

Research Paper

Parenting in the Digital Age: How is the Digital Awareness of Mothers?Alev Üstündağ^{*a}^a(ORCID ID: 0000-0001-5832-6810), University of Health Sciences, Turkey, alev.ustundag@sbu.edu.tr^{*}Corresponding author**ARTICLE INFO**

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**ABSTRACT**

In the study, aimed to determine mothers' awareness of digital parenting. This quantitative study employed a descriptive survey model. This study was conducted on 306 mothers whose children enrolled in kindergarten, primary school, secondary school, and high school participated in the research. The data were collected using the Digital Parenting Awareness Scale (DPAS) and personal information form for demographic information of the mothers. Descriptive analyses, Mann-Whitney U Test, Kruskal-Wallis Test and Tamhane's Post Hoc tests were used in the analysis of the data. The analysis results revealed that mothers' digital parenting awareness levels were high. Additionally, no significant difference was found in digital parenting awareness by child gender, previous knowledge about digital media, and the number of children mothers have. It was also found that the level of digital neglect of mothers between the ages of 46-50 was high, mothers living in the Cankaya had a high level of being a negative model, and the mothers living in the Keciören had a high level of efficient use of digital tools. The mothers whose children attended primary school were negative models, and those with undergraduate and graduate degrees had a high level of being negative models.

INTRODUCTION

Digital technology has increasingly become essential in children's lives (Wartella et al., 2014). According to the American Academy of Pediatrics (2013), the most commonly preferred media tools in children are digital media tools. Today, three out of four young people have smartphones, and 92% go online daily (We Are Social and Hootsuite, 2022). In Turkey, 94% of young people between 10-17 use the internet via mobile devices and spend approximately 7.5 hours on the internet and almost 3 hours on social media daily (We Are Social and Hootsuite, 2022). UNICEF (2017) reports that more than half of the world population possess at least one smartphone, and one-third of those users are children and adolescents. In addition, according to the data of the Information Technology Use Research in Children conducted by TUIK (2022), 82.7% of children aged 6-15 and 95.7% of children and youth aged 16-24 use the internet regularly the country. Besides that, 64.4% and 96.7% of children aged 6-15 use mobile phones regularly.

Studie has proven that digital media applications positively and negatively affect children (Papadakis, Zaranis, & Kalogiannakis, 2019). They can become handy for obtaining information, researching, developing new ideas, following the agenda, providing social support, and promoting friendships (Papadakis, Zaranis, & Kalogiannakis, 2019). On the other hand, it is possible to mention their harmful effects, including digital addiction, insufficient sleep, inactivity, poor communication, social life, obesity, behavioral problems, risky behaviors, and cyberbullying (Kim & Faith, 2020). Due to such negative outcomes, parents have concerns about children's technology use (Duggan et al., 2015). Therefore, it becomes essential for children, adolescents, and parents to develop digital competence.

Parents, specifically mothers, are children's first role models who teach them new behaviors and skills. Children imitate their parents, which is called social learning and applies to all children. According to the Social Learning Theory proposed by Bandura (1965), a person learns behavior through observation, imitation, and modeling. Thanks to social learning skills, children observe and imitate what adults do and ultimately act like them (Richert et al., 2010). Likewise, children observe their parent's attitudes and dispositions in using digital media tools and applications and begin to behave like them (Richert et al., 2010). There is a correlation between the frequency of smartphone and tablet computer, use by parents and children (Nevski & Siibak, 2016). In other words, the children of parents who excessively use digital media tools have a great interest in digital media (Nevski & Siibak, 2016).

As mentioned, the present technological age has boosted children's tendency to use the internet and digital media. Parents' digital competencies are discussed under the concept of "digital parenting" in the literature. The concept was first proposed by Rode (2009) and then used by many researchers. Today there are several definitions of digital parenting. For example, Huang et al. (2009) define digital parenting as "parents' providing protection for children and teens in digital environments, monitoring social media use, and finding information and resources." According to Yurdakul et al., digital parenting requires parents to be open to technological innovations and have sufficient digital competency to keep up to date, protect their children against digital risks, and guide them to

be respectful of personal rights in both virtual and real life. Livingstone and Helsper (2008) define digital parenting as a mediation between the internet and information technologies and young people and children. Unlike other researchers, Schweller (2014) and Vaillancourt (2015) discuss digital parenting roles through the concept of digital motherhood. In general terms, digital parenting can be conceptualized as a parenting role that urges parents to be aware of the advantages and disadvantages of digital technologies for children, to recognize the problematic internet use, to guide their children in the digital world, and to be a role model (Manap & Durmus, 2020).

