ ). Social media addiction of those who liked the content was found to be higher than those who did not like ( $X = 93.34$ ).

Scale/ Sub-Scales	Social Media App.	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	YouTube	377	29.17	10.20	11.15	0.000	YouTube< Instagram< TikTok
	Twitter	52	30.61	12.74			
	Instagram	855	32.92	11.68			
	TikTok	110	34.08	11.90			
Mood modification	YouTube	377	12.04	5.99	5.53	0.001	
	Twitter	52	13.53	6.35			
	Instagram	855	13.06	6.06			
	TikTok	110	14.53	6.25			
Relapse	YouTube	377	9.29	4.75	6.17	0.000	
	Twitter	52	10.26	6.30			
	Instagram	855	10.54	5.48			
	TikTok	110	11.27	5.92			
Conflict	YouTube	377	34.63	14.49	6.39	0.000	
	Twitter	52	36.46	19.02			
	Instagram	855	38.32	17.73			
	TikTok	110	41.66	19.61			
Social media addiction	YouTube	377	84.87	29.94	9.41	0.000	
	Twitter	52	90.88	39.77			
	Instagram	855	94.55	36.41			
	TikTok	110	101.55	37.96			
Total		1394					

**Table 6:** Variance analysis results for differentiation of social media addiction by the most used social media application.

Scale/ Sub-Scales	Like Preferences	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	I like by person.	123	34.86	12.09	14.65	0.000	I like by person>I like by content> I do not like, I just browse.
	I like by content.	1057	32.35	11.26			
	I do not like, I just browse.	273	28.89	11.29			
Mood modification	I like by person.	123	14.06	6.15	14.69	0.001	
	I like by content.	1057	13.25	6.04			
	I do not like, I just browse.	273	11.21	5.99			
Relapse	I like by person.	123	11.94	6.23	7.48	0.001	
	I like by content.	1057	10.23	5.30			
	I do not like, I just browse.	273	9.70	5.21			
Conflict	I like by person.	123	41.57	18.67	5.99	0.003	
	I like by content.	1057	37.68	16.90			
	I do not like, I just browse.	273	35.23	16.66			
Social media addiction	I like by person.	123	102.08	38.56	12.04	0.000	
	I like by content.	1057	93.34	34.38			
	I do not like, I just browse.	273	84.54	35.10			
Total		1453					

**Table 7:** Variance analysis results for differentiation of social media addiction by like.

### Findings regarding the differentiation of social media addiction of high school students by the number of screen views per hour

In order to determine whether the social media addictions of high school students differ according to the number of screen views per hour, the data were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups. The

results are given in table 8. Accordingly, number of screen views per hour was compared with social media addiction.

When table 8 is examined, it has been revealed that high school students' social media addiction differ ( $p<0.05$ ) by the number of screen views per hour. Social media addiction of those who look at the PC/phone/tablet screen 30-40 times in 1 hour was found to be the highest in the total and sub-scales of the scale compared to those who

Scale/ Sub-Scales	Screen Views per Hour	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	5-10 times	662	28.91	9.96	40.24	0.000	
	10-20 times	403	33.47	11.11			
	20-30 times	188	36.38	11.45			
	30-40 times	158	37.55	13.72			
	I am not looking	42	23.02	6.71			
Mood modification	5-10 times	662	11.66	5.68	23.67	0.000	
	10-20 times	403	13.48	6.09			
	20-30 times	188	14.56	5.94			
	30-40 times	158	15.77	6.42			
	I am not looking	42	10.00	5.80			
Relapse	5-10 times	662	9.58	4.88	10.65	0.000	30-40 times>20-30 times>10-20 times>5-10 times>I am not looking
	10-20 times	403	10.61	5.54			
	20-30 times	188	10.95	5.42			
	30-40 times	158	12.13	6.59			
	I am not looking	42	8.04	3.94			
Conflict	5-10 times	662	33.73	14.08	35.15	0.000	
	10-20 times	403	38.32	16.43			
	20-30 times	188	41.30	17.40			
	30-40 times	158	49.34	23.27			
	I am not looking	42	29.14	10.74			
Social media addiction	5-10 times	662	83.58	29.81	38.50	0.000	
	10-20 times	403	95.85	33.94			
	20-30 times	188	103.17	34.27			
	30-40 times	158	113.95	45.84			
	I am not looking	42	70.02	22.85			
	Total	1453					

**Table 8:** Differentiation of social media addiction by the number of screen views per hour.

look at it less ( $X=113.95$ ). As a result of the intergroup difference tests, as the number of screen views per hour increases in the total scale and in the sub-scales, the level of social media addiction increases. As the number of screen views decreases, the level of social media addiction decreases. Those who said they do not look at the screen in an hour were only 42 and they got the lowest score ( $X=70.02$ ).

