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The Effect of Digital Parenting Awareness on Problemic Media Use by Primary School Children

Dijital Ebeveynlik Farkındalığının İlkokul Çocuklarında Problemli Medya Kullanımına Etkisi

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Abstract

Objective: To examine the impact of digital parenting awareness (DPA) levels on problematic media use (PMU) among children.

Method: This cross-sectional study was conducted with children between the ages of 7-11 who admitted to the family medicine outpatient clinic of a tertiary hospital between 09.06.2022 and 08.12.2022, and met the inclusion criteria for themselves and their parents. Data were obtained through the Patient Information Form, Digital Parenting Awareness Scale (DPAS), and Problematic Media Use Measure-Short Form (PMUM-SF) administered to the parents.

Results: A total of 301 children, with an average age of 8.21±1.13 years and 174 (57.8%) girls, were included in the study. Most children had access to televisions (80.1%), mobile phones (67.4%), and tablets (34.6%) during the day. The percentage of those who spent ≥5 hours in front of the screen was 3.7% on weekdays and 14.6% on weekends. The mean PMUM-SF score was 17.37±7.40. The mean scores were 7.25±2.41 for Being Negative Model (NM), 9.05±3.34 for Digital Negligence (DN), 15.96±3.29 for Efficient Use (EU) and 15.09±3.61 for Protection From Risks (PR). There was a positive relationship between PMU, NM, and DN, but a negative relationship between EU and PR (p<0.001 for all). There were significant differences in gender, academic performance, weekday and weekend screen time, and PMUM-SF score (p=0.006; p<0.001; p<0.001; p<0.01, respectively). There was a significant relationship between the duration of weekday and weekend screen time and all subdimensions of DPAS (p<0.05 for all).

Conclusion: Although the DPA was moderate to good in parents, the PMU level was low in children. The PMU increased as the DPA decreased. PMU was higher among male students, those with low academic performance, and those who spent more time in front of screens. Children of parents with low DPA duration had increased screen time.

Keywords: Awareness, digital parenting, problematic media use, screen time

Öz

Amaç: Bu çalışmada; dijital ebeveynlik farkındalığı (DEF) düzeyinin çocuklarda problemli medya kullanımı (PMK) üzerine etkisinin incelenmesi amaçlandı.

Yöntem: Bu kesitsel çalışma, üçüncü basamak bir hastanenin aile hekimliği polikliniğine 09.06.2022-08.12.2022 tarihleri arasında başvuran, kendileri ve ebeveynleri çalışmaya dahil etme kriterlerini karşılayan 7-11 yaş arası çocuklar ile gerçekleştirildi. Veriler; hasta bilgi formu, Dijital Ebevenlik Farkındalık Ölçeği (DEFÖ) ve Problemli Medya Kullanım Ölçeği-Kısa Formu'nun (PMKÖ-KF) ebeveynlere uygulanması ile elde edildi.

Bulgular: Çalışmaya yaş ortalaması 8,21±1,13 yıl olan ve 174'ü (%57,8) kız olan toplam 301 çocuk dahil edildi. Çocukların gün içerisinde en çok televizyona (%80,1), cep telefonuna (%67,4) ve tablete (%34,6) erişimi vardı. Ekran başında ≥5 saat zaman geçirenlerin oranı hafta içi %3,7 iken hafta sonu %14,6 idi. PMKÖ-KF puanı ortalama 17,37±7,40 idi. DEFÖ alt boyut puan ortalamaları Olumsuz Model Olma (OMO) için 7,25±2,41, Dijital İhmal (Dİ) için 9,05±3,34, Verimli Kullanım (VK) için 15,96±3,29 ve Risklerden Korunma (RK) için 15,09±3,61 idi. PMK ile OMO ve Dİ arasında pozitif yönlü; VK ve RK arasında negatif yönlü anlamlı korelasyon vardı (hepsi için p=0,001). Cinsiyet, okul başarısı, çocuğun hafta içi ve hafta sonu ekran karşısında geçirdiği süre ile PMKÖ-KF puanı açısından anlamlı farklılık bulundu (p=0,006; p=0,001; p=0,001; p=0,01 sırasıyla). Çocuğun ekran karşısında geçirdiği süreler ile DEFÖ'nün tüm alt boyutları arasında anlamlı ilişki vardı (hepsi için p<0,05).

