The Meaning and Impact of Screen Time on Emotional Regulation in Children Aged 5-6 Years

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Abstrak

Increased screen time (ST) in children aged 5–6 years has various effects on their emotional development. Excessive ST can hinder children's ability to recognize and control their emotions. This study aims to explore the meaning and impact of screen time (ST) on children's emotional regulation. The study employed a descriptive qualitative approach, using interviews and observations with six parents of young children. Informants were selected using purposive sampling with the following criteria: (1) parents with different educational backgrounds (high school and bachelor's degree) to see variations in perceptions of ST and children's emotional regulation; (2) parents whose children routinely used ST for 5–8 hours per day; and (3) communicative parents, namely mothers and fathers of children aged 5–6 years who were willing to participate in the study. The results showed that parents perceived ST as a means of entertainment, learning, and calming their children. These findings were obtained through a thematic analysis of interview transcripts and observations, which revealed three primary meanings. ST evoked ambivalent emotional responses: children displayed positive responses, such as happiness, joy, calm, and imitative behavior, when using ST; however, they also exhibited adverse reactions, including anger, tantrums, sadness, and bargaining, when ST was discontinued. Excessive use without time limits can weaken children's ability to control their emotions. ST management strategies are implemented by setting time limits, determining goals, and considering the child's condition. These findings show that ST plays a dual role in children's emotional regulation.

Keywords: Early childhood, emotional regulation, parenting, screen time

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INTRODUCTION

The development of digital technology has brought about significant changes in the learning and play patterns of young children. Digital devices, including televisions, gadgets, tablets, and computers, have become an integral part of children's daily lives (Fitriyanti et al., 2024; Zhao et al., 2025). Screen Time (ST) was initially used as an alternative to support learning, entertainment media,

and early childhood skills. The fact is that easy access to digital devices often causes children to become acculturated to ST from a preschool age (Karki et al., 2025).

Data from the Central Statistics Agency (BPS) in 2024 shows that 58.25% of children aged 5-6 years in Indonesia have used digital devices, and 51.19% of them have accessed the internet (KOMDIGI, 2025). This figure certainly indicates that children of that age have spent more time on ST than socializing with their surroundings. The high frequency of children using ST poses a significant risk to their personality development, in which parenting patterns also play an important role (Xie et al., 2025; Zhao et al., 2025). Parents who rarely interact with their children cause them to spend more time in front of screens, thereby reducing their social competence (Ma et al., 2024). Furthermore, this can exacerbate attention problems and limit children's response to emotional regulation stimulation (Livingstone & Pothong, 2022; Tamana et al., 2019; Zhou et al., 2024).

Research shows that emotional regulation can help children recognize, understand, and manage their emotions optimally (Gomis et al., 2025). This lack of social interaction can also exacerbate problems with attention and emotional response in children, making them more prone to difficulty controlling their anger and calming themselves down in certain situations. The development of emotional regulation from an early age supports emotional and social balance in children throughout their lives, into adulthood.

A warm and responsive relationship with parents, especially between mother and child, greatly influences a child's emotional regulation (Hollenstein et al., 2017) . Attentive and consistent social interaction guides children to learn to understand, manage, and express their emotions optimally. However, the dominance of ST, which controls children's free time, can reduce the quality of parent-child interaction, thereby directly impacting overall emotional development and reducing children's academic participation (Gomis et al., 2025; Moh.fauzan, 2023).

Based on previous research conducted by Yu et al (2025) Behavioral problems such as emotional and antisocial symptoms are often experienced by children who spend more time in front of screens. In addition, Meng et al (2024), identifying children's behavior in restraining, inhibiting, and choosing appropriate responses in a situation is positively associated with low ST use in early childhood. Previous studies have been dominated by quantitative research focusing on the duration of ST or its impact on children's behavior. In contrast, parents' perspectives on ST and its impact on children's emotional regulation have rarely been analyzed. Previous studies have also seldom examined ST management strategies from the parents' perspective.

