

# The Use of Digital Technology by Parents from the Perspective of Children

Çocukların Gözünden Ebeveynlerinin Dijital Teknoloji Kullanımı

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#### Öz

Bu araştırma, okul öncesi dönem çocuklarının gözünden ebeveynlerinin dijital teknoloji kullanımına yönelik algı ve görüşlerini incelemeyi amaçlayan nitel bir çalışmadır. Çalışmada, bireylerin belirli bir fenomeni nasıl algıladıklarını derinlemesine anlamayı sağlayan fenomenolojik desen kullanılmıştır. Araştırmanın katılımcılarını, 15'i kız ve 12'si erkek olmak üzere toplam 27 çocuk oluşturmuştur. Çalışma grubundaki çocukların yaşları 48-72 ay arasında değişmektedir. Bu kapsamda, 48-60 ay arasında 9, 61-72 ay arasında ise 18 çocuk araştırmaya dahil edilmiştir. Katılımcılara ulaşmak için kartopu örnekleme yöntemi tercih edilmiştir. Araştırmanın verileri, ebeveynlerin dijital teknoloji kullanımına yönelik sorulardan oluşan yarı yapılandırılmış görüşme formu aracılığıyla toplanmıştır. Görüşme formunun kapsam geçerliliğini sağlamak için iki okul öncesi eğitimi uzmanından görüş alınmış ve uzmanların önerileri doğrultusunda gerekli düzenlemeler yapılmıştır. Dil açısından bir uzman tarafından değerlendirilen form, üç çocukla yapılan pilot uygulamanın ardından son halini almıştır. Görüşmeler yüz yüze gerçekleştirilmiş, görüşme öncesinde çocuklardan sözlü onam, ebeveynlerinden ise yazılı onam alınmıştır. Görüşmeler sırasında ses kaydı alınarak veriler kayıt altına alınmış ve analiz süreci için yazılı metinlere dönüştürülmüştür. Elde edilen veriler içerik analizi yöntemiyle çözümlenmiştir. Araştırma bulguları, ebeveynlerin dijital teknoloji kullanımının çocukların algılarını, duygularını ve davranışlarını etkileyebildiğini göstermektedir. Ebeveynlerin dijital teknolojilerle uzun süre meşgul olmaları, çocuklar tarafından genellikle ihmal algısı, yalnızlık, kıskançlık ve öfke gibi duygusal tepkilerle karşılanmıştır. Ayrıca, ebeveynlerin yoğun teknoloji kullanımı, aile içi etkileşimlerin azalmasına, yüz yüze iletişim kalitesinin düşmesine ve ebeveynlerin çocukların davranışsal ipuçlarına duyarsızlaşmasına yol açabilir. Bulgular, ebeveynlerin dijital davranışlarının çocukların medya alışkanlıklarını nasıl şekillendirdiğini açık bir şekilde ortaya koymuştur. Bazı çocukların ebeveynlerini taklit ederek benzer davranışlar sergilemeleri, sosyal öğrenme kuramını destekler niteliktedir. Elde edilen bulgular, ebeveynlerin dijital teknoloji kullanımının çocukların sosyal, duygusal ve bilişsel gelişimleri üzerindeki olumsuz etkilerini gözler önüne sermiştir. Çocuklar, ebeveynlerinin dijital teknolojilerle geçirdiği zamanın artmasıyla yalnızlık, ihmal edilmişlik ve güvensizlik duygularını sıkça ifade etmişlerdir. Bunun yanı sıra, çocukların aile içi etkileşimler sırasında ebeveynlerinin cihazlara odaklandığını gözlemlemelerinin, çocukların ebeveynleriyle olan iletişimlerinde kopukluk yaşamasına neden olduğu ifade edilmiştir. Bu bağlamda, yemek saatlerinde, oyun oynarken ya da yatmadan önce ebeveynlerin dijital teknolojilerle ilgilenmeleri, çocukların dikkat çekme çabalarını artıran bir faktör olarak değerlendirilmektedir. Olumsuz etkilerin yanı sıra, bazı çocuklar ebeveynleriyle birlikte dijital teknolojileri eğitici amaçlarla kullanmanın olumlu sonuçlarından bahsetmişlerdir. Çocuklar, ebeveynleriyle birlikte dijital teknolojilerde eğitici uygulamalar veya yaratıcı etkinliklerle vakit geçirmenin keyifli olduğunu belirtmişlerdir. Ancak bu tür olumlu etkilerin ortaya çıkabilmesi için ebeveynlerin dijital teknoloji kullanımını bilinçli bir şekilde yönetmeleri gerekmektedir. Ebeveynlerin, dijital teknoloji kullanımına sınırlar koyarak çocuklarıyla kaliteli zaman geçirmeleri, çocukların sosyal ve duygusal gelişimlerini desteklemek açısından kritik öneme sahiptir. Bu kapsamda, yemek saatleri, yatma zamanı ve oyun gibi aile içi özel anlarda dijital cihazlardan uzak durmak, çocukların duygusal ihtiyaçlarının karşılanmasında etkili olabilir. Bununla birlikte, ebeveynlerin dijital teknoloji kullanımının çocuklar üzerindeki etkileri konusunda bilinçlenmesi için eğitim programları düzenlenmeli ve bu programlarda ebeveynlere, çocuklara rol model olma, ekran sürelerini kontrol etme ve cihazları bilinçli bir şekilde kullanma konularında rehberlik edilmelidir. Sonuç olarak, bu araştırma ebeveynlerin dijital teknoloji kullanım alışkanlıklarını çocukların bakış açısıyla ortaya koymuş ve bu görüşlerden hareketle çocukların sosyal, duygusal ve bilişsel gelişimleri açısından önemli sonuçlar doğurabileceğini göstermiştir. Elde edilen bulgular, ebeveynlerin dijital teknolojilerle olan ilişkilerini bilinçli bir şekilde yönetmelerinin, çocukların sağlıklı bir şekilde gelişmesi ve aile içi bağların güçlenmesi açısından kritik bir önem taşıdığını vurgulamaktadır.