Sonuç: Ebeveynlerde DEF orta-iyi düzeyde iken çocuklarda PMK düzeyi düşük bulundu. DEF azaldıkça PMK artmakta idi. Erkeklerde, okul başarısı düşüklerde ve ekran karşısında uzun süre geçirenlerde PMK daha fazla idi. DEF düzeyi düşük olanların çocuklarında ekran süresi artmaktaydı.

Anahtar kelimeler: Dijital ebeveynlik, ekran süresi, farkındalık, problemli medya kullanımı

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Introduction

The internet, smartphones, tablets, television, radio, newspapers, and magazines are the most widely used media tools in mass communication (1). With the digitalization and easy accessibility of media tools, especially smartphones and tablets, their use by children is increasing (2,3).

When used consciously and appropriately, media tools are beneficial for child mental development and education (4-6). However, misuse of media tools can lead to many negative consequences. Problematic media use (PMU) is defined as excessive or improper use of media that causes problems in functionality (7). PMU paves the way for internet, television, smartphone, and digital game addiction (8). As exposure to digital media tools increases, physical problems, such as obesity and musculoskeletal disorders, as well as neuropsychiatric problems, such as sleep disorders, anxiety disorders, depression, attention deficit, and hyperactivity, may occur in children (9-11). Studies have also demonstrated that as PMU increases, academic achievement decreases in children (11-13). Therefore, for individuals aged 6 years and older, the American Academy of Pediatrics recommends reducing screen exposure as much as possible and having a strategy for managing electronic media to maximize its benefits (14).

To prevent PMU and its negative effects on children, parents must increase their awareness and ensure the efficient and safe use of media tools (15). "Digital parenting" is defined as parents being aware of the risks as well as the benefits of digital technologies, ensuring controlled use, and being a positive role model (16). High awareness of digital parenting contributes to children's development and academic success in relation to cognitive, mathematical, and thinking skills and protects children from negative consequences (17).

In this study, we aimed to examine the effect of digital parenting awareness (DPA) on PMU by children aged between 7 and 11.

Materials and Methods

Study Design

This study was planned as a single-center and, cross-sectional research. This study was conducted on children aged 7-11 years who were admitted to the family medicine outpatient clinic of a tertiary hospital between June 9 and December 12, 2022, and met the inclusion criteria for themselves and their parents.

The children and their parents who were included in the study did not have any severe psychiatric illness or communication barriers, such as hearing and speech disorders or cognitive dysfunction. Their parents consented to their participation in the study. Participants' parents were informed in detail, and verbal and written consent was obtained. All procedures were carried out in accordance with the Declaration of Helsinki. The study was approved by the Local Ethics Committee of University of Health Sciences Turkey, Gaziosmanpaşa Training and Research Hospital (date: June 8, 2022, no: 90).

Data Collection Tools

Data were collected from the parents through the administration of the patient information form, Digital Parenting Awareness Scale (DPAS), and Problematic Media Use Measure-Short Form (PMUM-SF).

Patient Information Form

The form, which was prepared by us and expected to be answered by the parents, included items that question the socio-demographic characteristics of the child (age, gender, number of siblings, school achievement), socio-demographic characteristics of the parents (age, education, and income status), and characteristics related to screen exposure (media tools used by the child and parents and frequency, etc.).

PMUM-SF

The scale, developed by Domoff et al. (7) in 2019 to investigate PMU in children aged 4-11 years, has a 27-item long form and a 9-item short form. The Turkish validity and reliability study of the long and short forms of the scales was conducted by Furuncu and Öztürk (8) in 2019. PMUM-SF has a single-factor structure and is scored on a 5-point Likert type (1= Never, 5= Always). The total PMUM-SF score was obtained by averaging the scores for all items. High scores on the scale indicate high PMU. Cronbach's alpha value for the short form of the scale is 0.93 (8).