### Findings regarding the differentiation of social media addiction of high school students by the frequency of sleeping disturbance

In order to determine whether the social media addictions of high school students differ according to the frequency of sleep disturbance, the data were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups. The results are given in table 9.

When table 9 is examined, it has been revealed that high school students' social media addiction differ ( $p<0.05$ ) by the frequency of sleeping disturbance. According to the differences between groups, it was found that social media addiction increased as the frequency of sleep disturbances increased. Accordingly, the social media addiction level of high school students who state that they have sleep disturbances every day is the highest in the total scale and sub-scales ( $X=113.60$ ). Those who state that they have a very common sleep disturbance come second ( $X=107.97$ ). Social media addiction of high school students in both groups is moderate. In other groups, social media addiction is at a low level.

### Findings regarding the differentiation of social media addiction of high school students by the frequency of headache

In order to determine whether the social media addictions of high school students differ according to the frequency of headaches, the data were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups. The results are given in table 10.

When table 10 is examined, it has been revealed that high school students' social media addiction differ ( $p<0.05$ ) by the frequency of headaches. According to the differences between groups, it was found that as the frequency of headache increased, social media addiction increased. Accordingly, the social media addiction level of high school students who stated that they had a headache every day was the highest in the total scale and sub-scales ( $X=111.12$ ). Those who stated that they had headaches very often came in the second place ( $X=103.04$ ). Social media addiction of high school students who state that they have a headache every day is at a moderate level. In other groups, social media addiction is at a low level.

### Findings regarding the differentiation of social media addiction of high school students by the loneliness perception

In order to determine whether the social media addictions of high school students differ according to the loneliness perception, the data

Scale/ Sub-Scales	Frequency of Sleeping Disturbance	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	Never	215	26.87	10.15	29.14	0.000	Everyday>Often>Sometimes>Never Very often>Often>Sometimes>Never
	Sometimes	741	31.06	10.54			
	Often	205	32.93	11.06			
	Very often	143	36.25	12.19			
	Everyday	149	37.86	13.17			
Mood modification	Never	215	10.98	5.86	23.14	0.000	
	Sometimes	741	12.27	5.71			
	Often	205	13.66	5.97			
	Very often	143	15.25	6.38			
	Everyday	149	15.87	6.46			
Relapse	Never	215	8.67	4.70	16.35	0.000	
	Sometimes	741	9.79	5.04			
	Often	205	11.17	5.30			
	Very often	143	12.14	6.10			
	Everyday	149	11.98	6.26			
Conflict	Never	215	30.73	14.07	40.24	0.000	
	Sometimes	741	34.90	14.85			
	Often	205	41.61	17.24			
	Very often	143	44.81	18.51			
	Everyday	149	47.99	21.11			
Social media addiction	Never	215	76.43	28.97	40.33	0.000	
	Sometimes	741	87.99	31.08			
	Often	205	99.03	35.08			
	Very often	143	107.97	38.74			
	Everyday	149	113.60	41.51			
	Total	1453					

**Table 9:** Differentiation of social media addiction by frequency of sleeping disturbance.

were analyzed with a one-way analysis of variance. LSD test was applied for the analysis of the difference between groups. The results are given in table 11.

When table 11 is examined, it has been revealed that high school students' social media addiction differ ( $p < 0.05$ ) by the loneliness perception. According to the differences between groups, it was found that social media addiction increased as the frequency of perception of loneliness increased. Accordingly, the social media addiction level of high school students who stated that they always felt lonely was the highest in the total scale and in the sub-scales, and it remained at a moderate level ( $X = 112.95$ ). In addition, it is noteworthy that the number of high school students who stated that they felt lonely often, very often and constantly was quite high ( $n = 558$ ).

### Findings regarding the analysis of high school students' liked/disliked contents on social media

The content that high school students like and dislike on social media has been tested with frequency analysis. The results are given in table 12. It has been revealed that high school students mostly like video/music content (78%), followed by selfie and multiple photos (64.3%), and then sports content (41.7%). The other contents were found to be below 40%.

When the content that high school students do not like on social media is examined, "Innuendo" ranks first (65.2%). This is followed

by "Politics" (40.9%) in the second place and "Quotes/Thinker sayings" (32.9%) in the third place. As a result, the fact that the content that high school students like on social media is mostly on visual (photo) and multi-media (video/music) is determinant in the social media application preferences they use most (Instagram, Youtube, TikTok).