Anahtar Kelimeler: Okul öncesi eğitim, Okul öncesi dönem, Ebeveyn-çocuk etkileşimi, Teknoferans, Dijital teknoloji kullanımı



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It is declared that scientific and ethical principles have been followed while carrying out and writing this study and that all the sources used have been properly cited. Emine Ela Şimşek

#### Complaints

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## Abstract

This study is a qualitative research project aimed at examining preschool children's perceptions and views of their parents' use of digital technology. The study employs a phenomenological design, allowing an in-depth understanding of how individuals perceive a specific phenomenon. The research participants comprised a total of 27 children, 15 of whom were girls and 12 boys. The ages of the children in the study group ranged from 48 to 72 months. Specifically, nine children aged 48-60 months and 18 children aged 61-72 months were included in the study. A snowball sampling method was used to recruit participants. Data were collected through a semi-structured interview consisting of questions about parents' use of digital technology. To ensure content validity, the interview form was reviewed by two experts in early childhood education, and necessary revisions were made based on their suggestions. A language expert also reviewed the form and finalized it after a pilot study involving three children. The interviews were conducted face-to-face; verbal consent was obtained from the children, and written consent was obtained from their parents before the interviews. During the interviews, audio recordings were taken to document the data, which were later transcribed into written texts for analysis. The collected data were analysed using the content analysis method. The study's findings indicate that parents' use of digital technology can influence children's perceptions, emotions, and behaviours. Children often perceived their parents' prolonged engagement with digital technology as neglect, which evoked emotional responses such as loneliness, jealousy, and anger. Furthermore, excessive parental use of digital technology was found to reduce family interactions, lower the quality of face-to-face communication, and desensitize parents to their children's behavioural cues. The findings also revealed how parental digital behaviours shape children's media habits. Some children imitate their parents' behaviours, which supports the social learning theory. The study highlights the negative effects of parents' use of digital technology on children's social, emotional, and cognitive development. Children frequently expressed feelings of loneliness, neglect, and insecurity as their parents spent more time on digital devices. Additionally, children observed that their parents' focus on devices during family interactions led to communication breakdowns. For example, parental engagement with digital technology during mealtimes, playtime, or bedtime was identified as a factor that increased children's attempts to gain attention. In addition to the negative effects, some children mentioned the positive outcomes of using digital technology with their parents for educational purposes. They noted that spending time with parents on educational apps or creative activities on digital devices was enjoyable. However, for such positive effects to emerge, it is critical for parents to manage their use of digital technology consciously. Setting boundaries on digital technology use and spending quality time with children is essential for supporting their social and emotional development. In this context, avoiding using digital devices during family moments such as mealtimes, bedtime, and playtime can effectively meet children's emotional needs. Furthermore, educational programs should be organized to raise parents' awareness of the effects of digital technology use on children. These programs should guide parents to be role models for their children, control screen time, and consciously use devices. In conclusion, this study sheds light on parents' digital technology usage habits from children's perspective. It demonstrates that these habits can significantly affect children's social, emotional, and cognitive development. The findings underscore the importance of parents consciously managing their relationship with digital technology to support their children's healthy development and strengthen family bonds.