The use of digital media tools is characterized by individuality (Berk, 2002). Children use smartphones, tablet computer, s, and gaming devices individually, which imposes limitations on observing and checking children’s digital media use. New technological innovations, regular updates, and the emergence of complex versions of applications require parents to follow them. If parents cannot use digital media, children may exploit this situation. Personal and portable media tools such as smartwatches, smartphones, and tablet computer, s also reduce parental control (Haddon & Vincent, 2014). Parents' social status, income level, digital media competency, and parenting attitudes also affect how they provide digital guidance to their children (Livingstone, 2007). According to Levin, Arafeh, Baker Deniz, and Gottesman (2004), there are some issues that parents should consider regarding digital guidance: a) to ascertain the current use of digital media, b) to consider children’ needs, c) to consider the home environment, d) to improve children's digital media literacy skills, e) to set goals and make appropriate decisions, f) to promote effective use of digital media tools to foster children's creativity.

Mothers play critical roles in parenting. In addition to being role models for supporting children's healthy development and developing desired behaviors, they are expected to be aware of digital risks and opportunities, take necessary precautions, and raise children's awareness. The digital parenting competencies of mothers as informal educators are important in this regard. It is necessary to raise both mothers' and children’s awareness of digital media literacy to ensure the safe use of digital content (Nakayama, 2011). Mothers should be mindful of their digital competencies to guide children and aim to acquire qualified digital competencies. Therefore, fostering mothers’ digital skills in this digital age is necessary. This study aimed to determine mothers’ awareness of digital parenting. In this sense, it will contribute to the limited literature on mothers’ digital awareness and competence. In the study, answers to the following questions were sought:

1. What is the digital parenting awareness level of mothers?
2. Does mothers’ awareness of digital parenting differ significantly by mother’s age, child gender, the number of children mothers have, mothers’ previous knowledge or training on digital media, residence place, and children’s and the mothers' education status?

METHOD

Research Model

This quantitative study employed a descriptive survey model, which aims to describe a past or present situation as it is (Metin, 2014). In the survey model, a current situation is described as it exists. In general survey models, single or relational surveys and arrangements are used to make a judgment or reach a conclusion about a population (Metin, 2014). A single survey model allows the identification of variables by type or amount. A relational survey model is used to determine the absence, presence, and degree of change between two or more variables. Since we aimed to describe a situation today, we preferred to use the general survey model (Metin, 2014).

Sample

This descriptive study was conducted on 306 mothers living in Keçiören, Çankaya, and Etimesgut districts in Ankara whose children enrolled in kindergarten, primary school, secondary school, and high school participated in the research.

First of all, 36 schools were selected by using the proportional probability selection method according to the number of students. A simple random sampling method was used in the selection of mothers from the selected schools. In simple random sampling, there is an equal probability for any combination in the universe to be included in a sample (Metin, 2014). Accordingly, the participants were selected from 36 schools, 9 of which were kindergarten, nine primary schools, nine secondary schools, and nine high schools. The general information about the mothers is shown in Table 1 below.