Finally; in the examinations made in 8 practice schools in Üsküdar with the social media addiction scale, it was found that social media addiction differed from school to school ( $p < 0.05$ ). Although the comparison between schools is not directly included in the aims of the research, according to the one-way analysis of variance analysis, the social media addiction of the students of Girls Anatolian Imam Hatip High School ( $X = 101.4$ ), was found to be the highest compared to students from other types of high schools ( $p < 0.05$ ). This result supported the result of the "social media addiction of female students higher than male students" obtained in the analyzes made by gender. Social media addiction of the Vocational and Technical Anatolian High School students included in the study in the second place was found to be high ( $X = 98.1$ ). The scale scores of students attending other types of high schools did not make any difference and were found close to each other, SMAS total scores ranged between 97.6 and 84.5.

### Conclusion and Discussion

With the increase in the use of social media, technology dependent use also increases. In previous studies, it has been emphasized that



Scale/ Sub-Scales	Frequency of Headache	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	Never	198	27.55	10.18	12.80	0.000	Everyday>Often>Sometimes>Never Very often>Often>Sometimes>Never
	Sometimes	863	31.75	11.11			
	Often	215	34.01	11.15			
	Very often	104	34.72	12.47			
	Everyday	73	35.52	13.98			
Mood modification	Never	198	11.23	5.70	15.36	0.000	
	Sometimes	863	12.48	5.84			
	Often	215	14.43	6.09			
	Very often	104	15.24	6.79			
	Everyday	73	15.30	6.77			
Relapse	Never	198	8.90	5.11	6.97	0.000	
	Sometimes	863	10.13	5.08			
	Often	215	11.25	5.89			
	Very often	104	11.20	6.07			
	Everyday	73	11.53	6.18			
Conflict	Never	198	30.75	15.70	22.29	0.000	
	Sometimes	863	36.64	18.21			
	Often	215	41.51	20.19			
	Very often	104	41.81	22.70			
	Everyday	73	48.93	17.07			
Social media addiction	Never	198	77.71	29.26	21.13	0.000	
	Sometimes	863	90.76	32.86			
	Often	215	101.19	36.28			
	Very often	104	103.04	40.50			
	Everyday	73	111.12	44.80			
	Total	1453					

**Table 10:** Differentiation of social media addiction by headache frequency.

social media addicted has negative consequences such as decreased production, unhealthy social relations and decreased life satisfaction [56]. In this context, it is important to understand how social media addiction develops in order to develop preventive education programs, although there are supportive results in new researches. At this point, while applying social media addiction scales in research, it is necessary to question additional symptoms such as frequent screen viewing, sleep disturbances, headaches, perception of loneliness, use of goal orientation to reach liked content and related pleasure.

The research was conducted with 1453 high school students in Üsküdar District of Istanbul Province in Turkey. According to the results obtained with SMAS, social media addiction of high school student students was found at a low level. However, in the analyzes made according to the SMAS dimensions, the social media addiction level was found to be moderate in the occupation and mood modification dimensions. The dependence on relapse and conflict dimensions was found to be low. At this point, it is understood that the total score in social media addiction measures does not alone predict the level of social media addiction.

In the examinations made by gender, social media addiction of female students was found to be higher than male students. There are some studies in the scientific literature confirming this result. It is also understood from previous studies that social media addiction of is related to mood regulation, especially due to their personal characteristics and their desire to be liked by the same sex and the opposite sex. The fact that women do more filtering and engage while

sharing photos on visual social networking sites such as Instagram also increases their occupation. And when they get likes, they naturally regulate their mood. Thus, there is more excessive use and addiction to social media than men [57].

In another study conducted with 9173 adolescents (12-19 years) in which a relationship was found between the frequency of use of social networking sites and addiction criteria, it was reported that there was a relationship especially with the loss of occupation and control [58]. In this study, as the duration of daily use increases, the result of the increase in social media addiction has supported this result. The increase in social media addiction of high school students who use social media for more than 7 hours a day and their moderate level of addiction confirms this.

