Journal of Education and Future
year: 2023, issue:24, 15-29
DOI: 10.30786/jef.1243788

Exploring of Parental Attitudes in the Context of the Digitalized Family

Article Type	Received Date	Accepted Date
Research	31.01.2023	27.09.2023

Enver Durualp* **Lügen Ceren Güneş**** **Ender Durualp*****

Abstract

The present descriptive survey research attempted to explore parents' digital parenting attitudes by certain variables related to children's use of technological tools. A total of 388 parents, 273 mothers and 115 fathers, with children aged 6-15 years were recruited for the study. The data were collected via Google forms using a demographic information form and the "Digital Parenting Attitude Scale" developed by İnan Kaya et al. and analyzed utilizing Mann-Whitney U and Kruskal-Wallis H tests. The findings revealed that the parents with children aged 11-15 years, with children using technological devices for 8 hours or more, and not supervising or restricting their children in the use of technological tools had a significantly stronger approval attitude toward the effective use of digital media. It was also found that parents with children watching TV the most, thinking that their children excessively use technological tools, and always supervising and restricting their children had a significantly stronger protective attitude against the risks of digital media. Overall, based on the findings, the paper concluded with some recommendations for parents, experts, and researchers.

Keywords: Digital parenting, digital parenting attitudes, effective use, risk protection, technological tools.

* Assist. Prof. Dr., Bartın University, Faculty of Education, Department of Educational Sciences, Bartın, Türkiye. E mail: enverdurualp@hotmail.com, https://orcid.org/0000-0002-9979-5506

** Research Assistant, Ankara University, Faculty of Health Sciences, Department of Child Development, Ankara, Türkiye. E mail: lckiyan@hotmail.com, https://orcid.org/0000-0003-1923-4491

*** Prof. Dr., Ankara University, Faculty of Health Sciences, Department of Child Development, Ankara, Türkiye. E mail: endora2212@hotmail.com, https://orcid.org/0000-0002-6645-6815

Dijitalleşen Aile Bağlamında Ebeveynlerin Tutumlarının İncelenmesi

Makale Türü	Başvuru Tarihi	Kabul Tarihi
Araştırma	31.01.2023	27.09.2023

Enver Durualp[*] **Lügen Ceren Güneş**[**] **Ender Durualp**[***]

Öz

Dijital ebeveynlik tutumlarının çocukların teknolojik araç kullanımına ilişkin birtakım değişkenlere göre tetkik edilmesini amaçlayan araştırma, nicel boyutta betimsel tarama modelinde tasarlanmıştır. Araştırma, 6-15 yaş arasında çocuğa sahip 273 anne ve 115 baba olmak üzere toplam 388 ebeveynin katılımıyla yapılmıştır. Verilerin derlenmesinde "Bilgi Formu"nun yanı sıra İnan Kaya ve arkadaşlarınca geliştirilen "Dijital Ebeveynlik Tutum Ölçeği" nden yararlanılmıştır. Google form aracılığı ile derlenen verilerin analizinde Kolmogorov-Smirnov, Mann Whitney U ve Kruskal Wallis H testleri kullanılmıştır. Yapılan analizler neticesinde 11-15 yaşları arasında çocuğu olan, çocuğu 8 saat ve üzerinde teknolojik araç kullanan, teknolojik araç kullanımında çocuğunu denetlemeyen ve kısıtlamayan ebeveynlerin dijital medyanın etkili kullanımını onaylama tutumlarının; çocuğu en fazla televizyon izleyen, çocuğunun aşırı teknolojik araç kullandığını düşünen, çocuğunu her zaman denetleyen ve kısıtlayan ebeveynlerin dijital medya risklerinden koruma tutumlarının anlamlı olarak yüksek olduğu görülmüştür. Araştırmadan elde edilen sonuçlar doğrultusunda ebeveynlere ve araştırmacılara öneriler sunulmuştur.

Anahtar Sözcükler: Dijital ebeveynlik, dijital ebeveynlik tutumları, etkili kullanım, risklerden koruma, teknolojik araç.

[*] Dr. Öğr. Üyesi, Bartın Üniversitesi, Eğitim Fakültesi, Eğitim Bilimleri Bölümü, Bartın, Türkiye. E posta: enverdurualp@hotmail.com, https://orcid.org/0000-0002-9979-5506

[**] Araştırma Görevlisi, Ankara Üniversitesi, Sağlık Bilimleri Fakültesi, Çocuk Gelişimi Bölümü, Ankara, Türkiye. E posta: lckiyan@hotmail.com, https://orcid.org/0000-0003-1923-4491

[***] Prof. Dr., Ankara Üniversitesi, Sağlık Bilimleri Fakültesi, Çocuk Gelişimi Bölümü, Ankara, Türkiye. E posta: endora2212@hotmail.com, https://orcid.org/0000-0002-6645-6815

Introduction

Unprecedented developments in information and communication technologies (ICT) bring substantial impacts on daily life, becoming a focus for political, economic, and global relations. Thus, they disrupt the perceptions of time and space and manifest a decentralized network of relations. Such transformation in ICT then enables individuals to communicate easily with anyone from anywhere. Not surprisingly, this mediated form of communication, thanks to novel ICT, has led to radical changes in the socialization forms of individuals (Aşkın, 2020; Karagülle & Çaycı, 2014). However, these radical changes are even becoming more and more commonplace since individuals now have a chance to maintain their relations and social activities initiated in digital media in the real world or vice versa. Digital media shine out as a complementary space for the socialization of people who have internalized socio-cultural codes of their social structures. These technological and social changes inevitably bring about the transformation of family and parenthood and pave the way for the emergence of a new parenting model in the digitalized family (Yurdigül & Deveci, 2021).