Keywords: Preschool education, Preschool period, Parent-child interaction, Technoference, Digital technology usage

# Introduction

In today's rapidly advancing world, the pervasive influence of digital technologies in our daily lives is a pressing concern. The COVID-19 pandemic has further accelerated this digitalization, triggering a profound social interaction and relationship shift. This transformation has impacted not only individuals' personal lives but also their family dynamics. In particular, understanding how parents' use of digital technologies affects parent-child interactions and relates to children's social, emotional, and cognitive development has become a vital area of research. The literature provides substantial evidence suggesting that parents' focus on digital technologies may negatively affect the quality of parent-child interactions (Anderson & Hanson, 2017; Fay-Stammbach et al., 2014; Zimmer-Gembeck et al., 2017).

Smartphones, tablets, and other digital technologies frequently occupy parents' daily routines, significantly influencing their interactions with their children (Radesky et al., 2016a). Parents' dependency on digital technologies for work or social life shapes children's observations and perceptions of these environments. Moreover, parents' attachment to mobile devices raises concerns about children's social and emotional development (Hinkley & McCann, 2018). Studies reveal that children are affected by observing their parents' technology use (Radesky, 2016b). While parental use of technology as an educational tool can positively influence children's learning processes, excessive use may lead to adverse effects (Griffith, 2023). Research indicates that parents' excessive interest in mobile devices reduces their levels of attention and sensitivity, which in turn affects children's behaviour. For instance, a study by Radesky et al. (2014) observed that parents' use of phones during mealtimes reduced verbal and non-verbal communication with their children, leading to increased attention-seeking behaviours among children. Such situations may result in behavioural issues in children, including anger, restlessness, and even withdrawal (McDaniel & Radesky, 2018a). Similarly, Stupica (2016) found that parents' engagement with devices during their children's sports activities negatively impacted children's performance. When children's attempts to gain their parents' attention are ignored, their emotional and physical development can be hindered.

The effects of parents' use of technology on children are often discussed within the concept of "technoference." *Technoference*, defined as technological interference, refers to interruptions or disruptions in individuals' daily lives, especially in their social relationships, caused by using technological devices (e.g., smartphones, tablets, televisions) (McDaniel, 2015; McDaniel & Coyne, 2016a). This term is particularly examined in the context of parent-child relationships, romantic partnerships, and general social interactions. This term, introduced into the literature by McDaniel and Radesky (2018a), refers to how technology interferes with parent-child interactions. Research shows that when parents turn to technological devices, they frequently overlook their children's attention-seeking behaviours, which can lead to behavioural problems in children (McDaniel & Coyne, 2016a). For example, McDaniel and Radesky (2018b) found that distracting use of digital technologies can result in children developing internalizing problems (e.g., anxiety, withdrawal) and externalizing issues (e.g., tantrums, emotional reactivity). This increase in parental distraction negatively impacts children's social-emotional skills (Lauricella et al., 2009).

Parents' constant engagement with social media or work-related tasks reduces face-to-face communication with their children. Consequently, children may not receive adequate attention and support from their parents (Hinkley & McCann, 2018), potentially leading to feelings of loneliness (Kildare & Middlemiss, 2017). Using digital technologies, parents may also become desensitized to their children's emotional needs (McDaniel & Coyne, 2016a). This desensitization can negatively impact children's abilities to express themselves and form social connections (Radesky et al., 2016a). Specifically, leaving children alone while parents are preoccupied with their devices can

result in children being exposed to excessive screen time, which may lead to long-term health and developmental issues (Haughton et al., 2015; Radesky & Christakis, 2016). Steiner-Adair and Barker (2014) found that children often feel lonely, sad, and angry when their parents are occupied with devices. Such emotional responses can cause attachment issues and a lack of trust in parent-child relationships. Furthermore, considering that children tend to model their parents' behaviour (Jago et al., 2012; Lauricella et al., 2015), it is evident that parental media habits may have long-term effects on children.

Parents' engagement with digital technologies directly influences children's screen time, which can pose significant developmental risks (American Academy of Pediatrics, 2016). For instance, children who observe their parents' television-watching habits are likelier to engage in excessive television viewing (Xu et al., 2015). Parents ' excessive and unconscious use of digital technologies increases the likelihood of children adopting similar habits, putting their development at risk. Excessive screen use among children is associated with negative outcomes, such as attention deficits, reduced social skills, and behavioural problems (American Academy of Pediatrics, 2016).