DPAS

The DPAS, developed by Manap and Durmuş (16) in 2020, comprises a total of 16 items and four sub-dimensions. The subdimensions are as follows; protection from risks (PR), efficient use (EU), negative model (NM), and digital negligence (DN). Parents were asked to rate how often they encountered each statement (1=Never, 5=Always). The subdimensions of the DPAS were evaluated independently of each other, and the scores obtained varied between 4 and 20. Higher scores in the PR and EU subdimensions indicate

higher DPA levels, whereas higher scores in the NM and DN subdimensions indicate lower DPA levels. The Cronbach's alpha internal consistency coefficients of the DPAS ranged from 0.634 to 0.799 (16).

Statistical Analysis

The SPSS v.22.0 package was used for data analysis in this study. Descriptive data on the socio-demographic information of the participants were presented in the form of frequency tables. Kolmogorov-Smirnov and Shapiro-Wilk tests showed that the parameters did not conform to a normal distribution. In the comparison of quantitative data, the Kruskal-Wallis test was used for intergroup comparisons of the parameters, and Dunn's test was used to determine the group causing the difference. The Mann-Whitney U test was used to compare parameters between the two groups. Spearman's rho correlation analysis was used to examine the relationships among the parameters. Significant differences were evaluated at the $p<0.05$ level.

Results

This study included 301 children aged 7-11 years with a mean age of 8.21±1.13 years. One hundred and seventy-four of the children (57.8%) were female. Two hundred sixty (86.4%) of the data collection forms were completed by mothers and 41 (13.6%) by fathers. Table 1 shows the distribution of the socio-demographic characteristics of children and their parents.

Table 2 shows the characteristics of children's and their parents' screen exposure based on the parent's statement. Accordingly, children most frequently accessed televisions (80.1%), mobile phones (67.4%), and tablets (34.6%) during the day. The value seen in the table regarding children's mobile phone use only represents access during the day and does not indicate mobile phone ownership. It is likely that children have easier access to their parents' phones. A total of 39.2% of parents (n=118) stated that they had previously received information about screen exposure in their children (Table 2).

Table 1. Socio-demographic characteristics of children and their parents

		Min-max	Mean ± SD (median)
Child's age		7-11	8.21±1.13 (8)
Maternal age (n=300)		24-51	37.01±4.93
Paternal age (n=297)		29-57	40.76±5.55
Number of siblings		1-8	1.64±1.02 (1)
		n	**%**
Child's gender	Female	174	57.8
	Male	127	42.2
School success	Weak	2	0.7
	Middle	34	11.3
	Good	139	46.2
	Very good	126	41.9
Maternal educational status	Literate	14	4.7
	Primary school	56	18.7
	Middle school	57	19.0
	High school	78	26.0
	University	95	31.7
Paternal educational status	Literate	6	2.0
	Primary school	56	18.9
	Middle school	54	18.2
	High school	99	33.3
	University	82	27.6
Income status	Low	62	20.6
	Moderate	186	61.8
	High	53	17.6