The digital world has been tailoring families around digital tools and transforming social relations between family members. The traditional perception often relies on the idea that family members need to share the same place/house; yet such a perception has evolved into a reality that highlights emotional belonging between family members through digital communication technologies. This understanding of family now allows family members to rally together in digital settings, regardless of their physical locations, to maintain their family relationships. It should be noted that although digitalization has diminished the significance of physical space for contemporary families and offers a technological infrastructure for their relations, the feeling of belonging and emotional commitment still need to be considered in such relations (Aşkın, 2020). On the other hand, the prominent actors of such an emerging family form may be "digital" parents. A parent in the digitalized family can be defined as one who bears sufficient technology literacy, follows cutting-edge developments, can be a role model in the use of technological devices, knows how to protect their child(ren) against online threats and risks, and organizes and monitors their interactions with digital media (Huang et al., 2018). Therefore, digital parenting refers to parents' conscious effort to understand, support, and regulate their children's use of digital media (Benedetto & Ingrassia, 2020). In this regard, digital parents are able to discuss the pros and cons of digital media with their children and prepare a guideline on the use of digital media for them. In addition, these parents can restrict their engagement in technology (e.g., setting restricted places where digital devices are prohibited at home) and can protect them from the harmful effects of digital media (e.g., frequent visits to outdoor spaces and playgrounds with their children; Kavitha & Sikandar, 2021).

Indeed, information and communication services offered by mobile media and cloud technologies are becoming more and more common in many urban communities. These services infiltrate all layers of society, shape families' communication practices and media consumption habits, and alter the form of the parent-child relationship, as well as parental guidance for children's use of digital media (Lim, 2018). The digital family (Global Kids Online, 2016), emerging drastically with the increasing internet access in Western urban communities and consisting of digitally connected members, is deeply connected through multimedia and communication platforms. It is now considered ordinary for such families to own and acquire televisions and desktop computers, as well as customized game consoles, music players, tablet computers, and smartphones. Media use in these media-rich households may become children's primary activity of daily living (Lim, 2018). Since a multimedia task allows two or more digital devices to be utilized simultaneously (Imren, 2019), children can listen to music while conversing with their friends via social media, or they can watch a YouTube video on their smartphones while playing games and send a Snapchat message to their friends on their laptops at the same time.

The literature on digitalized families and parents previously suggested noteworthy findings. Özkan and Hira (2017) reported that parents have difficulty controlling children engaged in digital media more than themselves. It was also documented that parents often use television or computer to entertain their children (He et al., 2010) and attribute a babysitter role to digital media (Nikken, 2019; Özkan & Hira, 2017). Since almost all parents are now social media users (Ulusoy & Bostancı, 2014), they allow their children to use digital media for their interests to manage their children's behavior and avoid arguments (Geurts et al., 2021). Most parents with children aged 0-5 years provide digital devices to their children

from their very first year (Gjelaj et al., 2020); even four-month-olds use digital devices (Reid Chassiakos et al., 2016). Therefore, family communication has recently become digital (Utma, 2020). It was also uttered in the literature that four-year-olds spend an average of 20 minutes a day using digital technology, and most of them prefer to be entertained by mobile applications on tablet computers (Neumann, 2015). It is now well-known that computers and computer games enter the lives of children from the age of four, and almost all play at least one digital game (Üstündağ, 2019). Screen-based media is now a ubiquitous feature of early childhood, even for children under five (Duch et al., 2013; Lenhart et al., 2015). Children start to use social media from the age of 7-9 (Güney, 2020; Ulusoy & Bostancı, 2014), and the age at which children start using digital technology affects their future technological competence (Juhanak et al., 2019). Undoubtedly, the previous findings promote the idea that the digitalized family with all its members is now surrounded by digital technologies. To this end, it seems important to explore the variables that may bring differences in the attitudes of digital parents.

Children within digitalized families are highly exposed to digital devices at an early age. Despite the learning-facilitating nature of digital media, it bears potential threats and risks that may adversely affect children's safety and future (Reid Chassiakos et al., 2016). In this sense, it seems critical to raise awareness of potential threats and risks of digital media among digital parents who are capable of instantly searching, reading, watching, or sharing any information needed. Contemporarily, it is highly needed to identify parental attitudes toward digital parenting approaches, list children's needs for digital technology to generate relevant technology-oriented activities, and make robust evaluations to evoke awareness of technology and digital services among people. Accordingly, the present study aimed to explore the digital parenting attitudes of parents with children aged 6-15 years by certain variables (children's age, children's gender, children's favorite technological tool, time spent with technological tools, frequency of technology use, use of safety software, parental supervision, restriction to children) related to children's use of technological tools. The findings are thought to be instrumental for parents, educators, experts, and future research.

Method

This section includes research design, sample, data collection tools, data collection method and data analysis.

Research Design

Employing a descriptive survey design, the present research explored parents' digital parenting attitudes by their children's use of technological tools. A descriptive survey design comprises research carried out with large groups to gather their opinions, observe their attitudes concerning a fact/phenomenon, and describe that fact/phenomenon (Karakaya, 2012).

Research Sample

The sample was conveniently selected among parents with children aged 6-15 years. Since no information about the population was handy, a power analysis was performed to ensure maximum volume for the sample. Upon the assumption that the population proportion is 0.50 and the difference between the population and sample proportions is at most 0.07 (0.50-0.43), the power analysis yielded a sample size of 388 parents. Then, the research was carried out with 388 parents, 273 mothers and 115 fathers. Initial statistics revealed that the majority of the parents were 36-45 years old (48.2%), had an undergraduate or higher education (64.5%), were employed (61.3%), and had 6-10-year-old (57.7%) and male (52.8%) children.

