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Childhood Exploring the Impact of Digital Devices on Social Development in Young Children

Regil Sriandila[1], Dadan Suryana[2]

[1] Universitas Negeri Padang, Padang, Indonesia; regilsriandila30@gmail.com
[2] Universitas Negeri Padang, Padang, Indonesia; dadan.suryana@yahoo.com

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ABSTRACT

This research aims to shed light on how the gadget phenomenon impacts young children's social development. Particularly gadgets have swept over society, converting even the youngest of users. Gadgets are not meant for young children, despite the fact that they are instruments for communication technology. To distract children, parents often give them devices. The case studies research technique was used by the researchers to examine how the use of technology affected young children's social development. Data collection methods included observation and interviews. According to the study's results, parents should carefully consider the advice they provide their children on acceptable smartphone usage. To ensure that early childhood growth as social beings is not impaired by a concentration on using gadgets, technological advancements like devices may still be utilised.

Corresponding Author:
Regil Sriandila
Universitas Negeri Padang, Padang, Indonesia; regilsriandila30@gmail.com

1. INTRODUCTION

Since the 2007 debut of the iPhone, the popularity of smartphones and tablets among children of all ages has exploded. At least one-third of US preschoolers had access to a particular mobile device by the time they were three years old, and they used it on average for over two hours every day. The growing usage of smartphones and tablets by young children has raised concerns about potentially harmful use. in 2022 (Chaibal & Chaiyakul), Today's technological use, however, is outpacing the amount of research done on the benefits and drawbacks of screen time for kids. The preschool years (ages 3 to 5) and the toddler period (1 to 3 years old) are both critical developmental stages for a child's emotional and cognitive development. High amounts of brain plasticity are often present throughout this time (Park and Park, 2002). Early childhood experiences may have an effect on lifetime screen habits in a similar way to how other health-related activities like diet and exercise do. In order to better understand the potential hazards and advantages of such usage, this article offers a thorough review and meta-analysis of studies investigating the association between smartphone and tablet use and psychosocial, cognitive, and sleep-related features in young children. 2018 (Hosokawa & Katsura).

The way individuals spend their lives has been profoundly changed by modern technology. One of the technologies that is developing the fastest is gadgetry. Technology is increasingly being used in social relationships. Gadgets appeal to all age groups, including teenagers, small children, and even the elderly. Technology usage among young children is given particular attention. Many careless parents completely delegate their responsibility for their children's education to technology. When their child is fussy, they act as if the gadget is their "nanny." The main reason parents give their children access to their technology is so that they may keep them calm while their parents are busy. Işkolu et al. (2002).They fail to consider the impact that devices have on children's language and social skills, however. In the present era, linguistic disorders in young children have become much more common (Lindsay and Strand, 2016). A whole new problem is raised by this, namely the unfairness of early social engagement. A number of studies have shown that exposing young children to interactive smartphone or tablet applications may help them develop better fine motor abilities, executive functioning, and problem-solving skills in science and math.

Furthermore, evidence suggests that developmentally appropriate educational apps may optimize benefits for young children when used selectively. The majority of interactive educational programs (i.e., not passive watching) were shown to provide the bulk of the positive learning advantages, which were revealed to be content-specific and limited. However, because these studies were mostly conducted using the use of a smartphone or tablet as the experimental condition, it is still unknown how large the beneficial effect will be and when naturalistic or habitual use may become an issue (i.e., when the harm outweighs the benefit) (Thomée, 2018). Therefore, it can be claimed that, when used sparingly, well-designed, developmentally appropriate educational applications may be helpful to young children. However, the advantages only apply to interactive applications rather than passive observing and are content-specific. Since smartphones and tablets have been employed in the majority of studies conducted so far, further study is needed to determine the extent of the positive effects and the point at which regular or excessive usage may be dangerous. The most common element is ICT equipment. Young people's usage of technology may lead to social isolation and a lack of emotional control (Braune-Krickau and colleagues, 2021).

