

Growing Up with Screens: A Study on the Effects of Excessive Mobile Device Exposure in Early Childhood

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Abstract

This study was conducted to determine young children's (Pre-Teens) exposure and impact on excessive use of mobile devices in early age. The children's access and ownership of mobile devices at a very early age has grown substantially in the past decade. The rapidly advancing technology has become a part of children's lives. This current generation of children is growing up in an era where mobile devices are the normal parts of daily lives interaction and communication. However, the early use of mobile phones has a negative impact and badly affected children's social, psychological as well as physical life. Most parents give mobile phones to their children at a very early age to make them busy so they will not disturb them while they are working. Although most parents understand the negative effects of mobiles for children, still they allow their child to use them. This awareness also examined how badly children were affected by using mobile phones and negative impacts of early usage of electronic media. Moreover, it looked into the emerging trend of mobile devices use by children might affect the social development of their children, their ability to develop strong communication skills, and relationships with others.

Keywords: *Mobile Phone Impact, Childhood Phone addiction, Mobile Phone Awareness, Physical Activity, Mental Health, Social Activity.*

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The material presented by the author(s) does not necessarily portray the view point of the editors and the management of the ILMA University, Pakistan.

(Print) 2707-8906 (online) 2788-8304, published by the ILMA University, Pakistan.

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1. Introduction

The current generation is growing up in an era where mobile devices are a part of daily communication and interaction. This campaign is the study of how children are affected by using mobile phones/devices at a very early age. Parents should be aware about the early use of smartphones' effect on child development and health. The trends indicated that children are using mobile devices at a younger age, causing a generational divide between parents and children although with the developmental progression into the children. However, the early use of mobile phones has badly affected children's social, psychological as well as physical life. By exploring parental perception of mobile device usage and how it affects children, the present study contributes to the negative's effects of children using mobile devices. The use of mobile devices first affects their studies, children are not focusing properly on their studies. Excessive use of mobiles damages eyesight (Wartella, E., Rideout, V., Lauricella, A. R., & Connell, S., 2014).

Majority of children own mobile phone devices by the age of six or seven and even one year old also watch YouTube. Overall, children spend about three to five hours each day watching YouTube, playing games and being online using the internet. Mobiles are the device that children are most likely to use to access the internet.

1.1 Background

The early use of mobile phones is associated with several problems and there are many reasons and problems of using mobiles when it comes to children. The continuous use of mobiles means increasing the use of the internet which means the underage access into social networking sites and early exposure of social media platforms which may cause early maturity. Not only this but also the negative use of the internet (Lissak, G., 2018).

There are many parents who give mobile phones to children at a very early age to make them busy so they will not disturb them while they are in a meeting or doing some other work. Although most parents understand the negative effects of mobiles for children but still, they allow their child to use them. These parents may be doing this for their own convenience, but others may not know about the badly impact of smartphones on their child's mental and physical health (Shabbir, T., Nadeemullah, M., & Memon, S., 2020). The child becomes so dependent on them that they cannot even spend a single day without them.

1.2 Scope of Research

The scope of this research is based on children using mobile at a very early age. The scope of the existing study is limited or restricted to the use and effect of mobile devices at the social and physical life of the younger generation. Parents give mobile phones to their children very early for their own convenience but they don't know about how mobile phones impact the lives of their children.

1.3 Research Objectives

1. To examine the extent of mobile device access and ownership among young children.

2. To analyse the psychological, physical, and social impacts of excessive mobile phone use in early childhood.
3. To evaluate parents' awareness and perceptions regarding the harmful effects of early mobile device exposure.
4. To explore the role of mobile device usage in the development of communication skills and social interaction in children.
5. To identify the motivations behind parental decisions to allow mobile device usage at an early age.

1.4 Research Questions

1. What is the average age at which children are introduced to mobile devices, and how frequently do they use them?
2. What negative physical, psychological, and social consequences are associated with early and excessive mobile device usage in children?
3. How aware are parents of the developmental risks associated with mobile device exposure at an early age?
4. In what ways does early mobile device usage affect a child's ability to communicate and form social relationships?
5. What are the primary reasons parents allow their children to use mobile devices despite knowing the risks?