Data Collection Tools

The data were collected using a demographic information form (also including children's characteristics of technology use) and the "Digital Parenting Attitude Scale" (DPAS).

The DPAS is a 12-item scale developed by Inan Kaya et al. (2018) and administered to parents with children 6-18 years to evaluate their attitudes toward their children's use of technology. The items are rated on a 5-point Likert-type scale ranging from 5 (strongly agree to 1 (strongly disagree). The scale is structured on two dimentions: Approving Effective Use of Digital Media and Protecting Against

the Risks of Digital Media. A high score on an item consisting of a positive or negative judgment shows the strength of the respondent's attitude in that direction. In the original study, exploratory factor analysis yielded a two-factor structure explaining 46.109% of the total variance. While internal consistency coefficients on the scale ranged from .724 to .776, the two-half-test reliability coefficients became between .631 and .764. The results of a paired samples t-test, performed in this study for reliability concerns, showed no significant differences between the pre- and post-test scores of the samples in both subscales. Hence, it can be asserted that the scale is a valid and reliable measurement tool (İnan Kaya et al., 2018).

For reliability concerns, Cronbach's alpha coefficients were calculated to be .78 for Part A and .74 for Part B. A rule of thumb in the literature suggests that a coefficient of 0.70 or higher is evidence of sufficient reliability of test scores (Büyüköztürk et al., 2019).

Procedure

The scholars developing the DPAS were first requested relevant permissions for the use of the scale, and then the Bartın University Social and Human Sciences Ethics Committee granted ethical approval to this study (15.04.2022/2022-SBB-0148). Next, the purpose of the research was explained to conveniently selected parents, and informed consent was obtained from those accepting voluntary participation in the study. Finally, the parents were asked to fill out the questionnaire booklet provided via Google Forms. The data were gathered between April 15 and June 10, 2022, and the procedure took approximately 15-20 minutes for each parent. Ultimately, the research findings are limited to the responses of conveniently selected parents, living in different regions of Turkey and having children aged 6-15 years, between April 15 and June 10, 2022.

Data Analysis

Kolmogorov-Smirnov test was utilized to check whether the data showed a normal distribution. Accordingly, the scores on the Approving Effective Use of Digital Media (Part A) (KS: .136; $p < .05$) and the Protecting Against the Risks of Digital Media (Part B) (KS: .096; $p < .05$) components showed a non-normal distribution. Therefore, the groups were compared using Mann-Whitney U and Kruskal-Wallis H tests. The significant differences between the groups were sought using the Mann-Whitney U test. The analyses were performed on the SPSS program, and a p-value < .05 was accepted as statistically significant.

Results

The findings of the research, which aims to examine digital parenting attitudes according to some variables related to children's use of technological devices, are reported in the following tables.

Table 1

The Parents' Views on Their Children's Use of Technological Tools

Feature		**n**	**%**
Technological Tool	Tablet	72	18,6
	Computer	59	15,2
	TV	46	11,9
	Mobil phone	211	**54,4**
Usage Time/day	0-1 hour	38	9,8
	2-4 hour	207	**53,4**
	5-7 hour	109	28,1
	8 hour and above	34	8,8
Frequency of use	Very little	42	10,8
	Very much	196	**50,5**
	Overuse	70	18,0
	Balanced	80	20,6
Purpose of usage*	Playing game	261	67,3
	Researching	154	39,7
	Listen to music	162	41,8
	Watching movie	178	45,9
	Watching videos	259	**66,8**
	Studying	205	52,8
	Do homework	198	51
	Social communication	141	36,3
Most visited websites*	Game	252	**64,9**
	Music	132	34
	Education	165	42,5
	Movie	149	38,4
	Chat	46	11,9
	Sports	33	8,5
	Science and technology	61	15,7
	Newspaper	3	0,8
	Social media	112	28,9

* More than one option has been ticked.

The findings revealed that 54.4% of the children used smartphones the most, 53.4% spent 2-4 hours a day with technological tools, and 50.5% spent "excessive time" with digital devices. The parents reported that their children used technological tools mostly for watching videos, playing games, and studying and mostly visited gaming, instructional, and movie streaming websites (Table 1).

About half of the parents (44.3) usually supervised their children while using technological tools, 50.5% did not use a filter program in technological tools, and 58.5% partially restricted their children from using digital devices. Besides, 30.2% reported that their children appreciated restrictions. The parents also noted that their children were most affected by technological tools regarding socialization, physical activity, and academic achievement and stated that the use of technological tools might pose risks of technology addiction, health problems, and communication with strangers (Table 2).

Table 2

The parents' views on their children's use of technological tools

Feature		n	%
Parental supervison	None	7	1,8
	Rarely	62	6,7
	Occasionally	111	28,6
	Ususally	172	**44,3**
	Always	72	18,6
Use of protection program	I use	151	38,9
	I don't use	196	**50,5**
	I don't know	41	10,6
Restriction status	I restrict	114	29,4
	I partially restrict	227	**58,5**
	I don't restrict	47	12,1
Child's response to restriction	S/He welcomes	117	**30,2**
	S/He resists	102	26,3
	S/He shows anger	111	28,6
	S/He acts reckless	18	4,6
	Other	40	10,3
Being affected by technological tools*	Physical	162	41,8
	Social	175	**45,1**
	Emotional	102	26,3
	Academic success	125	32,2
	Other	72	18,6
	Does not affect	19	4,9
Problems/Risks caused by technological tools*	Technology addiction	298	**92,8**
	cyberbullying	118	36,8
	Communication with strangers	150	46,7
	Violation of privacy of personal information	146	45,5
	Health problems	202	62,9
	Virus and malware	135	42,1
	Fraud	127	39,6

* More than one option has been ticked.

