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Araştırma Makalesi / Research Article

Does Parental Stress Trigger Children's Screen Addiction? An Investigation through the Mediating Role of Depression, Anxiety and Stress *

Ebeveyn Stresi Çocukların Ekran Bağımlılığını Tetikliyor mu? Depresyon, Anksiyete ve Stresin Aracılık Rolü Üzerinden Bir İnceleme

Oğuz Görkem Gelbal¹ Ozan Korkmaz²

¹ Psikolojik Danışman, Millî Eğitim Bakanlığı, İstanbul, Türkiye
² Doç. Dr., Karamanoğlu Mehmetbey Üniversitesi, Eğitim Fakültesi, Karaman, Türkiye

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*Sorumlu Yazar

Ozan Korkmaz Karamanoğlu Mehmetbey Üniversitesi Yunus Emre Yerleşkesi Eğitim Fakültesi

ozankorkmaz@kmu.edu.tr

Abstract: The aim of this study is to examine the mediating role of depression, anxiety, and stress in the relationship between parental stress and children's screen addiction. The study group consists of 511 participants, including 297 women and 214 men, who have primary school-aged children. Data were collected using the Problematic Media Use Scale, the Parental Stress Scale, the Depression-Anxiety-Stress Scale (DASS-21), and the Demographic Information Form. Pearson correlation analysis was conducted to investigate the relationships between parental stress, children's screen addiction, depression, anxiety, and stress. The mediating role of depression, anxiety, and stress in the relationship between parental stress and children's screen addiction was examined using Hayes' PROCESS Macro Model 4. Bootstrapping analysis was applied to test the significance of the model. The findings revealed a positive and significant relationship between children's screen addiction and parental stress, as well as between parental stress and depression, anxiety, and stress and parental stress. In addition, it was found that depression, anxiety, and stress did not mediate the relationship between parental stress and children's screen addiction.

Keywords: Parental stress, screen addiction, depression, anxiety, stress

Öz: Bu araştırmanın amacı ebeveyn stresinin çocukların ekran bağımlılığı ile ilişkisinde depresyon, anksiyete ve stresin aracılık rolünü incelemektir. Araştırmanın çalışma grubu ilkokula devam eden çocuğu olan 297'si kadın, 214'ü erkek toplam 511 katılımcılan oluşmaktadır. Araştırmada katılımcılardan veri toplamak için Problemli Medya Kullanım Ölçeği, Ebeveyn Stres Ölçeği, Depresyon-Anksiyete-Stres Ölçeği (DASS-21) ve Kişisel Bilgi Formu kullanılmıştır. Verilerin analizinde ebeveyn stresi, çocukların ekran bağımlılığı, depresyon, anksiyete ve stres arasında anlamlı ilişkiler olup olmadığını incelemek için Pearson korelasyon analizi yapılmıştır. Ebeveyn stresi ile çocukların ekran bağımlılığı ilişkisinde depresyon, anksiyete ve stresin aracılık rolü Hayes'in PROCESS Makro Model 4 ile incelenmiştir. Model sonucunun anlamlı olup olmadığını görmek için Bootstrapping analizi yapılmıştır. Araştırmadan elde edilen bulgular çocukların ekran bağımlılığı ile ebeveyn stresi arasında pozitif ve anlamlı ilişkiler olduğunu göstermiştir. Ayrıca depresyon, anksiyete ve stresi ile ebeveyn stresi arasında da pozitif ve anlamlı ilişkiler elde edilmiştir. Ebeveyn stresi ve çocuk ekran bağımlılığı ilişkisinde depresyon, anksiyete ve stresin aracılık rolüne sahip olmadığı elde edilen bir diğer bulgudur.

Anahtar Kelimeler: Ebeveyn stresi, ekran bağımlılığı, depresyon, anksiyete, stres

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Introduction

Technology, which has become an integral part of modern life, has rapidly evolved and opened the doors to the digital world. As of 2024, approximately 66.2% of the global population has internet access, 62.3% are active social media users, and 69.4% use mobile devices (DataReportal, 2024a). In Türkiye, the internet penetration rate is 88.8%, and 66.8% of the population actively uses social media, while mobile connection rates have reached 93.8% (DataReportal, 2024b; Turkish Statistical Institute, 2024). According to We Are Social (2024a), more than five billion people worldwide use the internet, including approximately 74 million in Türkiye, with around 20% of these users being children between the ages of five and 17. Similarly, the EU Kids Online study, conducted across 19 European countries, reports that more than 80% of children aged nine to 16 use smartphones to access the internet at least once a day, with 44% using computers, 22% tablets, 44% televisions, and 19% game consoles daily (Smahel et al., 2020).