The impact of parents' use of digital technologies on children's language development has also been a significant area of research. Studies indicate that background television disrupts parent-child communication and reduces the number of words spoken (Napier, 2014; Anderson & Hanson, 2017). An experimental study by Reed et al. (2017) revealed that parents distracted by phone calls were less likely to teach their children new words, limiting their vocabulary acquisition.

The effects of technology on children's development should be considered not only at the individual level but also at the societal level. Parents' use of technology influences family dynamics, children's social interactions, and overall quality of life (Lauricella et al., 2014). Children learn from observing their parents' technological habits and integrate these behaviours into their own lives (Bandura, 1978). Parents' use of technology plays a crucial role in shaping their children's future media habits and social interactions, and it has broader implications for society as a whole. How individuals consume media influences their socialization patterns and social cohesion within communities. Additionally, it can contribute to increased risks of cyberbullying, online fraud, and privacy violations. In this context, the way people engage with media has significant consequences for social interactions and community integration, as well as for digital security and ethical behaviour in online environments. It is essential to recognize that building a healthy society depends on raising well-adjusted children in all aspects of their lives, and responsible use of technology is a vital part of this process.

The reasons behind parents' use of digital technologies and the consequences of this use within the family have also been extensively examined in the literature. Semi-structured interviews reveal that parents use devices to cope with stress, relax with entertainment apps, or take a break from challenging parenting situations (Radesky et al., 2016b). The effects of digital technologies on family life are not always negative. Some studies suggest that these technologies can positively affect parents' emotional regulation, social support-seeking behaviours, and parenting skills (McDaniel, 2020; Radesky et al., 2016a; Torres et al., 2021). Wolfers (2021) found that parents use digital technologies to seek parenting advice, connect with other parents, or manage stress. This type of technology use can support mindful parenting practices and enable parents to demonstrate greater empathy, understanding, and compassion toward their children. However, despite the psychological benefits, parents acknowledge that devices can harm interactions with their children (Hiniker et al., 2015; McDaniel & Coyne, 2016b). The distracting potential of digital technologies makes it challenging to balance these positive effects. A study by Moser et al. (2016) revealed that while some parents attempt to limit their use of digital technologies around their children, they often struggle to

maintain this practice. Additionally, children's reactions to their parents' device use are noteworthy. According to Oduor et al. (2016), some children criticize their parents' use of digital technologies and desire more family-focused time. Such conflicts further complicate parents' efforts to manage their use of technology. Although there is a growing body of literature on the impact of parents' technology use on child development, this relationship's dynamics and underlying mechanisms remain incompletely understood (Hiniker et al., 2015; Jago et al., 2012; Lauricella et al., 2015). In this context, the present research aims to explore children's perspectives on their parents' use of technology.

## Method

# 1. Research Design

This study was conducted using the phenomenological design, one of the qualitative research methods. The phenomenological design aims to deeply understand individuals' experiences, perceptions, and interpretations of a specific phenomenon (Creswell & Poth, 2016). Within this framework, preschool children's perspectives regarding their parents' use of technology were examined in the context of their own experiences and perceptions.

## 2. Research Group

The study was conducted with voluntarily participating preschool children in Antalya. The snowball sampling method was used to reach the 27 preschool children in the study group. Due to their developmental characteristics, preschool children cannot participate directly in research studies. Therefore, communicating with their parents, teachers, or caregivers is often necessary to reach them. The snowball sampling method used in this study enabled the identification of other potential participants through parents and teachers, thereby facilitating the formation of a broader participant pool to examine children's perceptions of their parents' use of technology. Table 1 presents descriptive information about the children in the study group.

Demographic Information		Ν
	Girl	15
Gender	Boy	12
A	48-60 months	9
Age	61-72 months	18
The situation of going to kindergarten	Yes	22
The situation of going to kindergarten	No	5
Total		27

Table 1: Descriptive information about the children

The ages of the children in the study group range from 48 to 72 months. Nine children aged between 48 and 60 months participated in the study, while 18 children aged between 61 and 72 months were included. Additionally, 15 of the participating children were girls, and 12 were boys. Moreover, 22 children are enrolled in kindergarten, whereas five are not.

# 3. Data Collection Tool and Process

The data for the study were collected through a semi-structured interview form developed by the researcher. After obtaining the ethical approval document, the researcher began the data collection process by contacting preschool children. Using the snowball sampling method, the researcher formed the study group by reaching new participants through each child interviewed. During this process, the researcher also received support from the parents. The semi-structured interviews were conducted face-to-face.

