

ORIGINAL ARTICLE

Examining the Mediation Role of Parental Guilt in the Relationship between Working Mothers' Smartphone Addiction and Their Children's Problematic Technology Use*

Fatma Miray Sariyıldız^{ID}, Seher Merve Erus^{ID}

Department of Psychological Counseling, Yıldız Technical University Faculty of Education, İstanbul, Türkiye

ORCID iDs of the authors: F.M.S. 0009-0002-4459-240X, S.M.E. 0000-0001-5308-3872.

Main Points

- As a result of this study, according to the assessments made by working mothers, it was determined that parental guilt had a mediating effect on the relationship between smartphone addiction and problematic technology use in their children.
- It can be thought that mothers feel guilty because of the time they spend with their smartphones and exhibit addictive behaviors, which may lead them to engage in guilt-compensating behaviors that promote a permissive attitude towards their children. Accordingly, the mother who feels guilty may adopt a permissive parental attitude and engage in behaviors that compensate for her guilt.
- A mother who feels guilty, adopts a permissive parental attitude, and engages in behaviors that compensate for her guilt may mediate the development of problematic technology use in her child.

Abstract

This study aimed to examine the mediation of parental guilt in the relationship between smartphone addiction in working mothers and problematic technology use among their preschool children. A total of 260 working mothers, aged between 22 and 50, with preschool children, participated in the study. The study utilized the "Personal Information Form," "Smartphone Addiction Scale Short Form," "Parental Guilt Scale," and "Problematic Technology Use Scale for Children." SPSS bootstrapping analysis was applied to investigate the mediation of parental guilt in the relationship between mothers' smartphone addiction and their preschool children's problematic technology use. The analysis revealed that parental guilt mediated the relationship between mothers' smartphone addiction and their children's problematic technology use. The findings are discussed considering existing knowledge on smartphone addiction, parental guilt, and problematic technology use in children. In this direction, suggestions are presented with a focus on working mothers to reduce problematic technology use among children.

Keywords: Parental guilt, preschool period, problematic technology use, smartphone addiction, working mother

Introduction

Working mothers are expected to balance work, their spouses, children, and family, in addition to the effort they put in to reach the positions they aim for in their careers (Korkmaz, 2020). When the responsibilities of motherhood and working roles are combined, especially women with young

children face difficulties (Gozubuyuk, 2010). For women who try to balance their roles as worker, wife, and mothers, smartphones have become their helpers in fulfilling their responsibilities. However, digital conveniences are not limited to working life. Although needs are increasingly being met faster and easier through the applications developed, as Erbas (2020) emphasizes, technological addictions

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Corresponding Author:

Fatma Miray Sariyıldız

E-mail:

miraysariyildiz@outlook.com.tr

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have become widespread because of being able to access technology as easily as a smartphone.

Today, especially with the diversification of technological devices, the rate of preschool children's access to these devices is rapidly increasing (Topcu, 2018). As a result of the gradual increase in technology use, problematic technology uses, such as technological addictions, have emerged, and technological addictions have started to be taken seriously in early childhood (Erbas, 2020). In fact, children's predisposition to digital tools has become so high that in many current discussions, children are referred to as the "app generation," the "wireless generation," and the "e-child" (Selwyn & Odabasi, 2022).

Mothers' high use of smartphones and permissive parental attitudes towards their children increase problematic technology use (Kol, 2021). It is expected that the behaviors exhibited by children who are exposed to their parents' attitudes and observe their habits will also follow this trend. Therefore, in studies examining children's problematic use of technology, it is essential to investigate the technology habits and technology addictions of mothers, as they are the individuals with whom the child spends the most time from birth to primary school.

According to Aktas (1994), since mothers work and are busy for most of their days, they often experience feelings of guilt, believing they may be neglecting their children. Moreover, it is known that individuals experiencing guilt tend to adopt compensatory behaviors (Hoffman, 1996). Parents may demonstrate actions such as confessing, apologizing, offering delicious snacks, and giving more hugs to alleviate the guilt they feel (Aarntzen et al., 2019; Tangney, 1990). These compensatory behaviors, developed to alleviate guilt, often lead parents to adopt a permissive attitude. According to Baumrind (1966), parents with permissive attitudes may find it difficult to control their children's behavior because they allow them significant freedom, and children raised in this manner may have the freedom to eat, sleep, and use technology whenever they wish.

