

# Screen Time Practices among Children Visiting Pediatric Clinic: A Study of Parental Perception and Practices

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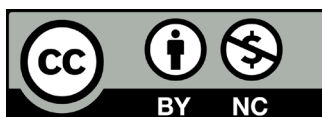
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## ABSTRACT

**Introduction:** With the increasing prevalence of digital devices, children's screen time has significantly risen, raising concerns about its impact on their physical, mental, and social development. Parental perception and practices play a crucial role in shaping children's media use and mitigating potential adverse effects. This study aimed to assess parental perceptions, screen time management practices, and the screen time behaviors of children attending a pediatric clinic.

**Methods:** A descriptive cross-sectional study was conducted over nine months (July 2024–March 2025) at Birat Medical College Teaching Hospital. A structured, self-administered questionnaire was completed by 413 parents or guardians of children aged 2–12 years visiting the pediatric outpatient clinic. Data were analyzed using SPSS software and descriptive statistics, including frequencies and percentages, were used for analysis.

**Results:** Most children (73.6%) had screen exposure exceeding one hour daily, with smartphones being the most commonly used device (71.2%). Watching videos (61.3%) was the dominant activity. Nearly 80% of parents reported setting screen time rules for their children, and 71% expressed concern regarding its impact. Educational benefits (63.7%) and creativity (36.6%) were recognized, yet many parents also cited adverse effects on emotional well-being (52.3%) and sleep (38.3%). Parental screen habits were closely aligned with children's usage patterns. Despite confidence in managing screen use (79.7%), over 30% of parents occasionally sought guidance on healthier practices.

**Conclusion:** Children's screen time remains substantial, with both positive and negative parental perceptions. While many parents demonstrate awareness and attempt regulation, gaps persist in aligning practices with recommendations. Targeted interventions and parental education are essential to foster balanced screen time habits and mitigate potential harms.

**Keywords:** Children; Digital media; Parental perception; Screen time.

## INTRODUCTION

In recent years, the widespread availability of digital devices such as smartphones, tablets, computers, and televisions has led to an increase in screen time among children.<sup>1,2</sup> With technology becoming an integral part of daily life, children are exposed to digital media at earlier ages and for longer durations. Although screen time can offer benefits such as enhanced access to educational content and the development of digital literacy<sup>3</sup> it also poses significant risks to physical, mental, and emotional health.<sup>4,5</sup>

Excessive screen time has been associated with various negative outcomes in children. Physically, it is linked to issues like obesity and vision problems<sup>5</sup>, while behaviorally, it has been connected to sleep disturbances, reduced attention spans, and challenges in social development that may adversely affect academic performance.<sup>4,6,7</sup> Parental behavior is crucial in shaping children's screen time habits. Parents not only serve as role models with their own screen use but also establish guidelines and rules governing their child's interactions

with digital media.<sup>8</sup> Their awareness and perceptions of the potential positive and negative impacts of screen time are vital in determining how media use is managed at home. Despite the recognized benefits of educational content, many parents find it challenging to balance these advantages against the risks of overexposure to entertainment and its adverse effects.<sup>1</sup>

This study aimed to explore parental perceptions and practices regarding screen time among children visiting a pediatric clinic. By examining parental screen time habits, the screen time behaviors of their children, and their views on the associated risks and benefits, the research sought to provide insights into the broader implications of digital media exposure on child development.

## METHODS

This descriptive cross-sectional study was conducted at the Department of Pediatrics, Birat Medical College Teaching Hospital, over a period of nine months, from July 2024 to March 2025. The target population for this study comprised parents or legal guardians of children aged 2 to 12 years who visited the pediatric outpatient clinic during the study period. The inclusion criteria required participants to be the primary caregivers of the child and willing to provide consent for participation in the study. Parents of children with developmental disorders or chronic illnesses were excluded from the study.