Prior to commencing the interviews, the researcher obtained verbal consent from the children, respecting their autonomy and right to participate. The children were informed that they had the power to terminate the interview at any time, further reinforcing the researcher's commitment to ethical conduct. Additionally, written consent forms were obtained from the parents, and permission was sought to make audio recordings. The parents were assured that these audio recordings would be used solely for the purposes of the research, demonstrating the researcher's transparency and respect for the participants' privacy.

The interviews with the children, which lasted an average of 8-12 minutes, were conducted at times suitable for the children and their parents in their chosen environment. This consideration for the children's comfort and convenience is a testament to the researcher's empathy and dedication to the study. To prevent data loss, the researcher took written notes during the interviews, ensuring that every detail was captured. Detailed information regarding the data collection tool is provided under the "Semi-Structured Interview Form".

# 3.1. Semi-Structured Interview Form

In the study, a semi-structured interview form was used to determine the views of children's parents on technology use. A semi-structured interview is a flexible data collection technique that allows for both the use of predetermined questions and the inclusion of additional questions during the interview process (Merriam, 2015). The eight questions included in the semi-structured interview form were developed based on a review of the literature and expert opinions. Care was taken to ensure that the questions fully reflected the scope of the research topic.

To ensure the content validity of the questions included in the interview form, the form was evaluated by two experts in the field of early childhood education. Following the experts' evaluations, the question *"How do you feel when your mother or father uses their phone/tablet/computer?"* was added to the interview form. After achieving content validity, the form was reviewed by a language expert to assess its clarity in terms of language. Based on this expert's feedback, modifications were made to clarify the meaning of specific questions.

Finally, a pilot study was conducted with three children to test the functionality of the questions, and the final version of the semi-structured interview form was prepared. Examples of some of the questions included in the interview form are as follows:

• What do you do when your mother or father uses their phone/tablet/computer?

• Does your mother's or father's use of a phone/tablet/computer affect you? How does it affect you? Can you provide an example?

# 4. Data Analysis

The audio recordings obtained during the study were first transcribed into written text. To prevent any confusion during the analysis and reporting processes and to ensure the confidentiality of the children's personal information, participants were assigned codes ranging from C1 to C27. This approach allowed the themes presented in the findings section to be supported by the children's views, enhancing the study's validity. The data were analysed using the content analysis method. Content analysis is a research technique that derives systematic, objective, replicable, and valid conclusions from identified data within a text (Barcus, 1959; Stone et al., 1966; Krippendorff, 1980). In qualitative research, the researcher adopts an approach to reveal relationships within the data and identify patterns. Accordingly, categories that could be coded, sub-themes belonging to these categories, and themes associated with these sub-themes were identified (Patton, 2018). In the present study, five themes were identified:

"Perspectives on parental digital technology use habits", "Parental digital technology use and communication", "Parental digital technology use and emotional reactions", "Parental digital technology use and indirect effects", and "Parental digital technology use and parenting roles".

# 4.1. Validity and Reliability

In qualitative research, validity and reliability are addressed in various dimensions to ensure the accuracy and trustworthiness of the findings. This study evaluated validity and reliability through the dimensions of credibility, transferability, consistency, and confirmability (Guba & Lincoln, 1982). The study's credibility was enhanced by supporting the findings with direct quotes, a practice that ensures transparency and integrity. Additionally, detailed reporting was adopted to support the study's transferability. Sub-themes and themes were clearly defined, and children's views were presented in detail under each theme. This approach allows other researchers to replicate the study in different contexts, further demonstrating the study's transparency.

Consistency was ensured by independently constructing and comparing the codes, categories, sub-themes, and themes derived from the interview data by both the researcher and a field expert. This collaborative approach ensures that multiple perspectives are considered, making the audience feel included in the study's findings. Any discrepancies in the coding process were discussed until a consensus was reached. Finally, confirmability was achieved by securely storing the recordings, allowing the data to be revisited for accuracy checks when necessary. The evaluations conducted by an expert also facilitated the verification of the study's findings.

# Results

This section presents the findings obtained from the analysis of the research data. The data derived from the analysis were categorized under the themes of "*Perspectives on parental digital technology use habits*", "*Parental digital technology use and communication*", "*Parental digital technology use and emotional reactions*", "*Parental digital technology use and indirect effects*", and "*Parental digital technology use and parenting roles*". The findings are presented with tables, explanations, and excerpts from participants' responses. The findings under the "Perspectives on Parental Digital Technology Use Habits" theme are included in Table 2, with the most frequently repeated codes provided as examples.