In the literature, Yuksel et al. (2020) concluded that parents' supervision of their children's internet use had an impact on the adolescents' addiction to the internet. According to the findings of the study by Buyuksahin Cevik & Celikkaleli (2010), adolescents who believed their parents' attitudes toward them were indifferent had significantly higher internet addiction levels. Although there have been studies on technology use with a focus on parents, studies on working mothers have been found

to be incomplete (Gunuç & Atli, 2018; Isikoglu & Ergenekon, 2021; Oguz & Kutluca, 2020). Especially considering the critical importance of the preschool period for a child's development, it was deemed necessary to examine the use of technology by working mothers and their children due to the increasing educational opportunities for women, changes in cultural structure, and economic concerns. In this context, it is believed that a mother's active use of a smartphone can influence the child. Also, mothers who serve as important role models for young children in technology use (Kurtoglu Erden & Uslupehlivan, 2021) may exhibit permissive attitudes toward technology use to alleviate guilt (Hoffman, 1996), which could be related to the child's problematic technology use. In this regard, it can be inferred that the child may develop problematic technology use because of the mother's increased guilt associated with smartphone use and her compensatory behaviors. This study aims to examine the relationship between working mothers' smartphone addiction, parental guilt, and preschool children's problematic technology use. The research questions are as follows:

- Is there a relationship between problematic technology use in children, smartphone addiction in working mothers, and parental guilt?
- Does parental guilt play a mediating role in the relationship between working mothers' smartphone addiction and their children's problematic technological use?

Material and Methods

This study was conducted following the relational model. The relational model is employed to address doubts about the relationship between variables through a literature review and to provide justification for the identified relationship (Wood & Brink, 1998). This model is an attempt to determine the variable most highly correlated with the criterion variable (McMillan & Schumacher, 2006). The relationships among these variables, highlighting the mediating role, are illustrated in Figure 1.

Participants

The research group comprises working mothers with preschool children. In this study, the convenience sampling method, preferred in cases where individuals available at a certain place and time voluntarily participate, was utilized (Martella et al., 2013). This sampling technique involves the selection of participants who are typically situated at a location (such as a school) that is appropriate for the study purpose. Convenience sampling is a cost-effective and time-efficient sampling strategy that is

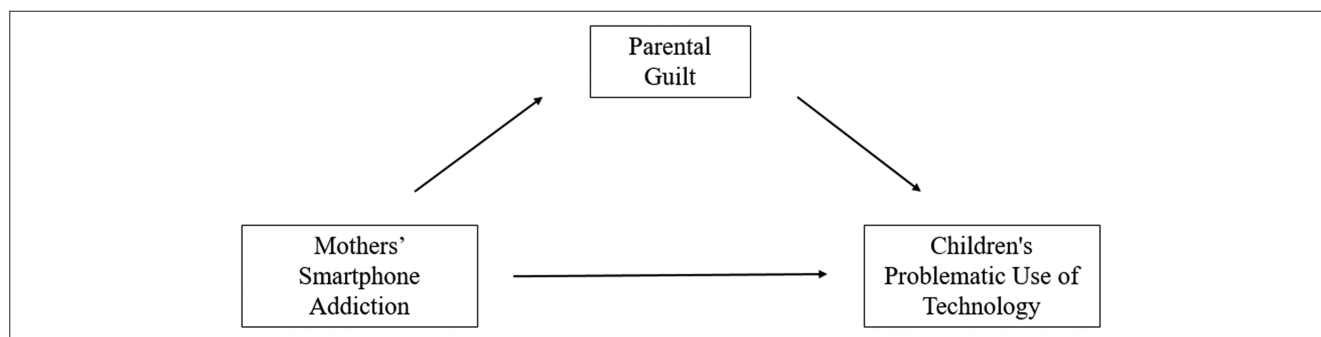


Figure 1. Model for Children's Problematic Use of Technology.

straightforward to use (Stratton, 2021). In this case, the researchers gathered information by contacting working mothers in their social circle who had kids between the ages of 2 and 6. According to the Social Security Institution (2023), individuals who work for an employer, independently on their own behalf, or as public officials with insurance are categorized as employees. Kline (2001) suggested that 200 participants may be sufficient for the analysis, so we reached 260 working mothers in Türkiye, aged between 22 and 50, with preschool-age children. Demographic information about the participants in the research group is provided in Table 1.

As shown in Table 1, the weekly working hours of the mothers were observed as follows: 52 (20%) of them worked less than 20 hours, 109 (41.9%) worked 21 – 40 hours, and 99 (38.1%) worked 41 hours or over. Additionally, 102 (39.2%) mothers work in the public sector, 127 (48.8%) work in the private sector, and 31 (11.9%) own their own businesses.