The result of this is a lack of communication and participation. Children who lack interpersonal contact skills, are impatient, and have interpersonal problems tend to develop distant from the natural world and their surroundings. Based on a review of the literature, this article examines how many parents are happy when they buy expensive and sophisticated technologies for their children. (2013) Przybylski & Weinstein. Nowadays, many kids would rather play with electronics than with their friends and neighbors, who might teach them how to regulate their emotions and help them interact. Research on this subject is required. Given the various advantages and disadvantages of technology, parents should exercise caution and awareness when providing their children with tools and facilities that are suitable for their needs in order to foster their growth and development. Parents must be aware of their children's needs in order to reach this decision. Because humans are social creatures, we interact and communicate with other individuals. As time and technology progress, people create tools and systems that can facilitate human communication. Technological developments in the telephone, radio, and television have altered society or individuals (EL Khaled & Mcheick, 2019). Children are often portrayed as passive consumers in children's media, but as technology has improved, kids may now actively engage with the tools at their disposal and are more likely to develop used to them. Information and communication technology (ICT), which is continuously developing, might, however, have a negative impact on utilizing gadgets if used excessively (Ometov et al., 2021). This phenomenon shows that everyone is familiar with and uses cutting-edge technology with user-friendly applications (Mawalia, 2020).

In truth, contemporary comforts serve as a kind of skeleton for our way of life. According to Kominfo, Indonesians own and use more smartphones and tablets than ever before in 2014. The poll's findings indicate that 79.5% of Indonesia's teenagers and young adults have access to the internet.

Children who spend too much time in front of a screen have a propensity to become oblivious to their surroundings (Montag et al., 2019). Instead of interacting with their peers on the playground or in the outdoors, they would prefer to interact with the sophisticated technology at their disposal. Kids will thus engage with their environment less as a consequence. This article's goal is to present a case study of how gadget culture has affected children's social development.

Because more and more young children are using digital gadgets on a daily basis, studies like "Exploring the Impact of Digital Devices on Social Development in Young Children" are crucial. The social skills children learn at a young age might be a good indicator of how far they'll go in life, and this study looks into the correlation between media exposure and those skills. This study takes a multifaceted look at how children's growing exposure to electronic media affects their relationships with adults and others around them. This research also suggests that the type of gadget and the content viewed may have a substantial effect on children's social development.

This study has the potential to inform parents, teachers, and policymakers about the digital media habits of young children. It may also have an impact on the creation of digital content and programming that prioritises children's social and emotional development. This study investigates the effects of television exposure on children's social interactions with adults, peers, and family members. Is there a correlation between how much time kids spend in front of devices and their capacity to interact with others as adults?

2. METHOD

Case studies and phenomenological studies are two qualitative research methods that are appropriate for "Exploring the Impact of Digital Devices on Social Development in Young Children." Phenomenological studies of young children's interactions with and responses to different types of digital media may be used to examine how technology has an impact on their social development. On the other hand, case studies may be used to examine how the use of digital devices affects young children's social development in settings that are more restricted, such specific households or schools.

Data collection techniques that can be used in qualitative research types such as phenomenological studies or case studies are as follows: Observation: Make direct observations of children when using digital devices and their interactions with the surrounding environment. This can provide information about how digital device use affects young children's social development. Interview: Conduct interviews with parents or caregivers of young children to find out their perceptions of the use of digital devices in children and how this affects the social development of young children. Participatory observation: Directly observing and engaging in children's activities related to digital device use to understand the context and experiences related to digital device use in young children.