Table 1. Mothers’ Demographic Characteristics

	Mothers			Mothers	
Age (Mothers)	n	%	District	n	%
26-30	27	8,8	Etimesgut	94	30,7
31-35	64	20,9	Keçiören	143	46,7
36-40	115	37,6	Çankaya	69	22,5
41-45	72	23,5	Age (Child)	n	%
46-50	21	6,9	3 years old	3	1,0
51-56	7	2,3	4 years old	9	2,9

Education Status (Mothers)		n	%			
Primary education		59	19,3	5 years old	22	7,2
High school		134	43,8	6 years old	21	6,9
University		89	29,1	7 years old	15	4,9
Master's/PhD		24	7,8	8 years old	18	5,9
Number of children	n	%		9 years old	10	3,3
1	57	18,6		10 years old	34	11,1
2	150	49,0		11 years old	73	23,9
3	81	26,5		12 years old	31	10,1
4	11	3,6		13 years old	9	2,9
5	7	2,3		14 years old	44	14,4
Gender (Child)	n	%		15 years old	6	2,0
Female	166	54,2		16 years old	6	2,0
Male	140	45,8		17 years old	3	1,0
				18 years old	2	0,7
Education Status (Child)	n	%		Digital Media Applications (Mothers)	n	%
Kindergarten	49	16,0		WhatsApp	28	9,2
Primary school	68	22,2		YouTube	1	0,3
Secondary school	127	41,5		Snapchat	9	2,9
High school	62	20,3		WhatsApp, Instagram	72	23,5
Digital Media Tools (Mothers)	n	%		WhatsApp, Instagram, Twitter	23	7,5
Smartphone	146	47,7		WhatsApp, Instagram, Twitter, YouTube	30	9,8
Smartphone, computer, smartwatch, television	5	1,6		WhatsApp, Instagram, YouTube, LinkedIn	25	8,2
Smartphone, computer, television	29	9,5		WhatsApp, Instagram, Pinterest	27	8,8
Smartphone, tablet computer	10	3,3		WhatsApp, Instagram, YouTube	21	6,9
Smartphone, tablet computer, computer,	16	5,2		WhatsApp, Instagram, YouTube, Pinterest	28	9,2
Smartphone, tablet computer, computer, smartwatch	5	1,6		WhatsApp, Instagram, YouTube, Spotify	25	8,2
Smartphone, tablet computer, computer, smartwatch, television	10	3,3		WhatsApp, Instagram, Bip	17	5,6
Smartphone, tablet computer, computer, television	30	9,8		Information about digital media	n	%
Smartphone, tablet computer, television	4	1,3		Yes	125	40,8
Smartphone, computer, smartwatch	4	1,3		No	181	59,2
Smartphone, computer	24	7,8		Education about digital media	n	%
Smartphone, television	21	6,9		Yes	41	13,4
Smartphone, smartwatch	2	0,7		No	265	86,6

As seen in Table 1, mothers' ages ranged from 26 to 56, and the majority were between 36-40 years (37.6%). Of them, 43.8% were high school graduates, 49% had two children, and 26.5% had three children. Similarly, 54.2% had girls, and 45.8% had boys. Among the children, 41.5% attended secondary school, 22.2% attended primary school, 20.3% attended high school, and 16% attended kindergarten. 46.7% of the mothers lived in Keçiören, 30.7% in Etimesgut, and 22.5% in Çankaya. Since all education levels were included in the study, the children's ages ranged from 3 to 18. All mothers had smartphones. Additionally, they could use other digital media tools such as computers, smart watches, televisions, and tablet computer, s. All mothers had WhatsApp, Instagram, Twitter, YouTube, Spotify, LinkedIn, Pinterest, and Bip accounts. 59.2% of the mothers stated that they did not receive information about digital media tools and applications, and 86.6% did not receive any training.

Data Collection Tools

The data were collected using the Digital Parenting Awareness Scale (DPAS) and personal information form for demographic information of the mothers. Table 1 presents the demographic information.

Personal Information Form: The form was prepared to determine the demographic information of the mothers participating in the research.