Data Collection and Data Collection Tools

The dataset was created by combining the personal information form with the measurement tools determined within the scope of the research. As a result of the decision of Yıldız Technical University Social and Human Sciences Research Ethics Committee meeting on October 31, 2022, the approval of the

ethics committee of Yıldız Technical University University numbered 20230502065 was obtained. Within the dataset, participants were first provided with information about the research's purpose, the use of the data exclusively for this study, non-disclosure to third parties, guidelines for responding, and information about the researcher, all in the context of informed consent. Forms were distributed through the Google Forms application on an online platform. Data were collected on a voluntary basis from mothers who were requested to complete the form for only one of their children. Data collection took place between December 2022 and February 2023. Further details about the measurement tools are provided below.

Problematic Technology Use Scale for Children

The Problematic Technology Use Scale for Children was developed by Konca et al. (2022) for parents with children in the preschool developmental stage. The scale employs a 5-point Likert scale and consists of 26 items. The exploratory factor analysis revealed a 4-factor structure, including continuity of use, resistance to control, impact on development, and deprivation-escape. Subsequently, confirmatory factor analysis confirmed that the goodness-of-fit index values were at an acceptable level. Cronbach's alpha coefficient for the total score of the scale was calculated as .93 (Konca et al., 2022). In this study, Cronbach's alpha coefficient was found to be .93.

Smartphone Addiction Scale

The 10-item, 6-point Likert scale-based Smartphone Addiction Scale was created by Kwon et al. (2013) to assess smartphone addiction. In the adaptation study into Turkish conducted by Noyan et al. (2015). The scale includes five factors: daily life functioning, deprivation, virtual environment-oriented relationships, overuse, and tolerance. Confirmatory factor analysis confirmed that the goodness-of-fit index values were at an acceptable level. The Cronbach's alpha coefficient for the total score of the scale items was found to be .86 (Noyan et al., 2015). In this study, the Cronbach's alpha coefficient was determined to be .90.

Parental Guilt Scale

Haslam et al. (2020) created the Parental Guilt Scale, which consists of 10 items graded on a 7-point Likert scale, to evaluate the cognitive and emotional aspects of guilt felt in relation to parenting. Reliability and validity studies were conducted by Polat et al. (2022) for the Turkish culture. The scale does not have sub-dimensions. Confirmatory factor analysis confirmed that the goodness-of-fit index values were at an acceptable level. The Cronbach's alpha reliability coefficient for the scale was calculated as .89 (Polat et al., 2022). In this study, Cronbach's alpha coefficient was found to be .90.

Data Analysis

Statistical analyses were conducted using the SPSS 23.0 (IBM SPSS Corp.; Armonk, NY, USA) package program and the SPSS PROCESS v.4.2 plug-in. It was observed that the variables in this study were convenient for univariate normality and also Mahalanobis distance values were calculated to assess multivariate normality, and three data points with values less than .001 were identified as outliers and removed. To unveil both direct and indirect effects, a regression-based mediation macro was employed following the recommendations of Preacher & Hayes (2018). Bootstrapping was applied to assess the significance of

Table 1.

Frequency and Percentage Values of Demographic Information of the Participants

Participants' Characteristics	f	%
Mother's age		
Under 35 years old	167	64.2
35 years of age or older	93	35.8
Mother's education level		
High school	32	12.3
Undergraduate	154	59.2
Graduate	74	28.5
Mother's weekly working time		
Less than 20 hours	52	20
21 – 40 hours	109	41.9
41 hours or over	99	38.1
Mother's sector of work		
Public sector	102	39.2
Private sector	127	48.8
Own business	31	11.9
Child age		
Under 35 months	83	32.4
36 – 48 months	59	23
49 – 60 months	57	22.3
61 months or older	57	22.3
Child gender		
Girl	128	49.2
Boy	132	50.8

the mediation. When using the bootstrap technique, a 95% CI was established using 5000 samples. Model four was utilized in the analysis, with the model structured as follows: the independent variable, smartphone addiction (X), the mediating variable, parental guilt (Mi) and the dependent variable, children's problematic use of technology (Y). mother's age and the child's gender were included in the analysis as control variables.

Results

Pearson correlation analysis was conducted to determine the relationship between the child's problematic technology use, the mother's smartphone addiction, and parental guilt variables. The results are presented in Table 2.

As shown in Table 2, there is a significant positive relationship between the child's problematic technology use and the mothers' smartphone addiction ($r = .25; p < .01$); the child's problematic technology use and parental guilt ($r = .30; p < .01$); and the mothers' smartphone addiction and parental guilt ($r = .18; p < .01$). Since a significant positive relationship was observed between these variables, a mediation analysis was conducted. The model used to analyze the mediation of parental guilt in the relationship between the problematic technology use of preschool children with working mothers and the mothers' smartphone addiction is presented in Figure 2.