This study employs a qualitative approach, utilizing interviews and observations, to explore parents' experiences, examine the meaning of ST for children (in terms of entertainment, learning, and comfort), and analyze its impact on emotional regulation. This approach presents a new perspective that enriches our understanding of digital-child interactions and emotional parenting practices. The high exposure of ST to early childhood in Indonesia poses risks to children's emotional regulation, social interaction, and academic engagement. Therefore, understanding the meaning of ST from the parents' perspective and management strategies is essential to support children's optimal emotional and social development, while providing a scientific basis for appropriate digital parenting interventions. This study aims to explore the meaning and impact of Screen Time on the emotional regulation of young children.

METHODOLOGY

Type of Research

This study uses a descriptive qualitative approach. This approach was chosen because the purpose of the study is to explore in depth the meaning and impact of ST use in regulating the emotions of early childhood.

Time and Place of Research

This research was conducted in May and June 2025 in the Wua-wua District, Kendari City, Southeast Sulawesi. Observations of informants were performed for 4-5 days per week, with each session lasting 4 hours. The duration of the observations varied according to the schedule and availability of each informant. Data collection lasted for a total of eight weeks.

Research Objectives

The research informants consisted of six parents. The specific criteria applied were: 1) Parents with different educational backgrounds (bachelor's degree and high school diploma) to observe different perceptions regarding ST and children's emotional regulation; 2) Children who engage in ST regularly for 5-8 hours/day; 3) Parents who are communicative in this regard, namely mothers of children aged 5-6 years.

Data Collection Techniques

Data collection techniques were carried out through observation, interviews, and documentation. Observations were made by observing the behavior of children and parents in order to obtain information related to the meaning of ST for parents and the impact of ST use on children's emotional regulation. Furthermore, semi-structured interviews were conducted with each parent, lasting 30-45 minutes, using interview sheets that had been prepared prior to the study. There were four general questions and 29 in-depth questions related to the research objectives during the

interview process. Data were also collected through documentation, including voice recordings and photographs.

Data Analysis Techniques

Data analysis in this study used Miles & Huberman's analysis, which consists of data collection, data reduction, data presentation, and conclusions. a) Data collection was conducted through observation, semi-structured interviews, and documentation. Observations were conducted to record the behavior of children and parents in relation to Screen Time (ST) usage, aiming to gain an understanding of the significance of ST for parents and its impact on children's emotional regulation. Semi-structured interviews were conducted with each parent for 30–45 minutes, using interview guidelines compiled based on the research objectives and literature review. Additional documentation, including audio recordings and photos, was used to support the validity of the data and reinforce the observation results.

Data reduction was carried out by selecting, summarizing, and focusing on interview transcripts, observation notes, and documentation in accordance with the research objectives. Parents' statements regarding ST use were categorized into themes of the meaning of ST and its impact on children's emotional regulation. c) Data presentation was carried out through tables, descriptive narratives, and direct quotes from informants to clarify patterns and relationships between themes. d) Conclusions were drawn by identifying the main themes from the patterns that emerged, examining consistency between informants, and triangulating data between interviews, observations, and documentation to ensure the validity of the findings.
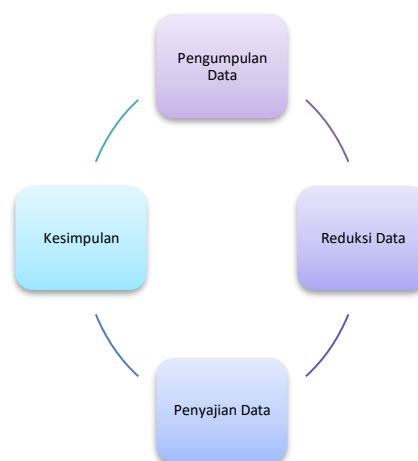

Figure 1. Miles & Huberman Research Process

RESULTS AND DISCUSSION

RESULTS

The study's results provide an overview of the research subjects. The data on the informants involved in this study are presented in Table 1.