The most used social media application was also questioned in the research and it was examined. Accordingly, it has been revealed that high school students who use TikTok are more addicted to social media than those who use Instagram and Youtube. Since Tik Tok offers short videos, interactions and sharing, it takes them a lot of time to prepare the environment for people to shoot videos, create a fiction for themselves and accordingly play themselves or their surroundings in this video. Considering these features, the frequent repetition of these stages by the adolescents who use Tik Tok regularly increases their social media addiction. The fact that the second and third most preferred social media applications are Instagram and Youtube shows that high school students spend more time on social media

Scale/ Sub-Scales	Loneliness Perception	n	$\bar{X}$	sd	F	p	Difference Between Groups
Occupation	Never	280	27.35	10.58	22.60	0.000	Always>Very often>Often>Some-times>Never
	Sometimes	615	31.63	10.54			
	Often	203	33.39	10.82			
	Very often	129	32.78	11.44			
	Always	226	36.50	13.19			
Mood modification	Never	280	9.52	4.96	72.06	0.000	
	Sometimes	615	12.00	5.29			
	Often	203	14.27	5.99			
	Very often	129	15.35	6.12			
	Always	226	17.17	6.31			
Relapse	Never	280	8.50	4.51	14.69	0.000	
	Sometimes	615	10.26	5.19			
	Often	203	10.52	5.10			
	Very often	129	10.62	5.43			
	Always	226	12.09	6.43			
Conflict	Never	280	31.53	14.80	33.36	0.000	
	Sometimes	615	35.78	14.87			
	Often	203	37.70	14.94			
	Very often	129	41.68	17.40			
	Always	226	47.30	21.79			
Social media addiction	Never	280	76.23	29.47	41.47	0.000	
	Sometimes	615	89.47	31.24			
	Often	203	95.89	31.58			
	Very often	129	100.30	35.20			
	Always	226	112.95	42.56			
	Total	1453					

**Table 11:** Differentiation of social media addiction by loneliness perception.

Social Media Contents	Analysis of Liked Contents		Analysis of Disliked Contents	
	n	%	n	%
Video/Music	1240	78	64	4.1
Selfie+Multiple Photos	1013	64.3	562	35.7
Sports	657	41.7	244	15.5
News	622	39.5	151	9.6
Animals	437	27.7	165	10.5
Education	406	25.8	170	10.8
Quotes/Thinker sayings	346	22	519	32.9
Recipes	280	17.8	386	24.5
Politics	246	15.6	644	40.9
Crafting	231	14.7	307	19.5
Ads	65	4.1	578	36.7
Innuendo	141	8.9	1028	65.2

**Table 12:** Frequency analysis of liked/disliked contents on social media.

applications with visual features. It can be said that the use of Facebook is almost non-existent among high school students (n=8).

In the “Social Media Use in 2018” research conducted with young Americans aged 18-24, it was reported that social media use increased exponentially, and it was reported that Facebook and Youtube use in adults increased to 68% and 73% [59]. In this study, the low use of Facebook by 1453 high school student adolescents between the ages

of 14-18 draws attention as a result consistent with different countries. However, it should not be overlooked that the choice of social media may differ from country to country and that different countries have their own social networks.

The other research result is related to like preferences. Some of the high school students like the content shared on social media according to the person. In other words, since it’s your friend’s share,

it does not matter what the content is. This behavior is not suitable for social media literacy. Because the content may be inappropriate, contain false information and may bring many more ethical problems. When the comparison was made by including the option of “Reading the content, browsing and liking it if it is appropriate” in the research, the social media addiction of those who liked according to the person showed a significant difference and was found to be the highest. In addition, the addiction level of those who preferred the option “I do not like, I just browse” was found to be the lowest. Thus, it can be taken into account in new research that the behavior of making likes to gain likes may be a predictor of social media addiction.

Whether the use of social networking sites is associated with addiction symptoms and psychosocial distress, and which variables (demography, personality) predict addiction use is still a subject of research [58,60]. In this study, high school students were asked about the frequency of screen viewing, the frequency of headaches, the frequency of sleep disturbances and the perception of loneliness, in order to give an idea about some symptoms. When each symptom was categorized, it was observed that the level of social media addiction increased as the frequency increased. According to the results obtained, it was revealed that high school students looked at the digital screen 30-40 times in 1 hour (n=158). The social media addiction score of this group was also found to be the highest (X=113.95). In the second place is the group that looks at the screen 20-30 times in 1 hour (X=103,17). Thus, it was revealed that the level of social media addiction increased as the screen viewing time increased within 1 hour.

When asked about the frequency of sleep disturbances, the amount of those who stated that they experience this very often and often every day (n=497) is also remarkable. However, the number of the group saying “sometimes” was also quite high (n=741). Just taking these numbers into account can be considered a remarkable result. Accordingly, it was found that social media addiction increased significantly as the frequency of sleep disturbances increased. The group that has sleep disorders every day has the highest SMAS score (X=113.60).