As can be seen in Figure 2, when examining the direct effects of the model, it was found that mothers' smartphone addiction predicted parental guilt ($B = .32, p < .001$), mothers' smartphone addiction predicted children's problematic use of technology ($B = .52, p < .001$), and parental guilt predicted children's problematic use of technology ($B = .37, p < .001$). Before adding parental guilt as a mediator variable to the model, it was observed that mothers' smartphone addiction directly and significantly predicted children's problematic use of technology ($B = .52, p < .001$). When the mediator variable was included in the model, the predictive power slightly decreased ($B = .39, p < .001$), but it remained significant. Consequently, these results indicate the presence of an indirect effect in the model, and parental guilt plays a mediating role in the relationship between mothers' smartphone addiction and children's problematic use of technology. To test the significance of this mediation role, bootstrap results for indirect effects are presented in Table 3.

As shown in Table 3, the bootstrapping analysis applied to the model provides bootstrapping coefficients and 95% CIs, indicating upper and lower values. Upon examining Table 3, it becomes evident that mothers' smartphone addiction predicts problematic use in children through parental guilt (bootstrap coefficient = .118, 95% CI = .05, .20).

Discussion

In this study, it was revealed that parental guilt played a mediating role in the relationship between working mothers' smartphone addiction and problematic technology use in their children. It is known that parents' and children's technology use habits are closely related to each other (Terras & Ramsay, 2016). Especially preschool children are more likely to use technological devices such as tablets and smartphones with their families than they are to use these devices alone (Marsh et al., 2015). In a study conducted by Lauricella et al. (2015), the correlation between parents' time spent with computers, smartphones, tablets, and televisions and children's screen use time confirms that parents' and children's technology use habits are related to each other. Parents' smartphone use is not limited to the time they spend alone and has also become common during the care of their children (McDaniel, 2020). According to Bandura (1978),

Table 2. Pearson
Correlation Analysis Between Problematic Technology Use, Smartphone Addiction, and Parental Guilt

	Correlation		
	1	2	3
1. Children's problematic use of technology	-		
2. Mothers' smartphone addiction	.25**	-	
3. Parental guilt	.30**	.18**	-
Mean	50.82	24.4	44.6
SD	19.14	10.68	13.75

Note: ** $p < .01$.

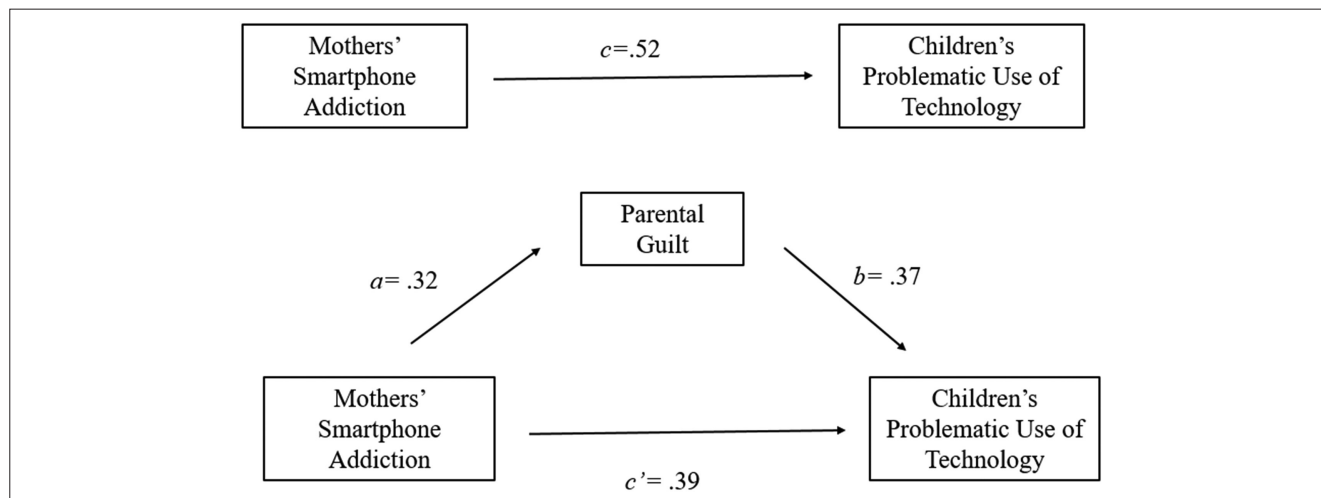


Figure 2. The Mediation Model for Children's Problematic Technology Use.

