



DOI: 10.18039/ajesi.1258231

## An Investigation of the Parental Mediation Situations of Preschool Children's Parents

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**Date submitted:** 01.03.2023

**Date accepted:** 09.06.2023

**Type<sup>4</sup>:** Research Article

### Abstract

Developments in information and communication technologies caused an increase in the possession of digital tools and facilitated their use. The use of digital tools, especially the internet, now starts below the age of two. In this sense, during early childhood, parents have a great responsibility as they are primarily responsible for their children's "digital exposure." They need mediation strategies to determine their children's use of digital tools. This study aims to examine the parental mediation situations of the parents of preschool children. This study, conducted as a survey model, adapted the Parental Mediation Scale to the preschool level as a data collection tool. The participants of the study consisted of 108 parents of preschool children. The results of the study determined that the parental role (mother–father) and educational status of parents affected parental mediation strategies; whereas, the number of children, internet usage experience, income status, and the age of the parents or children did not affect said strategies. The qualitative analysis indicated that the parents have many concerns about the social–emotional and physical problems that may occur due to internet use in children from an early age. It is among the other qualitative results that parents prefer more direct intervention techniques and technical solutions to protect their children from the risks of the internet. As a result of the research, this study presents suggestions to parents and researchers for future studies on children's conscious use of digital tools.

**Keywords:** effects of internet on pre-schoolers, mediation strategies, parental mediation

**Cite:** Dulkadir Yaman, N., Karademir, A., & Yaman, F. (2023). An investigation of the parental mediation situations of preschool children's parents. *Anadolu Journal of Educational Sciences International*, 13(2), 218-245. <https://doi.org/10.18039/ajesi.1258231>



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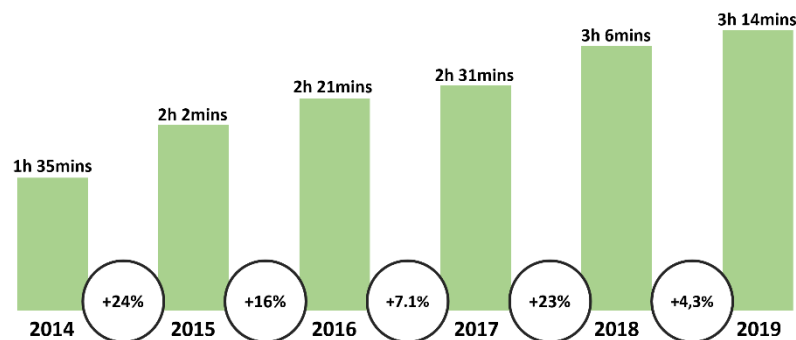
<sup>4</sup> This research study was conducted with Research Ethics Committee approval of Muş Alparslan University, dated 28.10.2020 and issue number E-10879717-050.01.04-13023.

## Introduction

There used to be investigations on what kind of rules or restrictions parents applied to their children regarding the use of digital media tools such as television when internet technology was not a part of people's daily life. In later years, with the inclusion of internet technology in daily life and its widespread use, parents adapted their television mediation strategies for their children to internet technologies. The technology change is reflected on parenting practices and also changed the interaction between parent and child (Macheroni, Ponte, & Jorge, 2018) because mobile devices made it possible to access the internet anytime and anywhere. At the national and international levels, the use of digital tools and the internet has been increasing, especially with the mobile use of the internet. According to the data of Internet World Stats (IWS, 2019) and We Are Social (2021), the rate of internet users worldwide constitutes more than half of the world population. Additionally, according to the Internet World Stats data, the rate of internet use in Turkey is 83.3%. Similarly, the Household Information Technologies report of the Turkish Statistical Institute ([TSI], 2020) presents the rate of internet use at home as 90.7%. Data from both IWS (2019) and TSI (2020) indicate that more than three-quarters of the population in Turkey use the internet. As the rate of internet use increases, the time spent on the internet also increases. The individual mobile device user rate is 67% worldwide (We Are Social, 2019). While 92.6% of users access the internet via mobile devices, people who access the internet through their smartphones constitute 91.5% of total internet users (We Are Social, 2021). As seen in Figure 1, the time one spends on the internet with mobile devices has been increasing since 2014.

**Figure1**

The changes in duration of daily internet use with mobile devices over the years



While the rate and duration of internet use increases, the age of use decreases. The decrease in the age of use can be due to the fact that mobile devices have an internet connection. According to the National Center for Education (NCES) data, 78% of children aged 15–18, 68% of children aged 11–14, 57% of children aged 5–10, and 45% of children aged 3–4 years use the internet (McFarland et al., 2019). Available data suggest that the age of starting to use the internet has decreased below two in Turkey (Aslan, 2016).

Not only children use digital tools. Adults also use digital tools or media for various advantages. As access to digital tools and especially the internet becomes easier, individuals can meet their daily needs such as shopping, banking transactions, and communication, and conduct their official transactions through the e-Government applications. The possibilities that technology, and especially the internet, offers are endless. However, it would not be appropriate to place digital tools and the internet in a special position and evaluate them only in terms of these possibilities (Valcke, Wever, Van Keer, & Schellens, 2011). Digital tools and

the internet come with many risks such as cyber bullying, cyber fraud, access to sexual and violent content, sexual invitations in the virtual environment, meeting unknown people online and offline, the danger of strangers in the virtual environment, and theft of personal information and identity information. Considering that the age of use for digital tools and especially the internet has decreased, it is necessary to protect the children who are unaware of these risks. With the idea that children, peers, parents, teachers, technology developers, policymakers, and legislators should work together to protect children from the risks and effects of digital environments (Chang, 2010; Livingstone et al, 2012; Duerager & Livingstone, 2012; Palfrey & Gasser, 2013), research states that parents especially have a great responsibility in preventing and reducing the risks that children may face (Rosen, Cheever, & Carries, 2008). As a common denominator in both views, the role of parents in knowing the effects of digital technologies on children's lives and ensuring the use and control of these technologies to avoid negative consequences comes to the fore. In this context, it can be said that parents should have digital parenting competencies to protect their children from online risks.

### **Early Childhood Parenting**

When people make good use of the early childhood period, it creates a strong foundation for the child's future cognitive, linguistic, motor, social, and emotional development. In this period, how much the child can explore and the content and the speed of their learning are closely related to how supportive their environment is and the opportunities that are offered to them (Yavuzer, 2016). For children to have a healthy development in all areas, they need to eat healthily, be in a rich and stimulating environment, and receive new learning opportunities during this period. The richer the environment is in terms of stimuli, the faster children can develop and learn. However, when the opposite happens, it may cause delays in all developmental areas of children (Yörükoğlu, 2007). Early life experiences determine the attitudes that children develop toward learning and their own abilities. Children who have positive experiences in their early childhood start to learn and develop positive attitudes about their own skills. It is known that children who have negative experiences in this period have a low success rate in school and post school life, and exhibit more behavioral problems (Cüceloğlu, 2016). For the child to grow up, develop, and cultivate positive attitudes toward learning, there is a need to create an environment that is compatible with the changing conditions of the age in which the child receives qualified cognitive stimuli, rich language interactions, positive social and emotional experiences, and support to act independently. This can only be possible with a family environment where there are good quality interactions (Ministry of National Education [MNE], 2013). Family is one of the most significant factors affecting the development, social adaptation, and success of the child. A child can realize their potential only if they grow up in an environment that cares about them, is sensitive to their needs, and protects them from negligence and punitive approaches. In this context, the quality of the child's relationship with their parents constitutes one of their most important early life experiences (MNE, 2013).

In this day and age, it is not unusual for children to use televisions, smartphones, and/or tablets, and computers at home (Saracho, 2015). These technologies have become an integral part of the physical and social world of children today. On the other hand, to fully understand the digital lives of young children, it is necessary to recognize that parents are also a critical factor in this equation. This is relevant because parents are the owners of the internet-connected digital technological devices their children use at home. Parents have control over

such devices and decide when, where, how, with whom, and for how long their children can use the internet with digital technologies. As a result, children and parents often interact with each other during internet-based digital activities in the family.

## Parental Mediation

The digital literacy skills of parents affect the parenting styles they use on their children in the process of using digital media. In this respect, parental mediation in the family aims to increase the opportunities that the child can benefit from in the online environment and to reduce the possible risks that the child may face. In its most general sense, one can define mediation as a concept that ends the disagreement between two people and reconciles both parties at some point. When considered in the context of the family, one can think of mediation as communication or interaction within the family. With the developments in technology, researchers started to handle the concept of mediation under the title of parental mediation and they first investigated television mediation (Valkenburg, Krcmar, Peeters, & Marseille, 1999). While a limited knowledge/skill is sufficient in the use of a television, much broader knowledge/skills are required to use internet technologies. To use internet technology, it is necessary to have the ability to use the tools that the internet connects to (Wang, Bianchi, & Raley, 2005). The device being in a fixed position when solving television-related problems makes the job of parents easier, while the portable options of internet technologies make it more difficult for parents to solve any arising issue. While the family can watch television in an environment where all members are together, it is difficult to share an activity with family members in an environment with mobile technologies (Livingstone & Helsper, 2008). In parallel, research indicated that parents can be an authority at home and there will be no problem in terms of supervision when it comes to watching television, but this is not the case for internet use (Livingstone & Das, 2010). Additionally, parent mediation has become a sub-dimension of digital parenting with the development and spread of information and communication technologies (Livingstone & Byrne, 2018). In this context, while active/guiding, rule-based/restrictive, and co-monitoring mediation (Valkenburg et al., 1999) are valid in television mediation, parental mediation types differ in the case of children's internet use. The different types of mediation found in the literature regarding digital tools and internet use are presented below;

- Eastin, Greenberg, and Hofschire (2006): real, evaluative, and restrictive
- Lwin, Stanaland, and Miyazaki (2008): restrictive, promotive, selective, and laissez faire
- Livingstone and Helsper (2008): active co-use, interaction and restrictions, technical restrictions, and monitoring
- Kirwil (2009): social co-use, time restriction, website restriction, technical restriction, and unrestricted rule-based
- Hasebrink et al. (2011): active, restrictive, monitoring, and technical
- Livingstone et al. (2015): active, safety, restricted, technical, and monitoring
- Blum-Ross and Livingstone (2016): facilitating and restricting
- Dulkadir Yaman and Kabakçı Yurdakul (2022): active, monitoring, technical, and safety

Active mediation includes strategies for participating in online activities and having discussions about them together. Safety mediation includes strategies for advising and guiding

children about the risks they face online. Technical mediation refers to the use of filtering software and parental controls in the use of the computer and internet. Monitoring strategies are strategies to check the child's computer, social media accounts, or phone after use (Livingstone, Mascheroni, Dreier, Chaudron, and Lagae, 2015).