Table 1. Research Informants

Informant Name	Age (Years)	Gender	Highest Level of Education	Occupation
MS	28 years old	Female	High school	Housewife
LM	34 years old	Female	Vocational school	Housewife
NF	29 years old	Female	Bachelor's degree	Housewife
FT	34 years old	Female	Bachelor's degree	Temporary employee
ES	33 years old	Female	Bachelor's degree	Housewife
TA	32 years old	Female	High school	Housewife

1. The Meaning of ST for Parents

Current technological developments have also encroached on the activities of young children. This has led to a situation where children are dependent on the use of ST. The interview results show that the meaning of ST differs among parents. Five out of six parents expressed different meanings of ST. This is evident from the interview results.

"ST is the time children spend playing with their cell phones or watching TV for the purpose of learning through educational videos and game applications." (Ms. MS, Informant 1)

The results of observations conducted by researchers indicate that children frequently watch videos on television sets or mobile phones. Children spend 6-8 hours a day watching videos. Furthermore, informants 2, 4, and 6 interpret ST as a medium of entertainment and emotional support for children. This can be seen from the results of interviews conducted by researchers, among others.

"I give my child a cell phone to fill their free time, and also so that my child can be calm and not throw tantrums when I am focused on work." (Mrs. LM, Informant 2)

Informants 4 and 6 also stated similar things, that ST was used as a medium to calm children down while their mothers were working. This statement illustrates that ST is used as a medium of entertainment and to regulate children's emotions. The interview results validate the researcher's findings from observation, which showed that the children's behavior while watching drawing videos, Doraemon cartoons, and Anomali Rembo Rubi was characterized by interest and calmness, indicating that they were no longer focused on their surroundings. Unlike the previous informant, Mrs. NF (informant 3) interpreted ST as a learning medium rather than just focusing on entertainment. The results of the interview with Mrs. NF stated that.

"I allow my child to watch TV for a maximum of one hour per day, and I supervise the programs they watch. I see that this activity helps increase their vocabulary and improve their pronunciation." informant 3.

These results are consistent with observations that researchers have often made, noting that parents frequently restrict cell phone access to the YouTube Kids app in the morning and evening, just before their children use their cell phones. Furthermore, informant 5 interpreted ST as a medium of entertainment. Observations showed that children appeared enthusiastic when playing with their cell phones and were focused, often ignoring their surroundings. The results of an interview with Mrs. ES, informant 5, supported this.

"ST as part of daily life, namely when children have free time, they will spend time playing with their cell phones." Informant 5.

Informants interpreted ST differently depending on the parents' motives for providing it. Mother MS interpreted the presence of ST as an integral part of her child's life, using it as a medium for entertainment and learning. Mothers, LM, FT, and TA interpreted ST as a means of providing entertainment and emotional support for young children. Furthermore, mothers NF and ES interpreted ST as a medium of entertainment for children.

2. The child's emotional reaction

Emotional reactions may arise due to intervention in this case, the use of ST. Responses across several subjects in this study varied, so they were classified into two groups: reactions during ST and reactions after ST. All six informants interpreted the positive and negative emotional impacts that were apparent in children who used ST every day. The results of observations of the child from informant three show that the child often responds to ST activities with happiness and joy throughout the duration of ST. The child appears happy, focused, seated, and sometimes smiles while playing with the cell phone—the results of an interview with informant three support this.

"When my child is given a cell phone, he immediately welcomes it with joy, sits quietly, and sometimes dances," said informant 3.

The presence of ST among young children elicits varied positive responses; however, children generally appear calm during ST. Furthermore, the three informants focused not only on the children's calm responses but also on their behavior. Informants 1, 2, and 5 noted that children often imitate the movements and speech of children from the content they watch. Thus, ST systematically emphasizes emotional impact. Negative responses frequently arise when ST is stopped, as seen in children crying and throwing tantrums. This is also in line with the information provided by informants in the following interviews.

"When my child is stopped from playing with their cell phone, they immediately throw a tantrum and cry," said informant 1.