Table 3. Path
Coefficients and Indirect Effect Results for Mediation Model

	Coefficient of Path	95% CI Level	
		LLCI	ULCI
Direct effects			
MSA→PG	.393	.162	.482
PG→CPUT	.368	.206	.539
Indirect effects			
MSA→PG→CPUT	.118	.050	.204

Note: CPUT = Children's problematic use of technology; LLCI = Lower limit of confidence interval; MSA = Mothers' smartphone addiction; PG = Parental guilt; ULCI = Upper limit of confidence interval.

the foundation of learning consists of observation, modeling, and imitation. Consequently, children acquire a significant portion of the traits that guide their own behavior by observing adults (Aydin, 2016). Especially when considering that children spend the most time with their families during their early years, the role of parents as primary role models becomes evident. Preschool children's development of habits through positive or negative modeling of their parents in terms of technology use plays a crucial role in determining the extent of problematic technology use in children (Akkoyunlu & Tugrul, 2002). Given that children emulate their parents' habits in the use of digital tools, Wong et al. (2020) identified a significant relationship between children's screen time and problematic technology use. The observation and modeling of mothers' behaviors due to their smartphone addiction can determine whether children's technology use becomes problematic or not. According to the study's findings, it can be hypothesized that mothers who perceive themselves as heavy smartphone users are likely to have children who also use technology extensively. This is consistent with the findings of Lermi and Afat (2020), who suggest that a mother who cannot set limits on phone use as a parent may struggle to establish boundaries for her child. It is well documented that technological addictions can develop in children whose parents fail to set limits on technology use. Therefore, it can be argued that a working mother's smartphone addiction may serve as an explanatory factor for a child's problematic technology use.

The increasing participation of women in the workforce has ignited a growing debate regarding the effects of maternal employment on children (Heiland et al., 2017). One of these effects pertains to the ways in which working mothers and their children utilize technology. For instance, Ersoz and Ozmen (2020) noted that the development of internet infrastructure in the business sphere has made it convenient for employees to conduct transactions using smartphones. However, smartphones are not limited to work-related activities, as social media applications have also become widely used. According to a report by Mail Online (2008), people have become so reliant on their cell phones that the mere thought of a low battery or disconnection can lead to increased stress levels. It is well established that the stress experienced by mothers can have an impact on their parenting roles and, subsequently, on their children (Meighan, 2017). In addition to the stress caused by technology addiction, the work and family roles imposed on working mothers also create additional stress factors. For instance, Korkmaz (2020) noted that working mothers must balance their

roles as a spouse, parent, child, and member of the family while also pursuing their career goals. Stress levels, particularly in working mothers, tend to escalate due to the conflict between their work, home, and parental responsibilities (Poduval J & Poduval M, 2009). It is inevitable for parents with elevated stress levels to experience feelings of guilt (Simon, 1995). According to Blatt et al. (1984), guilt is one of the fundamental elements of addiction. Studies conducted in this context have shown a relationship between addiction and guilt (Cam & Ayakdas Dagli, 2017; Kalyoncu et al., 2002). Additionally, guilt has also been associated with excessive smartphone use (Chatterjee & Kar, 2021). In addition to the guilt they experience due to their addiction, individuals also feel guilty for experiencing positive emotions resulting from the benefits gained through smartphone use (Lanette & Mazmanian, 2018). Moreover, the stress and guilt stemming from smartphone addiction play a crucial role in determining their relationship with their children. According to Kol (2021), children of mothers who use smartphones more intensively tend to learn technology at an early age. In this study, parental guilt was found to mediate the relationship between smartphone addiction among working mothers and problematic technology use in their children. As a result of this sense of guilt, individuals engage in compensatory behaviors to prevent the recurrence of similar situations (Ozdemir & Duzguner, 2020). To alleviate guilt, mothers who feel a sense of inadequacy due to their guilt may provide their children with cell phones when they are not present and instruct them to call in cases of need. However, these actions aimed at reducing guilt can inadvertently encourage unsupervised technology use by the child (Seagram & Daniluk, 2002). It can be inferred that mothers experience guilt because of the time they spend with their smartphones and exhibit addictive behaviors. Consequently, they may engage in guilt-compensating behaviors that center on a permissive attitude towards their child. Within a permissive attitude, children have the freedom to go to sleep, eat, and use technology whenever they please due to the lack of clear rules, inadequate supervision, and a high level of tolerance (Baumrind, 1966; Cetinkaya, 2020). In this context, it is conceivable that a guilt-ridden mother may adopt a permissive parental attitude and engage in behaviors aimed at compensating for her guilt.