The sample size was based on estimated clinic visits and a power analysis using an assumed 40% prevalence of excessive screen time, reflecting the proportion of children likely to exceed recommended limits. Using a 95% confidence level, 80% power, and a moderate effect size, the minimum required sample was 369. A total of 413 participants were enrolled in the study. Data were collected using a structured self-administered questionnaire designed specifically for this study. The questionnaire consisted of three sections: basic demographic information, the child’s screen time habits and perceived impact, and parents’ screen time habits and practices. The first section of the questionnaire captured basic demographic details, the second section focused on the child’s daily screen time usage, types of devices used, activities during screen time, and the perceived impact of screen time on the child’s development. The final section explored parental screen time habits, their practices in managing their child’s screen use, and their perceptions regarding the risks and benefits of screen exposure. Ethical approval for the study was obtained from the Institutional Review Board of Birat Medical College Teaching Hospital. Informed consent was obtained from all participants

prior to their inclusion in the study. Data were entered, cleaned, and analyzed using SPSS (Version 21). Descriptive statistics, including frequencies and percentages, were used to summarize demographic characteristics, screen time behaviors, parental perceptions, and management practices. Multiple-response analysis was applied to questions with more than one possible answer, such as device use and perceived screen time impacts.

## RESULTS

The study included 413 children, mostly aged 2–8 years with a slight majority of girls (53.3%). Guardians were predominantly 31–40 years old, mainly mothers and fathers, with many employed in the service sector or as homemakers (Table 1).

**Table 1: Demographic Characteristics of Participant**

Characteristics	Frequency (n)	Percentage (%)
<b>Child’s Age</b>		
2-4 years	149	36.07
5-8 years	156	37.77
9-12 years	108	26.15
<b>Child’s Gender</b>		
Male	193	46.73
Female	220	53.26
<b>Guardian’s Age</b>		
20-30 years	123	29.78
31-40 years	227	54.96
Above 40 years	63	15.25
<b>Relationship to Child</b>		
Mother	207	50.12
Father	192	46.48
Other	14	3.38
<b>Guardian’s Occupation</b>		
Farmer	79	19.12
Homemaker	110	26.63
Service	175	42.37
Business	37	8.95
Other	11	2.66

Children’s average daily screen time varied (Table 2), with nearly 39% under one hour, 35% at 1–2 hours, 20% at 2–4 hours, and only 6% exceeding four hours. Smartphones were the most commonly used device (71.2%), and watching videos was the primary activity (61.3%), while

**Table 2: Child’s Screen Time Habits (n=413)**

Screen Time components	Frequency (n)	Percentage (%)
<b>Average Daily Screen Time</b>		
Less than 1 hour	161	38.98
1-2 hours	143	34.62
2-4 hours	83	20.09
More than 4 hours	26	6.29
<b>Devices Used for Screen Time</b>		
Smartphone	294	71.18
Tablet	76	18.4
Computer/laptop	119	28.81
Television	155	37.53
<b>Activities Engaged in During Screen Time</b>		
Watching videos/ movies	253	61.25
Playing games	144	34.86
Using educational apps or websites	70	16.94
Social media or messaging	20	4.84
<b>Frequency of Entertainment Screen Use</b>		
Rarely or never	107	25.9
Occasionally (1-2 days per week)	80	19.37
Daily	226	54.72

over half (54.7%) used screens daily for entertainment. Parents typically spent 1–2 hours daily on non-work-related screen time (43.1%) and primarily used smartphones (80.1%) (Table 3). About 71% set rules for their own screen use, and nearly 80% set limits on their children’s screen time (Table 5), discussing these rules daily in many cases (57.1%). While most parents believed screen time had both positive (educational development 63.7%, creativity 36.6%) and negative (mental/emotional well-being 52.3%, sleep patterns 38.3%) impacts (Table 4), roughly 72% expressed concern about its effects.

Parental strategies for managing screen use are summarized in Table 5. The majority of parents (79.17%) reported setting limits on their child’s screen time, and 57.14% discussed screen time rules daily.