One can say that the common denominators of these mediation types included in the literature are facilitating and restrictive parental mediation types. While counseling and guidance are essential in facilitating mediation, restrictive mediation includes rules and restrictions. While observations indicate that the online opportunities and risks children face in families with restrictive mediation behaviors decrease, the online opportunities and risks increase in families exhibiting facilitating mediation behavior (Livingstone et al., 2017). The types of mediation that families adopt protect children against online risks such as problematic internet use. Research indicates that especially active and restrictive mediation types are protective against excessive internet use and unwanted situations in the online environment (Chandirma et al., 2020).

In the literature, studies on parental mediation focus on many variables such as the gender of the parents, their education level, the age of their children, the income level of the family, and the number of children in the family (Blum-Ross & Livingstone, 2016; Turow & Nir, 2000; Wang et al., 2005). The education level of the parents is a determinant in the mediation strategies they apply (Cabello-Hutt et al., 2018; Hasebrink et al., 2011; Livingstone et al., 2015; Wang et al., 2005). While families with a high level of education prefer active mediation, families with a low level prefer restrictive mediation (Hasebrink et al., 2011). The income levels of parents (Livingstone et al., 2015) affect their mediation strategies. There are observations that as the education and income level of families increase, parents become concerned about the increase in the time their children spend in front of the screen (Pew, 2015). Parents use different mediation strategies according to their parent role, that is, the mother or father role (Blum-Ross & Livingstone, 2016; Chaudron, 2015; Livingstone et al., 2017; Pew, 2015; Sütçü, 2017; Wang et al., 2005). A study examining the effect of parents' gender on their parental mediation preferences observed that mothers were more protective (Pew, 2015) and preferred restrictive mediation (Livingstone et al., 2017). Parental mediation preferences also differ according to the gender of the children. Mediation strategies adopted by parents vary between male and female children (Blum-Ross & Livingstone, 2016; Livingstone & Helsper, 2008; Wright, 2017). Research states that girls are more exposed to parental mediation (Livingstone & Helsper, 2008) and families prefer restrictive mediation (Wright, 2017). The age of the children (Beyens et al., 2018; Hasebrink et al., 2009; Hasebrink et al., 2011; Ho, Chen, & Ng, 2017; Piotrowski, 2017) also determines the mediation strategy.

Generally, there is a relationship between the parental mediation strategies applied and the online risks children face (Cabello-Hutt et al., 2018; Kirwil, 2009; Livingstone et al., 2017). There are associations between parental mediation strategies and cyber bullying (Ho et al., 2017; Wright, 2017), parenting styles (Eastin et al., 2006; Livingstone et al., 2015), and digital skills (Livingstone et al., 2017). Parental mediation is critical for the emotional development and well-being of the child. Particularly, the social-psychological conditions of children in their real lives also affect their risk-taking behavior in the online environment. Therefore, the better the child feels and the more positive emotions they have in their family and environment, the less risk they take online. If not so, it is known that people with a low level of satisfaction from their family and environment seek communication and relationships on the internet

(Livingstone & Helsper, 2007). Thus, parent–child relationships, the parental mediation style, and the support that the family provides shape online behaviors (Lee et al., 2021).

## The Importance of the Study

The developments in information and communication technologies (ICT) impact societies and lead to transformations. Changes in societies cause parental roles to change in relation to them. The fact that, along with their beneficial features, ICTs, and especially the internet, have risky features poses a great problem for children. While adults may be aware of dangerous situations, children are not at a level to evaluate whether the situation is dangerous or not due to their developmental characteristics. It has become the primary duty of today's parents to protect their children from the harmful effects of the internet and to raise them as individuals who can communicate effectively in digital environments, shop safely, receive education, and are aware of their rights and responsibilities while complying with ethical rules. Parents are the primary supervisors in turning the risks of the internet into opportunities and ensuring their children's safe internet use.

In this context, this study, which aims to examine the parental mediation situations of the parents of preschool children, seek answers to the following questions:

1. Does the parental mediation of preschool parents differ according to;
  - a. their gender,
  - b. their education level,
  - c. the number of children they have,
  - d. sending their child to preschool,
  - e. their internet use status,
  - f. their income level, and
  - g. the frequency of their child's use of the internet?
2. Is there a relationship between parental mediation of preschool parents and;
  - a. the parent's age
  - b. the child's age in months?
3. What are the internet use requirements of preschool children according to parents?
4. What behaviors do parents exhibit to protect their children from the risks of the internet?
5. According to preschool parents, what are the positive and negative aspects of the internet environment that their children experience?

## Method

### Research Design

The research was designed based on a survey model. Survey models are more concerned with how features are distributed in the target universe or between the individuals, rather than why opinions and these features originate (Fraenkel, Wallen, & Hyun, 2012). In a universe with many members, these studies collect universal data or sample data to make a general judgment about the universe (Creswell, 2014). Survey studies can make instantaneous situation determinations by collecting data from the participants once.



## Participants

The study used the convenience sampling method. Büyüköztürk et al. (2008) define the convenience sampling method as the selection of the sample from easily accessible units to which the study can be applied. Considering the pandemic conditions, Google Forms became a preferred method for researchers to carry out the data collection process in a healthy way. Participation in the research was voluntary and within the scope of the study, 641 parents were contacted. First, participants were asked whether they had children in the preschool period. According to the responses, 27% of the participants answered yes to this question. After this question, when asked whether they would take part in the study, only 149 parents agreed to participate voluntarily. There were 108 participants left out of the 149 parents who participated in the study after excluding the participants who marked all answers as "5" in the answers of the Parental Mediation Scale in the Preschool Period (PMSPP). The study analyzed the data of 108 participants. Table 1 presents the characteristics of the participants.

**Table 1**

*Characteristics of the Participants*

	Female	Male	Total
<b>Education Level</b>			
Elementary School	14 (77.77%)	4 (22.23%)	18 (16.66%)
Middle School	10 (100%)	-	10 (9.25%)
High School	20 (74.07%)	7 (25.93%)	27 (25%)
Associate Degree	8 (88.88%)	1 (11.12%)	9 (8.33%)
Bachelor's Degree	21 (72.41%)	8 (27.59%)	29 (26.85%)
Master's Degree	6 (66.66%)	3 (33.34%)	9 (8.33%)
Doctoral Degree	1 (16.66%)	5 (83.34%)	6 (5.58%)
<b>Number of Children</b>			
One child	18 (72%)	7 (28%)	25 (23.14%)
Two children	35 (74.46%)	12 (25.54%)	47 (43.51%)
Three children	22 (91.66%)	2 (8.34%)	24 (22.22%)
Four children	4 (40%)	6 (60%)	10 (9.25%)
Five children or more	1 (50%)	1 (50%)	2 (1.88%)
<b>Child's Preschool Attendance Status</b>			
Yes	51 (79.68%)	13 (20.32%)	64 (59.25%)
No	29 (65.9%)	15 (34.1%)	44 (40.75%)

**Table 2**  
(Devam)

	Female	Male	Total
<b>Child's Preschool Attendance Status</b>			
Yes	51 (79.68%)	13 (20.32%)	64 (59.25%)
No	29 (65.9%)	15 (34.1%)	44 (40.75%)
<b>Internet Use (in Years)</b>			
0–2 years	12 (75%)	4 (25%)	16 (14.81%)
3–5 years	16 (84.21%)	3 (15.79%)	19 (17.59%)
6–8 years	12 (60%)	8 (40%)	20 (18.51%)
9 years and older	40 (75.47%)	13 (24.53%)	53 (49.09%)
<b>Income Status</b>			
500–1499 TL	3 (100%)	-	3 (2.77%)
1500–2499 TL	17 (89.47%)	2 (10.53%)	19 (17.59%)
2500–3499 TL	16 (66.66%)	8 (33.34%)	24 (22.22%)
3500–4499 TL	4 (80%)	1 (20%)	5 (4.62%)
4500–5499 TL	9 (90%)	1 (10%)	10 (9.25%)
5500–6499 TL	3 (50%)	3 (50%)	6 (5.58%)
6500 TL and above	18 (58.06%)	13 (41.94%)	31 (28.72%)
I do not want to specify	10 (100%)	-	10 (9.25%)
<b>The Child's Internet Use Status</b>			
Never	10 (76.92%)	3 (23.08%)	13 (12.03%)
Rarely	19 (82.6%)	4 (17.4%)	23 (21.29%)
Sometimes	21 (63.63%)	12 (36.37%)	33 (30.55%)
Often	17 (80.95%)	4 (19.05%)	21 (19.44%)
Always	13 (72.22%)	5 (27.78%)	18 (16.69%)

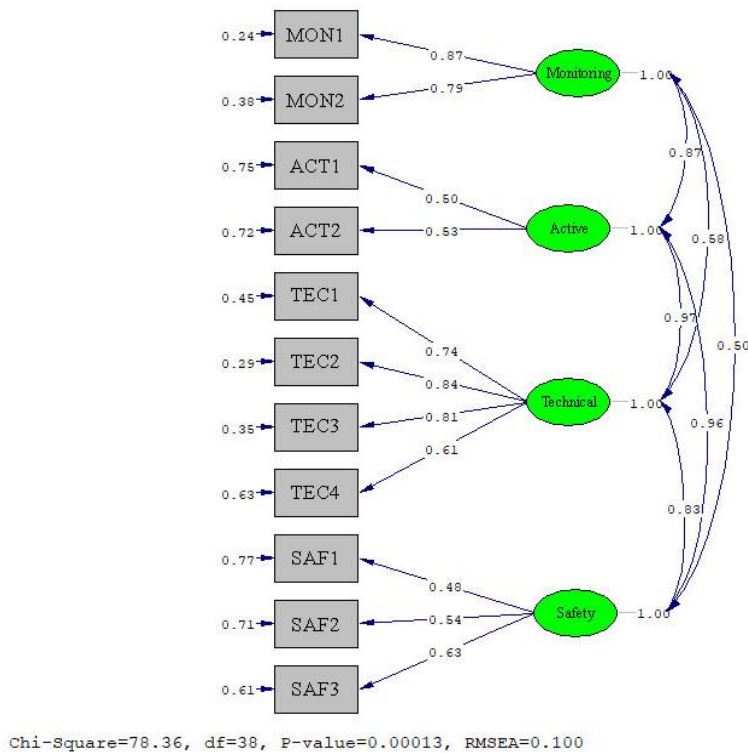
Of the participants whose characteristics are presented in Table 1, 80 (74.1%) are female and 28 (25.9%) are male. Observations indicate that the ages of the participants were concentrated between 29 to 41 and that the ages of the children of the participants attending preschool were between 35–68 months. Whatsapp (96.6%) is the leading social media platform the participants use, followed by Instagram (78.5%), YouTube (66.4%), Facebook (53%), and Twitter (22.8%). The technological devices in the homes of the participants are listed as smartphones (93.3%), televisions (74.5%), laptop computers (56.4%), tablets (53.7%), and smart televisions (40.9%). According to the examination of the educational use



of the devices the participants own and have at home are listed as smartphones (76.5%), laptop computers (48.3%), tablets (42.3%), televisions (24.2%), and smart televisions (20.1%).