SD: Standard deviation

Table 2. Characteristics of children and their parents' screen exposures

		n	%
Media tools that children can access during the day	Computer	49	16.3
	Television	241	80.1
	Tablet	104	34.6
	Mobile phone	203	67.4
	Game console	15	5
Media tools that the mothers could access during the day (n=300)	Computer	44	14.7
	Television	192	64
	Tablet	19	6.3
	Mobile phone	269	89.7
	Game console	3	1
Media tools that fathers can access during the day (n=297)	Computer	75	25.3
	Television	169	56.9
	Tablet	11	3.7
	Mobile phone	279	93.9
	Game console	4	1.3
Total screen exposure time on weekdays (hours)	None	6	2
	0-60 minutes	54	17.9
	1-2 hours	156	51.8
	3-4 hours	74	24.6
	5 hours or more	11	3.7
Mothers' total screen exposure time on weekdays (n=300)	None	9	3
	0-60 minutes	62	20.7
	1-2 hours	122	40.7
	3-4 hours	89	29.7
	5 hours or more	18	6
Fathers' total screen exposure time on weekdays (n=297)	None	16	5.4
	0-60 minutes	39	13.1
	1-2 hours	103	34.7
	3-4 hours	93	31.3
	5 hours or more	46	15.5
Total screen exposure time of children on weekends	None	7	2.3
	0-60 minutes	19	6.3
	1-2 hours	108	35.9
	3-4 hours	123	40.9
	5 hours or more	44	14.6
Mothers' total screen exposure time on weekend (n=300)	None	12	4
	0-60 minutes	37	12.3
	1-2 hours	109	36.3
	3-4 hours	107	35.7
	5 hours or more	35	11.7

Table 2. continued

		n	%
Fathers' total screen exposure time on weekdays (n=297)	None	11	3.7
	0-60 minutes	33	11.1
	1-2 hours	71	23.9
	3-4 hours	127	42.8
	5 hours or more	55	18.5
Parental prior knowledge of screen exposure in children	Yes	118	39.2
	No	183	60.8
Sources of information (n=118)	Doctor/healthcare worker	34	28.8
	Media	49	41.5
	Social media	57	48.3
	Medical resources	31	26.3
	Other	24	20.3

Table 3. Descriptive information about the total and subdimension scores obtained from each scale

	Min-max	Mean ± SD	Median	Cronbach's alpha
DPAS				
Negative model	4-14	7.25±2.41	7	0.654
Digital negligence	4-20	9.05±3.34	9	0.818
Efficient use	5-20	15.96±3.29	16	0.792
Protection from risks	5-20	15.09±3.61	15	0.647
PMUM-SF	1-4.56	1.93±0.82	1.8	0.897

SD: Standard deviation, DPAS: Digital parenting awareness scale, PMUM-SF: Problematic media use measure-short form

Table 4. Correlations of the total and subdimension scores of the scales with various children's variables

		DPAS-NM	DPAS-DN	DPAS-EU	DPAS-PR	PMUM-SF
Age	r	-0.001	-0.033	0.023	-0.028	0.009
	p	0.984	0.565	0.697	0.624	0.872
Number of siblings	r	-0.044	0.042	-0.086	-0.095	0.120
	p	0.482	0.504	0.166	0.126	0.054
Maternal age	r	-0.033	0.152	-0.160	-0.134	0.097
	p	0.570	**0.008***	**0.005***	**0.020***	0.093
Paternal age	r	-0.090	0.141	-0.094	-0.094	0.089
	p	0.122	**0.015***	0.104	0.104	0.126

*: Spearman's rho correlation, DPAS: Digital parenting awareness scale, PMUM-SF: Problematic media use measure-short form, EU: Efficient use, NM: Negative model, DN: Digital negligence, PR: Protection from risks

Table 3 presents descriptive information about the total and subdimension scores of the DPAS and PMUM-SF. The mean PMUM-SF score was 17.37±7.40. The mean scores of the DPAS subscales were 7.25±2.41 for NM, 9.05±3.34 for DN, 15.96±3.29 for EU, and 15.09±3.61 for PR (Table 3).

There was a statistically significant correlation between the PMUM-SF score and the DPAS subscales of NM (r=0.304; p=0.001), DN (r=0.476; p=0.001), EU (r=-0,202; p=0.001) and PR (r=-0.344; p=0.001).

Tables 4 and 5 present the relationships between various variables and the total and subscale scores of the scales. There were significant differences in gender, academic performance, weekday and weekend screen time, and PMUM-SF score (p=0.006; p<0.001; p<0.001; p<0.01, respectively). There was a significant relationship between the duration of weekday and weekend screen exposure time and all subdimensions of DPAS (p<0.05 for all) (Table 5).