Headache is included in the research as a serious symptom. This is an important problem that can also affect academic achievement in the high school student group [61]. When asked about the frequency of headaches in the study, it was quite high (n=863) who said sometimes. It is not a small number of people who say very often and often every day (n=392). Further, it was observed that social media addiction increased significantly as the frequency of headache increased. When the question of “How often do you feel lonely?” is asked, those who say “always” are 226, and those who say always+veryoften+often are 558. In the comparison, it was revealed that as the perception of loneliness increased, the level of social media addiction increased significantly. This result is also found in many studies investigating the relationship between loneliness and social media addiction [62-64]. Modeling the symptoms included in the research together in new studies with adolescent groups will be effective in determining the predictors of social media addiction. The results of this research have the potential to suggest new studies to be done.

Finally, the fact that different results were obtained in the sample groups where social media addiction studies were conducted, despite being in the same region, shows that generalizations in terms of social media addiction should be avoided. This research was conducted in 8 different types of high school schools located in Üsküdar District of Istanbul Province in Turkey, and it was revealed that the social

media addiction levels of high school students in these schools differ. Especially in the high school where only female students study, the highest level of social media addiction was found to be consistent with the result of the comparison made with SMAS according to gender. This result suggests that the level of social media addiction may be high in schools where girls are predominant. On the other hand, in some generational studies conducted by dividing into age groups, it is emphasized that some differences were detected in the samples of the same age, located in the same district or even a street away, and generalizations should be avoided [65,66]. Values, behaviors, habits, cultures may be similar and give an idea about the general, but small groups and individual studies should not be overlooked. Individual studies and preventive treatments are of vital importance, especially in psychological studies such as addiction.

## References

1. Ross C, Orr ES, Sisic M, Arseneault JM, Simmering MG, et al. (2009) Personality and motivations associated with Facebook use. *Computers in Human Behavior* 25: 578-586.
2. Tutgun-Ünal A, Bozkurt V (2020) Factors affecting social media addiction symptoms, in *Information Technologies and Communication: Individual and Community Security*. Turkish Academy of Sciences Publications: 165-189.
3. Katz E, Blumler JG, Gurevitch M (1974) Uses and gratifications research. *The Public Opinion Quarterly* 37: 509-523.
4. Tutgun-Ünal A (2021) *Social Media: Effects-Addiction-Measurement* (2ndedn). Der Publishing, Istanbul, Turkey.
5. Tutgun-Ünal A, Deniz L (2016) Examining University Students' Social Media Addiction. *Route Educational and Social Science Journal* 3: 155-181.
6. Tarhan N, Tutgun-Ünal A (2021) *Social media psychology* (1stedn). Der Publishing, Istanbul, Turkey.
7. Wilson K, Fornasier S, White KM (2010) Psychological predictors of young adults' use of social networking sites. *Cyberpsychol Behav Soc Netw* 13: 173-177.
8. Bozkurt V, Keser A, Zulfikar H (2020) Factors Predicting Life Satisfaction Among Social Media Users. *Journal of Social Policy Conferences: Advanced online publication* 78: 48-62.
9. Andreassen CS, Torsheim T, Brunborg GS, Pallesen S (2012) Development of a Facebook Addiction Scale. *Psychol Rep* 110: 501-517.
10. Andreassen CS (2015) Online social network site addiction: A comprehensive review. *Curr Addict Rep* 2: 175-184.
11. Dewald JF, Meijer AM, Oort FJ, Kerkhof GA, Bögels SM (2010) The influence of sleep quality, sleep duration and sleepiness on school performance in children and adolescents: A meta-analytic review. *Sleep Med Rev* 14: 179-189.
12. Griffiths MD (2005) A components model of addiction within a biopsychosocial framework. *Journal of Substance Use* 10: 191-197.
13. Hazar M (2011) Social media dependency-filed survey. *Journal of Communication Theory and Research* 32: 151-175.
14. Karaiskos D, Tzavellas E, Balta G, Paparrigopoulos T (2010) P02-232 - Social network addiction: A new clinical disorder? *European Psychiatry* 25: 855.
15. Kuss DJ, Griffiths MD (2011) Online social networking and addiction--a review of the psychological literature. *Int J Environ Res Public Health* 8: 3528-3552.