Table 3

Comparison of digital parenting attitudes by children's age

Sub-dimensions	Child's age	n	Mean Rank	Sum of Ranks	U	p
Approving Effective Use of Digital Media	6-10	224	183,76	41162,00	15962,000	**0,026**
	11-15	164	209,17	34304,00		
Protecting Against Digital Media Risks	6-10	224	202,93	45455,50	16480,500	0,082
	11-15	164	182,99	30010,50		

The analysis resulted in a significant difference between the parents' approval attitudes toward the effective use of digital media by children's age ($U = 15962.000$; $p < 0.05$). Considering the mean ranks, the parents with children aged 11-15 years had a more decisive attitude toward the effective use of digital media (Table 3).

Table 4

Comparison of digital parenting attitudes by children's gender

Sub-dimensions	Gender of child	n	Mean Rank	Sum of Ranks	U	p
Approving Effective Use of Digital Media	Female	183	186,64	34155,50	17319,500	0,187
	Male	205	201,51	41310,50		
Protecting Against Digital Media Risks	Female	183	190,48	34857,50	18021,500	0,502
	Male	205	198,09	40608,50		

As presented in Table 4, there was no significant difference between the parents' digital parenting attitudes by children's gender ($p > 0.05$).

Table 5

Comparison of digital parenting attitudes by children's favorite technological tool

Sub-dimensions	Technological tool	n	Mean rank	sd	χ^2	p	Meaningful difference
Approving Effective Use of Digital Media	Tablet	72	187,58	3	0,377	0,945	
	Computer	59	193,96				
	TV	46	197,68				
	Mobil phone	211	196,32				
Protecting Against Digital Media Risks	Tablet[1]	72	194,12	3	10,140	**0,017**	3-1
	Computer[2]	59	180,97				3-2
	TV[3]	46	242,55				3-4
	Mobil phone[4]	211	187,94				

The parents' protective attitudes against the risks of digital media differed significantly by children's favorite technological tool ($\chi^2_{(sd=3,\ n=388)} = 10.140$, $p < 0.05$). The Mann-Whitney U test yielded that the parents with children watching television the most had a stronger protective attitude against the risks of digital media than those with children using tablets, computers, and smartphones the most ($p < 0.05$).

Table 6

Comparison of digital parenting attitudes by time spent with technological tools

Sub-dimensions	Usage time/day	n	Mean rank	sd	χ^2	p	Meaningful difference
Approving Effective Use of Digital Media	0-1 hour[1]	38	150,78	3	15,448	**0,001**	2-1
	2-4 hour[2]	207	203,89				2-3
	5-7 hour[3]	109	177,88				4-1
	8 hour and above[4]	34	239,47				4-3
Protecting Against Digital Media Risks	0-1 hour	38	236,83	3	7,615	0,055	
	2-4 hour	207	191,79				
	5-7 hour	109	181,01				
	8 hour and above	34	206,96				

The findings showed a significant difference between the parents' approval attitudes toward the effective use of digital media by time children spend with technological tools ($\chi^2_{(sd=3,\ n=388)} = 15.448$, $p < 0.05$). Accordingly, it was found that the parents with children spending 8 hours or more with technological tools in a day had a stronger approval attitude toward the effective use of digital media.

Considering the results of the Mann-Whitney U test, the parents with children using technological tools 2-4 hours a day had a stronger approval attitude toward the effective use of digital media than those with children spending 0-1 hours and 5-7 hours with digital devices. Moreover, it was the case between parents with children spending 8 hours or more with technological tools in a day compared to children using technological tools 0-1 hours and 5-7 hours a day, respectively ($p < 0.05$) (Table 6).

The findings showed that parents' protective attitudes against the risks of digital media differed significantly by frequency of children's use of technological tools ($\chi 2(sd=3, n=388) = 9.198$, $p < 0.05$). Considering the mean ranks of the groups, it was discovered that the parents with children using technological tools excessively had a stronger protective attitude than those reporting that their children have a balanced use of technological tools ($p < 0.05$) (Table 7).

Table 7

Comparison of digital parenting attitudes by frequency of technology use

Sub-dimensions	Frequency of use	n	Mean rank	sd	χ^2	p	Meaningful difference
Approving Effective Use of Digital Media	Very little	42	167,67	3	3,352	0,340	
	Very much	196	201,52				
	Overuse	70	190,25				
	Balanced	80	195,11				
Protecting Against Digital Media Risks	Very little[1]	42	203,17	3	9,198	**0,027**	2-4
	Very much[2]	196	195,54				3-4
	Overuse[3]	70	219,52				
	Balanced[4]	80	165,51				

Table 8

Comparison of digital parenting attitudes by use of safety software

Sub-dimensions	Use of protection program	n	Mean rank	sd	χ^2	p
Approving Effective Use of Digital Media	I use	151	187,21	2	1,167	0,558
	I don't use	196	200,17			
	I don't know	41	194,26			
Protecting Against Digital Media Risks	I use	151	209,08	2	4,285	0,117
	I don't use	196	186,01			
	I don't know	41	181,37			

It was determined that the parents' approval attitudes toward the effective use of digital media and protective attitudes against the risk of digital media did not differ by their use of safety software in technological tools ($p > 0.05$) (Table 8).