## Data Collection Tools and Process

The data collection tools used in the research include questions about demographic information, the PMSPP, and two open ended questions. Apart from the scale, parents were asked two open-ended questions to determine whether the parents were aware of the risks of the Internet and their perspectives on the Internet. Since these questions were not in the scale, they were asked as open-ended, with the thought that they would contribute to the study. The demographic information form aimed to collect information based on the research questions. The PMSPP was developed according to the Parental Mediation Scale (PMS) formulated by Dulkadir Yaman (2019). The validity and reliability of the said PMS were ensured and consisted of four factors (Monitoring, Safety, Active, and Technical). The PMS consisted of 23 items measuring four dimensions. Monitoring dimension included seven items, safety mediation included six items, active mediation included four items, and technical mediation included six items. The instrument employed a five point Likert scale ranging from 1-Never to 5-Always. The participants were 416 Turkish middle school students. Upon examining the fit values of the scale, it is seen that the RMSEA value is.056, the SRMR value is.048, the NFI value is.959, the NNFI value is.975, and the CFI value is.978. These fit values are acceptable (Arbuckle, 2007; Hu & Bentler, 1999; Kenny, 2010; Steiger, 2007). According to calculations, the Cronbach's alpha internal consistency coefficient of the measurement tool was.93 for the whole scale,.89 for the monitoring mediation dimension,.83 for the safety mediation dimension,.82 for the active mediation dimension, and.80 for the technical mediation dimension (Dulkadir Yaman, 2019). Upon examining the validity and reliability values of the scale, one can say that the PMS is a valid and reliable measurement tool in determining the mediation types and levels of the parents. However, the developed PMS consists of questions for middle school students. In this context, upon examining the questions, one could see that they contained items that required literacy and they were not suitable for the preschool period. For this reason, since it would not be appropriate to use the PMS within the scope of this study, the items were adjusted to the preschool level while preserving the factor structure (Monitoring, Safety, Active, and Technical). The study was conducted with middle school students and there are items that require literacy skills. For example, items such as communicating by correspondence with digital tools have been deleted. Since the target audience in the adaptation was illiterate, their parents were reached. Parental mediation status of their parents was tried to be determined. For the adjusted structure, the researcher obtained the opinions of the experts in the assessment and evaluation field, and the language experts and the PMSPP reached its final form. As a result of the analysis of the collected data, the RMSEA value of the PMSPP is.094, the SRMR value is.083, the NFI value is.91, the NNFI value is.94, and the CFI value is.95. These are acceptable goodness-of-fit values (Arbuckle, 2007; Hu & Bentler, 1999; Kenny, 2010; Steiger, 2007). To determine the reliability values of the scale, the Cronbach's alpha internal consistency coefficient of the measurement tool was calculated. According to calculations, this value was.93 for the whole scale,.89 for the monitoring mediation dimension,.83 for the safety mediation dimension,.82 for the active mediation dimension, and.80 for the technical mediation dimension. Figure 1 presents the structure of the scale.

**Figure 1***The PMSPP model structure*

After the development of the data collection tool, the necessary research ethics committee approval was obtained before the data collection phase started, and the data were collected through Google Forms. Participation in the study was voluntary. In this context, the participants first received a question regarding whether they had children enrolled in preschool through Google Forms. After this question, they were asked whether they agreed to participate in the study or not. Participants who answered “yes” to both questions participated in the research by being directed to the other questions in the data collection tool.

## Data Analysis

The Kolmogorov Smirnov test was used to examine the normality assumptions of the tests utilized, and the study group included more than 50 participants (Büyüköztürk, Çokluk-Bökeoğlu ve Köklü, 2015). As a consequence of the test, it was established that the variables' skewness and kurtosis values were within +1.5 and -1.5 20. It is presumed that the data are normally distributed based on the findings of the Kolmogorov Smirnov Test and the skewness and kurtosis distributions. The data analysis within the scope of the research was based on the research questions collated in Table 2.

**Table 3***Data Analysis*

Research Questions	Data Collection Tool	Data Analysis
1. Does the parental mediation of preschool parents differ according to; their gender, their education level, the number of children they have, sending their child to preschool, their internet use status, their income level, and the frequency of their child's use of the internet?	PMSPP	Descriptive statistics (% , f, x), t-test, and Anova
2. Is there a relationship between parental mediation of preschool parents and; a. the parent's age? b. the child's age in months?	PMSPP	Correlation
3. What are the internet use requirements of preschool children according to parents?		
4. What behaviors do parents exhibit to protect their children from the risks of the internet?	Open Ended Questions	Content Analysis
5. According to parents, what are the positive and negative aspects of the internet environment that their children experience?		

As seen in Table 2, the data analysis in this study utilizes “%,” “f,” “x,” “t-test,” “ANOVA,” “correlation,” and “content analysis.” The research findings were obtained through content analysis of the answers given to the questions in the semi-structured interview form. The obtained data were first coded, and the codes containing the same expressions were gathered under a common parent theme. After assigning codes and themes, the main themes were determined in line with the purposes described by the questions asked, and the data were grouped accordingly. In order to enhance the reliability of the study by avoiding researcher bias and to keep the internal consistency high, the data were coded by another expert. In order for internal consistency to be high, the consensus among the coders is needed (Baltacı, 2017).

### Ethical Issues

The study was carried out within the scope of the permission dated and numbered received from the Scientific Research and Publication Ethics Committee of X University.

### Findings

The findings of the study were reviewed under several topics. These were: whether the perceptions of parental mediation of parents with children in the preschool period differ according to the factors of gender, education level, the number of children they have, their children's attendance in preschool, their internet usage, their income level, and their children's internet use frequency; whether there is a relationship between the parental mediation of parents with preschool children and the age of the parents and the age of their children; the requirements for internet use of preschool children according to parents; the behaviors of

parents to protect their children from the risks of the internet, and the positive and negative aspects of the internet environment in which their children are in, according to the parents.

### The difference between parents' parental mediation in the preschool period based on gender

The research used a t-test to examine whether the parental mediation of parents who had children in the preschool period differed according to gender. The study observed that women's parental mediation is higher than men's in all four factors. In the monitoring mediation dimension, the mean score of women ( $\bar{X}$ = 4.592; Sd = .799) was higher than the mean score of men ( $\bar{X}$ = 3.964; Sd = 1.297), and this difference was statistically significant ( $t(34.451) = 2.411$ ;  $p < 0.05$ ;  $\eta^2 = .078$ ). The effect size of this difference was determined to be at the medium effect level. In the active mediation dimension, the mean score of women ( $\bar{X}$ = 4.150; Sd = .638) was higher than the mean score of men ( $\bar{X}$ = 3.625; Sd = 1.014) ( $t(34,768) = 2.565$ ;  $p < 0.001$ ;  $\eta^2 = .086$ ). The effect size of this difference was also determined to be at the medium effect level. In the technical mediation dimension, the mean score of women ( $\bar{X}$ = 4.037; SD = .952) was higher than the mean score of men ( $\bar{X}$ = 3.196; Sd = 1.381) ( $t(36.380) = 2.983$ ;  $p < 0.001$ ;  $\eta^2 = .106$ ). The effect size of the difference was medium. In the safety mediation dimension, the mean score of women ( $\bar{X}$ = 4.545; Sd = .556) was higher than the mean score of men ( $\bar{X}$ = 4.023; Sd = .831) ( $t(35.849) = 3.090$ ;  $p < 0.05$ ;  $\eta^2 = .115$ ). It is seen that the effect size of this difference in the safety mediation dimension is also at a medium level.

### The difference between parental mediation in the preschool period and the education level of parents

The study analyzed the distribution of the parents participating in the study in the context of monitoring through active, technical, and safety mediation according to their education level (Table 3).

**Table 4**

*Descriptive data based on the education level*

	Monitoring	Active	Technical	Safety
<b>Elementary School</b>	$\bar{x} = 3.944$ ; Sd = 1.523	$\bar{x} = 3.972$ ; Sd = .794	$\bar{x} = 3.750$ ; Sd = 1.206	$\bar{x} = 4.388$ ; Sd = .563
<b>Middle School</b>	$\bar{x} = 4.700$ ; Sd = .632	$\bar{x} = 4.300$ ; Sd = .483	$\bar{x} = 4.525$ ; Sd = .558	$\bar{x} = 4.633$ ; Sd = .554
<b>High School</b>	$\bar{x} = 4.592$ ; Sd = .855	$\bar{x} = 3.963$ ; Sd = .887	$\bar{x} = 4.0$ ; Sd = 1.016	$\bar{x} = 4.493$ ; Sd = .786
<b>Associate Degree</b>	$\bar{x} = 4.555$ ; Sd = .845	$\bar{x} = 4.222$ ; Sd = .363	$\bar{x} = 3.861$ ; Sd = 1.008	$\bar{x} = 4.555$ ; Sd = .235
<b>Bachelor's Degree</b>	$\bar{x} = 4.551$ ; Sd = .805	$\bar{x} = 4.051$ ; Sd = .794	$\bar{x} = 3.655$ ; Sd = 1.218	$\bar{x} = 4.344$ ; Sd = .704
<b>Master's Degree</b>	$\bar{x} = 4.666$ ; Sd = .500	$\bar{x} = 4.166$ ; Sd = .790	$\bar{x} = 3.944$ ; Sd = 1.066	$\bar{x} = 4.555$ ; Sd = .471
<b>Doctoral Degree</b>	$\bar{x} = 3.583$ ; Sd = 1.020	$\bar{x} = 3.166$ ; Sd = .752	$\bar{x} = 2.583$ ; Sd = 1.310	$\bar{x} = 3.611$ ; Sd = .827

The study analyzed the variation of parents' parental mediation with preschool children according to their education levels through an analysis of variance. Considering the results of the analysis, one can observe that parents' parental mediation, in the context of the monitoring ( $F(6.101) = 1.715$ ;  $p < 0.001$ ), active ( $F(6.101) = .839$ ;  $p < 0.001$ ), technical ( $F(6.101) = 2.303$ ;  $p < 0.001$ ), and safety ( $F(6.101) = .719$ ;  $p < 0.001$ ) factors, did not show a significant difference according to their education level.