Digital Parenting Awareness Scale (DPAS): It was developed by Manap and Durmuş (2020). The five-point Likert-type scale had 16 items and four sub-factors: “Protection from Risks,” “Efficient Use,” “Being a Negative Model,” and “Digital Neglect” (rated as 1=Never, 2=Rarely, 3=Sometimes, 4=Frequently, 5=Always). The sub-factors of DEF were evaluated independently, and the scores obtained from the sub-dimensions ranged between 4 and 20. The high scores from the “Protection from Risks” and “Efficient Use” sub-factors pointed to high digital parenting awareness, whereas high scores from the “Being a Negative Model” and “Digital Neglect” sub-factors indicated poor awareness of digital parenting. There was no total score for the scale (Manap & Durmuş, 2020). The construct validity of the scale was examined with Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). EFA showed that scale had 16 items and a two-factor structure and explained approximately 57.56% of the total variance. The cronbach alpha internal consistency coefficients were .799 for the Being a Negative Model sub-dimension; .785 for the Digital Neglect sub-dimension; It is seen that Efficient Use sub-dimension takes .717 and Protection From Risks sub-dimension .634.information for sub-factors (Manap & Durmuş, 2020).

Data Collection

After necessary permissions were taken from the Ankara Provincial Directorate of National Education and school principals were informed about the study, a notice was hung in schools to invite and select mothers. The same notice was shared in social media parent groups. The forms were delivered to the mothers with the support of school counseling services. One week later, a reminder message was sent to increase participation. Volunteer mothers participated in the study.

Data Analysis

The data collected from the mothers were analyzed using the SPSS 25 program. Descriptive analysis methods were employed for descriptive information, and the results are presented in Table 1 and Table 2. The homogeneity of the data collected using the survey was tested as well. The significance level was found $p < 0.000$, which showed that the data were not normally distributed. Therefore, nonparametric tests were used. Accordingly, Mann-Whitney U Test was performed to determine whether there was a difference in DPAS sub-factors between the two independent groups. Kruskal-Wallis Test was used to determine whether there was a difference between independent groups. Upon finding a difference across groups, Tamhane's Post Hoc test was performed to determine the group that caused the difference. The significance level was set at $p < 0.05$.

Ethical Approval for Research

The research was approved by the Health Sciences University Hamidiye Scientific Research Ethics Committee (Date: 24.12.2021, No:21/744). All ethical rules were followed during the research.

RESULTS

This section involves the analysis results and findings.

Table 2. Results of the Mothers' Digital Parenthood Awareness Scale

	Being a Negative Model	Digital Neglect	Efficient Use	Protection from Risks
N	306	306	306	306
Mean	7,56	9,06	15,26	14,24
Standard deviation	2,59	3,18	3,54	4,00
Median	7,00	9,00	16,00	15,00
Minimum	4,00	4,00	4,00	4,00
Maximum	19,00	20,00	20,00	20,00

In DPAS, mothers’ scores in the “Being a Negative Model” sub-factor were 7.56 ± 2.59 ; it was 9.06 ± 3.18 in the “Digital Neglect”; 15.26 ± 3.54 in the “Efficient Use” and lastly 14.24 ± 4.00 in the “Protection from Risks” sub-factors. The scores that can be obtained from the DPAS sub-factors range between 4 and 20, and the sub-factors were evaluated separately (Table 2). The high scores from the “Protection from Risks” and “Efficient Use” sub-factors pointed to high digital parenting awareness, whereas high scores from the “Being a Negative Model” and “Digital Neglect” sub-factors indicated poor awareness of digital parenting. The analysis results revealed that mothers' digital parenting awareness levels were high.

Table 3. Mann Whitney U and Kruskal Wallis Test results of the relationship between the Mothers' Digital Parenthood Awareness Scale and various variables