While increased internet access can be seen as positive in terms of facilitating information access and saving time, many studies point out the potential risks associated with uncontrolled and excessive use (Yeşilay, 2020). These risks are particularly concerning for children, who are considered the most vulnerable group in this context (Kim et al., 2006). Reports indicate that the age at which children begin using the internet is steadily decreasing (Livingstone et al., 2011), and in Türkiye, screen addiction is more prevalent among children than other age groups (Cetinkaya, 2019). According to the most recent global data, 32.7% of internet users are between the ages of 0–19 (We Are Social, 2024a). Given that children's cognitive and emotional self-regulation skills are still developing, this widespread and early exposure to digital screens may pose significant risks for problematic usage or addiction.

The internet offers most of its content and opportunities through digital devices (television, telephone, computer, tablet, etc.). Although the use of these digital devices, also referred to as screen use in the literature, provides many

^{*} Bu çalışma birinci yazarın ikinci yazar danışmanlığında yürütülen yüksek lisans tezinden üretilmiştir.

benefits, it is possible to say that it poses a danger for individuals. Although excessive screen use negatively affects every age group, children are the most vulnerable (Kim et al., 2006). It has been suggested that long-term screen use reduces communication in children, dulls socialization, and reduces academic success (Baltacı et al., 2020). It has been observed that with the increase in screen use, problems such as irregular eating, sleep problems, anxiety, attention deficit, decline in academic success, vision problems, and difficulty in socializing occur in children (Martin, 2011). With the increase in screen use, problems such as attention deficit and hyperactivity, tic disorder, and autism are also increasing in children today. For instance, a recent meta-analysis conducted by Liu et al. (2024) reported a positive correlation between screen time and attention deficit hyperactivity disorder (ADHD). It is suggested that excessive screen exposure in children may contribute to the development of ADHD symptoms. Similarly, Mohamed et al. (2025) identified a positive association between daily screen time and tic disorders. Another meta-analytic study revealed that children and adolescents with autism spectrum disorder (ASD) are exposed to significantly more screen time compared to their typically developing peers (Slobodin et al., 2019). In line with these findings, several studies have also reported a positive relationship between screen time and ASD (Dong et al., 2021a; 2021b; Ophir et al., 2023). One important point is that increased screen use may gradually lead to problematic or excessive use in children. According to Shields and Behrman (2000), the physical problems of screen addiction seen in children are more common than in adults. Since children are in their developmental period, posture disorders, joint pains, joint aches, and sleeping and eating problems are more common. Therefore, it is possible to say that, in line with research, screen use is of great importance for children.

Considering that children's willpower and self-regulation skills are not yet fully developed, parents are expected to take primary responsibility for managing and regulating their children's screen use. In fact, parents are the first authorities to protect children who are just opening their eyes to the digital age from the risky situations on the screen. Lampard et al. (2013) stated that parents' control over screen time prevents children from becoming addicted to screens. There are many studies in the literature about the effects of parenting attitudes, parental guidance, and parents' screen use on children's screen use (e.g., Arıcı Doğan & Döğer, 2023; Asplund et al., 2015; Bhutani et al., 2025; Çelik, 2017; Gökçen, 2023; Karahan, 2021; Lee et al., 2024). In the current study, unlike this prevalence, parenting stress is addressed.