Table 9

Comparison of digital parenting attitudes by parental supervision

Sub-dimensions	Supervise status	n	Mean rank	sd	χ^2	p	Meaningful difference
Approving Effective Use of Digital Media	None[1]	7	293,21	4	11,466	**0,022**	1-2
	Rarely[2]	26	195,46				1-3
	Occasionally[3]	111	177,57				1-4
	Ususally[4]	172	207,05				1-5
	Always[5]	72	180,69				4-3
Protecting Against Digital Media Risks	None[1]	7	158,64	4	11,930	**0,018**	
	Rarely[2]	26	174,75				5-2
	Occasionally[3]	111	181,14				5-3
	Ususally[4]	172	191,37				5-4
	Always[5]	72	233,19				

The parents' approval attitudes toward the effective use of digital media ($\chi^2_{(sd=4,\ n=388)} = 11.466$, $p < 0.05$) and protective attitudes against the risks of digital media ($\chi^2_{(sd=4,\ n=388)} = 11.930$, $p < 0.05$) showed significant differences by supervision of children. Accordingly, while those never supervising their children had a stronger approval attitude toward the effective use of technological tools, the parents always supervising their children had a stronger protective attitude against the risks of digital media.

The test performed to reveal differences between the groups yielded that the parents never supervising their children had higher scores on Part A than those rarely, occasionally, usually, and always supervising their children, respectively. It was also the case between those usually supervising their children and occasional supervisors. On the other hand, the parents always supervising their children while using technological tools had higher scores on Part B than those rarely, occasionally, and usually supervising their children, respectively ($p < 0.05$) (Table 9).

Table 10
Comparison of digital parenting attitudes by restriction to children

Sub-dimensions	Restriction status	n	Mean rank	sd	χ^2	p	Meaningful difference
Approving Effective Use of Digital Media	I restrict[1]	114	174,57				
	I partially restrict[2]	227	197,56	2	8,169	**0,017**	3-1
	I don't restrict[3]	47	228,07				
Protecting Against Digital Media Risks	I restrict[1]	114	237,89				1-2
	I partially restrict[2]	227	188,08	2	38,830	**0,000**	1-3
	I don't restrict[3]	47	120,27				2-3

Finally, there were significant differences between parents' approval attitudes toward the effective use of digital media ($\chi^2_{(sd=2,\ n\ =\ 388)} = 8.169$, $p < 0.05$) and protective attitudes against the risks of digital media ($\chi^2_{(sd=2,\ n=388)} = 38.830$, $p < 0.05$) by restriction to children. Accordingly, the parents who did not restrict their children regarding technological tools had a stronger approval attitude than those who did not. Moreover, it was found that the parents restricting their children had a stronger protective attitude than those partially and not restricting children regarding technological tools ($p < 0.05$) (Table 10).

Discussion, Conclusion and Recommendations

The COVID-19 pandemic, ongoing for about two years, has unequivocally boosted the use of screen-based digital technology. Educational institutions worldwide have then switched to distance education as a form of crisis management; therefore, teachers, children, and parents have been the principal actors of distance education in everyday practice. Additionally, children now spend more time on various digital platforms as a way of staying in touch with their friends and other family members. The digital transformation in the 21st century has utterly forced families to change. These changes, resulting in digitalized families, have altered the definition and scope of parenting and laid the groundwork for the emergence of digital parenting. Since parents are the first to come to mind when it comes to keeping children safe, digitalized parents are expected to keep up with, adapt to state-of-art technology, and be aware of the risks, as well as the advantages, of digital media to raise physically and psychologically healthy children.

The research findings uncovered a significant difference between the parents' approval attitudes toward the effective use of digital media by children's age. It was found that the parents tended to approve of their 11-16-year old children's effective use of media more than those with children aged 6-10 years. It was previously documented that the vast majority of children under 13 years post their full names, nearly half share their mobile phone numbers, while less than half flag their home addresses in digital environments (Santisarun & Boonkrong, 2015). Then, such visibility of children with their personal information in digital environments at an early age inevitably makes them vulnerable to abusers (Bostancı, 2019), which also leads parents, the ultimate protectors of children's digital identities (Madden, 2012), to worry about their online experiences (Livingstone et al., 2017). Not surprisingly, many parents are now concerned about their children's exposure to violent images, digital identity theft, inappropriate content and advertisements, and cyberbullying while using the internet and digital media. In addition, it is another reason for concern that long-term use of digital media is likely to lead to addiction, replacing socialization and play activities and affecting children's emotional relationships with their parents and social environment (Livingstone&Byrne, 2018; Mertala, 2019; Zabatiero vd., 2018). Moreover, there is a plethora of evidence that the use of digital media deteriorates children's health (Page et al., 2010) through sleep loss (Lam et al., 2003). Considering increasing screen time with age (Cadoret vd., 2018; Hesketh vd., 2015; Przybyiski&Weinstein, 2019), children are already exposed to the risks of digital media from an early age. Therefore, it can be asserted that the participating parents adopted a protective attitude toward the adverse effects of digital media on their children from an early age.

The participating parents did not significantly differ in their digital parenting attitudes by their children's gender. Nevertheless, the literature hosts research concluding that high school girls are mostly restricted in the use of digital media by their mothers (Çetinkaya & Sütçü, 2016). It seems more appropriate that parents' approval and protective attitudes toward the use of digital media apply to all children.

On the other hand, there was a significant difference between the parents' protective attitudes against the risks of digital media by their children's favorite technological tools. Accordingly, those with children watching television the most had a stronger protective attitude than the parents with children using tablets, computers, and smartphones the most, respectively. The adverse impacts of excessive television viewing on human health are not a secret in the contemporary world (Lowry et al., 2002; Vessey et al., 1998). After the 2000s, television-oriented technology has immensely diversified with the introduction of screen-based digital devices such as computers, tablets, game consoles, and smartphones. Moreover, the introduction of these internet-enabled devices to the use of children has also led to an increase in the time they spend in front of the screen from an early age (Yücelyiğit & Aral, 2020). Expectedly, parents become worried when their children are connected to the internet or various digital platforms via computers or smartphones (Echeburua, Labrador, & Becoña, 2009). Nowadays, approximately 85% of children access social media via mobile devices (Anderson, 2016; Okumuş & Parlar, 2018). In this study, about 73% of the parents reported that their children use mobile devices to access digital media. Within social learning theory, children are highly affected by the media behaviors of their family members from an early age; thus, this finding may imply why children prefer mobile devices to access digital media like other family members (Lev et al., 2018). In addition, as mobile devices become more prominent in children's lives, many parents get worried about their children's frequent use of smartphones (Yaman et al., 2021) and face the challenge of how to effectively surveil their children's actions in online spaces. Considering the difficulty of parenting in the digital age, it seems critical that parents adopt a clear strategy for their children's use of technological tools.