<i>The sub-factors of DEF</i>	<i>Variables</i>	<i>N</i>	<i>Mean Rank</i>	<i>Total Rank</i>	<i>U</i>	<i>p</i>	
Gender (Children)							
Being a Negative Model	Female	166	160,83	266	104	,112	
	Male	140	144,81	202			
Digital Neglect	Female	166	150,29	249	110	,487	
	Male	140	157,31	220			
Efficient Use	Female	166	155,61	258	112	,647	
	Male	140	150,99	211			
Protection from Risks	Female	166	155,57	258	112	,655	
	Male	140	151,05	211			
Information about digital media							
Being a Negative Model	Yes	125	152,83	191	112	,911	
	No	181	153,96	278			
Digital Neglect	Yes	125	146,54	183	104	,250	
	No	181	158,31	286			
Efficient Use	Yes	125	163,30	204	100	,105	
	No	181	146,73	265			
Protection from Risks	Yes	125	164,17	205	997	,078	
	No	181	146,13	264			
Education about digital media							
Being a Negative Model	Yes	41	172,98	709	463	,127	
	No	265	150,49	398			
Digital Neglect	Yes	41	155,52	637	534	,874	
	No	265	153,19	405			
Efficient Use	Yes	41	179,82	737	435	,039	
	No	265	149,43	395			
Protection from Risks	Yes	41	179,34	735	437	,044	
	No	265	149,50	396			
Age (Mothers)							
<i>The sub-factors of DEF</i>	<i>Group</i>	<i>N</i>	<i>Mean Rank</i>	<i>Chi-Square</i>	<i>df</i>	<i>p</i>	<i>Significant Difference</i>
Being Negative Model	a)26-30 years old	27	126,76	5,358	5	,374	
	b)31-35 years old	64	150,66				
	c)36-40 years old	115	162,31				
	d)41-45 years old	72	157,13				
	e)46-50 years old	21	131,36				
	f)51-56 years old	7	166,93				
Digital Neglect	a)26-30 years old	27	139,24	15,217	5	,009	Between E and A, B, C, D
	b)31-35 years old	64	143,19				
	c)36-40 years old	115	150,71				
	d)41-45 years old	72	153,08				
	e)46-50 years old	21	223,79				
	f)51-56 years old	7	142,14				
Efficient Use	a)26-30 years old	27	154,61	1,193	5	,946	
	b)31-35 years old	64	157,88				
	c)36-40 years old	115	152,28				
	d)41-45 years old	72	155,72				
	e)46-50 years old	21	148,21				
	f)51-56 years old	7	122,21				
Protection from Risks	a)26-30 years old	27	170,94	6,184	5	,289	
	b)31-35 years old	64	166,10				
	c)36-40 years old	115	145,28				
	d)41-45 years old	72	158,36				
	e)46-50 years old	21	135,69				
	f)51-56 years old	7	109,50				
Residence place (district)							

A. Üstündağ

Being Negative Model	a	Etimesgut	94	147,30	7,939	2	,019	Keçiören and Çankaya
		Keçiören	143	144,97				
		Çankaya	69	179,63				
Digital Neglect		Etimesgut	94	137,55	4,460	2	,108	
		Keçiören	143	160,39				
		Çankaya	69	160,96				
Efficient Use		Etimesgut	94	155,91	5,117	2	,077	Keçiören and Çankaya
		Keçiören	143	161,83				
		Çankaya	69	132,96				
Protection from Risks		Etimesgut	94	157,95	2,483	2	,289	
		Keçiören	143	157,67				
		Çankaya	69	138,78				
Number of children								
Being Negative Model	a	1 children	57	160,36	1,681	4	,794	
		2 children	150	155,79				
		3 children	81	143,38				
		4 children	11	163,45				
		5 children	7	150,07				
Digital Neglect		1 children	57	146,50	,574	4	,966	
		2 children	150	154,25				
		3 children	81	156,48				
		4 children	11	150,91				
		5 children	7	164,00				
Efficient Use		1 children	57	154,21	5,488	4	,241	
		2 children	150	160,06				
		3 children	81	146,40				
		4 children	11	155,50				
		5 children	7	86,07				
Protection from Risks		1 children	57	168,95	5,502	4	,240	
		2 children	150	156,67				
		3 children	81	140,54				
		4 children	11	154,23				
		5 children	7	108,71				
Education Status (Child)								
Being Negative Model	a	Kindergarten	49	166,94	7,861	3	,049	Primary school and High school
		Primary school	68	173,09				
		Secondary school	127	146,43				
		High school	62	135,88				
Digital Neglect		Kindergarten	49	157,96	6,966	3	,073	
		Primary school	68	164,67				
		Secondary school	127	158,42				
		High school	62	127,65				
Efficient Use		Kindergarten	49	142,45	2,930	3	,403	
		Primary school	68	142,74				
		Secondary school	127	161,01				
		High school	62	158,65				
Protection from Risks		Kindergarten	49	144,91	1,798	3	,615	
		Primary school	68	149,77				
		Secondary school	127	161,32				
		High school	62	148,35				
Education Status (Mothers)								
Being Negative Model	a	a)Primary education	59	129,70	18,176	3	,000	Between A and C and D; between B and D
		b)High school	134	143,61				
		c)University	89	169,55				
		d)Master's/PhD	24	207,71				
Digital Neglect		a)Primary education	59	141,71	2,024	3	,568	
		b)High school	134	156,43				
		c)University	89	152,55				
		d)Master's/PhD	24	169,63				
		a)Primary education	59	163,54	4,262	3	,235	

