

Determination of Mobile Addiction and Social Media Addiction Level of Parents and Their Attitudes Towards Usage of Technology

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Abstract—The objective of this study is to determine the mobile addiction and social media addiction level of parents and their attitudes towards usage of technology. The study has a descriptive and correlational model pattern which is a quantitative research method. The sample of the study consisted of 200 pre-school student parents. In order to collect the data, “Mobile Addiction Scale”, “Social Media Addiction Scale” and “Parent Attitude towards Technology Usage Scale” were used and the descriptive statistics of the scale scores and the relational findings between the scale scores were included. Accordingly, statistically significant and positive correlations were found between the scores of parents' subscales in the 'Parental Attitude Scale for Technology Usage and 'Mobile Addiction Scale'. It is hoped that the study will shed light on other researchers in terms of their attitudes towards mobile and social media addiction levels and usage of technology.

Keywords—Mobile addiction, social media addiction, usage of technology, attitude, parent.

1 Introduction

According to the “Household Informatics Technologies Usage Study” conducted by Turkish Statistics Institute-TUIK, computer and internet usage in Turkey was found as 59.6% and 72.9% in 16-74 age group family members, respectively [1].

As a result of the widespread use of the internet with technological developments, mobile phones have become the most widely used technological devices in the social structure. With the mobile devices produced in the last decade, almost all operations can be performed which could be conducted with a computer. Especially with smart phones that provide access to the internet, the time spent with mobile phones increases for people who obtain many advantages. Such excessive use of mobile phones is becoming an addiction in society. The ability to access the internet with mobile phones at any time, the social media applications, and online mobile games they offer increase internet and mobile addiction [2,3,17,19,20].

With the emergence of web 2.0 technologies operated on the internet, individuals became users of social networks and became content-producers through the account they created. As the case for each of the technological addictions, it is inevitable for individuals of all ages to spend excessive time on social media and consequently have problems in fulfilling their personal, social, educational and professional responsibilities, as well as experience various psychological, physical and social problems [4,5,18].

With the rapid progress of technology, technological tools that meet the educational needs in the educational dimension have become indispensable elements of the educational components. These tools and materials have become increasingly widespread in recent years, and began to be used continuously in educational and training environment. In order to elevate the education to the desired level, parents of students should develop positive attitudes towards classes and technology as the most important educational institution of the child is the family environment. The family is where informal education of the child begins. Children's positive attitudes towards classes and technology and their beneficial use of technology depend largely on the positive attitudes and behaviors of their parents. If parents create the necessary awareness to show positive behaviors, it is possible for children to benefit from technology properly [6,7]. First of all, parents should use their mobile phones and social media tools only to the extent that they need, and they should not be addictive.

In this context, the aim of the study is to determine the attitudes of students' parents towards mobile addiction and social media addiction levels and technology usage. For this purpose, the following sub-objectives have been identified.

1. What is the distribution of parents' socio-demographic characteristics?
2. What is the distribution of parents' use of technology?
3. What are the parents' scores on the parental attitude scale, mobile addiction scale and social media addiction scale?
4. Is there a significant difference between the scores obtained by parents in parental attitude scale for technology usage, mobile addiction scale and social media addiction scale in terms of:

- Gender
- Age group
- Daily internet usage time
- Type of mobile operation system

5. Is there a significant correlation between the scores obtained from parental attitude scale for technology usage, mobile addiction scale and social media addiction scale.

2 Methods

2.1 Research model

This study was designed by Descriptive and Correlational research model, which is a quantitative research approach, to define the current situation [8]. In the correlation model, the relationship between variables and the level of this relationship is determined [9].

2.2 Sample of the study

The universe of this research consists of 2100 students in a faculty of education affiliated to a private university in 2018-2019 academic year. The sample consisted of 200 students who were determined by 95% confidence level based on simple random sampling method.

In the simple random sampling method, the selection of each unit in the universe is made impartially considering the possibility of being equal equality and independence in the selection of sampling [10].

2.3 Collection of data

Three different scale forms and a demographic information form prepared by the authors were used to determine the attitudes of students' parents towards mobile addiction and social media addiction levels and technology usage in data collection.