### The difference between parents' parental mediation in the preschool period and their number of children

The study examined the difference between the number of children parents had and their parental mediation (Table 4).

**Table 5**

*Descriptive data based on the number of children*

	Monitoring	Active	Technical	Safety
<b>1 Child</b>	$\bar{x} = 4.48$ ; Sd = .994	$\bar{x} = 4.28$ ; Sd = .764	$\bar{x} = 3.90$ , Sd = 1.252	$\bar{x} = 4.40$ ; Sd = .844
<b>2 Children</b>	$\bar{x} = 4.574$ ; Sd = .722	$\bar{x} = 3.978$ ; Sd = .820	$\bar{x} = 3.867$ ; Sd = 1.0	$\bar{x} = 4.489$ ; Sd = .505
<b>3 Children</b>	$\bar{x} = 4.208$ ; Sd = 1.102	$\bar{x} = 3.770$ ; Sd = .751	$\bar{x} = 3.377$ ; Sd = 1.116	$\bar{x} = 4.208$ ; Sd = .821
<b>4 Children</b>	$\bar{x} = 4.45$ ; Sd = 1.257	$\bar{x} = 4.05$ ; Sd = .598	$\bar{x} = 4.20$ ; Sd = 1.116	$\bar{x} = 4.566$ ; Sd = .545
<b>5 Children or More</b>	$\bar{x} = 3.0$ ; Sd = 2.828	$\bar{x} = 4.25$ ; Sd = 1.06	$\bar{x} = 1.5$ ; Sd = .707	$\bar{x} = 4.333$ ; Sd = .471

Considering the results of the analysis, one can observe that there is no significant difference in the parental mediation of the parents according to education level with regards to the factors of monitoring ( $F(4.103) = 1.579$ ;  $p < 0.001$ ), active ( $F(4.103) = .843$   $p < 0.001$ ), and safety ( $F(4.103) = .834$ ;  $p < 0.001$ ) mediation. However, there was a significant difference in the technical ( $F(4.103) = 3.241$ ;  $p < 0.05$ ,  $\eta^2 = .094$ ) dimension. The effect size of the difference in the technical dimension was at a medium level.

### The difference between the parents' parental mediation in the preschool period and the children's preschool attendance situation

This stage examined the difference between the mediation of the parents according to the situation of sending their children to preschool. One can observe that the parental mediation of the parents whose children go to the preschool is higher than the ones who do not in the monitoring and active mediation dimensions, and in the technical and safety mediation dimensions, those whose children do not go to preschool have a higher average than those who do. In the monitoring mediation dimension, the mean score of the parents whose children went to preschool ( $\bar{X} = 4.531$ ; Sd = .853) was higher than the mean score of those whose children did not ( $\bar{X} = 4.284$ ; Sd = 1.148), and this difference was statistically significant ( $t(74.556) = 1.215$ ;  $p < 0.05$ ;  $\eta^2 = .013$ ). One can also observe that the effect size

was small. In the dimension of active mediation, the mean score of parents whose children went to preschool ( $\bar{X}$  = 4.031; Sd = .786) was higher than the mean score of those whose children did not ( $\bar{X}$  = 3.988; Sd = .788), and this difference was statistically significant ( $t(106) = .276$ ;  $p < 0.05$ ). In the technical mediation dimension, the mean score of parents whose children went to preschool ( $\bar{X}$  = 3.761; Sd = 1.142) was lower than the mean of those whose children did not ( $\bar{X}$  = 3.903; Sd = 1.132), and this difference was statistically significant ( $t(106) = -.636$ ;  $p < 0.05$ ). In the safety mediation dimension, the mean score of parents whose children went to preschool ( $\bar{X}$  = 4.359; Sd = .693) was lower than the mean of those whose did not ( $\bar{X}$  = 4.484; Sd = .648), and this difference was statistically significant ( $t(106) = -.948$ ;  $p < 0.05$ ).

### The difference between parents' parental mediation in preschool period and parents' internet use

The study examined the difference between parents' internet use and parental mediation (Table 5).

**Table 6**

*Descriptive data according to internet use*

	Monitoring	Active	Technical	Safety
<b>0–2 years</b>	$\bar{x} = 4.343$ ; Sd = 1.350	$\bar{x} = 3.968$ ; Sd = .740	$\bar{x} = 4.062$ ; Sd = 1.188	$\bar{x} = 4.645$ ; Sd $\bar{x}$ .462
<b>3–5 years</b>	$\bar{x} = 4.552$ ; Sd = .895	$\bar{x} = 4.236$ ; Sd = .653	$\bar{x} = 3.907$ ; Sd = 1.193	$\bar{x} = 4.245$ ; Sd = .852
<b>6–8 years</b>	$\bar{x} = 4.45$ ; Sd = .971	$\bar{x} = 4.00$ ; Sd = .945	$\bar{x} = 3.712$ ; Sd = 1.049	$\bar{x} = 4.433$ ; Sd = .693
<b>9 years and older</b>	$\bar{x} = 4.405$ ; Sd = .920	$\bar{x} = 3.952$ ; Sd = .779	$\bar{x} = 3.754$ ; Sd = 1.148	$\bar{x} = 4.389$ ; Sd = .649

Upon examining the analysis results, one can observe that the parents' parental mediation did not differ significantly according to internet use status in the monitoring ( $F(3.104) = .148$ ;  $p < 0.001$ ), active ( $F(3.104) = .633$ ;  $p < 0.001$ ), technical ( $F(3.104) = .393$ ;  $p < 0.001$ ), and safety ( $F(3.104) = 1.051$ ;  $p < 0.001$ ) factors. There is no significant relationship between parents' internet use and parental mediation.

### The difference between parents' parental mediation in the preschool period and their income level

The study examined the difference between parents' income level and their parental mediation. According to the analysis results, it was determined that parents' parental mediation did not differ significantly according to income level in the monitoring ( $F(7.100) = 1.110$ ;  $p < 0.001$ ), active ( $F(7.100) = .290$ ;  $p < 0.001$ ), technical ( $F(7.100) = .977$ ;  $p < 0.001$ ), and safety ( $F(7.100) = 1.051$ ;  $p < 0.001$ ) mediation factors.

### The difference between parents' parental mediation in the preschool period and children's internet use frequency

Upon examining the results of the analysis performed to observe the difference between the parental mediation of parents and the frequency of internet use of their children, one can see that the parental mediation of parents did not show a significant difference according to the frequency of internet use of their children in the monitoring ( $F(4.103) = .320$ ;  $p$



< 0.001), active ( $F(4.103) = 1.492$   $p < 0.001$ ), and technical ( $F(4.103) = 2.127$ ;  $p < 0.001$ ) mediation factors. However, the analysis determined that there was a significant difference in the dimension of safety ( $F(4.103) = 2.980$ ;  $p < 0.05$ ,  $\eta^2 = .103$ ). One can say that the effect size of this significant difference in the safety dimension is at a medium level.

### The relationship between parents’ parental mediation in the preschool period and the age of the parent

The age distribution of the parents participating in the study varied between 25–52 and the study determined that their ages concentrated between 32–41. The research examined the relationship between parents’ parental mediation and their age. In the results of the analysis performed there was no significant relationship in the active ( $r = -.007$ ;  $p < .001$ ) and technical ( $r = -.113$ ;  $p < .001$ ) mediation dimensions. However, there was a significant relationship in the dimensions of monitoring ( $r = -.231$ ;  $p < .05$ ) and safety ( $r = -.209$ ;  $p < .05$ ) mediation. The direction of the small relationship between these dimensions is negative. In other words, parental mediation decreases as the age of the parents increase.

### The relationship between parents’ parental mediation in the preschool period and their children’s age

The age distribution of the children of the parents participating in the study varies between 2–78 months, and the analysis determined the children’s ages concentrated between 35–68 months. The study examined the relationship between parents’ parental mediation and their children’s age in months. As a result of the analysis performed, there was no significant relationship in the monitoring ( $r = -.138$ ;  $p < .001$ ), active ( $r = -.120$ ;  $p < .001$ ), technical ( $r = -.121$ ;  $p < .001$ ), and safety ( $r = -.041$ ;  $p < .001$ ) mediation factors.

### Qualitative Findings of the Study

The research carried out a content analysis of the open ended questions, and this resulted in an emphasis on the necessity of children’s internet use, the positive and negative aspects of the internet, and parental behaviors for protection from the negative aspects and risks. To examine the parents’ views on internet use, a structure similar to Table 6 emerges.