The parents with children using digital devices between 2-4 hours a day had a more approval attitude toward the effective use of digital media compared to those with children using technological tools between 0-1 hours and 5-7 hours a day, respectively. It was also the case between the parents with children using technological tools for 8 hours or more a day and those with children using digital devices between 0-1 hour and 5-7 hours a day, respectively. These findings may prove that children of those who appreciate the effective use of digital media spend more time with technological tools, while children of the parents with a protective attitude spare less time on technological devices. The widespread use of digital media, tools, and software in daily life has made the use of technology commonplace for children. Considering that even children have their own devices from birth to the age of seven (Nikken & Schols, 2015) and that many parents utter positive remarks about their children's use of technology (Gjelaj et al., 2019), it can confidently be proposed that media consumption has become an inextricable component of daily life.

Media consumption among children through screen-based technological tools varies depending on family use of digital media. While media consumption appears to be limited to one hour a day in families with minimal media access, it extends up to three hours in families with maximum media access (Nikken, 2017). Nonetheless, it was discovered that 36.9% of the parents reported that their children used technological tools between 5 and 8 hours a day. Children's intensive engagement in digital media suggests that the influence of traditional socializing institutions on children is gradually decreasing. The time spent with technological tools may cause "rapid socialization" among children aged 6-12 years, which affects their language, mental, and social development, as well as causing screen addiction (Aral & Doğan Keskin, 2020; Özkan & Hira, 2017).

On the other hand, it was concluded that the parents thinking that their children used technological tools a lot and excessively had a more protective attitude than those reporting that their children had a balanced use of technology. It is not surprising that parents are concerned about and restrict their children's use of digital tools given the online risks (e.g., illegal content, pedophiles, strangers, harassment, sexual violence, hate speech activities, cyberbullying, gambling, self-harm, and violation of privacy) (Zeybekoğlu-Akbaş & Dursun, 2020).

Despite no significant difference between the parenting attitudes of those using internet safety software and not, while the parents not using such software had a more favorable attitude toward the effective use of digital media, the others had a stronger protective attitude. This finding may indicate the parents adopted the "restrictive mediation" strategy and have an attitude toward regulating their children's use of digital media through implicit and explicit rules for the child-digital media relationship

(Nathanson, 1999; Shin & Huh, 2011). However, it should be noted that although restrictive mediation ensures less exposure to the risks of digital media, restrictions may bring a "forbidden fruit" effect (Nathanson, 2002).

The parents never supervising or restricting their children while using technological tools had a higher level of approval for the effective use of digital media, while those always following and restricting their children had a higher level of protective attitude toward the risks of digital media. This finding may be because of the parenting styles of the participating parents. Namely, the first finding may be associated with neglectful parenting where parents are fully involved in their children's activities and set no rules and punishments and permissive parenting where parents largely allow their children to do what they want to do (Santrock, 2004; Yusuf et al., 2020). The equivalence of neglectful and permissive parenting in the digital world is hyper-permissive parenting in which children are allowed to use the internet and technology as they wish, and parents are sensitive but not very demanding (Milovidov, 2020). The second finding, on the other hand, may be more related to democratic and authoritarian parenting. Such traditional printing styles may correspond to authoritarian, authoritative, helicopter, and lawnmower/snow-plow parenting in the digital world (Milovidov, 2020). The participating parents also uttered that digital life affected their children's socialization, physical activities, and academic achievement and might pose risks of technology addiction, health problems, and communication with strangers. Accordingly, digitalized parents need to adopt good parenting behaviors to satisfy their children's technological needs.

Overall, the present findings may steer the following recommendations. Parents are better to improve their competency in digital media at a digital-native level to enhance their digital media plans, engage their children in these plans, impose time restrictions on and guide their children's use of digital media, and protect them against the possible threats and risks of the digital environment. They may need to have conversations with their children regarding threats and risks of digital media as well as its positive aspects, use filter programs for harmful content, and raise their awareness that they are digital role models for their children in the use of mobile devices. Furthermore, parents may be recruited for digital media education in school-family collaboration. Finally, further research may focus on the qualitative nature of the subject to enable parents and children to develop strategies for technology use.

References

Anderson, M. (2016). *Parents, teens, and digital monitoring.* Washington: Pew Research Center.

Aral, N., & Doğan-Keskin, A. (2020). Çocuklarda teknoloji bağımlılığı. In C. Şahin, & S. Günüç (Eds.), *Teknoloji bağımlılıkları* (pp. 237-261). Ankara: Nobel Publishing.

Aşkın, D. (2020). Being a family in the tech network: Digital families, digital parenting and domestic alienation. In E. Dikici, O. Tire, & S. Adıgüzel (Eds.), *Family and sociology* (pp. 196-212). Konya: Eğitim Yayınevi.

Benedetto, L., & Ingrassia, M. (2020). Digital parenting: Raising and protecting children in media world. In Parenting-Studies by an Ecocultural and Transactional Perspective. IntechOpen.