The scales used were 'Development and Validation of the Mobile Addiction Scale' developed by Fidan, 'Social Media Addiction Scale - Adult Form' developed by Sahin and Yagci and 'Parents' Attitude Scale Regarding Technology developed by Kenar [3,4,11].

2.4 Analysis of data

IBM SPSS 24.0 software was used for statistical analysis of data set in the study. The frequency analysis of the socio-demographic characteristics, technology and internet usage of the parents was performed. In addition, descriptive statistics related

to the scores obtained from Parental Attitude Scale for Technology Use, Mobile Addiction Scale and Social Media Addiction Scale were shown.

Parental Attitude for Technology Usage Scale, Mobile Addiction Scale and Social Media Addiction Scale scores of parents were examined by Kolmogorov-Smirnov and Shapiro-Wilk tests. Mann-Whitney U test was used for comparisons where the independent variable had two categories, and Kruskal-Wallis H test was used for comparisons had more than two categories. The correlations between Parental Attitude Scale for Technology Use, Mobile Addiction Scale and Social Media Addiction Scale were tested with Spearman test.

3 Findings

Table 1. Distribution of socio-demographic features of parents (n=200)

	f	%
Gender		
Female	110	55,00
Male	90	45,00
Age group		
Less than 34 year	54	27,00
35-39 years	80	40,00
40 years and older	66	33,00
Education		
Primary education	33	16,50
High school	65	32,50
Undergraduate / Graduate	102	51,00
Internet connection at home		
Yes	176	88,00
No	24	12,00
Internet connection at home		
Less than 3 hour	88	44,00
3-5 hours	42	21,00
More than 5 hours	70	35,00
Mobile phone OS		
IOS	66	33,00
Android	134	67,00

An examination of the results of frequency analysis given in Table 2 shows that 55.0% of the participants are females and 45.0% are males, 27.0% are 34 years of age and younger, 40.0% are 35-39 years of age, and 33.0% are 40 years of age and older, 32.50% are high school graduates and 51.0% are undergraduate/graduate degree holders. It is seen that among the parents who participated in the study, 44.0% used internet for less than 3 hours a day, 21.0% used internet for 3-5 hours a day, 35.0% used internet for 5 hours and more a day, 33.0% used IOS mobile operating system and 67.0% used android operating system.

Table 2. Distribution of technology usage of parents (n=200)

	f	%
Purpose of mobile phone use *		
for interview purposes	158	79,00
Follow the news	113	56,50
Game	37	18,50
Education	85	42,50
Social networks	139	69,50
other	11	5,50
Owned social media accounts *		
Facebook	135	67,50
Youtube	121	60,50
WhatsApp	156	78,00
Viber	43	21,50
Snapchat	28	14,00
Instagram	132	66,00
Twitter	33	16,50
Linkedin	7	3,50
other	11	5,50
Intended use of social media *		
to follow new news	138	69,00
to communicate with friends	152	76,00
to spend time	97	48,50
other	17	8,50

*Multiple answers can be given.

When the findings regarding the distribution of technology use characteristics of the parents given in Table 2 are examined, it is seen that 79.0% of the parents used mobile phone for making calls, 69.50% for social networks, 56.50% for following news and 42.50% for educational purposes.

It was seen that 78,0% of the parents had Whatsapp, 67,50% had Facebook, 66,0% had Instagram and 60.50% had Youtube accounts. 76.0% of the parents who participated in the study stated that they used social media to communicate with their friends, 69.0% to follow flash news and 48.50% to spend time.