2. LITERATURE REVIEW

The widespread integration of mobile devices into daily life has had a profound influence on children's development, particularly in early childhood. Over the past decade, research has increasingly focused on the effects of early exposure to digital technology on children's cognitive, physical, and social well-being. The American Academy of Paediatrics (2016) emphasizes that children under the age of two should avoid screen time altogether, as their brains are in critical stages of development. Despite these recommendations, many children are regularly using mobile devices from infancy (Kabali et al., 2015).

Multiple studies have highlighted the psychological and behavioural consequences of excessive screen exposure. Domoff et al. (2019) developed the Problematic Media Use Measure to assess screen media addiction in children, revealing a link between overuse and emotional dysregulation. Similarly, Chassiakos et al. (2016) found that early and excessive screen media use contributes to attention problems, sleep disturbances, and delays in language acquisition. These findings are supported by Strasburger, Hogan, and Mulligan (2013), who discuss media's potential to contribute to issues such as obesity, poor academic performance, and aggression.

Physical health is another area of concern. Lissak (2018) identifies prolonged screen time as a cause of sedentary behaviour, which contributes to health problems such as obesity, eye strain, and disrupted sleep cycles. In the same vein, Sisson et al. (2010) found that increased screen time is correlated with reduced physical activity among children and a higher risk of being overweight.

The impact on social and language development is equally alarming. Linebarger and Walker (2005) suggest that television and mobile device exposure in infancy is associated with lower vocabulary and weaker language skills later in life. Vandewater, Bickham, and Lee (2006) highlight that screen-based entertainment often replaces critical free-play activities, leading to missed opportunities for developing interpersonal and communication skills.

From a socio-cultural perspective, parents' attitudes and behaviours greatly influence children's media use. Nikken and Schols (2015) argue that while parents are aware of the negative implications of media exposure, they often use devices as tools for distraction and convenience. Wartella et al. (2014) support this by noting that many parents resort to screens to keep children occupied, especially in busy households.

The developmental implications of this trend are vast. Livingstone and Blum-Ross (2020) explore how parental hopes and fears around technology shape digital childhoods, often resulting in unbalanced media diets. Hinkley et al. (2014) found that early media exposure is linked to poorer well-being outcomes, including reduced self-regulation and socio-emotional difficulties. Similarly, Radesky, Schumacher, and Zuckerman (2015) discuss both the benefits and the unknown risks of interactive media in early development.

In the context of Pakistan, local studies are beginning to reflect similar concerns. Chandio, Madni, Shabbir, and Rahim (2024) explore digital mobilization among youth and highlight the growing dependency on mobile devices. Shabbir, Nadeemullah, and Memon (2020) and Shahid, Ahmed, Shabbir, and Hussain (2024) point out how the digital environment is influencing younger demographics in complex socio-cultural settings. Mahesar et al. (2023) and Moroojo, Shabbir, and Hussain (2024) further examine how media exposure shapes attitudes and behaviors, including increased social isolation and reduced community interaction among children.

Finally, Kucirkova (2019) explores the future role of smartphones in early childhood education, suggesting the need for controlled and purposeful integration rather than unrestricted access. The question, therefore, is not merely whether children should use digital devices, but how, when, and under what circumstances, to mitigate harm and foster healthy development.

3. METHODOLOGY

This study adopts a mixed-method approach, combining both quantitative and qualitative research techniques to comprehensively understand the exposure and impact of excessive mobile device use among young children. Quantitative data will be collected through structured questionnaires administered to parents, caregivers, and early childhood educators, focusing on children's screen time habits, behavioural changes, and health outcomes. Additionally, qualitative insights will be

gathered through interviews and focus group discussions to explore parental attitudes, perceptions, and lived experiences. The target population includes children aged 2 to 8 years and their parents in urban and semi-urban areas. A stratified random sampling technique will ensure diverse socio-economic representation. Data will be analysed using descriptive statistics and thematic analysis to draw correlations and uncover deeper behavioural patterns. Ethical considerations such as informed consent, confidentiality, and voluntary participation will be strictly maintained throughout the research process.