Bostancı, M. (2019). Digital parents' perception of privacy in social media. *Online Academic Journal of Information Technology, 10*(38), 115-127. doi: 10.5824/1309-1581.2019.3.005.x

Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2019). *Scientific research methods in education*. Ankara: Pegem Academy Publishing.

Cadoret, G., Bigras, N., Lemay, L., Lehrer, J., & Lemire, J. (2018). Relationship between screen- time and motor proficiency in children: A longitudinal study. *Early Child Development and Care, 188*(2), 231–239. https://doi.org/10.1080/03004430.2016.1211123

Çetinkaya, L., & Sütçü, S. S. (2016). Parents' restrictions on their children's use of ınformation technologies and their reasons from the perspective of their children. *Turkish Online Journal of Qualitative Inquiry, 7*(1), 79-116. https://doi.org/10.17569/tojqi.58102

Duch, H., Fisher, E. M., Ensari, I., & Harrington, A. (2013). Screen time use in children under 3 years old: Asystematic review of correlates. *International Journal of Behavioral Nutrition and Physical Activity, 10*, 102. doi:10.1186/1479-5868-10-102

Echeburúa, E., Labrador, F. J., & Becoña, E. (2009). *Adicción a las nuevas tecnologías en adolescentes y jóvenes.* Madrid: Pirámide.

Geurts, M. S., Koning, I. M., Vossen, H., & Van den Eijnden, R. J. J. M. (2021). A qualitative study on children's digital media use and parents' self-interest. *Journal of Child and Family Studies, 23*, 1-12. https://doi.org/10.1007/s10826-021-02074-3

Gjelaj, M., Buza,K., Shatri, K., & Zabeli, N. (2020). Digital technologies in early childhood: Attitudes and practices of parents and teachers in Kosovo. *International Journal of Instruction, 13*(1), 165-184. https://doi.org/10.29333/iji.2020.13111a

Global Kids Online (2016). *Research synthesis 2015-2016.* New York: UNICEF.

Güney, Z. (2020). A research on children's use of social media. *Gümüşhane Üniversitesi Sosyal Bilimler Enstitüsü Elektronik Dergisi, 11*(1), 188-199.

He, M., Pich, L., Beynon, C., & Harris, S. (2010). Screen-related sedentary behaviors: Children's and parents' attitudes, motivations, and practices. *Journal of Nutrition Education and Behavior, 42*(1), 17-25. https://doi.org/10.1016/j.jneb.2008.11.011

Hesketh, K. D., Crawford, D. A., Abbott, G., Campbell, K. J., & Salmon, J. (2015). Prevalence and stability of active play, restricted movement and television viewing in infants. *Early Child Development and Care, 185*(6), 883–894. https://doi.org/10.1080/03004430.2014.963066

Huang, G., Xiaoqian, L., Chen, W., & Straubhaar, J. D. (2018). Fall-behind parents? The influential fac- tors on digital parenting self-efficacy in disadvantaged communities. *American Behavioral Scientist, 62*, 1186–1206.

İmren, M. (2019). A review on the variables predicting media multitasking. *Nesne, 7*(14), 136- 147. doi: 10.7816/nesne-07-14-09

İnan Kaya, G., Mutlu Bayraktar, D., & Yılmaz, Ö. (2018). Digital parenting attitude scale: validity and reliability study. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (46), 149-173. doi: 10.21764/ maeuefd.390626

Juhanak, L., Zounek, J., Zaleska, K., Barta, O., & Vlckova, K. (2019). The relationship between the age at first computer use and students' perceived competence and autonomy in ICT usage: A mediation analysis. *Computers and Education, 141*(103614), 1-14. https:// doi.org/10.1016/j.compedu.2019.103614

Karagülle, A., & Çaycı, B. (2014). Socialization and alienatıon in the network society. *The Turkish Online Journal of Design Art and Communication, 4*(1), 1-9.

Karakaya, İ. (2012). Bilimsel araştırma yöntemleri. In A. Tanrıöğen (Ed.), *Bilimsel araştırma yöntemleri* (pp. 57-86). Ankara: Anı Publishing.

Kavitha, K., & Sikandar, B. J. (2021). Digital parenting ıssues, challenges and nursing implications. *Journal of Pediatric Surgical Nursing, 10*(3):100-104.

Lam, P., Hiscock, H., & Wake, M. (2003). Outcomes ofinfant sleep problems: A longitudinal study of sleep, behavior, and maternal well-being. *Pediatrics, 111*, 203–207.

Lenhart, A., Smith, A., Anderson, M., Duggan, M., & Perrin, A. (2015). *Teens, technology and friendships*. Washington: Pew Research Center.

Lev, Y. B., Elias, N., & Levy, S. T. (2018). Development of infants' media habits in the age of digital parenting. In G. Mascheroni, C. Ponte, & A. Jorge (Eds.), *Digital parenting the challenges for families in the digital age* (pp. 103-112). The International Clearinghouse on Children, Youth and Media.

Lim, S. S. (2018). Transcendent parenting in digitally connected families when the technological meets the social. In G. Mascheroni, C. Ponte, & A. Jorge (Eds.), *Digital parenting the challenges for families in the digital age* (pp. 19-30). The International Clearinghouse on Children, Youth and Media.

Livingstone, S., Ólafsson, K., Helsper, E. J., Lupiáñez-Villanueva, F., Veltri, G. A., & Folkvord, F. (2017). Maximizing opportunities and minimizing risks for children online: The role of digital skills in emerging strategies of parental mediation. *Journal of Communication, 67*(1): 82-105. doi: 10.1111/jcom.12277

Livingstone, S., & Byrne, A. (2018). Parenting in the digital age the challenges of parental responsibility in comparative perspective. In G. Mascheroni, C. Ponte, & A. Jorge (Eds.), *Digital parenting the challenges for families in the digital age* (pp. 31-39). Göteborg: The International Clearinghouse on Children, Youth and Media.