**Table 7**  
*The Parents’ Views on Internet Use*

Theme	Subtheme	Category	Subcategory	Code	Sample Reviews	
Necessary	Required Fields	Education	Education Information Network	Educational use (N = 59)	<i>(Internet use is) required for training and educational activities presented on EBA. (P3)</i>	
				Interactive content (N = 14)	<i>I find it useful for children to use the interactive content, especially when they take a break from education. (P2)</i> <i>I think it is important for the child to carry out events via Zoom so that they can see what they are curious about. (P94)</i>	
			Learning concept	a	Colors, mathematical concepts, and opposite concepts (N = 32)	<i>We think the use of the internet is beneficial as it helps children learn concepts suitable for their development. (P64)</i> <i>My child especially learns opposite and mathematical concepts (such as numbers, the concept of more or less, and colors) through songs. (P16)</i>
				Reading activities	Digital story/fairy tale (N = 8)	<i>One can use the internet as a library. I think it is required to access digital stories. (P24)</i> <i>One can use digital stories as additional age-appropriate learning tools for children. (P4)</i>
			Entertainment	Educational games (N = 25)	<i>Through educational games, children learn the things that we have difficulty in explaining to them. (P51)</i>	
Cartoon/animation (N = 21)	<i>When he/she watches the instructional animations, he/she both has fun and learns. (P92)</i>					

**Table 8**  
(Continued)

Theme	Subtheme	Category	Subcategory	Code	Sample Reviews	
Reasons for its Necessity	Entertainment			Song-Dance (N = 17)	<i>He/she learns quickly whatever there is in new songs and lyrics. He/she performs dance moves. (P100)</i>	
				Video (N = 16)	<i>Although it is that significant, we see the benefits of the videos, they learn while having fun. (P60)</i>	
	Child			Curiosity (N = 19)	<i>The internet is necessary for the child to learn by watching the objects or events he/she is curious about. (P94)</i> <i>When our child's brother and sister used the internet, he/she got very curious, we could not help it, he/she has fun dancing and playing games. (P69)</i>	
				Boredom (N = 6)	<i>He/she uses it to relieve his/her boredom. (P18)</i>	
				Desire to have the child engaged in an activity (N = 30)	<i>He/she has to amuse himself/herself when he/she cannot go out, so he/she watches cartoons, etc. on the internet. (P66)</i>	
	Emotional needs	Family		Anxiety about the future (N = 18)	<i>I think that when he/she starts school, he/she will be more practical and active. (P92)</i> <i>I believe my child will make up for what he/she has lost during the pandemic, which is expected to last a long time, with the internet faster in the future. (P33)</i>	
				Different parenting attitudes (N = 4)	<i>Even though I did not want it, while I was at work, my partner got our child used to it. (P41)</i> <i>I do not find it necessary, but his/her mother lets him/her use it, thinking that it can be good for activities such as videos, games, etc. (P76)</i>	
				Environment	Envy (N = 12)	<i>We have neighbors, their children use the internet, tablets, and phones, so of course, our children become envious. (P38)</i>
	The age in which we live	Access to information		Easy and fast (N = 67)	<i>The opportunity to instantly access everything necessitates the internet. (P11)</i>	
				Necessity (N = 10)	<i>Everything is now on the internet, even homework, activities, so it is not our choice, it is our obligation. (P5)</i>	
				Technological developments	The age of technology (N = 33)	<i>One of the crucial requirements of the digital age we live in is to use technology correctly and competently. (P15)</i>
	Reasons for its Necessity	Cognitive Development	Learning		The increase in internet use (N = 20)	<i>With the pandemic, there has been an increase in the use of the internet for life skills such as distance education, shopping, etc. (P42)</i>
					Reinforcing learning (N = 16)	<i>It reinforces learning as children have the opportunity to watch and listen to things over and over on the internet. (P94)</i>
					Enjoyable learning (N = 13)	<i>Through experience and practice, technology and the internet help make learning enjoyable. (P4)</i>
		Language Development	Receptive language skills			Easy learning (N = 9)
Increased use of the imagination (N = 8)						<i>I think it improves the imagination. (P26)</i>
New words (N = 46)						<i>Children learn new words at a young age thanks to the internet, (P53)</i>
Language Development		Expressive language skills			Foreign language acquisition (N = 9)	<i>We have seen its benefits in terms of foreign language learning. (P37)</i> <i>I think that it may contribute to the acquisition of bilingual, second language skills. (P26)</i>
					Listening to stories (N = 8)	<i>They can listen and read the stories they want with virtual books. (P96)</i>
					Discussing the topic in detail (N = 15)	<i>We like our child's detailed explanations about a new topic they see and watch. (P58)</i>
Academic Skills		Scientific process skills			Fluent conversations with parents (N = 6)	<i>(His/her) use of the internet made his/her speech faster (P20)</i>
					Encouraging research (N = 10)	<i>I find the internet useful for research and learning. We can learn about the subjects we do not know. (P72)</i> <i>It is nice for researching information and educational games. They can conduct research on different subjects. (P32)</i>
					Gaining different perspectives (N = 4)	<i>Children gain a new point of view. (P58)</i> <i>It is an important platform for them to discover new things and see places that they cannot visit. (P101)</i>
Unnecessary		Reasons for Finding It Unnecessary	Child	Cognitive Skills	Technology	<i>When playing games with educational content, it is important to both have fun and learn, as well as develop skills for the use of technology. (P28)</i>
					Addiction (N = 85)	<i>Addiction is the biggest harm of internet use. (P3)</i> <i>If I do not interfere, I think they can forget about themselves and persistently use the internet. (P94)</i>
					Distractibility (N = 43)	<i>I find it has a negative effect in terms of cognitive development, I think it causes attention deficit and distractibility, and we observe these in our child. (P65)</i>
Unnecessary	Reasons for Finding It Unnecessary	Child	Cognitive Skills	Inhibiting active thinking/Passive learning (N = 34)	<i>Children become robotized after a certain time. (P3)</i> <i>We witness that children become dreary since it (the internet) prevents active thinking. They go from an active to a more passive state. (P1)</i>	

**Table 9**  
(Continued)

Theme	Subtheme	Category	Subcategory	Code	Sample Reviews
Unnecessary Finding It Unnecessary	Reasons for Finding It Unnecessary	Child	Cognitive Skills	Laziness (N = 33)	<i>Internet-based applications cause the brain to become lazy and accustomed to easy situations, and our children become rote learners and expect everything to be presented to them. (P84) The internet provides one with ready data and, by overstimulation, also makes the mind lazy. (P60)</i>
				Perception disorder (N = 10)	<i>If he/she watches the phone or computer for a long time, his/her perceptive power decreases even if his/her perception is strong. (P53) Unfortunately, he/she thinks the virtual world is real. (P51)</i>
			Social-emotional skills	Disrupting social relations (N = 54)	<i>It is a factor that confines the child and disconnects him/her from social life when one does not pay attention. (P100)</i>
				Decreased social problem-solving skills (N = 50)	<i>I think these children, who need to experience real life, live in a virtual reality confined to their screens. (P26) They learn to hit, shout, and solve everything by yelling if they watch violent videos. (P53)</i>
				Behavior/mood change (N = 26)	<i>If he/she watches harmful content, he/she always learns harmful things and changes his/her good behavior. (P53)</i>
				Negative psychological effect (N = 19)	<i>When they encounter images, videos, or advertisements that contain horror elements, their sleep patterns get disrupted at night. (P21)</i>
				Unhappiness (N = 17)	<i>Today, the internet cause children to be more unhappy children, they cannot enjoy anything. (P42)</i>
				Impatience (N = 7)	<i>In general, I find the internet is negative. It causes impatience and carelessness in the child. (P27)</i>
				Greed/dissatisfaction (N = 3)	<i>Unfortunately, since we started using the internet, his/her communication has stopped improving and he/she has become a greedy child. (P42) Children are not easily satisfied while using the internet. They want more and have a hard time quitting video and games. (P6)</i>
				Physical skills and health	Decrease in physical activities (N = 29)
		Eye disorders (N = 21)	<i>Long-term use of the internet is very harmful to eye health. (P81)</i>		
		Physical ailments, neck/waist (N = 14)	<i>It seems that in the future, children will struggle with physical ailments such as neck and lower back pain, posture disorders, as they remain sedentary spending a lot of time in front of the screen. (P93)</i>		
		Inconsistency with age and developmental characteristics (N = 9)	<i>There is a lot of content on the internet that is not suitable for children in this age group. It is clear that there is no other way to intervene other than monitoring children developmentally. (P104) One can view the videos that children encounter on the internet, inappropriate advertisement videos that pop up out of nowhere, and applications that are difficult for children to use as things that are not suitable for their age group. (P4)</i>		
		Internet	Content		Exposure to inappropriate content (N = 76)
				Not being culturally appropriate (N = 41)	<i>I believe that children and families who encounter too much content that is not suitable for our culture are in danger. (P83) While disregarding culture, YouTubers mislead children and cause them to be envious. (P79)</i>
Losses in moral values (N = 28)	<i>Children experience rapid moral deterioration due to the internet. (P27)</i>				
Directing to violence (N = 23)	<i>There is too much violent content. You cannot tell when it will show up. Children began to embrace violence over time. (P92)</i>				
Difficult to control (N = 18)	<i>The number of harmful content on the internet goes up every day. It becomes harder to protect and monitor children. (P18) When one cannot control and monitor learning, it can negatively affect children's cognitive and affective development. (P4)</i>				

In Table 6, one can observe that parents' views on internet use fall under the themes of "Necessary and Unnecessary." The study combined the answers of parents who consider internet use necessary for early childhood under the categories of education, entertainment, emotional needs, and the age in which we live. One can observe that parents expressed their opinions on the necessity of using the internet for their children to access the training and interactive content provided on the Education Information Network (EIN). Parents who stated that children can learn colors, mathematical concepts, and opposite concepts using the internet, think that the internet can provide age-appropriate reading activities. These parents, who claim that their children experienced an improvement in their skills for technology use due to the internet, believe that learning is reinforced and children's imagination develops through it. Parents stated that their children learned new local and foreign words in an enjoyable manner by making use of educational games, cartoons/animations, songs/dances, and videos on the internet. Some of the parents who were pleased with the detailed conversations about the content their children watched, stated that the internet encourages children to do research, and, thus, they can gain different perspectives. Most of the parents who stated that they use the internet to satisfy their children's curiosity and end their boredom stated that they use the internet to keep them busy when they cannot go out. Parents who are worried that their children are experiencing learning losses during the pandemic process believe that they have the opportunity to make up for the loss due to the internet. Some parents who think that in the age we live in, environmental factors can increase the use of the internet psychologically, believe that the internet is needed more because it facilitates and accelerates access to information because of technological developments.

The majority of parents who participated in the study believe that internet use is addictive for children. Additionally, most of the parents who find the use of the internet unnecessary stated that the internet causes cognitive distractibility in children, hinders their active learning, and makes them lazy. Also, almost all of the parents who believe that the internet will cause deterioration in children's social relations if not intervened stated that their children's social problem-solving skills decreased, while many parents in the same category think that harmful content causes children to change their behavior/temperament. Some of the families who think that images, videos, or advertisements containing elements of horror disrupt children's sleep patterns claim that today's children become more unhappy, impatient, and greedy individuals who do not enjoy anything due to the use of the internet. One can observe that almost one-third of the families participating in the research believe that their children are inactive due to their long screen times. Many of these parents, who believe that this situation affects their children negatively in terms of health (eye and body health), also stated that the content on the internet is not suitable for the age and developmental characteristics of their children. Correspondingly, families think that inappropriate content is intentionally placed on almost every program and website. Finally, it is understood that parents who claim that the internet creates a situation that is difficult to control in a social-emotional sense are concerned about their children losing their cultural and moral values due to negative content. In addition to these parent views, Table 7 presents the structure that emerged as a result of the examination of the parents' ways of protecting their children against the risks of the internet.