Table 3. Parental attitude scale for technology use, mobile addiction scale and social media addiction scale scores (n = 200)

	n	\bar{x}	s	Min	Max
Socio-Psychological Development	200	25,26	7,39	11	52
Interest and Success	200	24,06	5,91	7	35
Internal and External Quality of the Course	200	14,11	3,86	4	20
Learning and Participation	200	10,22	2,51	3	15
Evidence	200	10,25	3,62	4	20
Tolerance	200	11,29	4,13	4	20
Estrangement	200	10,24	3,98	4	20
Emotional Change	200	10,76	3,50	4	20
Conflict	200	10,51	3,68	4	20
Repeat	200	10,55	4,03	4	20
Mobile Internet Trend	200	12,78	3,52	4	20
Mobile Addiction	200	14,38	4,37	5	25
Virtual Tolerance	200	29,61	8,69	11	55
Virtual Communication	200	23,79	7,97	9	45

In Table 3, descriptive statistics related to the scores obtained by parents in the study from Parental Attitude Scale for Technology Use, Mobile Addiction Scale and Social Media Addiction Scale are given.

It is observed that, as regards the Parental Attitude Scale for Technology Use, parents who participated in the study obtained $\bar{x}=25,26\pm 7,39$ points from Socio-psychological development sub-dimension, $\bar{x}=24,06\pm 5,91$ points from interest and success in the course sub-dimension, $\bar{x}=14,11\pm 3,86$ points from internal and external qualification of the course sub-dimension, and $\bar{x}=10,22\pm 2,51$ points from Learning and participating in the course sub-dimension.

As regards Parents Mobile Addiction Scale, the parents received $\bar{x}=10,25\pm 3,62$ points from markedness sub-dimension, $\bar{x}=11,29\pm 4,13$ from Tolerance sub-scale, $\bar{x}=10,24\pm 3,98$ from emotional change sub-dimension, $\bar{x}=10,51\pm 3,68$ points from conflict sub-dimension, $\bar{x}=10,55\pm 4,03$ points from repetition sub-dimension, $\bar{x}=12,78\pm 3,52$ points from Mobile internet education sub-dimension, and $\bar{x}=14,38\pm 4,37$ points from Mobile addiction sub-dimension.

It has been found out that as regards Social Media Addiction Scale, the parents who participated in the study received $\bar{x}=29,61\pm 8,69$ points from virtual tolerance sub-dimension and $\bar{x}=23,79\pm 7,97$ points from virtual communication sub-dimension.

Table 4. Parental attitude scale for technology use, mobile addiction scale and social media addiction scale scores according to the gender of parents (n=200)

	Gender	n	\bar{x}	s	M	SO	Z	p
Socio-Psychological Development	Female	110	25,15	7,56	24,00	97,90	-0,704	0,481
	Male	90	25,38	7,22	25,00	103,68		
Interest and Success	Female	110	24,57	5,94	26,00	106,56	-1,643	0,100
	Male	90	23,43	5,85	24,00	93,09		
Internal and External Quality of the Course	Female	110	14,37	3,47	15,00	103,40	-0,787	0,431
	Male	90	13,79	4,28	14,50	96,96		
Learning and Participation	Female	110	10,30	2,39	11,00	102,23	-0,473	0,636
	Male	90	10,12	2,66	10,00	98,38		
Evidence	Female	110	9,83	3,42	10,00	94,70	-1,578	0,115
	Male	90	10,76	3,81	10,00	107,59		
Tolerance	Female	110	10,95	4,30	10,00	94,89	-1,522	0,128
	Male	90	11,71	3,89	11,50	107,36		
Estrangement	Female	110	9,75	4,13	8,00	92,97	-2,048	0,041*
	Male	90	10,84	3,73	11,00	109,70		
Emotional Change	Female	110	10,29	3,47	10,00	92,01	-2,303	0,021*
	Male	90	11,32	3,46	11,00	110,87		
Conflict	Female	110	10,19	3,81	9,00	95,19	-1,442	0,149
	Male	90	10,89	3,50	10,00	106,99		
Repeat	Female	110	10,02	3,87	9,00	92,87	-2,072	0,038*
	Male	90	11,20	4,14	11,00	109,83		
Mobile Internet Trend	Female	110	12,84	3,57	13,00	101,94	-0,390	0,697
	Male	90	12,71	3,48	12,00	98,74		
Mobile Addiction	Female	110	14,28	4,25	14,00	99,53	-0,262	0,793
	Male	90	14,49	4,54	14,00	101,68		
Virtual Tolerance	Female	110	29,00	8,54	28,00	96,04	-1,206	0,228
	Male	90	30,34	8,86	29,00	105,95		
Virtual Communication	Female	110	23,20	7,77	23,00	97,27	-0,873	0,383
	Male	90	24,51	8,19	23,00	104,44		

*p<0,05

Table 4. shows the results of the Mann-Whitney U test for the comparison of the scores obtained by the Parental Attitude Scale for Technology Use, Mobile Addiction Scale and Social Media Addiction Scale according to the gender of the parents.