3.1 Marketing Strategy

- Awareness campaign message
- Engagement to reach and raise more awareness
- Host awareness events
- Social focus
- Infographics

3.2 SWOT

Table 1: SWOT Analysis – Campaign on Early Mobile Use

Strengths	Weaknesses	Opportunities	Threats
• Improvement in child development	• Lack of awareness	• Engage with local services and third sector organizations	• Using mobile to gain immediate knowledge for personal/academic use
• Improvement in academic performance	• Illiteracy		• Ability to communicate in emergency situations
• Proper sleep	• Funds limitation		
• Lack of health issues			
• Lack of inappropriate media			

3.3 Target Audience

Segment A and B is selected as target market. These are the people who have the ability to change a society. They are quick at adapting changes and believe in negative impacts of mobile devices. Also because the campaign will be most relevant for them, if people learn about their negative impact on their children, there is a better chance of them implementing it in their lives.

3.4 Consumer Psychology

Consumer psychology is responsible for understanding how people think and what motivates them, which allows them to develop successful strategies that will lead to more audience or other desired outcomes for the campaign. It is important to understand human behaviour so that they can be effective in build campaigns. Consumer psychology has the knowledge necessary for helping implement successful strategies for the campaign.

3.5 Campaign Objective / Goals

The main goal and objective of a campaign is to create a media narrative or control the spread of information about the campaign to give awareness to the main target audience. The campaign goal, aim or objective states what needs to change, and to what extent, in order to solve the problem addressed by this campaign.

- Attracts media attentions
- Generate awareness about campaign
- Inform the public or target audience
- Enhance the campaign reputation
- Build stakeholder relations
- Persuade

3.6 NGO- Startup- Agency (Campaign)

NGO: Save the children foundation

The Save the children foundation is an NGO formed in 2021.

The save the children foundation focuses on creating awareness, academic education, Parent Training and Teacher Development. The campaign main aim is to build awareness and work to promote and improve the social and political conditions of the society and children on a broad scale. The NGO uses the arts and technologies to innovate, create and develop new strategies to raise awareness to parents about the early usage of mobile devices.

3.7 Social Media: (Channels)

INSTAGRAM: Instagram is a brilliant tool for marketers and businesses to reach and connect with audiences to build a community. Instagram helps to grow the campaign awareness and also to reach the target audience. It is the most effective to build awareness and persuade the target audience.

FACEBOOK: Facebook remains the single and also most effective social media marketing platform out there. A Facebook for campaign awareness can help connect you with target audience and offer key information about your campaign.

3.8 Key Message / Big Idea

The key message and big idea behind this campaign is to build more awareness towards the target audience about the negative impacts of children using mobiles in early ages.

3.9 Action Plan

The action plan is to raise awareness. Raising awareness is an important process for the campaign; it helps in seeking to inform and educate people about a topic or issues to the main target audience. Through the help of Digital Presence, it can build an identity for campaign. Being on social media platforms also helps in improving the campaign and gaining more reach. It can make it easy to communicate with online communities, generating strong leads to capturing and simulating interest in a campaign.

3.10 Campaign Title

Early Usage of Mobile Phone

Slogan:

“SAY IT WITHOUT MOBILE PHONES”

4. FINDINGS AND PROMOTIONAL STRATEGY

4.0.1 Content promotion strategies

- Sharing a post on social media platforms.
- Linking back to new content from old posts on social media.
- Referencing new articles in social media platforms, or any discussions with people who might be interested in the topic
- Doing outreach/link building to gain backlinks to your content. This will also help in boosting the content in the search results.
- Running a series of posts on social media platforms mostly viable for content that's focused on promoting the campaign.
- Optimize the visual images to support easy sharing.

4.1 Advertising Objectives

A. Increase Lead Generation

Lead generation is the process which helps in creating audience interest in campaign. With the help of strong lead generation, it can attract leads (the potential target audience) into advertising objective. This process also helps in the capturing and simulating interest in a campaign for the purpose of developing leads.

B. Awareness

Awareness-raising is an important process for the campaign; it helps in seeking to inform and educate people about a topic or issue to target audience with the intention of influencing their attitudes, behaviors and beliefs towards the achievement of a defined purpose or goal of the campaign.

C. Grow Digital Presence

A digital presence is how campaigns appear on the internet or online. Through an online presence, it can help in building an identity for a campaign, ideally one that can easily stand out. A digital presence can also make the campaign appear more credible.

D. Social Media Engagement

Being on social media is a good way to see what the audience likes and dislikes about the campaign. It can help in improving the campaign and gain more reach. It can also help and make it easy to communicate with online communities. Social media engagement measures the public shares, reach, likes and comments for campaigns.