Sub-Theme	Category	f
	Long-term usage	17
Usage Duration	Perceived neglect due to duration	12
	Short-term usage	10
	Constant usage	16
Usage Frequency	Intermittent usage	7
	Uninterrupted usage	4
	Phone usage	26
True of Llagon	Television usage	23
Type of Usage	Tablet usage	13
	Computer usage	7

Table 2: Findings on perspectives on parental digital technology use habits

Usage during shared time	17
Usage during meal times	15
Morning usage	7
Night-time usage	5
Work-related usage	14
Entertainment-related usage	11
Shopping-related usage	9
Communication-related usage	5
	Usage during meal times Morning usage Night-time usage Work-related usage Entertainment-related usage Shopping-related usage

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When Table 2 is examined, it is observed that children's perspectives on their parents' digital technology use habits are categorized under the sub-themes of "*usage duration*", "*usage frequency*", "*type of usage*", "*time of usage*", and "purpose of usage". Accordingly, children highlighted their parents' long-term (f=17) and constant (f=16) technology use. In terms of the type of usage, phone usage (f=26) and television usage (f=23) were frequently mentioned, while it was emphasized that technology use often occurred during shared time (f=17) or meal times (f=15). Additionally, children stated that their parents primarily used technology for work-related purposes (f=14) and entertainment (f=11). Some example statements under the theme of children's perspectives on their parents' digital technology use habits are as follows:

"My dad is always looking at his phone; it feels like he never talks to me." (C5)

"My mom is constantly on her phone." (C3)

"My dad is always watching the news." (C11)

"My mom pays attention to her phone while in the kitchen or at the table." (C8)

"My dad is always working on his computer for his job." (C14)

Table 3: Findings related to the theme of parental digital technology use and communication

Sub-Theme	Category	f
	Reduction in communication time	23
Impact on Parent-Child	Decrease in face-to-face communication	17
Communication Quality	Deterioration in communication quality	9
	Discovery of shared interests	7
	Disruption of family time	19
Impact on Family Communication	Decrease in shared activities	13
	Increase in conflicts	7
	Communication breakdown	4
	Joint use of digital technologies	3
Child's Efforts to Gain Parental	Behavioural reactions	16
Attention	Creative attempts to gain attention	9

 Physical intervention	8
Using similar technology	5
Verbal requests for attention	5
Silence to attract attention	2

According to Table 3, the theme of parental digital technology use and communication is divided into three sub-themes: "*impact on parent-child communication quality*", "*impact on family interaction*", and "*child's efforts to gain parental attention*". Children reported that parental technology use reduces parent-child communication time (f=23) and deteriorates the quality of face-to-face communication (f=17). Additionally, children highlighted negative effects such as the disruption of family time (f=19) and increased conflicts (f=7) due to parental technology use. Lastly, within the scope of children's efforts to gain attention, behavioural reactions (f=16) and creative attempts to gain attention (f=9) emerged as prominent categories. Some example statements under the theme of parental digital technology use and communication are as follows:

"My mom looks at her phone even while talking to me." (C7)

"My mom gets furious at my dad because he is always on his phone." (C19)

"While my dad was looking at his tablet, I drew a picture for him, but he did not notice." (C5)

Table 4: Findings related to the theme of parental digital technology use and emotional reactions

Sub-Theme	Category	f
	Anger and frustration	16
	Feeling of loneliness	13
	Sense of neglect	10
Emotions	Insecurity	7
Emotions	Feeling of guilt	5
	Disappointment	4
	Sense of self-confidence	3
	Jealousy	2
	Silence or withdrawal	19
Emotional Reactions	Confrontation with the parent or complaints	5
	Developing independence	3
	Expectation of attention and care	19
Emotional Needs	Seeking love and affection	15
	Need for approval and support	10
	Desire to build a connection	5

 Need for safety and protection	3
Desire for equal sharing	1

According to Table 4, the sub-themes under the theme of parental digital technology use and emotional reactions are identified as "*emotions*", "*emotional reactions*", and "*emotional needs*". Children expressed experiencing anger and frustration (f=16), feeling of loneliness (f=13), and a sense of neglect (f=10) in response to their parents' use of digital technology. Silence or withdrawal (f=19) was the most frequently observed response among emotional reactions. Additionally, children emphasized their expectations for attention (f=19) and love (f=15) from their parents. Some example statements under the theme of parental digital technology use and emotional reactions are as follows:

"My dad loves his phone more than me." (C9)

"When my mom did not pay attention to me, I played alone." (C15)

"My dad spends too much time on his tablet; he should spend some time with me instead." (C22)

Table 5: Findings related to the the	neme of parental dig	ital technology use a	nd indirect effects