Limitations and Directions/Suggestions for Future Research

The results obtained are very important; however, this study has limitations. The first limitation is that this research was planned to be cross-sectional, so it does not capture the changes experienced by mothers and their children over time. To address this limitation, longitudinal studies that track changes in the levels of problematic technology use in children, smartphone addiction, and parental guilt among working mothers can be planned. The second limitation is that the characteristics of working mothers were not examined in detail in this study, and the characteristics of the mothers reached for the study were limited to those specified in the demographic information. For this reason, future studies can be planned to evaluate the characteristics of mothers, such as their working conditions, where they live (rural or metropolitan), ethnicity, etc. Additionally, future research may explore additional mediating variables, such as parental attitudes, stress, marital satisfaction, and the parent-child relationship, alongside parental guilt in the relationship between problematic technology use in children and smartphone addiction in working mothers. Furthermore, research can extend to include non-working

mothers as participants. In subsequent studies, problematic technology use during primary, secondary, and high school periods can be examined, with a particular focus on working mothers.

As a result of this study, it was determined that parental guilt had a mediating effect on the relationship between smartphone addiction and problematic technology use in their children. In this regard, the concept of digital parenting can be incorporated into psychoeducational programs designed to reduce problematic technology use among children. Furthermore, efforts can be made to ensure that families utilize technology consciously, both for themselves and their children. Specifically, professionals providing counseling to working mothers can address feelings of guilt and the accompanying sense of inadequacy, aiming to develop healthier mother-child relationships by reducing maternal guilt and associated compensatory behaviors. Additionally, experts in the field of addiction can work towards addressing and alleviating guilt as part of addiction treatment for their clients. To promote the appropriate use of technology by children, awareness-raising sessions can be organized for parents, emphasizing conscious technology use for both parents and their children.

Data Availability Statement: The data that support the findings of this study are available on request from the corresponding author.

Ethics Committee Approval: This study was approved by the Ethics Committee of Yıldız Technical University University (approval number: 20230502065 date: 31.10.2022).

Informed Consent: Informed consent was obtained from participants who agreed to take part in the study.

Peer-review: Externally peer reviewed.

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References

- Aarntzen, L., Derks, B., van Steenberg, E., Ryan, M., & van der Lippe, T. (2019). Work-family guilt as a straightjacket: An interview and diary study on consequences of mothers' work-family guilt. *Journal of Vocational Behavior, 115*, 103336. [\[CrossRef\]](#)
- Akkoyunlu, B., & Tugrul, B. (2002). Okuloncesi cocukların ev yasantısındaki teknolojik etkileşimlerinin bilgisayar okuryazarlığı becerileri üzerindeki etkisi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 23* (23).
- Aktas, Y. (1994). Çalışan anne ve çocuğu. *Yasadıkca Eğitim, 36*, 7 – 11.
- Aydin, A. (2016). Eğitim psikolojisi. *Pegem Akademi Yayıncılık*.
- Bandura, A. (1978). paradigms and recycled ideologies. *Cognitive Therapy and Research, 2*(1), 79 – 103. [\[CrossRef\]](#)
- Baumrind, D. (1966). Effects of authoritative parental control on child behavior. *Child Development, 37*(4), 887 – 907. [\[CrossRef\]](#)
- Blatt, S. J., Rounsaville, B., Eyre, S. L., & Wilber, C. (1984). The psychodynamics of opiate addiction. *Journal of Nervous and Mental Disease, 172*(6), 342 – 352. [\[CrossRef\]](#)