16. Tutgun-Ünal A (2019) Examining the social media addiction of Communication Faculty students: Üsküdar University example. *Kastamonu Journal of Communication Studies* 2: 49-80.
17. Ağyar Bakır B, Uzun B (2018) Developing the social media addiction scale: Validity and reliability studies. *The Turkish Journal on Addictions* 5: 507-525.
18. Deniz L, Ünal AT (2019) Development of a set of scales toward the use of social media and values of generations in social media age. *International Journal of Society Researches* 11: 1025-1057.
19. Kaşıkara G, Doğan U (2017) Desire for being liked scale: Validity and reliability study. *Journal of MSKU Education Faculty* 4: 51-60.
20. Şahin C, Yağcı M (2017) Adult form of social media addiction scale: Validity and reliability study. *Journal of Ahi Evran University Kirsehir Education Faculty* 18: 523-538.
21. Tas İ (2017) The validity and reliability study of the short form of the social media addiction scale for adolescents. *Online Journal of Technology Addiction & Cyberbullying* 4: 27-40.
22. Tutgun-Ünal A, Deniz L (2015) Development of the Social Media Addiction Scale. *AJIT-e Online Academic Journal of Information Technology* 6: 51-70.
23. van den Eijnden RJJM, Lemmens JS, Valkenburg PM (2016) The Social media disorder scale. *Computers in Human Behavior* 61: 478-487.
24. Goldberg I (1996) Goldberg's message.
25. Griffiths M (2009) Internet Addiction - Time to be Taken Seriously? *Addiction Research* 8: 413-418.
26. Müller KW, Dickenhorst U, Medenwaldt J, Wölffing K, Koch A (2011) FC18-03 - Internet addiction as comorbid disorder in patients with a substance-related disorder: Results from a survey in German inpatient clinics. *European Psychiatry* 26: 1912.
27. Young KS (1996) Psychology of computer use: XL. Addictive use of the Internet: a case that breaks the stereotype. *Psychol Rep* 79: 899-902.
28. Young KS (1998) Internet addiction: The emergence of a new clinical disorder. *Cyberpsychology and Behavior* 1: 237-244.
29. Young K (2009) Internet Addiction: Diagnosis and Treatment Considerations. *Journal of Contemporary Psychotherapy* 9: 241-246.
30. Caplan SE (2005) A social skill account of problematic internet use. *Journal of Communication* 55: 721-736.
31. Shapira NA, Goldsmith TD, Keck PE Jr, Khosla UM, McElroy SL (2000) Psychiatric features of individuals with problematic internet use. *J Affect Disord* 57: 267-272.
32. Davis RA (2001) A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior* 17: 187-195.
33. Gonul AS (2002) Pathological internet use ( Internet dependency /abuse). *Yeni Symposium* 40: 105-110.
34. Caplan SE (2010) Theory and measurement of generalized problematic Internet use: A two-step approach. *Computers in Human Behavior* 26: 1089-1097.
35. Deniz L, Tutgun-Ünal A (2016) The adaptation of generalized problematic internet use scale 2 (GPIUS2) into Turkish: Validity and reliability studies. *The Journal of Academic Social Science* 4: 7-20.
36. American Psychiatric Association (1995) *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Primary Care Version*. APA, Washington, DC, USA.
37. Balcı Ş, Tiryaki S (2014) Facebook addiction among high school students in Turkey. *The International Institute of Social and Economic Sciences (IISES)*. Vienna 10th Academic Conference, Austria.
38. Çam E, İşbulan O (2012) A new addiction for teacher candidates: Social networks. *Turkish Online Journal of Educational Technology* 11: 14-19.
39. Mehdizadeh S (2010) Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychol Behav Soc Netw* 13: 357-364.
40. Savcı M, Aysan F (2017) Technological addictions and social connectedness: predictor effect of internet addiction, social media addiction, digital game addiction and smartphone addiction on social connectedness. *Dusunen Adam The Journal of Psychiatry and Neurological Sciences* 30: 202-216.
41. Uzun Ö, Yıldırım V, Uzun E (2016) Habit of Using the Social Media and Correlation of Social Media Addiction, Self Esteem, Perceived Social Support in Adolescent with Attention Deficit Hyperactivity Disorder. *TJFMPC* 10: 142-147.
42. Yılmazsoy B, Kahraman M (2017) Addiction to Social Media And Usage Of The Social Media For Educational Purposes: The Facebook Example. *Journal of Instructional Technologies & Teacher Education* 6: 9-20.
43. Tarhan N (2017) *Psychological warfare*. Timas Publishing, Istanbul, Turkey.
44. Tarhan N, Nurmedov S (2019) *Coping with addiction, virtual or real addiction (7th edn)*. Timas Publishing, Istanbul, Turkey.
45. Aktan E (2018) Üniversite Öğrencilerinin Sosyal Medya Bağımlılık Düzeylerinin Çeşitli Değişkenlere Göre İncelenmesi. *Journal of Erciyes Communication* 5: 405-421.
46. Kaya G (2018) A research on the relationship between social media addiction and internet usage purposes. *Department of Social Sciences, Mersin University, Mersin, Turkey*.
47. Köklü B (2019) The relationship between social media usage characteristics, desire to be liked, showing oneself as a perfectionist, and social anxiety in university students. *Social Sciences Institute, Uskudar University, Istanbul, Turkey*.
48. Lee G, Lee J, Kwon S (2011) Use of social-networking sites and subjective well-being: A study in South Korea. *Cyberpsychol Behav Soc Netw* 14: 151-155.
49. Wei T, Wang C (2011) The characteristics of social networks of China's college students. *Modern Management* 1: 219-223.
50. Deniz L, Gürültü E (2018) High school students' social media addiction. *Kastamonu Educational Journal* 26: 355-367.
51. Tarhan, N., Narcissistic people have empathy blindness, in Nevzat Tarhan Blog. 2020.
52. Tutgun-Ünal A, Deniz L, Moon M.-K (2011) A comparative study of problematic internet use and loneliness among Turkish and Korean prospective teachers. *Turkish Online Journal of Educational Technology* 10: 14-30.
53. Shaffer HJ, LaPlante DA, LaBrie RA, Kidman RC, Donato AN, et al. (2004) Toward a syndrome model of addiction: Multiple expressions, common etiology. *Harv Rev Psychiatry* 12: 367-374.
54. Erikson EH, Erikson JM (1998) *The Life Cycle Completed (Extended Version)*: W.W. Norton & Company, London, UK.
55. Karasar N (2016) *Bilimsel Araştırma Yöntemi Kavramlar İlkeler Teknikler*. Nobel Publishing, Ankara, Turkey.
56. Sun Y, Zhang Y (2021) A review of theories and models applied in studies of social media addiction and implications for future research. *Addict Behav* 114: 106699.
57. Tutgun-Ünal A, Tarhan N, Muradi P, Kurt AS (2021) The adaptation of The Instagram Addiction Scale (TIAS) into Turkish: Validity and reliability studies. *The Turkish Online Journal of Educational Technology (TOJET)* 20: 76-89.