Table 5. Correlations of the total and subdimension scores of the scales with variables of children and parents

		DPAS-NM	DPAS-DN	DPAS-EU	DPAS-PR	PMUM-SF
		Mean ± SD (median)	Mean ± SD (median)	Mean ± SD (median)	Mean ± SD (median)	Mean ± SD (median)
Child's gender	Female	7.16±2.27 (7)	8.9±3.27 (9)	15.95±3.3 (17)	15.31±3.48 (16)	1.82±0.78 (1.6)
	Male	7.36±2.59 (7)	9.25±3.43 (9)	15.98±3.3 (16)	14.79±3.78 (15)	2.08±0.85 (1.9)
	[1]p	0.771	0.467	0.923	0.273	**0.006***
School success	Middle	7.12±2.33 (7)	10.24±3.54 (11)	15.79±3.75 (16)	15.29±4.07 (16)	2.27±0.92 (2.4)
	Good	7.49±2.56 (7)	9.34±3.1 (9)	15.56±3.34 (16)	14.66±3.64 (15)	1.98±0.75 (1.9)
	Very good	7.01±2.25 (7)	8.37±3.38 (8)	16.48±3.09 (17)	15.56±3.42 (16)	1.76±0.82 (1.5)
	[2]p	0.337	0.001*	0.074	0.099	**0.001***
Maternal educational status	Literate	7.14±2.63 (7)	8.29±2.16 (8)	16.14±3.61 (18)	15.36±4.27 (16)	1.87±0.64 (1.8)
	Primary sch.	6.73±2.49 (6)	8.66±3.72 (9)	16.61±3.52 (18)	16.09±3.57 (17)	1.89±0.84 (1.7)
	Middle sch.	7±2.29 (7)	9.21±2.86 (9)	15.6±3.57 (17)	14.96±3.58 (15)	1.82±0.68 (1.7)
	High school	7.5±2.5 (7)	9.14±3.91 (9)	15.62±3.45 (16)	14.81±4.02 (15)	2.05±0.98 (1.8)
	University	7.49±2.32 (7)	9.24±3.01 (9)	16.08±2.79 (16)	14.73±3.13 (15)	1.93±0.78 (1.8)
	[2]p	0.188	0.524	0.312	0.121	0.934
Paternal educational status	Literate	6.17±2.14 (6)	7.5±1.05 (8)	14.33±3.56 (14)	13.83±4.22 (14)	1.83±0.61 (1.8)
	Primary sch.	6.82±2.46 (6)	9.04±3.47 (9)	15.93±3.43 (17)	15.23±3.73 (16)	1.99±0.89 (1.8)
	Middle sch.	6.94±2.46 (7)	8.81±3.17 (9)	16.72±3.3 (18)	15.76±3.54 (16)	1.85±0.65 (1.7)
	High school	7.23±2.17 (7)	8.9±3.26 (8)	15.97±3.32 (16)	15.09±3.74 (16)	1.88±0.81 (1.7)
	University	7.87±2.59 (7)	9.45±3.6 (9)	15.59±3.09 (16)	14.71±3.39 (15)	1.95±0.86 (1.7)
	[2]p	0.059	0.651	0.119	0.422	0.970
Total screen exposure time on weekdays (hours)	None	5.5±1.64 (5)	5.67±1.51 (5)	18±3.16 (20)	17±3.95 (18)	1.35±0.41 (1.2)
	0-60 min.	6.94±2.37 (6)	8.11±2.88 (7)	16.76±2.97 (18)	15.76±3.58 (17)	1.59±0.54 (1.5)
	1-2 hours	7.02±2.3 (7)	8.74±2.89 (9)	16.08±3.16 (17)	15.29±3.41 (16)	1.88±0.77 (1.7)
	3-4 hours	8.14±2.46 (8)	10.5±4.02 (10)	15.18±3.59 (16)	14.15±3.88 (14)	2.24±0.86 (2.1)
	≥5 hours	6.91±2.74 (6)	10.09±3.36 (10)	14.55±3.39 (14)	14.18±3.46 (15)	2.54±1.39 (2)
	[2]p	**0.003***	**0.001***	**0.017***	**0.047***	**0.001***
Children's total screen exposure time on weekends	None	6.29±1.98 (5)	7.43±2.94 (7)	18.29±3.15 (20)	16.57±4.39 (19)	1.46±0.64 (1.2)
	0-60 min.	6.32±2.03 (6)	7.68±2.58 (8)	15.53±3.82 (17)	15.16±3.76 (16)	1.31±0.37 (1.1)
	1-2 hours	6.98±2.47 (7)	8.27±2.96 (8)	16.79±2.74 (18)	15.96±3.15 (16)	1.8±0.72 (1.7)
	3-4 hours	7.45±2.35 (7)	9.4±3.2 (9)	15.37±3.42 (16)	14.6±3.73 (15)	1.98±0.79 (1.8)
	≥5 hours	7.89±2.46 (8)	10.84±4.04 (10)	15.41±3.52 (16)	14.05±3.74 (15)	2.45±1 (2.2)
	[2]p	**0.042***	**0.001***	**0.004***	**0.013***	**0.001***
Knowledge of screen exposure in children	Yes	6.89±2.28 (6)	8.42±3.11 (8)	16.51±3.09 (17)	15.61±3.42 (16)	1.87±0.82 (1.7)
	No	7.48±2.47 (7)	9.46±3.42 (9)	15.61±3.38 (16)	14.75±3.7 (15)	1.97±0.83 (1.8)
	[1]p	**0.043***	**0.008***	**0.022***	0.053	0.231