Efficient Use	b)High school	134	141,76			
	c)University	89	161,97			
	d)Master's/PhD	24	162,96			
Protection from Risks	a)Primary education	59	149,35			
	b)High school	134	148,16	1,735	3	,629
	c)University	89	160,95			
	d)Master's/PhD	24	165,92			

As seen in Table 3, there was no significant difference in the DPAS sub-factors in terms of child gender, previous knowledge or training on digital media, and the number of children mothers have. However, there was a significant difference in mother scores who received training on digital media from the “Efficient Use” and “Protection from Risks” sub-factors. In this sense, digital parenting awareness levels of mothers who received training were significantly higher than those of mothers who did not. In addition, the findings indicate that mothers could use digital tools efficiently and protect their children from digital risks.

The findings regarding mothers' age suggested statistically significant differences in "Digital Neglect" sub-factor mean scores. Tamhane's post hoc test yielded a significant difference in favor of 46-50 years old mothers. In other words, the mothers in that age group had a high level of digital neglect.

The analysis results regarding residence place (district) revealed that the mothers' mean scores in the “Being a Negative Model” and “Efficient Use” sub-factors differed significantly. The Tamhane's post hoc test, which was conducted to determine the group with a significant difference, showed that it was between those living in Keçiören and Çankaya districts, and it was in favor of those living in Çankaya district for the “Being a Negative Model” sub-factor. That is, mothers in Çankaya were pretty negative role models for their children. In the “Efficient Use” factors, the difference was between Keçiören and Çankaya districts, and it was in favor of those living in the Keçiören district. This finding suggests that mothers living in Keçiören use digital tools more efficiently than other participants.

The findings regarding children's school type indicated statistically significant differences in the "Being a Negative Model" sub-factor mean scores. Tamhane's post hoc test results revealed that the difference was between primary and high school levels and was in favor of primary schoolers. Accordingly, mothers whose children attended primary school had a high level of “being a negative model.”

The analysis results regarding mothers' education status showed that “Being a Negative Model” mean scores differed significantly. The post hoc test suggested that the difference was between the mothers who graduated from primary school and those who were university graduates. It was in favor of the mothers who graduated from university. Similarly, there was a significant difference between primary school graduate mothers and postgraduate mothers, which was in favor of the latter. The findings suggest that mothers with undergraduate and graduate education had a high level of “being a negative model” for their children.

DISCUSSION

The digital age of the 21st century has given rise to several technological changes not only for children but also for parents, which plays a critical role in the emergence of the concept of digital parenting. It is well-known that the Covid-19 pandemic urged both children and parents to spend much time in front of the screen and even have digital addictions (Keleşoğlu & Karduz, 2020). In this sense, digital parenting can be considered an important 21st-century skill. Parents, especially mothers, have important roles and responsibilities in shaping children's digital media experiences (Zaman & Mifsud, 2017). Therefore, this study aimed to examine mothers' digital parenting awareness. The findings showed that mothers had high levels of digital parenting awareness, which overlaps with several findings in the relevant literature suggesting that mothers' awareness of digital parenting is higher than fathers (Manap & Durmuş, 2021). Similarly, Nayci (2021) explored the digital parenting awareness of parents with primary school students during the COVID-19 pandemic and concluded that mothers' digital parenting awareness was higher than fathers. In a study by Liao, Khoo, and Ang (2008), it was concluded that mothers were more mindful of their children's internet use than fathers.