58. Müller KW, Dreier M, Beutel ME, Duven E, Giralt S, et al. (2016) A hidden type of internet addiction? Intense and addictive use of social networking sites in adolescents. *Computers in Human Behavior* 55: 172-177.
59. Smith A, Anderson M (2018) Social Media Use in 2018. Internet, Science & Tech, Pew Research Center, USA.
60. Aalbers G, McNally RJ, Heeren A, de Wit S, Fried EI (2019) Social media and depression symptoms: A network perspective. *J Exp Psychol Gen* 148: 1454-1462.
61. Berryman C, Ferguson CJ, Negy C (2018) Social media use and mental health among young adults. *Psychiatr Q* 89: 307-314.
62. O'Day EB, Heimberg RG (2021) Social media use, social anxiety, and loneliness: A systematic review. *Computers in Human Behavior Reports* 3: 100070.
63. Song H, Zmyslinski-Seelig A, Kim J, Drent A, Victor A, et al. (2014) Does Facebook make you lonely?: A meta analysis. *Computers in Human Behavior* 36: 446-452.
64. Yang CC ((2016)) Instagram use, loneliness, and social comparison orientation: Interact and browse on social media, but don't compare. *Cyberpsychol Behav Soc Netw* 19: 703-708.
65. Ekşili N, Antalyalı ÖL (2017) A study to determine the characteristics of generation Y in Turkey: A survey on school administrators. *Humanities Sciences (NWSAHS)* 12: 90-111.
66. Morsümbül Ş (2014) An analysis on the change of cultural values between three generations: Ankara case. *Hacettepe University Journal of Turkic Studies* 21: 137-160.