**Table 10**  
**Ways to Avoid the Risks of the Internet**

Theme	Subtheme	Category	Code	Sample Reviews
Direct Intervention	Safety Mediation	Verbal Intervention	Warning (N = 26)	<i>I warn my child and tell him/her to let me know when commercials or different videos come on. (P92)</i> <i>I try to explain in an age-appropriate way that he/she should not watch inappropriate content. (P22)</i> <i>I try to talk to my child and explain things in a manner he/she understands. (P31)</i>
			Informative (N = 15)	<i>In case he/she encounters negative content, I provide information and monitor him/her, that way we can easily reach the information we want. (P44)</i> <i>I talk and chat with him/her about games and the videos he/she watches. (P45)</i> <i>I talk to them about installing programs and the use of these programs. (P61)</i> <i>I try to talk to him/her and explain that the internet can be useful as well as harmful if misused. (P84)</i>
			Guidance (N = 9)	<i>I try to observe what he/she downloads or does on my smartphone, and I warn him about misuse. I try to guide him/her on how to correctly use the internet. (P26)</i>
	Active Mediation	Co-use	Event and content sharing (N = 32)	<i>When my child has a phone in his/her hand, I follow him/her constantly, if necessary, I stop what I am doing and play with him/her. (P53)</i> <i>I monitor him/her, I offer to play the games he/she is playing together. (P30)</i> <i>I make him/her use the internet with me as much as possible. (P100)</i>
			Checking the content (N = 30)	<i>I monitor him/her constantly and he/she always shows me every page he/she opens and gets permission to watch it. (P33)</i>
			Discussing the content (N = 12)	<i>I try to monitor him/her, I see what he/she is watching and what sites he/she is visiting. I try to talk to him/her and explain that the internet can be useful as well as harmful if misused. (P84)</i>
			Time/duration (N = 21)	<i>I stay close to him/her so he/she spares less time, I let him/her use it for a short time. (P54)</i>
	Restrictive mediation	Restrictions /rules	Internet access (N = 16)	<i>We turn off the Wi-Fi. We allow him/her to use the internet at certain hours for the risk of addiction and we try to follow the videos he/she watches. We choose the downloadable applications together or as the parents. This is how we try to select suitable applications. (P4)</i>
			Content (N = 14)	<i>I set boundaries. Both for the time he/she spends and the broadcast he/she watches. (P69)</i> <i>I try to keep track of the apps he/she uses and the content he/she watches. We have certain rules, and we apply them. (P29)</i>
			Program/application hiding (N = 7)	<i>I hide YouTube and similar programs that have a lot of ads. (P27)</i>
Attempting not giving devices (N = 3)			<i>I try not to give them things like phones and tablets. (P38)</i>	
Offline applications (N = 17)			<i>I do not allow him/her to use the internet much. I prefer offline applications. (P57)</i>	
Indirect Intervention	Technical mediation	Use of Program	Virus software (N = 10)	<i>I use antivirus software. That way, we block most sites and programs. (P20)</i>
			Ad blockers (N = 9)	<i>I pay attention to using ad-blocking programs. (P14)</i>
			Internet protection package (N = 19)	<i>In-program adjustments and built-in restrictions. I use software that allows private family-linked control. (P15)</i>
	Technical solutions	Parental control settings (N = 15)	Parental control settings (N = 15)	<i>In-program adjustments, parental controls, and built-in restrictions. I utilize software that provides special family-linked control. (P15)</i>
			Filtering (N = 14)	<i>I choose programs that are appropriate for his/her age. I use internet filters. (P13)</i> <i>I keep it in a fully filtered mode, I can get reports. (P108)</i>
Monitoring mediation	Supervision-monitoring	Control and monitoring (N = 68)	Encryption (N = 12)	<i>We use a parent password, we set a password on the tablet he/she uses so he/she does not watch the wrong things without us realizing it. (P81)</i> <i>I stay next to him/her or I set it up myself after checking what he/she has to watch. (P83)</i> <i>I allow him/her to use it (the device) by monitoring him/her in a controlled manner. I have uploaded nice brain teaser games and educational programs. (P33)</i> <i>I check the sites he/she logs into. (P101)</i>
			Directing to different activities (N = 13)	<i>We try to attract attention and play games by producing different activities from playdough and scrap materials at home. (P98)</i>
	Suspension from the internet	Trying to make them forget (N = 7)	Trying to make them forget (N = 7)	<i>I try to make him/her forget about the internet as much as possible and keep him/her busy with different things. (P37)</i>
			Generating interesting activities (N = 3)	<i>I make sure that he/she spends quality time with me with different interesting indoor activities so that he/she does not need the virtual environment. (P100)</i>
	Helplessness	Lost belief	Inability to do anything (N = 30)	<i>Unfortunately, we cannot do anything because they see everything, and we cannot prevent it. (P63)</i>

Upon examining Table 7, one can observe that parents participating in the study prefer direct interventions that include verbal warnings, informative dialogue, guidance, co-use, and restrictions, or indirect interventions that include technical solutions, monitoring, and the use of programs in which technical details stand out to protect children from the risks of the internet.



Under the direct intervention theme, one can observe that many parents warn their children to be careful about inappropriate content, inform them, and try to guide them on the correct use of the internet. It is seen that some of the parents do not confine themselves to verbal intervention and make their children be part of activities and content directly during the internet use process. Additionally, there was the observation that parents try to protect their children from harmful effects by discussing the content of the website and applications with their children. Some of the families who used a direct intervention approach allowed their children to use the internet for short periods, while others preferred to restrict internet access and content. Findings also indicate that parents who believe that YouTube and similar programs, which receive a lot of advertisements, harm their children, also remove these applications from their devices, and if this is not a solution, they choose not to allow their children to use the device.

Parents who prefer indirect intervention mostly use offline applications, virus software, and programs such as advertisement blockers. Additionally, it is noteworthy that many families in the same group of parents want to protect their children from harmful effects preferring internet protection packages, parental control settings, and technical solutions such as filtering and encryption. One can derive that about two-thirds of the parents participating in the research try to keep their children under indirect control during internet use. In addition, the findings suggest that parents try to install more educational games and programs suitable for their child's age on their devices. Interestingly, there was a feeling that a few families tried to reduce their children's internet use by designing indoor activities using different materials and equipment. Finally, the findings indicate that one-third of the participants cannot protect their children from the risks of the internet and feel helpless in this regard.

### **Conclusion, Discussion and Implications**

The study examined the parental mediation of parents who have children in the preschool period depending on their gender, education level, number of children they have, sending their children to preschool, internet use, income level, internet use frequency, age of the parent, and age of their children. Additionally, open ended questions focused on the internet use requirements of preschool children, the pattern of parents to protect their children from the risks of the internet, and the positive and negative aspects of the internet environment of which their children are a part of according to the parents.

In conclusion, the study found that the mediation preferences of the parents were not different according to their education levels. Contrary to the literature, the mediation preferences of parents who do not have a diploma or who have a doctorate did not show any differences. There are studies in the literature that show that parental mediation differs according to the education level. There are indications that families with a high level of education are worried about their children (Pew, 2015) and prefer different mediation strategies according to their education level (Caballo-Hutt et al., 2018; Hasebrink et al., 2011). It is thought that there is no difference because the number of participants in the study is small and there are not many participants from different education levels.

Considering the difference between the number of children and parental mediation, there was no significant difference in terms of monitoring like active safety mediation, however, there was a significant difference in the technical mediation dimension. Similarly, parental mediation regarding internet use does not differ according to the number of children in the



family (Dulkadir Yaman, and Kabakçı Yurdakul, 2022). The reason for the significant difference in technical mediation is thought to be due to the digital literacy of the parents.

While it is seen that the mediation preferences of parents whose children go to preschool are higher in the monitoring and active mediation dimensions, the conclusion was that those parents whose children did not go to preschool had a higher average in technical and safety mediation dimensions. While there is a significant difference in the monitoring mediation dimension here, there is no significant difference in the active, technical, and security mediation dimensions. In other words, one can say that parents whose children go to preschool adopt monitoring mediation strategies for their children. One should take into account that these results may be affected by social desirability. Research states that it is not easy to measure parental mediation because of parents and children's perceptions of social desirability (Dinh & O'Neill, 2019).

The quantitative data obtained within the scope of the study determined that parental mediation did not differ significantly in terms of the monitoring: active, technical, and safety mediation factors according to internet use situations. Research states that the increase in internet access at home does not affect parents' mediation (Eastin, et al., 2006) and that parents' digital skill levels cause their mediation preferences to differ (Livingstone et al., 2017).

The present study also analyzed the difference between parents' income levels and their parental mediation. The analysis determined that the parental mediation of the parents did not differ significantly in terms of the monitoring: active, technical, and safety factors according to income level. Similarly, it is stated that the income level is not related to monitoring mediation (Wang et al., 2005). Another study reported that the family income level affects mediation strategies (Livingstone et al., 2015). Additionally, families with higher income levels are more concerned about their children's screen time (Pew, 2015) and use mediation strategies more, especially parental control and other active mediation strategies (Dinh & O'Neill, 2019).

The results of the analysis carried looked at the difference between the parental mediation of the parents and the frequency of internet use of their children and determined that the parental mediation of the parents did not differ significantly in the monitoring, active, and technical dimensions in terms of the frequency of children's internet use. However, it was determined that there was a significant difference in the safety dimension.

In this study, which examined the relationship between parents' parental mediation and their age, there was no relationship between their age and the active and technical dimensions, however, there was a negative relationship in the monitoring and safety dimensions. In other words, the monitoring and safety mediation strategies adopted by parents decrease as their age increases.

According to the results, it is not possible to talk about any relationship between the age of the children in months and the parental mediation of the parents. In the literature, there are studies that have opposing findings. It is stated that parental mediation differs according to the age of the child (Beyens et al., 2018; Hasebrink et al., 2009; Ho et al., 2017) and more mediation takes place when the children are younger (Livingstone et al., 2017; Hasebrink et al., 2011). There are indications that the variety and frequency of mediation strategies parents apply decrease as children get older (Livingstone & Helsper, 2008; Nikken & Jansz, 2014; Sonck et al., 2013).