Becoming a parent affects the lives of mothers and fathers physically, psychologically and socially. Adding a child to a family is a joyful event, but it is also a difficult process. The parenting role requires taking on responsibilities such as teaching the child right from wrong, traditions, and social skills, in addition to basic duties and responsibilities such as childcare, nutrition, safety, and shelter. According to Deater-Deckard (2004), being a parent is walking a rocky road that causes ups and downs in physical and mental health that affect people's functioning in the cycle of home and work. In addition, this path brings with it concerns about children and changes in bilateral relations. In this demanding journey, mothers and fathers sometimes feel inadequate regarding the responsibilities of being a parent. Child demands that put pressure on parents can create stress in mothers and fathers (Kaner et al., 2011). Parental stress is the stress that mothers and fathers feel about not being able to fulfill their parenting responsibilities (Abidin, 1992). Parental stress appears to depend on many factors. It has been stated that there is a positive significant relationship between the harsh use of discipline by mothers and fathers and parenting stress. It has also been reported that mothers and fathers who were subjected to psychological and physical punishment in their childhood experience intense stress in their parenting roles and use more psychological and physical violence against their children. These findings show that parenting stress plays a mediating role in the transmission of psychological and physical violence across generations (Niu et al., 2018). Independent of other factors, the mere experience of being a parent may contribute to increased levels of parenting stress. The children's developmental periods, the parent-child relationship, the social support of the environment, the parents' background, and their psychological and physical health are also important sources that affect parenting stress (Lazarus, 1984).

Negative mood and stress, both in parenting and in daily life, cause deterioration in parenting functions and lead to child adaptation and behavioral problems (Capaldi et al., 2002). According to the research of Wakschlag and Keenan (2001), it was reported that parenting stress, harsh discipline, and low behavioral sensitivity factors pose a risk for behavioral problems in children. Still, parenting stress is the strongest risk factor. According to Garland (2007), parenting stress in mothers can lead to attention problems, hyperactivity, and aggressive behavior in school-aged children. Belsky's Process Model also emphasizes that parenting has an impact on the children's development (Belsky, 1984). Abidin's (1989) Parental Stress Model also states that problems will arise in children when parental stress is high. Similarly, it is stated that if the parenting role is negatively affected, the children's development will be damaged (Diener & Swedin, 2019). In the current study, the relationship between screen addiction, which is one of the types of behavioral addiction seen in children, and parental stress is seen as an important problem situation that needs to be examined. In this regard, it is considered important to examine the predictive value of parental stress on screen addiction in children. In addition, in the current study, the relationship between parental stress and children's screen addiction is examined in a one-directional structure, in line with the theoretical grounding of Belsky's (1984) and Abidin's (1989) models, both of which primarily frame parental influence as a determinant of child outcomes. This orientation was a conscious methodological choice. However, we acknowledge that the relationship between parenting stress and children's behavioral problems may be bidirectional. As highlighted in recent literature, behavioral issues in children, including screen-related problems, may also contribute to increased levels of parental stress over time (McDaniel & Radesky, 2018; Senn et al., 2023). Therefore, although our model focuses on a one-way prediction from parents to children, it is important to note that determining a clear cause-and-effect direction can be complex.

In line with Belsky's (1984) Process Model and Abidin's (1989) Parental Stress Model, it is also essential to consider the specific emotional states that may interact with or arise from parenting stress. For instance, depression is a syndrome that includes symptoms such as deep sadness, pessimism and, apathy and negatively affects psychological well-being (Öztürk, 1994). In a similar vein, anxiety emerges as the body's response to uncertain threats and is often accompanied by

autonomic symptoms such as palpitations, sweating, and headaches (Özakkaş, 2014). On the other hand, stress is defined as a negative emotional experience that triggers biochemical and behavioral changes and may interfere with physical health and daily routines (Kemeny, 2003). It is known that factors that increase parental stress are generally negative emotional states. For example, in Abidin's (1989) Parental Stress Model, parents' past depression history or current depression level appears as an important factor affecting parental stress. At the same time, in this model, parental stress also affects parental health. In Belsky's Process Model, it is seen that the developmental history of the individual can have an impact on parenting (Belsky, 1984). However, both widely accepted models do not address the possible existence of psychosocial factors that mediate the relationship between parental stress and child development. In the proposed models, negative emotional states such as depression, anxiety, and stress appear to be factors that increase parental stress.