E. Engage Target Market

Engage Target Market is an effective strategy or plan to increase campaign satisfaction and awareness by having more positive interactions with the target audience.

F. Persuade

Persuasive advertising is a method of advertising objectives that helps to convince an audience. This advertising method attempts to frame campaign in a positive light and convince the audience about the benefits of the campaign.

G. Reputation

Positive reputation enhances the campaign, by advertising a positive reputation, it helps in establishing trust with the audience. The strong positive reputation attracts better people to the campaign.

H. Focus on the USP

Focus on USP is the essence that makes differ from others and makes the campaign stand out more.

4.2 Advertising Strategies

Print and Graphic Arts Media

- Newspaper
- Billboards and posters

Electronic Media

- *Internet Advertising:* Online advertising is one of the most effective ways for campaigns to expand their reach and find the target audience. Online or internet advertising helps to inform, persuade, remind, and educate the target audience about the campaign.
- *Mobile Advertising:* Current trends in mobile advertising involve major use of social media platforms such as Instagram and Facebook. Mobile advertising is similar to online advertising and is increasingly gaining importance as a method of reaching awareness.

4.3 Tone of Voice

Rational tones are used in the campaign, which are especially effective when the idea contains many features that will appeal to the audience's sense of reason. Rational tone seeks to communicate the message in a simple and direct way. Rational tone is used for something that makes sense or that could be based in fact or someone who behaves and thinks logically. So, this is the reason for using this tone.

4.4 Interview Results

Q.1: What local issue did you identify to counter your campaign?

Local Issues

The local issues that are being identified for our campaign is the current generation is growing up in an era where mobile devices are a part of daily communication and interaction.

Children are using mobile devices at a very younger age, Parents give their own mobile phones to their children very early that causing a generational divide between parents and children although with the developmental progression into the children.

However, the early use of mobile phones has badly affected children's social, psychological as well as physical life and badly impact on it.

Q.2: What primary and secondary research data have you gathered relevant to this local issue to support your campaign concept?

The primary and secondary research for the campaign is we should start the online survey questionnaire form and collect the responses of peoples or parents according to campaign. People give their reviews, ideas and feedback regarded to campaign which support our campaign.

Q.3: Who is the primary target audience within your local community/country/region? Provide specific details and descriptions of the ideal candidate to discover your campaign.

Target Audience

The main target audience is the parents and guardians.

Besides that, we also target the Upper-class families because they give or buy personal mobile phones for their children.

Other than we also targeted middle class families because they can't afford to give personal but they give access of their own mobile phones.

Q.4: What is the key message you want to communicate to your target audience, and what slogan will you use to effectively convey this message? How will this messaging appeal to your target audience?

Key Message

The key message and big idea behind this campaign is to build more awareness towards the target audience about the negative impacts of children using mobiles in early ages.

The slogan we use is: “SAY IT WITHOUT MOBILE PHONES”. This slogan is effective and going appeal to our main target audience especially to the parents who gives mobile phones at a very early age.

Q.5: Provide a list of tactics you will use to reach your audience and describe how they support your overall integrated campaign strategy.

Tactics

- Visit the target places like schools where parents gathered so that we can give awareness and get more responses about parents.
- Create a online survey form about the campaign survey so get the responses of people and parents according to their mindsets and getting feedbacks.
- Social media marketing through Facebook and Instagram about the campaign. It is the most effective to build awareness and persuade the target audience.
- Create banners and posters about our campaign that will also help in reaching the target audience.

Q.6: How will your campaign impact, help or change your local community? Please clearly define what success looks like, and outline the benchmarks you plan to demonstrate the success of your campaign strategy.

Impact of Campaign

The campaign is all about the giving awareness about how badly impact of early usage of mobile phones on children development, health as well as psychological and physical life.

By help of this awareness campaign aware target audience about the negative impacts which may help or change our local community and decreases the ratio of harmful effects on child's health as well as psychological and physical life.