This is clearly visible to researchers: the child begins to stamp their feet, clench their fists, and cry loudly.

"My child sometimes asks for more time when he hasn't finished playing with his cell phone, but if I force him to stop, he sometimes cries, though not for long. I calm him down with a hug," said informant 3.

Observations of the child of informant 3 reveal that when screen time is stopped, the child responds by bargaining about the time. However, if this approach is unsuccessful, the child exhibits sad expressions and cries. Based on the findings from six informants, children's emotional reactions to screen time can be divided into two types. During use, children tend to exhibit positive responses, such as feelings of happiness, joy, and calmness, as well as imitative behavior. However, when Screen Time is stopped, children often display adverse reactions such as anger, tantrums, sadness, or attempts at bargaining. This shows that Screen Time intervention affects children's emotional dynamics, both positively and negatively.

3. The Role of ST in Children's Emotional Regulation

Interviews with six informants showed that Screen Time (ST) plays a dual role in regulating children's emotions. ST is considered helpful, especially when parents are busy with other things besides parenting. The majority of informants said that ST is effective in calming children who are fussing or having tantrums. In informant 6, the observation results showed that when a child cries or gets angry for no apparent reason, giving them ST can calm them down. The informant's statement reinforced this:

"My child often cries because he gets bored quickly with toys or repetitive activities, so I let him use ST to calm him down. Of course, I do this within time limits," said informant 6.

"I've noticed that the more intensely my child plays with his cell phone, the more often he throws tantrums and is difficult to calm down, especially when he is stopped, unless he is given something he likes," said informant 2.

Thus, it can be concluded that Screen Time plays an ambivalent role in regulating children's emotions. On the one hand, ST serves as a tool that helps parents calm their children when they are fussy or throwing tantrums. However, on the other hand, excessive and unregulated use can actually weaken children's ability to control their emotions. This can be seen from the increased intensity of tantrums and the difficulty children have in calming themselves down when access to ST is stopped.

4. Parent Management Strategy

The management of ST by parents aims to describe the parenting patterns and interventions used to help children regulate their emotions. The discussion focuses on the strategies used and the considerations underlying the provision of ST. In general, the six informants agreed that ST was used when children showed signs of boredom, fussiness, or needed entertainment. Some parents also view ST as a tool to calm children and divert their attention when no other enjoyable activities are available. The results of interviews with three informants are as follows.

"I allow my child to watch television when he is fussy, but with limited viewing time," said Informant 6.

"Television viewing is limited to a maximum of one hour, to provide entertainment for the child, especially if there are no other enjoyable activities," said Informant 1.

"Television is provided as a means of learning and entertainment, but it is balanced with time limits," said Informant 3.

The results of the observation indicate that the three informants, namely Informat 6, Informat 1, and Informat 3, tend to give ST to children as a means of calming them down when they are fussy or require attention. Informant 6 uses ST directly as a calming tool. Meanwhile, informant 1 gives ST when parents are busy or have specific activities, so that children remain calm and avoid tantrums. As for informant 3, ST was given occasionally when the child was fussy or when the mother needed to finish housework, with a predetermined duration. From these findings, it can be seen that, although the background situations and reasons for use differed, the primary purpose of administering ST in these three cases was similar: to calm the child while ensuring that its use was not excessive.

The results of interviews with the other three informants showed different considerations in the use of ST in children. Based on the results of observations with informant 4, ST was used as a calming tool. This finding was consistent with the interview results, which showed that ST was used to distract children who were bored, especially when no other alternative activities were available. Furthermore, observations of informant 5 revealed that ST was administered when parents were busy and wanted to prevent their children from being fussy. This aligns with the informant's statement in the interview, which indicates that ST was allowed when children felt bored and there were no toys, particularly to prevent tantrums. Unlike informant 2, the observation results showed that the informant used ST as a tool to calm children.