- Cam, O., & Ayakdas Dagli, D. (2017). Alkol bağımlılarında içselleştirilmiş damgalama, suçluluk ve utanç duyguları. *Bağımlılık Dergisi, 18*(4), 145 – 151.
- Can, A. (2022). SPSS ile bilimsel araştırma sürecinde nicel veri analizi. *Pegem Akademi Yayıncılık*.
- Cetinkaya, B. (2020). Cocuğun kişilik gelişiminde anne baba rolü. *Pegem Akademi Yayıncılık*.
- Cevik, G. B., & Celikkaleli, Ö. (2010). Ergenlerin arkadaş bağıllığı ve internet bağımlılığının cinsiyet [ebeveyn tutumu ve annesine eğitim düzeylerine göre incelenmesi]. *Journal of the Cukurova University Institute of Social Sciences, 19*(3).
- Chatterjee, S., & Kar, S. K. (2021). Smartphone addiction and quality of sleep among Indian medical students. *Psychiatry, 84*(2), 182 – 191. [\[CrossRef\]](#)
- Elvin-Nowak, Y. (1999). The meaning of guilt: A phenomenological description of employed mothers' experiences of guilt. *Scandinavian Journal of Psychology, 40*(1), 73 – 83. [\[CrossRef\]](#)
- Erbas, Y. H. (2020). Erken çocukluk eğitiminde dijital teknoloji ve öğrenme. In R. F. Agmaz & F. Ergulec (Eds.), *Pegem Akademi*.
- Ersöz, B., & Özmen, M. (2020). Dijitalleşme ve bilişim teknolojilerinin çalışanlar üzerindeki etkileri. *AJIT-e, 11*(42), 170 – 179. [\[CrossRef\]](#)
- Gozubuyuk, M. (2010). Anaokulunda çocuğu olan çalışan ve çalışmayan annelerden rol memnuniyetine göre depresyon ve kaygı belirtileri düzeylerinin karşılaştırılması [Yayınlanmamış Yüksek Lisans Tezi]. Maltepe Üniversitesi.
- Gunuç, S., & Atlı, S. (2018). 18 – 24 aylık bebeklerde teknolojinin etkisine yönelik ebeveyn görüşleri. *Addicta: The Turkish Journal on Addictions, 5*(2), 1 – 22. [\[CrossRef\]](#)
- Haslam, D., Filus, A., & Finch, J. (2020). The guilt about parenting scale (GAPS): Development and initial validation of a self-report measure of parenting guilt; and the relationship between parenting guilt and work and family variables. *Journal of Child and Family Studies, 29*(3), 880 – 894. [\[CrossRef\]](#)
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: The Guilford Press.
- Heiland, F., Price, J., & Wilson, R. (2017). Maternal employment and time investments in children. *Review of Economics of the Household, 15*(1), 53 – 67. [\[CrossRef\]](#)
- Hoffman, M. L. (1996). Empathy and moral development. *Annual Report of Educational Psychology in Japan, 35*, 157 – 162. [\[CrossRef\]](#)
- Isikoglu, N., & Ergenekon, E. (2021). Bebeklerin teknolojik araçları kullanmalarıyla ilgili anne görüşleri. *Ankara University Journal of Faculty of Educational Sciences (JFES), 54*(1), 117 – 140. [\[CrossRef\]](#)
- Kalyoncu, O. A., Mirsal, H., Ozkan Pektas, D., Gumüüs, O., Tan, D., & Beyazyurek, M. (2002). Alkol bağımlılarında suçluluk ve utanç duyguları. *Journal of Dependence, 3*(3), 160 – 164.
- Kline, R. B. (2016). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- Kol, S. (2021). Erken çocuklukta teknoloji kullanımı. *Pegem Akademi*.
- Konca, A. S., Baltacı, Ö., & Akbulut, Ö. F. (2022). Problematic technology use scale for young children (ptus-yc): Validity and reliability study. *International Journal of Assessment Tools in Education, 9*(2), 267 – 289. [\[CrossRef\]](#)
- Korkmaz, E. V. (2020). İş hayatında kadın çalışanlara uygulanan destekler perspektifinde kadın çalışanların psikolojik sahiplenme ve yılmazlık durumları. *Gazi Kitabevi*
- Kurtoğlu Erden, M., & Uslupehlivan, E. (2021). Dijital çağda değişen ebeveynlik rolleri: Teknoloji kullanımında anne babalar rehber mi engel mi olmalı? *Sosyal Politika Çalışmaları Dergisi, 21*(51), 447 – 474. [\[CrossRef\]](#)
- Kwon, M., Kim, D. J., Cho, H., & Yang, S. (2013). The smartphone addiction scale: Development and validation of a short version for adolescents. *PLOS ONE, 8*(12), e83558. [\[CrossRef\]](#)