4.5 Analysis of Responses (Qualitative)

Table 2: Responses Analysis

Theme	Supporting Evidence from Interview	Implications for Campaign
Early Exposure to Mobile Devices	Children use mobile devices at a very young age; parents give their phones to children early.	Highlights the root local issue – need to address negative developmental, psychological, and social effects.
Generational Divide	Parents and children face a gap in communication and interaction due to technology use.	Campaign must bridge this divide by educating parents about alternative communication and engagement.
Negative Impacts on Children	Early use badly affects social, psychological, and physical life of children.	Strong awareness message : “Say it without Mobile Phones” → focuses on children’s wellbeing.
Community Research & Feedback	Online survey/questionnaire to gather parents’ responses, reviews, ideas, and feedback.	Two-way communication approach → ensures campaign reflects real community concerns.
Target Audience – Parents & Families	Main focus on parents and guardians, especially upper-class families (who buy phones for kids) and middle-class families (who share their phones).	Campaign must be tailored with segmented messaging for different socioeconomic groups.
Messaging & Slogan	Key message: build awareness of negative impacts; Slogan: “SAY IT WITHOUT MOBILE PHONES.”	Clear, emotionally resonant slogan appealing directly to parents, motivating behavior change.
Tactics & Strategies	- School visits - Online surveys - Social media campaigns (Facebook & Instagram) - Posters and banners	Integrated approach combining offline (schools, posters) and online (social media, surveys) to maximize outreach and credibility.

Community Impact & Success	Campaign aims to reduce harmful effects on children's health, psychological, and physical development. Success = visible awareness, parent engagement, reduced harmful phone use.	Clear benchmarks: awareness levels, parent feedback, reduced early mobile phone use.
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4.6 Survey Result (Quantitative)

Table 3: Results of Survey

Survey Question	Response Breakdown	Key Insight
Demographics	Gender: 42% Male, 57% Female Age: 16–20 (15%), 21–25 (33%), 26–30 (21%), 31–35 (25%), 36+ (14%) Total Responses = 111	Majority respondents are female (57%) and young adults (21–35 = 79%) .
Q1. Age when kids first use mobiles	1–4 yrs (45.9%), 5–8 yrs (25.7%), 13+ yrs (23%)	Nearly 46% exposed before age 5 , showing very early mobile use.
Q2. Age when children get their own phone	11–15 yrs (53%), 16–20 yrs (30%), ≤ 10 yrs (7%)	Most children own a mobile by early teens (11–15) .
Q3. Is it effective to give mobiles to kids?	No (67%), Yes (32%)	Majority believe giving phones to kids is not effective .
Q4. Main reasons parents give mobiles	Entertainment/break (62%), Education (15%), Keep contact with parents (14%), Contact friends (4%), Others (3%)	Entertainment dominates (62%) , rather than educational needs.
Q5. Main use by children	Gaming (33%), Social Media/Internet (36%), YouTube (27%)	Majority use = social media/internet followed by gaming.
Q6. Time spent daily on phone	5–6 hrs (45%), 7+ hrs (22%), 3–4 hrs (18%), 2 hrs (12%)	67% spend 5+ hours daily , very high screen time.
Q7. Positive impact on child development?	Yes (81%)	Interestingly, most parents (81%) think phones help development , despite earlier concerns.
Q8. Awareness of harmful effects	Aware but still give (54%), Not aware (45%)	Many parents aware yet continue giving phones (behavior–attitude gap).
Q9. How often parents check children's phones	Never (36%), Always (26%), Rarely (18%), Sometimes (19%)	Over 1/3rd never monitor phones , leaving risks unchecked.
Q10. Monitoring text/content shared	Not monitor (55%), Monitor (45%)	Majority do not monitor children's online/text activities.

Q11. Concern if child brings phone to school	Concerned (80%)	Very high concern over school use.
Q12. Usefulness of awareness campaign	Strongly Agree (46%), Agree (45%), Neutral (8%)	91% positive feedback, strong support for campaign.