[1]: Mann-Whitney U test, [2]: Kruskal-Wallis test, *: p<0.05, note: Two children with poor school achievement were excluded from the comparison. DPAS: Digital parenting awareness scale, PMUM-SF: Problematic media use measure-short form, EU: Efficient use, NM: Negative model, DN: Digital negligence, PR: Protection from risks

Discussion

In this study, which aimed to investigate digital awareness in parents and examine its effect on PMU in children aged 7-11 years, it was found that parents' digital awareness was at a medium-good level and PMU in their children was at a low level. As DPA decreased among parents, PMU increased among children.

DPA can be examined in four subdimensions: "Being negative model", "digital neglicence", "efficient use" and "protection from risks" with the measurement tool developed by Manap and Durmuş (16). Parents with more NM and DN behaviors had lower DPA levels, whereas parents with more EU and PR behaviors had higher DPA levels (16). They also showed that parents with healthy family roles had fewer NM and DN behaviors but more EU and PR behaviors. Parents whose children had internet addiction reported more NM and DN behaviors and less EU and PR behaviors (18). In this thesis study, Arslan (19) showed that the higher the NM and DN behaviors in parents, the higher the level of PMU in children aged 4-11 years. PMU was found to be lower in children of parents with high RK behaviors (19). Similarly, in Coşkunalp's (20) study, it was shown that as the digital efficacy of parents decreased, the level of PMU increased in children aged 7-10 years.

In our study, PMU levels were higher in children of parents with more NM and DN behaviors, and PMU levels decreased as PR and EU behaviors increased. Our study is similar to the literature in this respect and emphasizes the importance of increasing the DPA and ensuring that they guide their children in the correct use of media tools.

The use of media tools can be influenced by various factors. It has been shown that children of different genders may prefer to use different media tools and that PMU behaviors are particularly high in boys (13,19,20). In another study, during the pandemic, no significant relationship was found between gender and PMU. Considering that the use of media tools increased in all segments of society during the pandemic period, this could have been an expected result (21). However, no significant difference was observed between gender variables and parents' digital awareness and competencies (19,20).