3. FINDINGS AND DISCUSSION

3.1. The Effect of Using Gadgets on Children's Social Development

ICT attracts users because of its practicality and ease of usage. One of them is a piece of technology that, despite its numerous advantages, promotes dependency among its users, especially among children (Sundus, 2017). Children's prolonged tech use can be attributed to their natural inquisitiveness. Kids need to socialize in person more often than they do in front of a computer. They consider someone who can accomplish that to be a genuine learning partner. There's no way for them to tell if the on-screen people are actually comprehending what they're saying. During childhood, a person's physical, mental, and, most importantly, social and emotional foundations are established. The prevalence of technology in modern society means that today's kids like playing with electronic devices (Wahyuni et al., 2019). Kids who spend too much time with electronic devices tend to tune out their surroundings because they develop a sense of security from playing alone with their devices. Basic social and emotional abilities are among those that develop during childhood.

It has been shown in prior research that kids' exposure to technology has a negative effect on their imagination (Nikolopoulou, 2018). The blame is shared by the kid, the school, and the parents. Parents need to be aware of how to select age-appropriate technology and software for their kids. One of them is that infants begin their process of social development from birth and through a process of imitation. A youngster in the midst of growing and developing must have active participation in this (Wheeler et al., 2002). Children's mental growth in the areas of social and emotional development is greatly aided by the time and attention paid to one another during social interactions (Li et al., 2022). Children's social development is stunted by excessive screen time (Suhana, 2018). Less time will be spent interacting with adults, other children, and the outside world (Yunita & Suryana, 2022). Children's dependence on electronic devices might have negative effects on their mental health and interpersonal skills. Kids who are too independent-minded to care about anyone but themselves. So they are socially inept in modern culture. This is a process that continues from childhood into maturity (Suryana & Hijriani, 2021). Young people will have trouble interacting with their neighbors if they continue to obsess with technical adequacy.

Regular usage of electronic gadgets can develop a dependency on them, which can then lead to addictive patterns of behavior. The process of being socially acceptable includes a period of isolation. When a kid doesn't hang out with other kids his age, we call that isolation (Suryana, 2013). Children's physical activity and social skills may suffer if they spend too much time glued to screens. These days, kids would rather stay within their own electronic bubbles than interact with other people. Because of this, children may grow more self-centered and less interested with their community (Suryana, 2014). Voluntary exile, as described by Hurlock, is the situation in which an individual decides to withdraw from the organization because they are no longer interested in participating in its activities. Forced exile refers to a situation in which a person is cut off from their community because their presence is deemed useless. If children are to successfully integrate into a new community, it is vital that they have positive adult role models to look up to. A child's level of social adjustment may be measured by (1) how they look to others and (2) how well they are able to conform to the norms of the group. (2) the ability to fit in with new social settings, or how effectively a youngster adapts to the numerous social groups he encounters. The youngster is happy with his or her place in the group and has positive social attitudes toward others, engages in group activities, and takes on leadership roles. Researchers have shown that attempting to quiet a toddler with a smartphone or other electronic device can actually impair the child's capacity to develop self-regulation. Although the negative effects of television and movies on young children are widely acknowledged, the public's awareness of the impacts of smartphone and tablet use on the developing brain has lagged behind the rate at which young children are adopting these technologies. The study's authors cautioned that children's "social-emotional development" may be negatively impacted if electronic devices were used as a pacifier. Will young children be able to self-regulate if these gadgets become the major means of relaxing and diverting them?

However, they also found that using a device before the age of three may impede the development of skills required for math and science. Some studies have demonstrated benefits to toddlers using mobile devices, such as enhanced academic engagement in children with autism or early reading skills. In order to promote wholesome social development in early childhood, we advocate for more "disconnected" family interactions in general and suggest that young children may benefit from "set family hours" of quality time spent with relatives - without the involvement of television and mobile devices (Ramelan & Suryana, 2021). Even though there is plenty of professional evidence that children under 30 months do not learn as well from television and videos as they do from human interaction, the study's authors claim that there hasn't been nearly enough research into whether or not interactive apps on mobile devices produce results that are comparable to human interaction. Excessive usage of smartphones and tablets may hinder children's ability to develop empathy and problem-solving skills naturally via unstructured play and peer interaction. Playing with blocks is a better way for young children to learn maths than using technology toys. As a result, it might take the place of practical exercises that develop sensorimotor and visual-motor skills, both of which are essential for