While the influence of negative emotional states such as depression, anxiety, and stress on parental stress has been acknowledged in existing models (Abidin, 1989; Belsky, 1984), it is also plausible that these emotional states may themselves be exacerbated by high levels of parental stress. This suggests a reciprocal dynamic in which emotional difficulties both contribute to and stem from parenting-related burdens. However, these internal experiences may not only circulate within the parent's psychological world but could also manifest in their interactions with the child. One important avenue to explore is whether these emotional states act as psychological bridges-mediators-between parental stress and problematic outcomes in children, such as screen addiction. In other words, could the emotional strain resulting from parental stress-manifested as depression, anxiety, and stress—function as a psychological pathway through which children's behavioral outcomes, such as screen addiction, are indirectly shaped? Addressing this question allows us to deepen our understanding of how parental stress extends beyond the parent and potentially shapes child behavior through affective channels. In this context, whether depression, anxiety, and stress serve as a bridge between parental stress and the level of screen addiction in children is another phenomenon that needs to be examined.

The Present Study

Children born into the digital age are exposed to screens from an early age, and prolonged screen use has been linked to various physical, emotional, and behavioral problems. These include eye disorders, head and neck pain, sleep disturbances, joint pain, attention deficits, irritability, anger, detachment from reality, and social withdrawal (Gedik, 2021). Given the vulnerability of children and their limited capacity for self-regulation, excessive and uncontrolled screen use poses a serious risk for developing screen addiction.

The current study aims to investigate one of the possible psychological mechanisms underlying this issue by focusing on the role of parental stress. Specifically, the primary goal is to examine whether parental stress predicts screen addiction in children. In addition, the study seeks to determine whether parents' emotional difficulties, namely depression, anxiety, and stress, mediate this relationship. By doing so, this research aims to contribute to a deeper understanding of how parenting-related psychological factors may influence children's problematic media use. Ultimately, the study hopes to inform future intervention efforts aimed at preventing or reducing

screen addiction by targeting not only children's behavior but also parental well-being. Based on these aims, the following research questions were formulated: (1) Does parental stress predict children's screen addiction? and (2) Do depression, anxiety, and stress mediate the relationship between parental stress and children's screen addiction? The hypothetical model developed for these research questions is presented in Figure 1

Method

This research was carried out using the relational screening method. The relational screening model examines the relationships between two or more variables (Büyüköztürk et al., 2019). In addition, a mediation analysis was conducted to examine through which mechanisms the relationships between the variables emerged by testing whether the effect of the independent variable (parental stress) on the dependent variable (screen addiction in children) occurred indirectly through a mediating variable (depression, anxiety, stress) (Hayes, 2018).

Participants

Participants in this study were selected based on the criterion that they had to be either the mother or the father of a child enrolled in primary school. A convenience sampling method was used to recruit participants, as it allowed for practical access to volunteer parents during the data collection process (Etikan et al., 2016). While this non-probability sampling technique facilitated data collection, it also poses a limitation in terms of generalizability of the findings.

The study group of this research consists of 511 people who have children attending primary school. 297 (58.1%) of the participants were female and 214 (41.9%) were male. Participants' ages ranged from 22 to 57. The mean age was 36.44 (SD=5.17). The socio-economic levels perceived by the participants regarding themselves are as follows: 85 people with a low (16.6%), 401 people with a medium (78.5%), and 25 people with a high (4.9%). The educational backgrounds of the participants are as follows: 92 people (18%) are primary school graduates, 122 people (23.9%) are secondary school graduates, 136 people (26.6%) are high school graduates, 161 people (31.5%) are university graduates.

Measures

Personal Information Form: A personal information form containing demographic information about the participants was created by the researchers. This form includes information about the participants' age, gender, perceived socioeconomic level, and educational status.

Depression Anxiety Stress Scale-21: The scale was developed by Lovibond & Lovibond (1995) and was adapted into Turkish by Sarıçam (2018). The scale consists of 21 items, three sub-dimensions: depression, anxiety, and stress, and a 4-point Likert-type scoring system (0: Never to 4: Always). The total score of each sub-dimension is calculated by adding the scores of the items obtained from the sub-dimensions of the scale. High scores obtained from sub-dimensions indicate that the individual has intense emotions related to that dimension. In the Turkish adaptation study, Cronbach's Alpha internal consistency coefficient was reported as .87 in the Depression sub-dimension, .85 in the Anxiety sub-dimension, and .81 in the Stress sub-dimension. Cronbach's Alpha internal consistency coefficient calculated for the scale within the scope of the current research was .82 for the Depression sub-

dimension, .82 for the Anxiety sub-dimension, and .80 for the Stress sub-dimension.