Lowry, R., Wechsler, H., Galuska, D.A., Fulton, J.E., & Kann, L. (2002). Television viewing and its associations with overweight, sedentary lifestyle, and ınsufficient consumption of fruits and vegetables among us high school students: Differences by race, ethnicity, and gender. *Journal of School Health 72*(10):413–421. doi: 10.1111/j.1746-1561.2002.tb03551.x

Mertala, P. (2019). Digital technologies in early childhood education–a frame analysis of preservice teachers' perceptions. *Early Child Development and Care, 189*(8), 1228- 1241.

Madden, M. (2012). *Parents, teens, and online privacy*. Washington: Pew Research Center.

Milovidow, E. (2020). *Parenting in the digital age positive parenting strategies for different scenarios*. Strasbourg: Council of Europe.

Nathanson, A. I. (1999). Identifying and explaining the relationship between parental mediation and children's aggression. *Communication Research, 26*(2), 124-143. https://doi.org/10.1177/009365099026002002

Nathanson, A. I. (2002). The unintended effects of parental mediation of television on adolescents. *Media Psychology, 4*(3), 207-230. https://doi.org/10.1207/S1532785XMEP0403_01

Neumann, M. M. (2015). Young children and screen time: Creating a mindful approach to digital technology. *Australian Educational Computing, 30*(2), 1-15.

Nikken, P., & Schols, M. (2015). How and why parents guide the media use of young children. *Journal of Child and Family Studies, 24*(11), 3423-3435.

Nikken, P. (2017). Implications of low or high media use among parents for young children's media use. *Cyberpsychology: Journal of Psychological Research on Cyberspace, 11*(3), article 1. http://dx.doi. org/10.5817/CP2017-3-1

Nikken, P. (2019). *Iene Miene Media: Een review van het mediagebruik van kinderen tussen de 0 en 6 jaar in Nederland sinds 2012*. Nederlands: Netwerk Mediawijsheid.

Okumuş, V., & Parlar, H., (2018). Children's social media usage purposes and parent's attitudes. *Sosyal Bilimler Dergisi, 17*(33), 357-368.

Özkan, A., & Hira, İ. (2017). Digital media and socialization: Parents view on 6-12 age children socialization (İstanbul case). *Kesit Akademi Dergisi, 9*, 245-270.

Page, A. S., Cooper, A. R., Griew, P., & Jago, R. (2010).Children's screen viewing is related to psychologicaldifficulties irrespective of physical activity. *Pediatrics,126*(5), 1011–1017.

Przybyiski, A. K., & Weinstein, N. (2019). Digital screen time limits and young children's psychological well-being: Evidence from a population-based study. *Child Development, 90*(1), 56–65. doi: 10.1111/cdev.13007

Reid Chassiakos, Y. L., Radesky, J., Christakis, D., Moreno, M. A., & Cross, C. (2016). Children and adolescents and digital media. *Pediatrics, 138*(5), e20162593. https://doi.org/10.1542/peds.2016-2593

Santisarun, P., & Boonkrong, S. (2015). Social network monitoring application for parents with children under thirteen. 2015 7th International Conference on Knowledge and Smart Technology (KST). https://doi.org/10.1109/kst.2015.7051456

Santrock, J. W. (2004). *Educational psychology*. New York: McGraw-Hill Companies, Inc.

Shin, W., & Huh, J. (2011). Parental mediation of teenagers' video game playing: Antecedents and consequences. *New Media and Society, 13*(6), 945–962.

Ulusoy, A., & Bostancı, M. (2014). Children's social media use and the role of parents. The *Journal of Academic Social Science Studies, 28*, 559-572.

Utma, S. (2020). The effect of social media on the transformation of the family institution: Digitalization of family communication. *Uluslararası Sosyal Araştırmalar Dergisi, 13*(71), 1016-1023.

Üstündağ, A. (2019). Digital games preferred by children aged 4-6. *ÇKÜ Sosyal Bilimler Enstitüsü Dergisi, 10*(2), 1-19.

Vessey, J., Yim-Chiplis, P., & MacKenzie, N. (1998). Effects of television viewing on children's development. *Pediatric Nursing, 24*(5): 483–486.

Yaman, F., Çubukçu, A., Küçükali, M., & Kabakçı-Yurdakul, I. (2021). An investigation of parents' use of digital media. *Shanlax International Journal of Education, 10*(1), 76-88. https://doi.org/10.34293/ education.v10i1.4327

Yurdigül, A., & Deveci, M. (2021). Transformation of parenting on the axis of new communication technologies: Opportunities and threats]. In A. Zinderen (Ed.), *Digital sociology studies* (pp. 139-159). Ankara: Nobel Scientific.

Yusuf, M., Witro, D., Diana, R., Santosa, T. A., Alfikri, A. A., & Jalwis, J. (2020). Digital parenting to children using the internet. *Pedagogik Journal of Islamic Elementary School, 3*(1), 1–14. doi: 10.24256/pijies.v3i1.1277

Yücelyiğit, S., & Aral, N. (2020). Children's and their parents' use of digital technology with the aim of production or consumption. *İnönü Üniversitesi Eğitim Fakültesi Dergisi, 21*(2), 1071-1084.

Zabatiero, J., Straker, L., Mantilla, A., Edwards, S., & Danby, S. (2018). Young children and digital technology: Australian early childhood education and care sector adults' perspectives. *Australasian journal of early childhood, 43*(2), 14-22.

Zeybekoğlu-Akbaş, Ö. & Dursun, C. (2020). The impact of technology on the family: Digital parent and children of the changing family. *Turkish Studies-Social, 15*(4), 2245-2265.