4.7 Discussion

1. What age are children when they first use a mobile phones?
 - 45.9% of kids first use mobile phone at age of 1 to 4.
 - 25.7% of children first use mobile phone at age of 5 to 8.
 - 23% of children did not use mobile phone until they were 13 or Above.
2. In which age are children when parents buy or give them their own mobile phones?
 - 53% parents let their children have their own mobile phone by the age of 11 to 15.
 - 30% children have a own phone at a age of 16 to 20.
 - Nearly 7% parents buying or giving their child first phone at 10 or under.
3. In your opinion, is it effective to give mobile phones to kids?
 - 67% think that giving mobile phones to kids is not effective.
 - 32% think that giving mobile is effective
4. What are the main reason parents give their child a mobile phone.
 - 62% parents allowing their child to use mobile to keep them entertained and give themselves a break.
 - 15% for educationally beneficial.
 - 14% for keep in contact with them.
 - 4% for keep in contact with friends.
 - Others:
 - 1% we gave them for educational purpose but they misuse.
 - 1% to keep them busy so parents can carry on their chores.
 - 1% parents do not give attention to children so they give them phones.
5. What do children mainly use mobiles for?
 - 33% of kids use their phone for gaming.
 - 36% spending time on social media or internet.
 - 27% of kids watching youtube.
6. How much time do kids spend a time on their phone in a day?
 - 45% of kids spending 5 to 6 hours on mobile phones.
 - 22% of kids spending more than 7 hours.
 - 18% spending 3 to 4 hours.

- 12% spending 2 hours.

7. Do you think that giving or having a mobile phone has a positive impact on child development?

- 81% parents think that the use of mobile phones has a positive impact on their kid's development.

8. Do you think that parents should be aware about harmful effects of early usage of mobile phones?

- 54% are aware about harmful effects early usage of mobile phones but they still give them.
- 45% are not aware about harmful effects.

9. How often do parents have to check the mobile phones or history of their children?

- 36% of never check their children mobile phones.
- 26% of always check their children mobile phones.
- 18% of rarely check their children mobile phones.
- 19% of sometimes check their children mobile phones.

10. Do you, as a parent/guardian monitor your child's text messages and other content that is shared via their mobile phone?

- 55% of parents not monitor child's text messages and other content that is shared via their mobile phone.
- 45% of parents monitor their content that is shared via their mobile phone.

11. If your child brings a mobile to school, are you concerned that they may be accessing data, rather than being engaged in learning activities during class time?

- 80% of parents concerned about if your children brings a mobile to school.

12. Is this awareness campaign is helpful for parents/guardians and children?

- 46% strongly agree that this awareness campaign is helpful for parents/guardians and children.
- 45% agree that this awareness campaign is helpful for parents/guardians and children.
- 8% are neutral.

5. CONCLUSION

This study sheds light on the growing concern regarding young children's exposure to mobile devices at an early age and its far-reaching consequences. As mobile technology becomes increasingly embedded in daily life, its usage by children—

often unsupervised and excessive—has raised significant developmental, psychological, and social concerns. The findings suggest that early and frequent use of mobile devices can negatively impact children's physical health (such as vision issues and poor posture), mental well-being (including emotional detachment and behavioral issues), and social development (such as reduced face-to-face interaction and communication skills).

Despite being aware of these risks, many parents still provide mobile devices to their children as a convenient way to manage their time or reduce disturbances during work. This paradox highlights the urgent need for awareness campaigns and practical parenting strategies that promote healthy digital habits from an early age.

Ultimately, while mobile devices are not inherently harmful, their unregulated and excessive use during formative years can have long-term implications. Therefore, a balanced approach—guided by informed parenting and supportive policies—is essential to ensure that technology supports, rather than hinders, the healthy development of the next generation.

5.1 Recommendations

A. Parental Guidance and Supervision

Parents should monitor and limit the screen time of their young children, ensuring that mobile devices are used under supervision and only for age-appropriate, educational content.

B. Digital Literacy and Awareness Campaigns

Governments, schools, and healthcare institutions should initiate awareness programs to educate parents and caregivers about the developmental risks associated with early mobile device exposure.

C. Encouraging Alternative Activities

Parents and educators should promote physical play, storytelling, arts, and face-to-face interactions as healthier alternatives to mobile use, helping children develop cognitive and social skills naturally.

D. Establishing Screen Time Guidelines

Pediatricians and child development experts should issue clear, evidence-based screen time recommendations for different age groups to guide families in making responsible choices.

E. Role of Educational Institutions

Schools and early childhood centers can play a proactive role by integrating digital wellness into their curriculum and advising parents on healthy technology practices at home.

F. App and Content Control

Developers and tech companies should collaborate to create more child-friendly, time-restricted, and educational apps that encourage balanced usage while discouraging addictive patterns.

G. Modelling Healthy Behavior

Adults should model balanced digital behavior themselves. When children observe mindful mobile usage by parents and teachers, they are more likely to adopt similar habits.

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