Problematic Media Use Measure: The scale was developed by Domoff et al. (2017) and was adapted into Turkish by Furuncu and Öztürk (2020). The scale measures the screen addiction of children between the ages of four and 11 to all digital devices and is administered to parents. The scale has a 27-item long form and a 9-item short form. The items consist of a 5-point Likert-type scoring system (1: Never to 5: Always) and the total score of the scale is obtained by averaging all items. High scores on the scale, which is filled out by parents by observing the children's behavior, indicate children's problematic screen use, in other words, their level of screen addiction. In the Turkish adaptation study, Cronbach's Alpha values for the long and short forms of the scale were found to be .97 and .92, respectively. In the current study, the long form of the scale was used, and the Cronbach's Alpha coefficient for the total dimension was calculated as .96.

Parental Stress Scale: The scale was developed by Berry & Jones (1995) and was adapted into Turkish by Gördesli and Sünbül (2021). The original version of the scale consists of 16 items and the scale has a 5-point Likert-type scoring system (1: Absolutely not appropriate *to* 5: Absolutely appropriate). The Turkish form also consists of 16 items and four factors. The total score of the scale is obtained by taking the score from all items. The scale aims to measure the parental stress levels of parents. In the Turkish adaptation, the Cronbach's Alpha internal consistency coefficient of the scale was reported as .81 for the total dimension. In the current study, the Cronbach's Alpha internal consistency coefficient calculated for the scale was found to be .81 for the total dimension.

Data Collection

In order to collect research data, the necessary permissions were first obtained from the XXX [Hidden for anonymity] University Scientific Research and Publication Ethics Committee. Scientific research and publication permission was given by the board in the meeting numbered 2023/07 dated 04.08.2023. After obtaining ethics committee permission, the researchers reached out to the parents of students attending four different primary schools in the Avcılar district of Istanbul in the 2023-2024 academic year. The data collection tool link (Google Forms) was shared through teacher communication groups in each school. As it was distributed via informal channels, the exact number of parents who received or viewed the survey could not be determined. On average, it took participants approximately 7 to 10 minutes to

complete the questionnaire. Informed consent was obtained from all participants before data collection.

Data Analysis

Data were obtained from a total of 529 participants in the study. Before the analysis of the data, the z values of the calculated scores of the participants were examined in order to determine the extreme values. Z values outside \pm 3 are considered extreme values (Çokluk et al., 2016). When the Z values of the scores were examined; data belonging to a total of 18 people were excluded from the analyses, including three from the Problematic Media Use Scale, two from the Parental Stress Scale, six from the Depression sub-dimension of the Depression-Anxiety-Stress Scale, four from the Anxiety sub-dimension, and three from the Stress sub-dimension. In the last case, the analyses were performed on data from a total of 511 individuals.

Kurtosis and skewness values were examined for the distribution of the data. The values between ±1.5 indicate that the distribution of the data is normal (Tabachnick & Fidell, 2001). When Table 1 is examined, it is seen that the distribution of the scores used in the research is normal. Analyses were conducted to find answers to the research questions. Pearson correlation analysis was performed to determine the relationships between variables. Hayes' (2018) PROCESS Macro Model 4 was used to test the mediating role of depression, anxiety, and stress in predicting parental stress on screen addiction in children. Bootstrapping method was also used to examine the significance of indirect effects. In this method, 10,000 resampling and 95% confidence intervals were preferred. IBM SPSS 29 statistical package program was used in the analysis of the data.

Findings

Descriptive statistics and Pearson correlation analysis findings obtained for the variables are presented in Table 1.

As seen in Table 1, there is a positive and significant relationship between screen addiction in children and parental stress (r=.32, p<.001). Additionally, there are positive and significant relationships between screen addiction and depression (r=.43, p<.001), anxiety (r=.40, p<.001), and stress (r=.46, p<.001) in children. Similarly, there are positive and significant relationships between parental stress and depression (r=.48, p<.001), anxiety (r=.36, p<.001), and stress (r=.40, p<.001).

The mediation model to be tested in the current study was examined using the Bootstrapping method with the SPSS PROCESS Macro Model 4. The results of the model tested for the mediating role of depression, anxiety, and stress in the relationship between parental stress and screen addiction in children are presented in Figure 1.