In our study, similar to the literature, no significant difference was found in DPA according to sex; however, the PMU was higher in boys. This may be because, in traditional families in our society, girls' use of media tools is more controlled. There is a need to raise DPA, regardless of gender, from PMU and to address its possible negative consequences.

The age of the child is another factor associated with the use of media tools (17,22). The duration of the use of media tools increases with an increase in the ability to use devices, especially in early childhood, and the use of social media and access to harmful content online increases in adolescence (23). However, Magis-Weinberg et al. (21) did not find a relationship between child age and PMU during the pandemic period. Studies explaining the relationship between child age and DPA are limited. Coşkunalp (20) observed that parents of older children had lower levels of digital efficacy.

In our study, no correlation was found between age and DPA and PMU. The age range of the children included in our study falls outside of early childhood and adolescence, which are examined in detail in terms of the use of media tools as mentioned above. Further research on different age groups should be conducted to contribute to the literature.

As parents get older, their restrictive behavior toward their children in terms of time and content in the use of media tools may decrease, and the tendency of screen addiction in children may increase (18,19,24). In contrast, a study showed that restrictive attitudes were more common in parents over the age of 40 (25). However, studies have not reported a significant relationship between parental age and PMU (19,20).

In our study, a relationship was found between parental age and DPA; PR behaviors increased, and DN levels decreased with increasing maternal age. This may be due to the difficulty in adapting to digital devices with advancing age and a low level of knowledge about possible risks. However, parents who are introduced to digital tools at a younger age may be more aware of the disadvantages of these tools.

Parents' digital awareness also differs according to socio-economic status. As parents' education and income levels increase, their digital parenting scores also increase (26). In Manap and Durmuş's (18) study, which was conducted in 2021, it was observed that parents with university degrees were more likely to exhibit NM behavior. In a study conducted by Akkaya et al. (27), it was observed that EU behavior increased with parental education level, but no significant relationship was found with income level. The level of PMU may also be affected by parental education level and income level (28).

In this study, no significant relationship was found between parental education level, income level, and PMU. However, low-income parents were less likely to engage in NM. This

may be because access to digital media tools becomes more difficult as income declines.

With the increase in the duration of parents' media tool usage, there has been a corresponding rise in media tool usage among children, potentially leading to various physical and psychological issues (21,29,30). As parental smartphone use duration increased, NM and DN behaviors also increased (18). The levels of DPA and PR behaviors decreased as the parents' screen-use time increased, whereas NM and aggressive behaviors increased (27). In our study, PMU increased as the duration of using media tools increased among children. However, similar to the literature, it was observed that the parent's DPA subscales were negatively affected. PMU will become less common if parents impose acceptable limits on their own media use as well as their children's.

Study Limitations

This study has some limitations. First, due to the single-center and cross-sectional design of the study, the findings may not be generalized to the general population. Second, parents may have avoided giving correct answers to some of the questions because they fear being exposed to negative criticism. Contributions to the literature should continue with more comprehensive and multicenter studies.

Conclusion

In this study; PMU levels were found to be low in children aged 7-11 years, and their parents were observed to have moderate to good levels of DPA. As DPA decreases, PMU increases in children. Parents' digital awareness should be further increased and possible negative consequences should be prevented through timely intervention, especially for children at high risk of PMU.

Ethics

Ethics Committee Approval: The study was approved by the Local Ethics Committee of University of Health Sciences Turkey, Gaziosmanpaşa Training and Research Hospital (date: June 8, 2022, no: 90).

Informed Consent: Participants' parents were informed in detail, and verbal and written consent was obtained.

Authorship Contributions

Concept: E.E., S.T.K., O.B., Design: E.E., S.T.K., O.B., Data Collection or Processing: E.E., S.T.K., Analysis or Interpretation: E.E., S.T.K., Drafting Manuscript: S.T.K., Critical Revision of Manuscript: E.E., S.T.K., O.B., Final Approval and Accountability: E.E., S.T.K., O.B., Supervision: S.T.K., Writing: E.E., S.T.K., O.B.

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