Sub-Theme	Category	f
	Increase in screen time	15
	Negative health habits	10
Impact on the Child's Habits	Positive technology habits	9
	Development of technology addiction	7
	Attention and concentration problems	5
	Usage guided by parental direction	11
Child's Attitude	Normalization of technology	9
Toward	Perceiving technology as a source of entertainment	8
Technology Use	Negative attitude toward technology	6
	Viewing technology as a tool for education and learning	4
	Constant screen usage	11
Child's Imitation of	Modelling positive technology behaviours	9
Parental	Exploring social media	9
Technology Use	Turning to games and applications	7
	Focusing on digital technologies	5
	Technology use during meal times	18
Impact on Daily Routines	Effects on family interactions	16
	Neglect of routines	15

 Entertainment and relaxation through technology	9
Disruption of sleep patterns	4

When Table 5 is examined, it is observed that the theme of parental digital technology use and its indirect effects includes four sub-themes: *"impact on the child's habits"*, *"child's attitude toward technology use"*, *"child's imitation of parental technology use"*, and *"impact on daily routines"*. It has been determined that children's habits change due to their parents' digital technology use. Accordingly, an increase in screen time (f=15) and the development of negative health habits (f=10) were identified among children. Additionally, children were found to tend to normalize technology (f=9) and perceive it as a source of entertainment (f=8). Within the sub-theme of the impact of technology use on daily routines, effects such as technology use during meal times (f=18) and a decrease in family interactions (f=16) were highlighted. Some example statements under the theme of parental digital technology use and its indirect effects are as follows:

"I use learning apps with my mom." (C13)

"My dad always plays games on his phone, so I like games too." (C20)

"When my dad looks at his phone, I want a phone too." (C9)

"My mom and dad watch TV while eating, so I watch cartoons on my tablet." (C10)

Table 6: Findings related to the theme of parental digital technology use and parental roles

Sub-Theme	Category	f
	Perception of the parent as being preoccupied	21
	Perception of an inattentive parent	19
Child's Perception of	Lack of love and compassion	17
Parenting	Perception of insufficient support	14
	Perception of a harsh or impatient parent	8
	Perception of a sharing and engaging parent	6
	Modelling technology addiction	17
	Negative technology behaviours	13
Parent's Role as a Model	Modelling social media use and sharing	9
	Positive technology behaviours	7
	Demonstrating digital balance	3
	Neglect of parental responsibilities	18
Conflict Between Child	Postponement of the child's responsibilities	12
and Parental Responsibilities	The conflict between duties and attention	9
	Role reversal	7

Disruptions in the parent's time management

According to Table 6, the theme of parental digital technology use and parental roles includes the sub-themes of "*child's perception of parenting*", "*parent's role as a model*", and "*conflict between child and parental responsibilities*". Children reported that during their parents' use of technology, they often perceived their parents as preoccupied (f=21) and inattentive (f=19). Furthermore, it was identified that parental technology use led to role-modelling behaviours such as modelling technology addiction (f=17) and negative technology behaviours (f=13). Lastly, children noticed issues such as neglect of parental responsibilities (f=18) and disruptions in time management (f=5) caused by their parents' technology use. Some example statements under the theme of parental digital technology use and parental roles are as follows:

"My mom does not hold me like she used to because she is always on her phone." (C6)

"I want to play the same game my dad plays." (C20)

"My mom is always on the phone, so I take care of my younger sibling." (C17)

Discussion, Conclusion and Recommendations

This study examined children's perspectives on their parents' use of digital technology under five main themes. The findings reveal that parents' prolonged engagement with digital technologies can cause significant disruptions in children's social, emotional, and behavioural development. This aligns with findings in the literature highlighting the adverse effects of technological interruptions in parent-child interactions, referred to as "technoference" (McDaniel & Radesky, 2018a). The current study emphasizes that parents' constant interaction with screens can lead children to feel neglected and develop feelings of anger and frustration. This is consistent with Steiner-Adair and Barker's (2014) findings, which showed that children develop negative emotions such as loneliness and anger toward their parents' technology use.

The frequency and context of parents' digital technology use directly influence the quality of parent-child communication. Turkle (2011) highlighted this issue, noting that constant interaction with screens weakens parent-child bonds. The current study's findings also indicate that children perceive their parents as distancing themselves from face-to-face communication and dividing family time. This observation aligns with Radesky et al.'s (2014) findings, which showed that parents' use of mobile devices during meals reduces parent-child interactions and increases children's attempts to gain attention. Furthermore, the literature frequently emphasizes that technological interruptions decrease parental sensitivity to children and delay responses to children's behavioural cues (Blackman, 2015; Kushlev, 2015). In this study, children's attention-seeking attempts were found to vary, including physical intervention, creative displays of interest, or retreating into silence. This indicates that children struggle to express their emotional needs and resort to indirect strategies to meet them (Hiniker et al., 2015; Rideout & Robb, 2018). Additionally, parents' intense engagement with digital technologies can cause children to experience attention and concentration problems.