It was found that there was no statistically significant difference between sociopsychological development, interest and success, internal and external quality of the course, learning and participation subscale scores in the Parental Attitude Scale for Technology Use according to the gender of the participating parents ($p > 0,05$).

It was found that the difference between the scores obtained from the subscales of significance, tolerance, conflict, mobile internet tendency and mobile addiction in the Mobile Dependency Scale according to the gender of the parents was not statistically significant ($p > 0.05$). It was also found that the difference between the scores obtained from the sub-dimensions of divergence, emotional change and repetition of the Mobile Dependency Scale was statistically significant according to the gender of the

parents ($p < 0.05$). Male parents' scores of divergence, emotional change and repetition subscales were higher than females.

There was no statistically significant difference between the scores obtained from the virtual tolerance and virtual communication sub-dimensions of the Social Media Addiction Scale of the male and female parents included in the study ($p > 0.05$).

Table 5. Parental attitude scale for technology use, mobile addiction scale and social media addiction scale scores according to the age of parents (n=200)

	Age group	n	\bar{x}	s	M	SO	Z	p	d
Socio-Psychological Development	Less than 34 year	54	24,20	7,43	23,00	93,33	5,427	0,066	
	35-39 years	80	26,71	6,72	26,50	112,15			
	40 years and older	66	24,35	7,93	24,00	92,24			
Interest and Success	Less than 34 year	54	24,50	5,62	26,00	104,83	10,357	0,006*	1-3
	35-39 years	80	25,46	5,16	26,00	112,58			2-3
	40 years and older	66	22,00	6,48	22,00	82,32			
Internal and External Quality of the Course	Less than 34 year	54	14,54	3,71	15,00	105,84	10,899	0,004*	1-3
	35-39 years	80	14,95	3,45	15,50	112,38			2-3
	40 years and older	66	12,74	4,11	13,00	81,73			
Learning and Participation	Less than 34 year	54	10,44	2,20	10,00	103,99	7,230	0,027*	1-3
	35-39 years	80	10,69	2,29	11,00	110,56			2-3
	40 years and older	66	9,47	2,84	10,00	85,45			
Evidence	Less than 34 year	54	9,44	3,81	9,50	87,56	3,768	0,152	
	35-39 years	80	10,61	3,63	10,00	105,89			
	40 years and older	66	10,45	3,40	10,00	104,55			
Tolerance	Less than 34 year	54	10,22	4,34	10,00	85,57	7,215	0,027*	1-2
	35-39 years	80	12,13	4,25	12,50	112,51			
	40 years and older	66	11,15	3,61	11,00	98,15			
Estrangement	Less than 34 year	54	9,43	4,45	8,00	85,66	5,820	0,054	
	35-39 years	80	10,28	3,87	10,00	101,93			
	40 years and older	66	10,86	3,62	11,00	110,91			
Emotional Change	Less than 34 year	54	9,74	3,67	10,00	82,31	7,452	0,024*	1-2
	35-39 years	80	11,06	3,62	11,00	106,05			1-3
	40 years and older	66	11,21	3,05	11,00	108,66			
Conflict	Less than 34 year	54	9,63	3,96	8,00	84,01	7,893	0,019*	1-2
	35-39 years	80	11,11	3,54	12,00	112,44			