Table 1. Findings regarding variables

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Variable	1.	2.	3.	4.	5.
1. PMUM					
2. PSS	.32***				
3. DAS-D	.43***	.48***			
4. DAS-A	.40***	.36***	.69***		
5. DAS-S	.46***	.40***	.76***	.70***	
Mean	2.08	28.49	3.43	2.93	4.68
SD	.80	9.19	3.16	2.89	3.28
Kurtosis	18	33	.03	.56	09
Skewness	.74	.68	.86	1.02	.62

Note₁: Significant at *** p<.001 level.

Note₂: PMUM: Problematic Media Use Measure/Screen Addiction, PSS: Parental Stress Scale, DAS-D: Depression Anxiety Stress Scale-21 Depression sub-dimension, DAS-A: Depression Anxiety Stress Scale-21 Anxiety sub-dimension, DAS-S: Depression Anxiety Stress Scale-21 Stress sub-dimension.

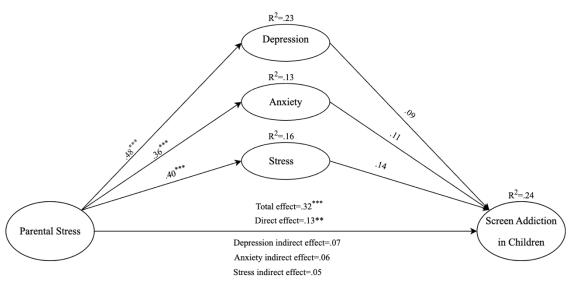


Figure 1. Findings regarding the mediation model

Table 2. Bootstrapping analysis findings on unstandardized coefficients

D. d		SE	t	%95 CI	
Paths	Coefficients			LLCI	ULCI
Direct effects					
$PSS \rightarrow DAS-D$.16	.01	12.16	.14	.19
$PSS \rightarrow DAS-A$.11	.01	8.72	.09	.14
$PSS \rightarrow DAS-S$.14	.01	9.79	.11	.17
$PSS \rightarrow PMUM$.01	.004	2.99	.004	.02
DAS-D→PMUM	.02	.02	1.44	01	.06
DAS-A→PMUM	.03	.02	1.89	001	.06
DAS-S→PMUM	.03	.02	1.83	003	.09

Note_{1:} PMUM: Problematic Media Use Measure/Screen Addiction, PSS: Parental Stress Scale, DAS-D: Depression Anxiety Stress Scale-21 Depression sub-dimension, DAS-A: Depression Anxiety Stress Scale-21 Anxiety sub-dimension, DAS-S: Depression Anxiety Stress Scale-21 Stress sub-dimension.

Note₂: SE: Standard error, %95 CI: Confidence interval values, LLCI: Lower-level confidence interval, ULCI: Upper-level confidence interval.

When Figure 1 is examined, it is seen that parental stress predicts depression (β =.48, SE=.01, t= 12.16, p<.001), anxiety $(\beta=.36, SE=.01, t=8.72, p<.001)$ and stress $(\beta=.40, SE=.01, t=$ 9.79, p<.001). Depression (β =.09, SE=.02, t= 1.44, p>.05), anxiety (β =.11, SE=.02, t= 1.89, p>.05) and stress (β =.14, SE=.02, t= 1.83, p>.05) did not predict screen addiction in children. On the other hand, the direct effect of parental stress on screen addiction in children was found to be significant $(\beta=.13, SE=.004, t= 2.99, p<.01)$. The absence of significant direct effects of depression, anxiety, and stress on screen addiction in children in the model suggests that the indirect effects of parental stress through these variables cannot be statistically meaningful. Consequently, it can be concluded that depression, anxiety, and stress do not mediate the relationship between parental stress and children's screen addiction. It was observed that the variables in the model explained 24% of the variance of screen addiction in children $(F_{(4.506)}=40.95, p<.001)$. Table 2 shows the t-values, standard errors (SE), and 95% confidence interval values (95% CI) for the unstandardized coefficients of the paths in the model.