The findings also highlight the indirect effects of parents' digital technology use on children. Imitating parents' behaviours leads children to increase their screen time and develop technology addiction tendencies, supporting Bandura's (1977) social learning theory. The literature indicates that children directly model their parents' media habits and adopt these behaviours (Xu et al., 2015). Existing research has also examined the relationship between parental mobile device usage and attitudes toward technology and how these factors influence children's media habits (Cingel & Kremar, 2013; Lauricella et al., 2015; Pila et al., 2021). For instance, Pila et al. (2021) found that parents'

attitudes toward technology, their own use of mobile media, and other family-level factors are associated with children's overall mobile media usage and engagement with science and math media.

The study also revealed that parents' engagement with digital technologies negatively affects children's perceptions of parental roles. Consistent with the literature, as parents spend more time on digital devices, children perceive this negatively and develop emotional responses (Livingstone & Blum-Ross, 2020). Indeed, parents' use of technology can disrupt children's daily routines and upset the balance of parent-child relationships (Coyne et al., 2017). In the current study, children perceived their parents as inattentive, unaffectionate, and neglecting their responsibilities, significantly weakening the parent-child bond. These findings align with Bowlby's (1982) attachment theory, which emphasizes that emotional unavailability in parents can lead to attachment issues in children. Similarly, Lauricella et al. (2015) found that parents' excessive technology use could undermine children's sense of trust in their parents, a finding consistent with the present study. Moreover, children's negative perceptions of their parents' roles can increase emotional reactions such as loneliness, jealousy, and anger, leading to trust issues (Sroufe, 2005).

Finally, the positive aspects of parents' digital technology use should not be overlooked. In this study, some children mentioned the positive effects of using digital technologies for educational purposes with their parents. This finding supports Radesky and Christakis's (2016) conclusion that digital technologies can enhance parent-child interactions when used appropriately. However, for such positive effects to emerge, parents must consciously manage their digital technology use.

This study highlights the effects of parents' digital technology use on children's perceptions, emotions, and behaviours, demonstrating how these effects can influence children's social, emotional, and cognitive development. The findings show that children perceive prolonged parental engagement with digital technologies as neglect and elicit emotional responses such as loneliness, jealousy, and anger. Furthermore, decreases in family interactions, reduced quality of face-to-face communication, and parental insensitivity to children's behavioural cues weaken the parent-child bond. On the other hand, children's imitation of their parent's behaviours, leading to increased screen time and the risk of developing technology addiction, clearly illustrates how parental digital habits shape children's media behaviours. In this context, parents' conscious management of technology use is critical to supporting their children's social and emotional development.

The findings underscore the importance of parents limiting their digital technology use and spending quality time with their children. Avoiding digital technologies during special moments, such as mealtimes, bedtime, and playtime, can enhance family interactions and help meet children's emotional needs. Additionally, implementing practices like family digital detox periods—designated times free from digital technology—can strengthen parent-child bonds. Educational programs should be organized to raise parents' awareness of the effects of their technology use on children. These programs should guide parents on setting boundaries for digital technology use, serving as role models, and using devices consciously. However, limiting this use and controlling screen time is essential to protect children from health and developmental issues related to excessive screen exposure. Parents can also positively shape their children's relationship with technology by using digital technologies for educational applications and creative activities.

The present study has several limitations and offers suggestions for improvement in future research. First, the study was conducted with only 27 preschool children. The limited number of participants and their selection from a specific geographical region (Antalya) restrict the generalizability of the findings. Future studies could include a more extensive and diverse sample from different geographical areas and socioeconomic groups to enhance external

validity. Additionally, the study focused solely on children's perceptions of their parents' digital technology use, excluding their parents' perspectives. Incorporating both children's and parents' views in future research could allow for a more comprehensive examination of the phenomenon. Furthermore, the study was conducted with children aged 48-72 months. This age range includes significant differences in cognitive and emotional development, which may result in findings that are not homogeneous across all age groups. Future research could focus on narrower age ranges or compare different age groups to better address developmental variations. Moreover, employing mixed-method approaches that combine qualitative and quantitative data could provide deeper and more generalizable insights into the effects of parental digital technology use on children.

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