	40 years and older	66	10,48	3,51	10,00	99,52			
Repeat	Less than 34 year	54	9,63	4,41	9,00	85,42	5,595	0,061	
	35-39 years	80	11,09	4,09	12,00	109,20			
	40 years and older	66	10,65	3,52	11,00	102,30			
Mobile Internet Trend	Less than 34 year	54	12,94	3,81	13,00	103,50	1,611	0,447	
	35-39 years	80	13,10	3,63	13,00	104,53			
	40 years and older	66	12,26	3,11	12,00	93,16			
Mobile Addiction	Less than 34 year	54	14,44	4,97	14,00	99,53	0,031	0,985	
	35-39 years	80	14,31	3,86	14,00	100,43			
	40 years and older	66	14,39	4,50	14,00	101,39			
Virtual Tolerance	Less than 34 year	54	28,67	10,36	27,00	90,69	2,636	0,268	
	35-39 years	80	29,23	7,45	29,00	101,04			
	40 years and older	66	30,83	8,60	29,00	107,87			
Virtual Communication	Less than 34 year	54	22,80	8,32	22,00	93,19	1,335	0,513	
	35-39 years	80	23,53	6,97	24,00	101,52			
	40 years and older	66	24,92	8,76	22,00	105,25			

*p<0,05

Table 5 shows the results of the Kruskal-Wallis H test for the comparison of the scores obtained from the Parental Attitude Scale for Technology Use, Mobile Addiction Scale and Social Media Addiction Scale according to the age group of the parents included in the study.

It was found that there was no statistically significant difference between the scores of the parents who participated in the study from the sociopsychological development subscale of the Parental Attitude Scale for Technology Use according to age groups ($p > 0.05$). On the other hand, it was found that the difference between the points of interest and success, internal and external quality, learning and attendance subscales were statistically significant ($p < 0.05$). The scores obtained by the parents aged 40 and over from the sub-dimensions of interest and success, internal and external quality of the course, learning and participation in the course were found to be lower than the parents in other age groups.

It was found that there was no statistically significant difference between the scores obtained from the markedness, divergence, repetition, mobile internet tendency and mobile addiction subscales of the Mobile Dependency Scale according to the age group ($p > 0.05$). There was a statistically significant difference between the scores obtained from the subscales of tolerance, emotional change and conflict in the Mobile Dependency Scale according to the age group of the parents ($p < 0.05$). Parents aged 34 years and younger received lower scores on tolerance, emotional change, and conflict sub-dimensions than those aged 35-39. In addition, parents aged 34 and under scored lower on the emotional change subdimension than individuals aged 40 and over.

Table 6. Parental attitude scale for technology use, mobile addiction scale and social media addiction scale scores according to the daily internet usage time of parents (n=200)

	Time	n	\bar{x}	s	M	SO	X ²	p	d
Socio-Psychological Development	Less than 3 hour	88	25,07	7,45	24,50	99,64	0,201	0,905	
	3-5 hours	42	24,98	5,61	24,00	98,31			
	More than 5 hours	70	25,66	8,28	25,00	102,90			
Interest and Success	Less than 3 hour	88	24,44	5,75	26,00	104,31	1,528	0,466	
	3-5 hours	42	24,62	5,22	25,50	103,98			
	More than 5 hours	70	23,24	6,48	24,00	93,63			
Internal and External Quality of the Course	Less than 3 hour	88	14,27	3,81	15,00	102,30	1,358	0,507	
	3-5 hours	42	14,60	3,18	15,00	106,79			
	More than 5 hours	70	13,61	4,26	14,00	94,46			
Learning and Participation	Less than 3 hour	88	10,23	2,47	11,00	101,76	4,077	0,130	
	3-5 hours	42	10,81	2,18	11,00	113,49			
	More than 5 hours	70	9,86	2,70	9,50	91,13			
Evidence	Less than 3 hour	88	9,66	3,35	10,00	92,75	6,339	0,042*	1-3
	3-5 hours	42	9,86	3,54	10,00	93,51			
	More than 5 hours	70	11,21	3,85	10,50	114,44			
Tolerance	Less than 3 hour	88	10,48	3,83	10,00	89,89	12,532	0,002*	1-3
	3-5 hours	42	10,60	3,88	10,00	89,98			2-3
	More than 5 hours	70	12,73	4,31	13,00	120,15			
Estrangement	Less than 3 hour	88	9,49	3,69	8,00	90,63	7,803	0,020*	1-3
	3-5 hours	42	9,83	3,80	10,00	95,80			2-3
	More than 5 hours	70	11,43	4,20	11,50	115,74			
Emotional Change	Less than 3 hour	88	10,42	3,56	10,00	95,06	3,918	0,141	
	3-5 hours	42	10,26	3,19	10,50	93,62			
	More than 5 hours	70	11,47	3,53	11,00	111,46			
Conflict	Less than 3 hour	88	10,22	3,71	10,00	95,76	1,581	0,454	
	3-5 hours	42	10,26	3,42	10,00	99,18			
	More than 5 hours	70	11,01	3,80	10,00	107,25			
Repeat	Less than 3 hour	88	10,13	3,91	10,00	95,51	2,540	0,281	
	3-5 hours	42	10,33	4,19	10,00	96,24			
	More than 5 hours	70	11,21	4,05	11,00	109,34			
Mobile Internet Trend	Less than 3 hour	88	12,35	3,13	12,00	93,90	2,819	0,244	
	3-5 hours	42	13,36	3,67	14,00	111,79			
	More than 5 hours	70	12,97	3,87	13,00	102,03			