learning and applying math and science. According to Rahmadani et al. (2019), a child's early years are characterized by a dynamic sequence of development that is influenced by the child's biological make-up, social and cultural environment, and interactions with adults. Aspects of psychosocial and cognitive development, such as thinking maturity, emotion control, reasoning, problem solving, and communication, are essential for early childhood development and are required for appropriate integration into the social environment. Between the ages of 12 and 18 months, a kid can learn to understand and follow basic instructions. Between the ages of 18 and 24 months, a child can have a vocabulary of 20 to 300 words. A child can take turns and share between the ages of 3 and 4. Between the ages of 3 and 4, a child can understand the viewpoint of others. Expected growth in intellect and the building of character throughout the preschool years.

Physical movement, active exploration of the outdoors, social engagement with caregivers, and child-led imaginative, unstructured, or pretend play are all ways that a child might reach developmental milestones (Suryana & Desmila, 2022). It may be more difficult for kids to acquire other crucial cognitive, social, and emotional abilities if they don't have enough opportunities to engage with their surroundings and reach developmental goals. Issues with self-regulation, social disengagement, weak reading and communication skills, and physical health problems like obesity may all be adverse outcomes of even a little disturbance of healthy development (Suryana, 2021). Extreme neglect may prevent children from developing the social-emotional, physical, and language skills necessary for daily living. Even while some of a kid's challenges may not be serious enough to need medical treatment, they are likely to lessen the benefits schooling offers to the child (Suryana & Hijriani, 2021).

The researchers discovered that exposing children to well-researched early learning television shows like Sesame Street, as well as e-books and learning-to-read applications on mobile devices, improved their vocabulary and reading comprehension as they grew closer to entering school. so that parents may evaluate the app before deciding whether to let their child to use it (Nilawati & Suryana, 2016). Parents of small children often use their iPhones when their children are around. Researchers are just now examining how parental responsiveness and receptivity are impacted by smartphone usage, and how those effects eventually influence parent-child interactions, attachment development, and maybe other outcomes for kids. In order to properly advise parents on the use of smartphones while watching over newborns and young children, this study aims to highlight what is still unknown while summarizing what is already known.

The negative impacts of smartphone use on several facets of social relationships have been connected to users' "absorption" in digital gadgets, also known as immersion, and technological distraction, also known as "technoference" (the disruption of social connection by technology). To immerse oneself, one must redirect their attention away from their physical surroundings and toward their electronic device and all of the available online communication and entertainment alternatives. Technoference is a momentary pause in speaking, while absorption refers to a more pervasive shift in focus from the other person to the technology.

Throughout the parent interviews for the study, they felt worry about how technology may affect the emotional and social development of their kids. Teenagers of today spend a lot of time on social media and playing video games, which may hinder them from learning important social skills like communicating, cooperating with others, and interacting with peers. Young children risk missing out on important chances that might aid in the development of their social and communication skills if they spend too much time on electronic gadgets. This may limit their ability to develop enduring connections and partnerships.

Parents then report a wide range of effects when their kids have too much screen usage. To begin, it may be difficult for today's youth to put down their electronic devices for any length of time. Second, they may have trouble falling asleep or stay up longer than usual if they use technology right before bed. The third risk is that they will stop participating in extracurricular activities altogether. Fourth, people may have problems focusing on what they're doing in class or at work. Young people

may have difficulty making and keeping friends, may develop fewer useful social skills, and may lose touch with their immediate surroundings.