The results of the research showed that mothers have a high level of digital parenting awareness. This is an important finding because, as a result of their research, Akay and Kayılı (2023) found that parents' digital parenting attitudes have an effect on adolescents' internet addiction. In addition, Arıcı Doğan and Döğür (2023) examined the relationship between mothers' digital parenting attitudes and mother-child internet addiction and found that the relationship between them was significant. In other words, high awareness of parents has a positive effect on their children's use of digital technology. In addition, this positive result is also important in terms of indirectly protecting children from digital technology-related harm. As Kuyumcu (2023) emphasizes, the most effective way to prevent Sharenting, the new disease of the digital age, is to raise awareness of parents.

On the other hand, Tosun and Mihci (2020) found that parents' digital parenting levels were low, yet still, the average scores of mothers were higher than that of fathers. Digital technology can have advantages or disadvantages for child development. Awareness of risks and opportunities, preventing problematic internet use, guiding children in the digital world, and being a role model are considered among desired parenting skills to support child development today (Ciboci & Labaš, 2019). In light of the findings, it

was an important and promising finding that the mothers of the digital world children of today had a high level of digital parenting awareness.

In the study, no significant difference was found in mothers' digital parenting awareness by the variables of child gender, mothers' previous knowledge about digital media, and the number of children they have. Similarly, Nayci (2021) determined no meaningful difference in mothers' digital parenting awareness by the number of children they had. Thus, it can be inferred that mothers' digital parenting awareness stays the same no matter how many children they have. Even in the literature, no study found an effect of child number on mothers' digital parenting awareness, although numerous studies addressed this issue in terms of children. At the same time, no research results reveal that the number of children is effective for parents in digital parenting awareness. For example, Lauricella, Wartella, and Rideout (2015) argue that social learning is essential in children's use of digital tools because children learn by observation and envision adults as role models in media use. Besides, Ólafsson, Green, and Staksrud (2017) revealed that the presence of older children was associated with an increase in daily internet use. In other words, in homes with more than one child, young children begin to be familiar with digital media early, and daily internet use may be more prolonged (Ólafsson, Green, & Staksrud, 2017). Therefore, while digital parenting awareness does not differ by the number of children, it differs for children.

The critical finding was that mothers' previous knowledge about digital media tools did not cause a significant change in their digital parenting awareness. However, the analysis showed that training mothers about digital media tools and applications brought about significant changes in the "efficient use" and "protection from risks" sub-factors. In this sense, it is indicated that while receiving information did not change mothers' awareness, receiving training contributed to their awareness of digital media. In other words, offering training to mothers has long-term and favorable outcomes.

As mentioned above, another finding was that mothers trained in digital media use had a high level of efficient use and protection of their children from risks, which is a noteworthy finding as of being a role model for children. Likewise, Uzuegbunam (2019) emphasized that "mothers should be able to use digital technology effectively, consider children's needs in this information age, and support them in acquiring and using information correctly." Several researchers underlined parents' roles in ensuring the efficient and safe use of digital media and protection from risks in the digital world (Gomez et al., 2017; Keya et al., 2020; Nouwen & Zaman, 2018). This finding suggests the role and importance of parent training in ensuring children's digital safety. For instance, İnan-Kaya, Mutlu-Bayraktar, and Yılmaz (2018) determined that parents should be well-informed about digital risks considering the prevalence of unfavorable content for children on the internet. The negative outcomes related to the digital world involve children's exposure to age-inappropriate content, ill-minded people, digital violence, and cyberbullying (Üstündağ, 2020). It is primarily the parent's responsibility to protect children against such negative situations in the digital world. Therefore, parents are expected to be competent in digital parenting. Due to the complexity of digital technology tools and daily innovations, parents should always follow the agenda (Haddon & Vincent, 2014).