Discussion and Conclusion

The first question to be answered in the study was "Does parental stress predict children's screen addiction?" According to the findings, parental stress was found to directly predict children's screen addiction positively. In fact, it has been observed that parents with high parental stress have

communication problems with their children and use negative parental attitudes and educational methods (Gabriel & Bodenmann, 2006; Pan et al., 2025; Senn et al., 2023; Webster-Stratton, 1990). This situation may disrupt family communication and result in an increase in the frequency of maladaptive behaviors in the child. High parental stress levels also negatively impact parental self-efficacy (Aktu, 2024; Crnic & Ross, 2017; Heath et al., 2015; Petermann & Petermann, 2006). Parents who feel that they are not enough for their children and cannot fully fulfill their parenting roles may be at a loss in dealing with this worrying situation. It is inevitable that children will be the most affected by all these negativities. It is essential to protect children born into the digital age from excessive and unconscious use of technology. However, due to the negativities caused by parental stress, the parent may distance themselves from the child and leave the child unsupervised to screen addiction. According to the stress model developed by Webster-Stratton (1990), parenting stress affects the child and causes negative behaviors. In the Belsky Process Model, it is emphasized that parents have an impact on the children's development (Belsky, 1984). Abidin's (1989) Parental Stress Model also states that problems will arise in children when parental stress is high. Studies in the literature also have findings that support the positive relationship between parental stress and children's screen addiction obtained from this current study (e.g., Bağcı Çetin, 2024; Bozoglan & Kumar, 2022; Brauchli et al., 2024; Elmaoğlu et

al., 2022; Kim et al., 2021; McDaniel & Radesky, 2018; Pazarcıkcı, 2014). Accordingly, these results imply that parental stress may be a factor that triggers screen addiction in children.

Secondly, the research sought to answer the question, "Do depression, anxiety, and stress have a mediating role in the relationship between parental stress and children's screen addiction?" The study examined whether depression, anxiety, and stress would increase with increasing parental stress levels and whether this would have an impact on children's screen addiction. For this reason, the mediating role of depression, anxiety, and stress in the relationship between parenting stress and children's screen addiction was investigated. According to the findings, it was seen that depression, anxiety, and stress did not have a mediating role in the relationship between parental stress and children's screen addiction. According to the model test conducted to examine the mediating role, as parenting stress increases, parents' depression, anxiety, and stress levels also increase. However, it has been determined that this increase does not play a mediating role in increasing children's screen addiction. Our results align with more recent studies, which argue that while parental stress influences children's behavior, it does not always do so through emotional states (e.g., Kim et al., 2021; McDaniel & Radesky, 2018). In particular, parental stress may directly influence children's screen addiction, but this effect is not necessarily mediated by psychological states. This finding underscores the need for further exploration into other possible mediating factors, such as family dynamics or digital parenting practices (Brauchli et al., 2024; Pan et al., 2025).

According to the Belsky (1984) Process Model, the most important determinants of parental behavior are the individual and psychological characteristics of the parent. According to Abidin's (1992) Parental Stress Model, the parent's past depression history or current depression level affects parental stress. At the same time, parental stress also affects the individual's parental health. In this context, according to both models, psychological states such as depression, anxiety, and stress affect parental stress. However, our current research findings suggest that these models, particularly in terms of mediation, do not sufficiently explain certain situations and reveal that increased parental stress causes an increase in depression, anxiety, and stress. These findings indicate that the relationship between emotional states and parental stress is likely to be bidirectional, with each influencing the other. At the same time, this finding obtained from the current study shows that parental stress causes an increase in the parent's negative emotional state, but the parent's negative emotional state is not reflected in the children's screen addiction. In other words, while parental stress has an impact on the children's screen addiction, it appears that the parent's more specific negative emotions such as depression, anxiety, and stress are not reflected in the children's screen addiction.

One possible explanation for why parental stress directly affects children's screen addiction while negative emotional states such as depression, anxiety, and stress do not serve as mediators may lie in the observable behavioral consequences of stress versus the internalized nature of emotional states. In other words, parental stress is more likely to manifest itself in daily parenting behaviors, such as less supervision, inconsistent discipline, or emotional unavailability, which may in turn lead children to seek solace or stimulation through screens (Crnic & Ross, 2017; Webster-Stratton, 1990). These behavioral pathways may be more influential in shaping

children's media habits than the parents' internal emotional states, which may not be directly visible or impactful on daily parent—child interactions (McDaniel & Radesky, 2018).