The results of the interview with informant 2 indicated that the informant administered ST under certain conditions, such as when the child was bored or wanted to imitate their friends. These results show that although each parent has different methods, they both believe that the use of ST

needs to be controlled. Setting a precise duration and purpose is considered essential to avoid adverse effects, such as addiction or use that is not balanced with the child's needs.

The management of ST by parents can be understood as part of a parenting strategy and a form of emotional intervention aimed at helping children calm down and reduce fussy behavior. However, it still requires wise regulation to prevent a negative impact.

DISCUSSION

Positive parenting plays a vital role in supporting child development because it can foster understanding, shape a healthy personality, and reduce children's dependence on screen time (ST). A warm, accepting parenting style that involves children in daily activities provides them with space to learn how to express their emotions in a healthy manner. These findings are in line with the view that Garcia et al (2024) and Zhao et al (2025) That positive parenting can foster emotional balance and reduce problematic behaviors that arise from excessive ST use.

This study found that parents interpret ST in different ways. Most informants consider ST as a means of entertainment and a tool to calm children when they are fussy, while others interpret ST as a learning medium. These differences in interpretation show that parents' perceptions greatly influence how ST is used and the duration of its use. This is in line with the findings Sanders et al (2016) and Hawi & Rupert (2015) that parental perceptions and practices will influence technology-related parenting strategies, which in turn will impact screen time duration, the types of content children access, and potential behavioral problems. When screen time is positioned solely as entertainment or a tool for emotional control, parenting patterns tend to be permissive, which can risk hindering children's emotional regulation development.

Research shows that parents often use screen time as a tool to calm their children, in line with the practice of giving gadgets as emotional control devices. Dependence on digital devices makes children prone to anger, tantrums, or sadness when screen time is restricted, thereby risking their mental health and emotional skills. Unsupervised ST use can also interfere with physical health such as sleep disorders and lack of outdoor activities—and reduce social and emotional skills (Donthu et al., 2023; Frogley et al., 2023). Conversely, a positive interpretation of ST can encourage more focused parenting, particularly during early childhood, a crucial period for habit formation and emotional regulation.

Parents minimized the negative impact of ST in this study through the implementation of management strategies, including setting time limits for use, monitoring the types of content viewed, and considering the child's emotional state before providing ST. These strategies align with recommendations (2025), which emphasize the importance of active guidance and selecting

appropriate content as efforts to form healthy digital habits and effective time management. The American Academy of Pediatrics (AAP) recommends limiting digital device use to a maximum of 2 hours per day (Gingold et al., 2013). This approach not only helps control ST use but also strengthens the emotional bond between parents and children.

This finding also supports the view that Halpin et al (2021) Children who are difficult to control when using ST can lower parents' confidence in applying supervision. However, when parents have a good understanding of the purpose and limitations of ST use, their self-efficacy in regulating their children's digital habits will also increase. This shows that ST guidance and management are an integral part of positive parenting that is adaptive to technological developments.

The results of this study confirm that ST has a dual role in early childhood, including as a tool for entertainment and learning that supports positive emotions, but also has the potential to cause dependence and emotional regulation difficulties when used excessively. Therefore, wise and consistent parenting is essential so that ST can be optimally utilized to support child development, rather than hindering the growth and development process.

Regarding early childhood education, the results of this study have important implications for parenting and learning practices. Early childhood education institutions can work together with parents to provide education on the healthy use of ST, including limiting screen time, supervising children when they use digital media, and selecting educational content that is appropriate for the child's age. Thus, the use of ST can be directed to become a means of supporting the balanced cognitive and emotional development of children.

CONCLUSION

Parents perceive Screen Time (ST) in early childhood as a means of entertainment, a learning medium, and a way to calm children. The use of ST has varying emotional effects, including children tending to show positive responses such as happiness, joy, calmness, and imitation of behavior when ST is used, but reacting negatively with tantrums, crying, and anger when its use is stopped. Therefore, wise management is necessary through the establishment of precise durations and objectives, so that the benefits of ST can be felt without causing adverse effects on children's emotional development.

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