Mobile Addiction	Less than 3 hour	88	13,93	3,64	14,00	95,98	2,302	0,316	
	3-5 hours	42	13,81	4,20	14,00	95,92			
	More than 5 hours	70	15,27	5,16	15,00	108,94			
Virtual Tolerance	Less than 3 hour	88	28,19	7,48	28,50	93,05	5,076	0,079	
	3-5 hours	42	28,43	7,95	28,50	95,27			
	More than 5 hours	70	32,09	10,01	31,00	113,00			
Virtual Communication	Less than 3 hour	88	22,64	7,20	21,50	93,10	5,180	0,075	
	3-5 hours	42	22,62	6,55	22,50	94,94			
	More than 5 hours	70	25,94	9,22	25,00	113,14			

*p<0,05

The results of the Kruskal-Wallis H test, which are used to compare the scores obtained from the Parental Attitude Scale for Technology Use, the Mobile Addiction Scale and the Social Media Addiction Scale, according to daily internet usage time, are given in Table 6.

It was found that there was no statistically significant difference between sociopsychological development, interest and achievement of the course, internal and external quality of the course, learning and attendance subscale scores in the Parental Attitude Scale for Technology Use according to the daily internet usage time of the parents included in the study ($p > 0.05$).

It was determined that the difference between the scores obtained from the emotional change, conflict, repetition, mobile internet tendency and mobile addiction sub-dimensions of the Mobile Addiction Scale according to the daily internet usage period of the parents was not statistically significant ($p > 0.05$). The difference between the scores obtained from the subscales of markedness, tolerance and divergence was found to be statistically significant ($p < 0.05$). The scores obtained from the tolerance and divergence subscales of the parents whose daily internet usage time was 5 hours or more were found to be higher than the other parents. In addition, parents with a daily internet use of 5 hours or more scored higher on the markedness subscale than parents using the internet 3 hours or less per day.

It has been seen that there was no statistically significant difference between the scores obtained from the virtual tolerance and virtual communication sub-dimensions in the Social Media Addiction Scale according to the daily internet usage period of the parents ($p > 0.05$).

Table 7. Parental attitude scale for technology use, mobile addiction scale and social media addiction scale scores according to the type of operating system of parents (n=200)