Considering the qualitative analysis of the open ended questions directed to the parents in the research, families regard the internet more necessary for educational purposes. In the literature, some studies focus on the academic learning of young children through play behaviors, development, and the use of internet-based digital technologies at home (Folorunsho, 2016). Mc Pake et al. (2013) report that children's interaction with digital technologies at home can improve their general communication and creativity levels. In addition, children can improve their competence in digital technologies, learn new concepts, and expand their knowledge and understanding of the world around them by using and having fun with software programs, online searches, and digital books in accordance with the technology age (Plowman et al., 2012). In parallel with the parents' opinions, past research emphasized through a meta-analysis that technology-supported stories are more beneficial for young children's language skills and literacy development than traditional reading contexts such as storybook reading (Takacs et al., 2015).

Contrarily, there are some concerns in the literature about the negative role of digital technologies on the social development, cognitive development, and physical development of children, also that internet technology can isolate children from natural social interaction (AAP 2016; Blackwell et al., 2014; Chaudron et al., 2018). The negative opinions of parents regarding the use of the internet and their reasons for viewing the internet as unnecessary are proof that these concerns still continue to increase. Upon examining the literature, within the scope of the EU Kids Online Project (2010), "online opportunities are; access to global information, educational resources, entertainment, games, user-generated content production, technology expertise and literacy, career development, personal health, and experience sharing with those who are remote; and online risks are; illegal content, pedophiles, excessive or sexual violence, other harmful or offensive content, racist/hate speech activities, advertising/commercial persuasion, biased/false information (advice, health), abuse of personal information, cyber bullying, harassment, gambling, financial crimes, self-harm (suicide, anorexia, etc.), violation of privacy, and illegal activities (piracy, unauthorized file uploading, etc.)" (EU Kids Online, 2010). It is necessary to inform children and parents about all these opportunities and risks and raise their awareness. This will make the job of parents easier, as they are responsible for protecting their children, especially against risks. However, there is no clear guidance for parents about how children should use digital technologies at home (Livingstone & Franklin 2018; NAEYC & the Fred Rogers Center, 2012). Additionally, in regards to adapting and using internet-based digital technologies to create a better learning environment at home, one can say that the different demographic characteristics of families may affect the result (Papadakis et al., 2019; Pew, 2015). For example, the mediation strategies that parents of different ages and educational backgrounds prefer significantly change their children's use of digital technologies connected to the internet. While parents prefer the active co-use of the internet over technically restricted or monitoring mediation forms (Livingstone & Helsper 2008), the collaborative use of internet-based digital technologies, social sharing, and guidance (Johnson 2015) facilitate learning, by also protecting against the risks of the internet and the unnecessary exposure of children to inappropriate content (Cho & Cheon 2005), excessive intervention and restrictions can cause different problems. Contrary to the studies of Cho and Cheon (2005), according to current studies, one can say that children are more likely to use digital technologies together with their parents during virtual activities, due to the natural tendency of parents to explain, question, monitor, and expand on the information provided by digital activities (Konca & Tantekin Erden, 2021; Ofcom, 2019). In addition, it is extremely significant for parents to be aware of physical or psychological

disorders, addiction to digital tools or the internet in their children due to internet use, and to take the necessary precautions regarding these problems in terms of intervention. It is known that mediation attitudes, support, and control within the family are effective in eliminating or minimizing these risks from an early stage (Ihmeideh & Shawareb, 2014; Nevski & Siibak, 2016). For this reason, it is critical for the individual development of children that they receive information and direction from their families about the appropriate use of the internet and the risks they may encounter (Wu et al., 2014). In this context, it is necessary to raise the awareness of and educate both children and families about the digital world in general. Finally, parents are advised to monitor and check the digital content their children are exposed to through online activities.

### **Limitations and Future Directions**

Research states that parental mediation preferences are context-dependent and may vary depending on who initiates the mediation: parent or child (Zaman et al., 2016). These research results reflect the cross-sectional situation at the time of the data collection. A longitudinal collection of data may offer a more comprehensive perspective. Additionally, researchers can conduct qualitative research to examine the perceptions, attitudes, and views of parents and children toward mediation.

This study investigated parents' mediation strategies from the parents' point of view. Research indicates that parents and children differ in their views regarding family studies conducted with parents and children (Austin, 1993; Byrne & Lee, 2011; Koolstra & Lucassen, 2004; Lenhart et al., 2011; Turov & Nir, 2000; Wisniewski, Xu, Rosson, & Carroll, 2017). To provide a more comprehensive perspective, it is recommended to conduct triangulated studies that include data from observations with larger participant groups, including children and parents of different age groups.

### **Contribution Rate of the Researchers**

First Author: Conceptualization, Methodology, Writing - drafting the article, approval of the final version

Second Author: Conceptualization, Methodology, Formal Analysis, Writing - approval of the final version.

Third Author: Methodology, Formal Analysis, Writing - original draft. approval of the final version.

### **Statement of Conflict of Interest**

- This manuscript has not been submitted to, nor is under review at, another journal or other publishing venue.
- The authors have no affiliation with any organization with a direct or indirect financial interest in the subject matter discussed in the manuscript.
- The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Acknowledgements**

We thank hundreds of participants who contributed to the current research through their invaluable responses.

## References

- AAP Councils on Communications and Media. (2016). Media and young minds. *Pediatrics*, 138(5), Article e20162591. <https://doi.org/10.1542/peds.2016-2591>
- Arbuckle, L. J. (2007). *Amos user's guide*. USA: Amos Development Corporation.
- Aslan, A. (2016). *The Changes in Safer Internet Use of Children in Turkey between the years of 2010-2015 and Impacts of Related Implementations*. Unpublished doctoral dissertation. Atatürk University Institute of Educational Sciences, Erzurum.
- Austin, E. W. (1993). Exploring the effects of active parental mediation of television content. *Journal of Broadcasting and Electronic Media*, 37, 147–158.
- Avrupa Çevrimiçi Çocuklar (EU Kids Online) Projesi (2010). <http://eukidsonline.metu.edu.tr>
- Baltacı, A. (2017). Nitel veri analizinde Miles-Huberman modeli. *Ahi Evran Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 3(1), 1-14.
- Beyens, I., Valkenburg, P. M., and Piotrowski, J. T. (2018). Developmental trajectories of parental mediation across early and middle childhood. *Human Communication Research*, 45(2), 226-250.
- Blackwell, C. K., Lauricella, A. R., & Wartella, E. (2014). Factors influencing digital technology use in early childhood education. *Computers & Education*, 77, 82–90. <https://doi.org/10.1016/j.compedu.2014.04.013>
- Blum-Ross, A., and S. Livingstone (2016). *Families and screen time: Current advice and emerging research*. Media Policy Brief 17. London: Media Policy Project, London School of Economics and Political Science.
- Büyüköztürk, Ş., Çakmak, K., E., Akgün, E., Ö., Karadeniz, Ş., ve Demirci, F. (2008). *Bilimsel Araştırma Yöntemleri*. Ankara: Pegem Akademi
- Büyüköztürk, Ş., Çokluk-Bökeoğlu, Ö. ve Köklü, N. (2015). *Sosyal bilimler için istatistik*. Ankara: Pegem Akademi Yayıncılık.
- Byrne, S., and Lee, T. (2011). Toward predicting youth resistance to internet risk prevention strategies. *Journal of Broadcasting & Electronic Media*, 55, 90–113.
- Cabello-Hutt, T., Cabello, P., and Claro, M. (2018). Online opportunities and risks for children and adolescents: The role of digital skills, age, gender and parental mediation in Brazil. *New Media & Society*, 20(7), 2411–2431. <https://doi.org/10.1177/1461444817724168>
- Chandrima, R. M., Kircaburun, K., Kabir, H., Riaz, B. K., Kuss, D. J., Griffiths, M. D., & Mamun, M. A. (2020). Adolescent problematic internet use and parental mediation: A Bangladeshi structured interview study. *Addictive Behaviors Reports*, 12, 100288. <https://doi.org/10.1016/j.abrep.2020.100288>
- Chang, C. (2010). Internet safety survey: Who will protect the children?. *Berkeley technology Law journal*, 25(1), 501-527.
- Chaudron, S. (2015). Young children (0-8) and digital technology. *A qualitative exploratory study across seven countries*. Joint Research Centre. European Commission.
- Chaudron, S., Di Gioia, R., & Gemo, M. (2018). Young Children (0–8) and Digital Technology: A qualitative study across Europe. *European Commission Joint Research Centre*. <https://doi.org/10.2760/294383>

- Cho, C. H., & Cheon, H. J. (2005). Children's exposure to negative internet content: Effects of family context. *Journal of Broadcasting & Electronic Media*, 49(4), 488–509. [https://doi.org/10.1207/s15506878jobem4904\\_8](https://doi.org/10.1207/s15506878jobem4904_8)
- Cüceloğlu, D. (2016). *Geliştiren anne-baba* [Developing parents]. Remzi Kitabevi.
- Duerager, A., and Livingstone, S. (2012). *How can parents support children's Internet safety?* EU Kids Online, London, UK. <http://eprints.lse.ac.uk/42872> adresinden erişildi
- Dulkadir Yaman, N. & Kabakçı Yurdakul, I. (2022). Exploring Parental Mediation of Internet Use Through Young Children's Perspective, *Education and Information Technologies*, 27, 7451–7469. <https://doi.org/10.1007/s10639-022-10939-3> .
- Eastin, M. S., Greenberg, B. S., and Hofschire, L. (2006). Parenting the internet. *Journal of Communication*, 56(3), 486-504.
- Folorunsho, A. I. (2016). *Young Children's Engagement and Interactions with Digital and Non-Digital Activities: A Case Study* [Doctoral dissertation, Canterbury Christ Church University]. <https://repository.canterbury.ac.uk/item/88319/young-children-s-engagement-and-interactions-with-digital-and-non-digital-activities-a-case-study> .
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (8<sup>th</sup> ed.). NY: McGraw-Hill.
- Hasebrink, U., Görzig, A., Haddon, L., Kalmus, V., and Livingstone, S. (2011) "Patterns of risk and safety online: in-depth analyses from the EU Kids Online survey of 9- to 16-year-olds and their parents in 25 European countries". LSE Research Online. [http://eprints.lse.ac.uk/39356/1/Patterns\\_of\\_risk\\_and\\_safety\\_online\\_%28LSERO%29.pdf](http://eprints.lse.ac.uk/39356/1/Patterns_of_risk_and_safety_online_%28LSERO%29.pdf) . Son erişim tarihi: 10 Şubat 2016.
- Hasebrink, U., Livingstone, S., Haddon, L., and Ólafsson, K. (2009). *Comparing children's online opportunities and risks across Europe: Cross-national comparisons for EU Kids Online*. LSE, London: EU Kids Online
- Ho, S. S., Chen, L., and Ng, A. P. (2017). Comparing cyberbullying perpetration on social media between primary and secondary school students. *Computers & Education*, 109, 74-84.
- Hu, L. T. and Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Ihmeideh, F. M., & Shawareb, A. A. (2014). The association between internet parenting styles and children's use of the internet at home. *Journal of Research in Childhood Education*, 28(4), 411–425. <https://doi.org/10.1080/02568543.2014.944723>
- IWS (2019). World Internet Users and 2019 Population Stats. <https://www.internetworldstats.com/stats.htm> adresinden erişildi.
- Johnson, G. M. (2015). Young children at risk of digital disadvantage. In K. L. Heider & M. R. Jalongo (Eds.), *Young Children and Families in the Information Age: Applications of Technology in Early Childhood* (pp. 255–275). USA: Springer.
- Kenny, D. A. (2010). Measuring model fit. <http://davidakenny.net/cm/fit.htm> . Son erişim tarihi: 11 Nisan 2019