- Lanette, S., & Mazmanian, M. (2018). The smartphone "Addiction" Narrative is compelling but Largely Unfounded. *Extended abstracts of the 2018 CHI conference on human factors in computing systems* (pp. 1 – 6). [CrossRef]
- Lauricella, A. R., Wartella, E., & Rideout, V. J. (2015). Young children's screen time: The complex role of parent and child factors. *Journal of Applied Developmental Psychology, 36*, 11 – 17. [CrossRef]
- Lermi, U., & Afat, N. (2020). Ortaokul öğrencilerinde bilgisayar oyun bağımliliğinin ebeveyn davranışları açısından incelenmesi. *İZU Eğitim Dergisi, 2*(3), 122 – 136. [CrossRef]
- 2008, 1 Şubat). Nomophobia. Retrieved from <https://www.dailymail.co.uk/news/article-550610/Nomophobia-fear-mobile-phone-contact-plague-24-7-age.html>
- Marsh, J., Plowman, L., Yamada-Rice, D., Bishop, J., Lahmar, J., Scott, F., ... & Winter, P. (2015). *Exploring Play and Creativity in Preschoolers' use of apps: Final Project Report*.
- Martella, R. C., Nelson, R. C., Morgan, R. L., & Marchand Martella, N. E. (2013). *Understanding and interpreting educational research*. New York: Guilford Press.
- McMillan, J. H., & Schumacher, S. (2006). Research in education requires evidence-based inquiry. *Person education*
- Meighan, M. (2017). Maternal role attainment: becoming a mother. *Nursing theorists and their work-e-book*, 432-444.
- Noyan, C. O., Enez Darcin, A., Nurmedov, S., Yilmaz, O., & Dilbaz, N. (2015). Akıllı Telefon Bağımlılığı Olceğinin Kısa Formunun üniversite öğrencilerinde Türkçe geçerlilik ve güvenilirlik çalışması. *Anatolian Journal of Psychiatry/Anadolu Psikiyatri Dergisi, 16*, 73 – 81.
- Oguz, B. N., & Kutluca, A. Y. (2020). Okul öncesi dönemde çocukları olan ebeveynlerin teknoloji kullanımına yönelik görüşlerinin incelenmesi. *Ondokuz Mayıs University Journal of Education Faculty, 39*(2), 252-268.
- Özdemir, N., & Düzgüner, S. (2020). Suçluluk, pısmanlık ve günahkarlığın kapsamı ve diğer yakın kavramlarla ilişkisi. *Ondokuz Mayıs Üniversitesi İlahiyat Fakültesi Dergisi, 49*(4), 497 – 529. [CrossRef]
- Park, J. H., & Park, M. (2021). Smartphone use patterns and problematic smartphone use among preschool children. *PLoS One, 16*(3), e0244276. [CrossRef]
- Poduval, J., & Poduval, M. (2009). M. Working mothers: How much working, how many mothers, and where is the womanhood? *Mens Sana Monographs, 7*(1), 63 – 79. [CrossRef]
- Polat, M., Eryigit, D., Aydogdu, B. N., Eksi, F., & Eksi, H. (2022). Adapting the guilt about parenting scale (GAPS) to Turkish culture: validity and reliability study. *Current Psychology, 1* – 9. [CrossRef]
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879 – 891. [CrossRef]
- Seagram, S., & Daniluk, J. C. (2002). "It goes with the territory." The meaning and experience of maternal guilt for mothers of preadolescent children. *Women and Therapy, 25*(1), 61 – 88. [CrossRef]
- Selwyn, N., & Odabaşı, H. F. (2022). Dijital yaşamda çocuk. In H. F. Odabaşı (Ed.), *Pegem Akademi*.
- Simon, R. W. (1995). Gender, multiple roles, role meaning, and mental health. *Journal of Health and Social Behavior, 36*(2), 182 – 194. [CrossRef]
- Social Security Institution (2023). *Employee and Employer Insurance Scope*. Retrieved from <https://www.sgk.gov.tr/>
- Stratton, S. J. (2021). Population research: Convenience sampling strategies. *Prehospital and Disaster Medicine, 36*(4), 373 – 374. [CrossRef]
- Tabachnick, B. G., & Fidell, L. S. (2020). Çok değişkenli istatistiklerin kullanımı M. Baloğlu (Çev.). *Atlas akademik Yayıncılık*.
- Tangney, J. P. (1990). Assessing individual differences in proneness to shame and guilt: Development of the Self-Conscious Affect and Attribution Inventory. *Journal of Personality and Social Psychology, 59*(1), 102 – 111. [CrossRef]
- Terras, M. M., & Ramsay, J. (2016). Family digital literacy practices and children's mobile phone use. *Frontiers in Psychology, 7*, 1957. [CrossRef]
- Topçu, S. (2018). Çocuk ve sanal ortam. *Kocatepe Tıp Dergisi, 19*(1), 27 – 33. [CrossRef]
- Wong, R. S., Tung, K. T., Rao, N., Leung, C., Hui, A. N., Tso, W. W., Fu, K. W., Jiang, F., Zhao, J., & Ip, P., Jiang, F., Zhao, J., & Ip, P. (2020). Parent technology use, parent-child interaction, child screen time, and child psychosocial problems among disadvantaged families. *Journal of Pediatrics, 226*, 258 – 265. [CrossRef]
- Wood, M. J., & Brink, P. J. (1998). Correlational designs. *Advanced design in nursing research, 2*.
- Yuksel, R., Kocairi, C., Arslantas, H., & Soylemez, B. (2020). Ergenlerde internet bağımliliğini etkileyen faktörler. *Balıkesir Sağlık Bilimleri Dergisi, 9*(1), 19 – 28.