**Table 3: Parental Screen Time Habits (n=413)**

Screen Time Variables (Parent)	Frequency (n)	Percentage (%)
<b>Average Daily Screen Time (Non-Work Related)</b>		
Less than 1 hour	127	30.75
1-2 hours	178	43.09
2-4 hours	55	13.31
More than 4 hours	53	12.83
<b>Devices Used Parent for Screen Time (Multiple Responses)</b>		
Smartphone	331	80.14
Tablet	36	8.71
Computer/laptop	85	20.58
Television	89	21.54
<b>Frequency of Checking Devices During Family Time</b>		
Rarely or never	162	39.22
Occasionally (2-4 times per day)	215	52.05
Frequently throughout the day	36	8.71
<b>Parents Setting Rules for Their Screen Use</b>		
Yes	294	71.18
No	119	28.81
<b>Screen-Free Activities with Children</b>		
Rarely or never	105	25.42
Occasionally (1-2 days/week)	126	30.5
Daily	182	44.06
<b>Parental Concern About Impact on Child's Well-Being</b>		
Yes	297	71.91
No	102	24.69
Don't Know	14	3.38
<b>Confidence in Being a Role Model</b>		
Yes	272	65.85
No	76	18.4
Don't Know	65	15.73

**Table 4: Parental Perception of Screen Time Impact on Children (n=413)**

Perception Variables	Frequency(n)	Percentage(%)
<b>Satisfaction with Child's Screen Time Habits</b>		
Very satisfied	128	30.99
Somewhat satisfied	140	33.89
Don't know	44	10.65
Dissatisfied	101	24.45
<b>Belief in Positive Impact of Screen Time</b>		
Yes	252	61.01
No	123	29.78
Don't Know	38	9.2
<b>Perceived Positive impacts of Screen Time</b>		
Educational development	263	63.68
Analytical skills	81	19.61
Creativity	151	36.56
Social skills	52	12.59
No positive impact	53	12.83
<b>Belief in Negative Impact of Screen Time</b>		
Yes	284	68.76
No	90	21.79
Don't Know	39	9.44
<b>Perceived Negative Impacts of Screen Time</b>		
Physical health	145	35.1
Mental/emotional well-being	216	52.3
Academic performance	109	26.39
Sleep patterns	158	38.25
No negative impact	49	11.86
<b>Concern About Excess Screen Time Risks</b>		
Yes	330	79.9
No	53	12.83

In terms of self-efficacy, 79.66% of parents expressed confidence in managing their child's screen habits, while 12.34% were not confident, and 7.99% were unsure. When it came to seeking advice on healthy screen habits, 30.99% did so occasionally, 19.61% frequently, and 28.32% were considering it. However, 21.06% of parents reported no need to seek such advice (Table 5).

**Table 5: Parental Practices for Managing Child's Screen Time (n=413)**

Management Practices Variables	Frequency (n)	Percentage (%)
<b>Do you set limits on your child's screen time?</b>		
Yes	327	79.17
No	86	20.82
<b>Frequency of Discussing Screen Time Rules</b>		
Daily	236	57.14
Multiple times per week	76	18.4
Once a week	32	7.74
Never	69	16.7
<b>Confidence in Managing Child's Screen Time</b>		
Yes	329	79.66
No	51	12.34
Don't know	33	7.99
<b>Seeking Advice About Healthy Screen Time Habits</b>		
Frequently	81	19.61
Occasionally	128	30.99
Considering it	117	28.32
No need	87	21.06

## DISCUSSION

This study aimed to explore the screen time practices of children visiting a pediatric clinic, alongside parental perceptions and practices regarding screen use. Given the pervasive presence of digital devices in modern households, understanding these dynamics is crucial for addressing the potential benefits and harms associated with screen time in children. The findings of this study reveal several key insights into the amount of screen time children are exposed to, the type of activities they engage in, and how parents perceive and manage these behaviors.