- Advances In Industrial Biotechnology | ISSN: 2639-5665
- Advances In Microbiology Research | ISSN: 2689-694X
- Archives Of Surgery And Surgical Education | ISSN: 2689-3126
- Archives Of Urology
- Archives Of Zoological Studies | ISSN: 2640-7779
- Current Trends Medical And Biological Engineering
- International Journal Of Case Reports And Therapeutic Studies | ISSN: 2689-310X
- Journal Of Addiction & Addictive Disorders | ISSN: 2578-7276
- Journal Of Agronomy & Agricultural Science | ISSN: 2689-8292
- Journal Of AIDS Clinical Research & STDs | ISSN: 2572-7370
- Journal Of Alcoholism Drug Abuse & Substance Dependence | ISSN: 2572-9594
- Journal Of Allergy Disorders & Therapy | ISSN: 2470-749X
- Journal Of Alternative Complementary & Integrative Medicine | ISSN: 2470-7562
- Journal Of Alzheimers & Neurodegenerative Diseases | ISSN: 2572-9608
- Journal Of Anesthesia & Clinical Care | ISSN: 2378-8879
- Journal Of Angiology & Vascular Surgery | ISSN: 2572-7397
- Journal Of Animal Research & Veterinary Science | ISSN: 2639-3751
- Journal Of Aquaculture & Fisheries | ISSN: 2576-5523
- Journal Of Atmospheric & Earth Sciences | ISSN: 2689-8780
- Journal Of Biotech Research & Biochemistry
- Journal Of Brain & Neuroscience Research
- Journal Of Cancer Biology & Treatment | ISSN: 2470-7546
- Journal Of Cardiology Study & Research | ISSN: 2640-768X
- Journal Of Cell Biology & Cell Metabolism | ISSN: 2381-1943
- Journal Of Clinical Dermatology & Therapy | ISSN: 2378-8771
- Journal Of Clinical Immunology & Immunotherapy | ISSN: 2378-8844
- Journal Of Clinical Studies & Medical Case Reports | ISSN: 2378-8801
- Journal Of Community Medicine & Public Health Care | ISSN: 2381-1978
- Journal Of Cytology & Tissue Biology | ISSN: 2378-9107
- Journal Of Dairy Research & Technology | ISSN: 2688-9315
- Journal Of Dentistry Oral Health & Cosmesis | ISSN: 2473-6783
- Journal Of Diabetes & Metabolic Disorders | ISSN: 2381-201X
- Journal Of Emergency Medicine Trauma & Surgical Care | ISSN: 2378-8798
- Journal Of Environmental Science Current Research | ISSN: 2643-5020
- Journal Of Food Science & Nutrition | ISSN: 2470-1076
- Journal Of Forensic Legal & Investigative Sciences | ISSN: 2473-733X
- Journal Of Gastroenterology & Hepatology Research | ISSN: 2574-2566
- Journal Of Genetics & Genomic Sciences | ISSN: 2574-2485
- Journal Of Gerontology & Geriatric Medicine | ISSN: 2381-8662
- Journal Of Hematology Blood Transfusion & Disorders | ISSN: 2572-2999
- Journal Of Hospice & Palliative Medical Care
- Journal Of Human Endocrinology | ISSN: 2572-9640
- Journal Of Infectious & Non Infectious Diseases | ISSN: 2381-8654
- Journal Of Internal Medicine & Primary Healthcare | ISSN: 2574-2493
- Journal Of Light & Laser Current Trends
- Journal Of Medicine Study & Research | ISSN: 2639-5657
- Journal Of Modern Chemical Sciences
- Journal Of Nanotechnology Nanomedicine & Nanobiotechnology | ISSN: 2381-2044
- Journal Of Neonatology & Clinical Pediatrics | ISSN: 2378-878X
- Journal Of Nephrology & Renal Therapy | ISSN: 2473-7313
- Journal Of Non Invasive Vascular Investigation | ISSN: 2572-7400
- Journal Of Nuclear Medicine Radiology & Radiation Therapy | ISSN: 2572-7419
- Journal Of Obesity & Weight Loss | ISSN: 2473-7372
- Journal Of Ophthalmology & Clinical Research | ISSN: 2378-8887
- Journal Of Orthopedic Research & Physiotherapy | ISSN: 2381-2052
- Journal Of Otolaryngology Head & Neck Surgery | ISSN: 2573-010X
- Journal Of Pathology Clinical & Medical Research
- Journal Of Pharmacology Pharmaceutics & Pharmacovigilance | ISSN: 2639-5649
- Journal Of Physical Medicine Rehabilitation & Disabilities | ISSN: 2381-8670
- Journal Of Plant Science Current Research | ISSN: 2639-3743
- Journal Of Practical & Professional Nursing | ISSN: 2639-5681
- Journal Of Protein Research & Bioinformatics
- Journal Of Psychiatry Depression & Anxiety | ISSN: 2573-0150
- Journal Of Pulmonary Medicine & Respiratory Research | ISSN: 2573-0177
- Journal Of Reproductive Medicine Gynaecology & Obstetrics | ISSN: 2574-2574
- Journal Of Stem Cells Research Development & Therapy | ISSN: 2381-2060
- Journal Of Surgery Current Trends & Innovations | ISSN: 2578-7284
- Journal Of Toxicology Current Research | ISSN: 2639-3735
- Journal Of Translational Science And Research
- Journal Of Vaccines Research & Vaccination | ISSN: 2573-0193
- Journal Of Virology & Antivirals
- Sports Medicine And Injury Care Journal | ISSN: 2689-8829
- Trends In Anatomy & Physiology | ISSN: 2640-7752

Submit Your Manuscript: <https://www.heraldopenaccess.us/submit-manuscript>