	OS	n	\bar{x}	s	M	SO	Z	p
Socio-Psychological Development	IOS	66	25,64	7,81	24,00	101,09	-0,101	0,919
	Android	134	25,07	7,20	25,00	100,21		
Interest and Success	IOS	66	22,98	5,91	23,00	88,67	-2,035	0,042*
	Android	134	24,59	5,86	26,00	106,33		
Internal and External Quality of the Course	IOS	66	13,64	3,66	14,00	91,67	-1,523	0,128
	Android	134	14,34	3,94	15,50	104,85		
Learning and Participation	IOS	66	9,94	2,53	10,00	94,95	-0,961	0,337
	Android	134	10,36	2,50	11,00	103,23		
Evidence	IOS	66	10,53	3,61	10,50	106,25	-0,993	0,321
	Android	134	10,10	3,63	10,00	97,67		
Tolerance	IOS	66	11,11	4,29	11,00	97,83	-0,461	0,645
	Android	134	11,38	4,06	11,00	101,82		
Estrangement	IOS	66	10,32	4,03	10,50	102,33	-0,315	0,752
	Android	134	10,20	3,97	9,00	99,60		
Emotional Change	IOS	66	10,29	3,46	11,00	94,22	-1,082	0,279
	Android	134	10,99	3,51	11,00	103,59		
Conflict	IOS	66	11,12	4,02	12,00	110,18	-1,670	0,095
	Android	134	10,20	3,48	10,00	95,73		
Repeat	IOS	66	10,47	3,82	11,00	101,77	-0,219	0,826
	Android	134	10,59	4,14	10,00	99,87		
Mobile Internet Trend	IOS	66	12,52	3,43	12,50	96,52	-0,685	0,493
	Android	134	12,91	3,57	13,00	102,46		
Mobile Addiction	IOS	66	14,50	4,78	14,00	99,04	-0,251	0,801
	Android	134	14,31	4,17	14,00	101,22		
Virtual Tolerance	IOS	66	30,44	9,34	29,00	104,31	-0,654	0,513
	Android	134	29,19	8,36	29,00	98,62		
Virtual Communication	IOS	66	24,91	8,72	24,00	107,27	-1,163	0,245
	Android	134	23,24	7,55	22,00	97,16		

Table 7 shows the results of the Mann-Whitney U test conducted to compare the scores of the parents who participated in the study from the Parental Attitude Scale for the Use of Technology, the Mobile Addiction Scale and the Social Media Addiction Scale according to the type of mobile operating system.

It was found that the difference between the scores obtained from the sociopsychological development, internal and external quality of the course, learning and participation sub-dimensions of the Parental Attitude Scale for Technology Use was not statistically significant according to the type of mobile operating system ($p > 0.05$). It was seen that the difference between the scores obtained from the sub-dimension of interest and success in the course was statistically significant according to the type of mobile operating system used by the parents and it was seen that the parents using Android received higher scores in this sub-dimension.

It was found that the difference between the scores obtained from the subscales of the markedness, tolerance, divergence, emotional change, conflict, repetition, mobile

internet tendency and mobile addiction were not found to be statistically significant according to the type of mobile operating system ($p > 0.05$).

It was found that there was no statistically significant difference between the scores obtained from the virtual tolerance and virtual communication subscales in the Social Media Addiction Scale according to the type of mobile operating system of the parents ($p > 0.05$).

Table 8. Correlations between scores obtained by parents from Parental Attitude Scale for Technology Use, Mobile Addiction Scale and Social Media Addiction Scale (n=200)

		Socio-Psychological Development	Interest and Success	Internal and External Quality of the Course	Learning and Participation
Evidence	r	0,318	-0,068	-0,058	0,020
	p	0,000*	0,339	0,416	0,775
Tolerance	r	0,165	0,049	0,108	0,108
	p	0,020*	0,492	0,128	0,128
Estrangement	r	0,198	-0,126	-0,058	0,020
	p	0,005*	0,076	0,413	0,784
Emotional Change	r	0,186	-0,006	0,011	0,095
	p	0,008*	0,931	0,875	0,180
Conflict	r	0,250	-0,002	0,094	0,174
	p	0,000*	0,976	0,186	0,014
Repeat	r	0,285	-0,058	-0,003	0,062
	p	0,000*	0,415	0,963	0,383
Mobile Internet Trend	r	0,031	0,346	0,371	0,364
	p	0,660	0,000*	0,000*	0,000*
Mobile Addiction	r	0,118	-0,017	-0,018	0,026
	p	0,097	0,813	0,799	0,713
Virtual Tolerance	r	0,161	-0,074	-0,013	0,016
	p	0,023*	0,298	0,852	0,818
Virtual Communication	r	0,078	0,015	0,009	0,105
	p	0,275	0,835	0,900	0,138

* $p < 0,05$

Table 8 shows the results of the Spearman correlation analysis conducted to determine the correlations between the scores of the Parental Attitude Scale for Technology Use, the Mobile Addiction Scale, and the Social Media Addiction Scale obtained by the parents covered by the study.