Moreover, previous studies have noted that while negative affective states like depression and anxiety are associated with parenting difficulties, their impact is often indirect and mediated through stress-induced behaviors or family context variables (Pan et al., 2025; Senn et al., 2023). For example, a parent experiencing anxiety might not inherently change the child's routine unless that anxiety also leads to avoidant parenting or reduced monitoring. In contrast, parental stress often directly leads to reduced parental control and increased reliance on digital devices as a coping mechanism or distraction for the child (Brauchli et al., 2024). This suggests that stress, as a functional and outward-facing state, may be a more immediate trigger for changes in family dynamics and screen-related behavior in children.

Another important consideration is children's own perception and awareness. Children, especially in early and middle childhood, may not fully recognize or react to their parents' depressive or anxious moods, but they are highly sensitive to behavioral patterns such as disengagement, irritability, or permissiveness—all of which are common behavioral consequences of parental stress (Belsky, 1984; Gabriel & Bodenmann, 2006). Therefore, while negative emotional states do increase with parental stress—as confirmed in this study—they may not be the mechanism through which screen addiction develops in children.

In this regard, future models may benefit from integrating parenting behaviors, such as discipline style, screen time supervision, or digital media attitudes, as possible mediators between parental stress and children's screen addiction (Bhutani et al., 2025; Lee et al., 2024). Exploring these pathways can offer a more comprehensive framework for understanding how family-level stress is transmitted to child-level behavioral outcomes.

Thus, our study offers a new perspective to this field by demonstrating that parental stress can directly affect children's screen addiction, but this effect is not mediated by depression, anxiety, and stress. This finding provides data that can advance new research avenues on both parenting theories, such as Belsky's (1984) Process Model and Abidin's (1992) Parental Stress Model, and the psychological effects of children's screen addiction.

Limitations and Future Directions

The current study has certain limitations that should be acknowledged to provide a clear perspective on the findings and guide future research. First, it was conducted with parents living in Istanbul, a city in Türkiye, whose children were attending primary school. This homogeneity in the sample limits the generalizability of the findings to different demographic or geographical groups. Additionally, the crosssectional nature of the study restricts the ability to establish causal relationships between parental stress and children's screen addiction. Future research would benefit from employing longitudinal designs to capture changes over time and identify causal pathways more effectively. One limitation of the present study is that it did not consider the potential bidirectional relationship between parenting stress and children's behavioral outcomes, including screen addiction. Future research is recommended to explore this relationship using longitudinal or reciprocal models to better capture the dynamic interplay between parent and child variables.

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The current study examined the mediating roles of depression, anxiety, and stress in the relationship between parental stress and screen addiction. However, it did not account for other potentially significant psychosocial variables, such as family dynamics, parenting styles, marital satisfaction, or social support, which could further explain this relationship. Expanding the scope of research to include these variables could provide a more comprehensive understanding of the factors influencing children's screen addiction. In addition, in this current study, demographic variables such as participants' age, gender, and educational background were collected for descriptive purposes only and were not included in the main analyses. While this decision was based on the theoretical focus of the study, the exclusion of these variables from the analytical model may be considered a limitation. Future studies could incorporate such demographic factors to further enrich the findings and provide a more comprehensive perspective.

For future research, qualitative studies could be conducted to explore the underlying reasons and determinants of the relationship between parental stress and children's screen addiction in greater depth. Such studies could also investigate how parents cope with stress and manage their children's screen time, offering valuable insights for intervention strategies. Additionally, larger and more diverse samples, representing various socioeconomic, cultural, and geographical contexts, should be included in future studies to enhance the generalizability of findings.

From an application perspective, the findings emphasize the importance of addressing parental stress in interventions designed to manage children's screen addiction. Developing and implementing parent-focused seminars, group guidance sessions, individual counseling, and psychoeducation programs that incorporate strategies for stress management could be effective in mitigating the risks associated with screen addiction. These programs should be tailored to provide practical tools for parents to balance their own well-being while guiding their children toward healthy digital habits.

Author Contributions

The first author carried out the planning of the study, data collection, and literature review. The first and second authors performed the statistical analyses. All authors contributed to the writing of the article and read and approved the final version of the study.

Ethical Declaration

This study was conducted with the approval decision taken at the 2023/07 meeting of the Bahçeşehir University Scientific Research and Publication Ethics Committee (Protocol No. 2023/07) dated 04.08.2023.

Conflict of Interest

The authors declare that they have no conflict of interest with any institution or person within the scope of the study.

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