### Screen Time Patterns and Device Usage

The results indicate that a substantial proportion of children are exposed to screens on a daily basis. Although 38.98% of children spent less than 1 hour on screens and 34.62% spent 1–2 hours daily, nearly one-quarter (26.39%) engaged in screen time beyond the recommended limits (i.e., 2 hours or more per day). Smartphones were the most commonly used device (71.19%), consistent with global trends that highlighted increased mobile device

accessibility among children.<sup>1</sup>The predominance of video and movie watching as the main activity indicates that passive screen consumption remains the primary mode of engagement. This finding is not only in line with international literature<sup>9</sup> but is also observed in regional studies from Nepal and India, where increased access to affordable smartphones has significantly altered children's media consumption patterns.<sup>10,11</sup> Furthermore, while a smaller segment of children engages in gaming or educational activities, this suggests a potential avenue for targeted interventions that promote active and educational use of digital media over passive consumption.

### Parental Screen Time and Influence

Parental behavior is crucial in shaping children's screen habits. Our findings reveal that a significant number of parents themselves engage in screen activities 43.1% reported 1–2 hours of non-work-related screen time and nearly 26% exceeded 2 hours. Although a majority of parents set rules for their own screen use (71.19%) and impose limits on their child's screen time (79.18%), nearly half of the children still exceed recommended limits. This gap suggests that while parental awareness is high, there is a need for more effective strategies to translate these intentions into consistent behavioral control. Research from neighboring countries supports this observation; for instance, studies from Pakistan<sup>12</sup> and India<sup>11</sup> have found that high parental screen time is strongly associated with increased screen exposure in children. These studies emphasize the role of parental modelling where parents' own habits directly influence children's media consumption and suggest that comprehensive family-based interventions may be necessary to mitigate excessive screen time.<sup>13,14</sup>

### Parental Perceptions of Screen Time Impact

The study also highlighted the complex, dualistic nature of parental perceptions. Although 61.02% of parents acknowledged that screen time can have positive impacts citing benefits such as educational development, enhanced creativity, and improved analytical skills, 68.77% also believed that screen time could negatively affect children's mental/emotional well-being, sleep patterns, and physical health. This ambivalence mirrors the global discourse surrounding digital media, where the potential benefits of technology are weighed against its risks.<sup>15</sup> Similar findings have been reported in studies from Nepal and other South Asian countries, where parents express both optimism and concern regarding digital exposure.<sup>12,16</sup> Nearly 80% of parents in our study expressed concern about the risks associated with excessive screen time, suggesting that while awareness is high, the strategies in place to counterbalance these

risks may be insufficient. This highlights the need for developing more robust educational programs that not only increase awareness but also provide practical guidance for managing screen time effectively within the cultural context of Nepal.<sup>10</sup> In Nepal, rapid urbanization, affordable mobile technology, and busy urban lifestyles have led to increased screen time, as digital media becomes a key source of entertainment and education.<sup>16</sup>

Studies conducted in India and Pakistan also report similar trends.<sup>11,12</sup> This regional trend, compounded by limited recreational spaces, poses potential developmental risks for children. To address these issues, targeted public health initiatives and parental education such as co-viewing, active mediation, and the use of parental controls are essential.<sup>1,2</sup> Collaboration among healthcare providers, educators, and policymakers is crucial for developing culturally appropriate guidelines and interventions that promote balanced daily routines and screen-free alternatives. Future research should utilize longitudinal designs and incorporate objective measures, such as digital usage tracking, to validate self-reported data. Intervention studies examining the efficacy of parental education programs would further elucidate effective strategies for reducing excessive screen time.

## CONCLUSION

Overall, this study reveals significant daily screen exposure among children alongside high parental concern and proactive management strategies. Yet, the persistence of excessive screen time among a considerable proportion of children indicates that current measures may be insufficient. Enhancing parental awareness, providing practical management tools, and implementing region-specific interventions are crucial for safeguarding children's physical, mental, and emotional well-being in an increasingly digital age.

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