When the Table 10 was examined, it was observed that there were statistically significant and positive correlations between the scores obtained from the sociopsychological development subscale of the Parental Attitude Scale for Technology Use and the scores obtained from the subscale of markedness, tolerance, divergence, emotional change and repetition in the Mobile Dependency Scale ($p < 0.05$). As the scores obtained from the sociopsychological development sub-dimension of the parents increased, the scores obtained from the sub-dimension of markedness, tolerance, divergence, emotional change and repetition also increased.

It was found out that the interest and success in the course, the internal and external quality of the course, learning and participation sub-dimensions of the Parental Attitude Scale for Technology Use and the mobile internet tendency of the Mobile Addiction Scale showed statistically significant correlations ($p < 0,05$). These correlations are positive, and as the scores of parents' interest and success, internal and external quality, learning and participation subscales increase, the scores obtained from the mobile internet tendency subscale also rise.

4 Conclusion and Discussion

In this study, which aims to determine the attitudes of students' parents towards mobile addiction and social media addiction levels and technology usage, important results have been obtained based on the findings and the most remarkable ones are given below.

Based on an examination of the technology use characteristics of the parents who participated in the study, it was concluded that 79% used mobile phone for making/receiving calls, 69.50% used it for social networks and 42.50% used it for education purposes whereas 78.0% had WhatsApp account and 76.0% used social media to communicate with their friends.

In the study, it was found that parents, 55.0% of whom were females and 45.0% of whom were males, had similar attitudes and opinions about technology use, social media and mobile addiction. However, it was concluded that male parents control mobile phone use more often than female parents, feel safer with, and are more addicted to mobile phone use.

Smart phones are widely used in several applications such as calling, texting, internet, navigation, gaming and social networks. With these applications, smart phones, which are among the indispensable elements of social life, have become a device that users want to check at any time. According to Lee, Chang, Lin and Cheng, who stressed that the desire to constantly check for messages or calls stems from habit, behaviors that force a person to these actions lead to mobile addiction [12].

Another finding is that parents have similar attitudes towards the use of technology in terms of sociopsychological development compared to age groups, and that only parents of 40 years and older have lower attitudes towards the use of technology by themselves and their children. Parallel to this result, Kuzu in his study titled "Internet and Family", found that as the duration and frequency of internet usage of parents increased, the rate of internet usage for communication purposes increased; it was also found that the usage of internet for communication purposes decreased in older ages [13].

Another finding is that compared to parents aged 35-39, parents aged 34 and under use mobile devices for less time, that their smart phones make them less comfortable, and that they have fewer problems with people around them. Another result is that parents who use internet for 5 hours and more a day check their phones more frequently and suffer from more frustration. In addition, it can be said that this group

could not do without thinking about using their mobile phones more compared to the parents using internet for 3 hours or less per day.

The study conducted by Adikuzel et al. with the title “The effects of problematic internet usage of university students on family relationship” found that a considerable majority of families is adversely affected by problematic internet usage and that parents supported the internet usage of their children and that the usage duration increased gradually in the group which showed support [14].

In addition, there are statistically significant and positive correlations based on the research findings. Accordingly, as the attitudes of parents towards the use of technology increase, mobile addiction levels increase as well. When the changing world conditions, media and technology factors are considered, the responsibilities of the families become more serious and their burden becomes heavier as it is known that children take their families as a model while learning attitudes and values [15].

Another correlational result is that, as the attitudes of parents towards technology use increase, their mobile addiction and their access to the internet from mobile rises as well. Every user of all ages is intensely interested in internet technology. Society and technology are in constant interaction with each other. On the other hand, family is the cornerstone of society [16]. Parents need to be more careful with the Internet, mobile devices and social media instrument, given that children are always imitating and copying their parents.

In the light of these results, it is recommended that parents have information about technological developments, participate in trainings to be organized by educators on conscious use of Internet and social media monitoring, and that educators should organize courses and seminars for parents.

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