Another study finding was that mothers whose children attended primary school had a high level of being a negative model. Nevertheless, there is a similar finding in the literature. In research on digital parenting awareness, mothers' education status was examined, not children's. For example, Tosun and Mihci (2020) investigated the digital parenting behaviors of parents with preschoolers and found low levels of digital parenting attitudes. Additionally, Nayci (2021) examined the digital parenting awareness of parents with primary school students during the COVID-19 pandemic and concluded that fathers were more negative role models than mothers. It has been observed that parents' digital media habits are influential on children's digital attitudes, and there is a correlation between parents' and children's screen time; that is, the more time parents spend in front of the screen, the more children use smartphones excessively (Çelik, 2017; Kubik, 2017; Manap et al. Durmus, 2021; Üstündağ, 2020). Social learning theory explains this phenomenon. Accordingly, children learn through observation and model the behaviors in their social environment (Bacanlı, 2003). Especially mothers and fathers are the primary role models of children (Deniz, 2007). In this regard, positive role model behaviors are one of the parenting responsibilities. According to Livingstone, Haddo, Görzig, and Ólafsson (2010), the more often children use digital technologies, so does their exposure to online risks. Therefore, mothers should be positive models for children and be mindful of the safe use of digital technologies.

Another finding was that mothers with undergraduate and graduate degrees had a high level of being a negative model for their children. In the literature, studies mostly showed that as parents' education status increases, so does their awareness of digital parenting. For instance, Yaman, Yurdakul, Akbulut, and Dönmez (2022) investigated the digital parenting profile in Turkey and found that well-educated parents used the internet more frequently than low-educated ones and, therefore, had better digital parenting self-efficacy. Similarly, Gür and Türel (2022) found that parents with higher levels of education had better digital parenting attitudes, which overlaps with the findings of Alvarez et al. (2013). Although our findings revealed that mothers' digital awareness levels were high (see Table 2), mothers with undergraduate and graduate education had a high level of being a negative model for their children, which is not consistent literature findings. This finding can be interpreted as that, instead of educational status, mothers' previous knowledge and training on digital technology affect their digital parenting awareness.

CONCLUSION

This study was conducted to determine mothers' digital parenting awareness, and the findings indicated high levels of digital parenting awareness. Additionally, no significant difference was found in digital parenting awareness by child gender, previous knowledge about digital media, and the number of children mothers have. However, there was a significant difference in the

“Efficient Use” and “Protection from Risks” sub-factor scores of mothers who received training on digital media, indicating that those mothers' digital parenting awareness is high. It was also found that the level of digital neglect of mothers between the ages of 46-50 was high, mothers living in the Çankaya had a high level of being a negative model, and the mothers living in the Keçiören had a high level of efficient use of digital tools. The mothers whose children attended primary school were negative models, and those with undergraduate and graduate degrees had a high level of being negative models.

Overall, the research contributes to the digital parenting literature by shedding light on mothers' awareness levels and factors that may affect their digital parenting practices. To wrap it up, we can suggest that the findings of the research largely align with existing literature on the subject, reinforcing the importance of mothers' role in digital parenting and the need for their awareness of digital risks and opportunities. The results of the current research also revealed that the reinforcing the importance of mothers' role in digital parenting and the need for their awareness of digital risks and opportunities. Therefore, the research makes an important contribution to the literature on mothers' awareness in the digital age. Due to the being role models for supporting children's healthy development and developing desired behaviors, importance should be given to the digital parenting competencies of mothers. Given that digital technology is indispensable in life, and potentially its continuity, identifying and addressing early signs of digital parenting awareness provides an opportunity for parents to enable them to make healthier progress throughout their child's life. However, our relatively small sample and one-off design limit the broad applicability of our findings. Future research on parents' digital parenting skills should be conducted at regular intervals in larger sample groups in a cross-sectional design. A potential limitation of the research is that it relied on self-reported data. Self-reported measures may not always accurately reflect participants' actual behavior or awareness levels. That's why, future studies may consider including observational or behavioral measures to supplement self-report data.

Main Points

- Parents, specifically mothers, are children's first role models who teach them new behaviors and skills.
- Mothers play critical roles in parenting.
- In addition to being role models for supporting children's healthy development and developing desired behaviors, they are expected to be aware of digital risks and opportunities, take necessary precautions, and raise children's awareness.
- The digital parenting competencies of mothers as informal educators are important in this regard.
- It is necessary to raise both mothers' and children's awareness of digital media literacy to ensure the safe use of digital content.

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