- Kirwil, L. (2009). Parental mediation of children's internet use in different european countries, *Journal of Children and Media*, 3(4), 394-409.
- Konca, A.S., Tantekin Erden, F. Young children's social interactions with parents during digital activities at home. *Child Indicators Research*, 14, 1365–1385 (2021). <https://doi.org/10.1007/s12187-020-09800-1>
- Lee, V. W. P., Ling, H. W. H., Cheung, J. C. S., Tung, S. Y. C., Leung, C. M. Y., & Wong, Y. C. 2021. Technology and Family Dynamics: The Relationships Among Children's Use of Mobile Devices, Family Atmosphere and Parenting Approaches. *Child and Adolescent Social Work Journal*, 1-8. <https://doi.org/10.1007/s10560-021-00745-0>
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., and Rainie, L. (2011). Teens, Kindness and Cruelty on Social Network Sites: How American Teens Navigate the New World of " Digital Citizenship". *Pew Internet & American Life Project*.
- Livingstone, S., & Byrne, J. 2018. "Parenting in the Digital Age". The Challenges of Parental Responsibility in Comparative Perspective (p. 19-30). In Giovanna Mascheroni, Cristina Ponte & Ana Jorge (eds.) *Digital Parenting. The Challenges for Families in the Digital Age*. Göteborg: Nordicom.
- Livingstone, S., & Franklin, K. (2018). Families with young children and 'screen time' advice. *Journal of Health Visiting*, 6(9), 434–439.
- Livingstone, S., and Das, R. (2014) Media, communication and information technologies in the European family. *Family Platform*. [http://eprints.lse.ac.uk/29788/1/EF8\\_LSE\\_MediaFamily\\_Education.pdf](http://eprints.lse.ac.uk/29788/1/EF8_LSE_MediaFamily_Education.pdf) . 12 Kasım 2014.
- Livingstone, S., and Helsper, E. J. (2008). "Parental mediation of children's internet use", *Journal of Broadcasting & Electronic Media*, 52(4).
- Livingstone, S., Davidson, J., Bryce, J., Hargrave, A. M., and Grove-Hills, J. (2012). *Children's Online Activities: Risks and Safety*. UK.
- Livingstone, S., Mascheroni, G., Dreier, M., Chaudron, S., and Lagae, K. (2015) How parents of young children manage digital devices at home: The role of income, education and parental style. London: EU Kids Online, LSE.
- Livingstone, S., Ólafsson, K., Helsper, E. J., Lupiáñez-Villanueva, F., Veltri, G. A., and 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.
- Lwin, M. O., Stanaland, A. J. S., and Miyazaki, A. D. 2008. "Protecting children's privacy online: How parental mediation strategies affect website safeguard effectiveness", *Journal of Retailing*, 84, 2005–2217.
- Mascheroni, G., Ponte, C., & Jorge, A. (2018). *Digital parenting: The challenges for families in the digital age*. Sweden: Nordicom.
- McFarland, J., Hussar, B., Zhang, J., Wang, X., Wang, K., Hein, S., ... & Barmer, A. (2019). *The Condition of Education 2019*. NCES 2019-144. *National Center for Education Statistics*.



- McPake, J., Plowman, L., & Stephen, C. (2013). Pre-school children creating and communicating with digital technologies in the home. *British Journal of Educational Technology*, 44(3), 421–431.
- NAEYC & the Fred Rogers Center. (2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. [https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/topics/PS\\_technologyWEB.pdf](https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/topics/PS_technologyWEB.pdf) . Accessed 15 Feb 2021.
- Nevski, E., & Siibak, A. (2016). The role of parents and parental mediation on 0–3-year-olds digital play with smart devices: Estonian parents' attitudes and practices. *Early Years*, 36(3), 227–241. <https://doi.org/10.1080/09575146.2016.1161601>
- Nikken, P., and Jansz, J. (2014). Developing scales to measure parental mediation of young children's internet use. *Learning, Media and technology*, 39(2), 250-266.
- Ofcom. (2019). *Children and Parents: Media Use and Attitudes Report*. [https://www.ofcom.org.uk/data/assets/pdf\\_file/0023/190616/children-media-use-attitudes-2019-report.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0023/190616/children-media-use-attitudes-2019-report.pdf)
- Palfrey, J., and Gasser, U. (2013). *Born Digital: Understanding the First Generation of Digital Natives*. New York: Basic Books.
- Papadakis, S., Zaranis, N., & Kalogiannakis, M. (2019). Parental involvement and attitudes towards young Greek children's mobile usage. *International Journal of Child-Computer Interaction*, 22,100144.
- Pew Research Center, December 17, 2015, "Parenting in America: Outlook, worries, aspirations are strongly linked to financial situation." [http://www.pewsocialtrends.org/files/2015/12/2015-12-17\\_parenting-inamerica\\_FINAL.pdf](http://www.pewsocialtrends.org/files/2015/12/2015-12-17_parenting-inamerica_FINAL.pdf)
- Piotrowski, J. T. (2017). The parental media mediation context of young children's media use. In *Media exposure during infancy and early childhood* (pp. 205-219). Cham: Springer.
- Plowman, L., Stevenson, O., Stephen, C., & McPake, J. (2012). Preschool children's learning with technology at home. *Computers and Education*, 59(1), 30–37. <https://doi.org/10.1016/j.compedu.2011.11.014>
- Rosen, L. R., Cheever, N. A., and Carrier, L. M. (2008). The impact of parental attachment style, limit setting and monitoring on teen myspace behavior. *Journal of Applied Developmental Psychology*, 29, 459-471.
- Saracho, O. N. (2015). Developmentally-appropriate technology and interactive media in early childhood education. In K. L. Heider, & M. Renck Jalongo (Eds.), *Young Children and Families in the Information Age: Applications of Technology in Early Childhood* (pp. 183–205).
- Sonck, N., Nikken, P., and de Haan, J. (2013). Determinants of internet mediation: A comparison of the reports by Dutch parents and children. *Journal of Children and Media*, 7(1), 96-113.
- Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling, *Personality and Individual Differences*, 42(5), 893-898.

- Sütçü, S. S. (2017). Çocukların bilişim teknolojileri kullanımlarına yönelik kısıtlamalara karşı tepkileri, *Eğitimde Kuram ve Uygulama*, 13(2), 301-315.
- Takacs, Z. K., Swart, E. K., & Bus, A. G. (2015). Benefits and pitfalls of multimedia and interactive features in technology-enhanced storybooks: A meta-analysis. *Review of Educational Research*, 85(4), 698–739.
- Turow, J., and Nir, L. (2000) The internet and the family: The view from parents, the view from kids. From Report Series. No. 13. The Annenberg Public Policy Center of the University of Pennsylvania. [https://repository.upenn.edu/cgi/viewcontent.cgi?article=1409&context=asc\\_papers](https://repository.upenn.edu/cgi/viewcontent.cgi?article=1409&context=asc_papers) . Son erişim tarihi: 10 Ocak 2015.
- Türkiye İstatistik Kurumu ([TÜİK], 2019). Hanehalkı Bilişim Teknolojileri (BT) Kullanım Araştırması, 2019. Türkiye İstatistik Kurumu Haber Bülteni, 30574. Retrieved from <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=30574> .
- Türkiye İstatistik Kurumu ([TÜİK], 2020). Hanehalkı Bilişim Teknolojileri (BT) Kullanım Araştırması, 2020. Türkiye İstatistik Kurumu Haber Bülteni, 33679. Retrieved from [https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-\(BT\)-Kullanim-Arastirmasi-2020-33679](https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-(BT)-Kullanim-Arastirmasi-2020-33679) adresinden erişildi.
- Valcke, M., De Wever, B., Van Keer, H. ve Schellens, T. (2011). Long-term study of safe internet use of young children. *Computers & Education*, 57(1), 1292-1305.
- Valkenburg, P. M., Krccmar, M., Peeters, A. L., and Marseille, N. M. (1999). Developing a scale to assess three styles of television mediation: 'Instructive mediation,' 'restrictive mediation,' and 'social covieving', *Journal of Broadcasting & Electronic Media*, 43(1), 52-66.
- Yavuzer, H. (2016). *Ana-baba ve çocuk* [Mother-father and child], Remzi Kitabevi.
- Yörükoğlu, A. (2007). *Aile ve çocuk* [Family and child], Özgür Yayınları.
- Wang, R., Bianchi, S. M., and Raley, S. B. (2005). Teenagers' Internet use and family rules: A research note, *Journal of Marriage and Family*, 67(5), 1249-1258.
- We Are Social. (2019). "Digital 2019" Retrieved February 18, 2020 (<https://wearesocial.com/digital-2019>).
- We Are Social. (2021). "Digital 2021" Retrieved February 25, 2021 (<https://wearesocial.com/digital-2021>).
- Wisniewski, P., Xu, H., Rosson, M. B., and Carroll, J. M. (2017). Parents Just Don't Understand: Why Teens Don't Talk to Parents about Their Online Risk Experiences. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (pp. 523-540). ACM.
- Wright, M. F. (2017). Parental mediation, cyberbullying, and cybertrolling: The role of gender. *Computers in Human Behavior*, 71, 189-195.
- Wu, C. S. T., Fowler, C., Lam, W. Y. Y., Wong, H. T., Wong, C. H. M., & Loke, A. Y. (2014). Parenting approaches and digital technology use of preschool age children in a Chinese community. *Italian Journal of Pediatrics*, 40(1), 1–8. <https://doi.org/10.1186/1824-7288-40-44>