Parents have also expressed concern about how my child's development could be harmed by heavy use of technology. Because of my son's intense interest for technology, it is challenging for me to limit his screen time. I advise parents to learn what their kids like and dislike so they may fill their time with things they will find more engaging. Parents should discuss with their children the benefits of setting screen time limits and encouraging less frequent usage of screens in general. Finally, parents must limit their screen time and encourage their kids to participate in more social activities outside the home.

3.2. Use a Smartphone

Regarding parents' cellphone use at home, a number of observations among older kids have been found. For instance, research indicates that teens have unfavourable perceptions of their parents' smartphone use. According to what I've seen and heard, children nowadays believe they must compete with their parents' smartphones for their parents' attention. Steiner-Adair and Barker (in Gotlieb, 2014) based their findings on interviews with more than a thousand children aged 4 to 18. They discovered that when children attempt to distract their parents from using their smartphones, they get fatigued, dissatisfied, angry, and enraged. Contrary to the many studies that have been completed on the influence of smartphone use on interactions between adults or between parents and their older children, less study has been done on the impact of parental smartphone use and technical aspects. Relationships between parents and preschoolers, toddlers, and babies. However, the majority of parents of babies and toddlers are also proficient and frequent users of digital gadgets since they too have grown up with them. The Pew Research Center (2019) reports that 94% of people aged 18 to 29 and 92% of people aged 30-49 possess smartphones, making this age range the one with the highest likelihood of having young children. Furthermore, the vast majority of persons in this age group (90%) and younger people (92%), respectively, regularly use social media.

The phrase "disturbed parenting" has made its way into common parlance to describe parents who are too engrossed in their mobile devices to give their young children the attention they need. There are a lot of unfavourable outcomes linked to this practise for young kids. To fully grasp the potential influence of parental smartphone usage on the parent-child bond, it is essential to look beyond this surface discussion and take into account the more intricate interactional processes that occur between parents and infants or young children. Social development begins at birth since infants are naturally curious about and open to interacting with others. Infants, toddlers, and preschoolers, in particular, have been found to rely heavily on parental arrangements in interactions and to be extremely sensitive to disturbances and disturbances of relational processes, such as those caused, perhaps, by parental smartphone use.

It has been shown that parental attentiveness and sensitivity play a significant impact in this formative period of interaction. Parents who are sensitive to their children's needs are able to decode their cues, respond appropriately, and help their children thrive. The likelihood, regularity, and precision with which parents respond to their children are all considered components of parental sensitivity. Psychiatric illnesses, parental pressure, and perhaps smartphone influence can all lead to diminished parental sensitivity. The attachment process between a parent and child, and subsequent child outcomes including the ability to self-regulate, can be negatively impacted by disruptions in parental sensitivity.

However, studies have shown that caring parents help their children form healthy attachments. The formation of trusting bonds with caring adults is a primary focus in the early years. In order for the parts of the brain responsible for handling emotions, managing stress, and establishing an internal sense of self to develop, attachment communication is crucial. Many experts agree that talking to a real person, initiating and keeping eye contact, and paying attentive attention are crucial steps in mastering a new tongue or culture. Is it possible that, like in the classic still face experiment, parents' smartphone

use in the presence of their infants and young children alters their sensitivity, and thus disrupts the development of the parent-child relationship or causes parents to become unresponsive? Even infants can adapt fairly well to changes in their routines with their carers. However, the widespread availability of smartphones, with their appealing communicative features and immersive effects, has the potential to desensitise parents in a way that has never been seen before, thereby interfering with the crucially important processes of mutual attunement and relatedness between carers and their infants, toddlers, or preschool-aged children (Natari & Suryana, 2022).

This review aims to consolidate what is known about these questions in order to provide appropriate advice to parents and provide practical guidelines on smartphone use. Some parents say they use their phones for long periods of time when out with their kids every day, while others say they do the same while at home. Some parents' excessive use of electronic devices in the presence of their children begs the question: why? There are several ways in which becoming parents at a young age can be emotionally taxing. Caring for an infant, toddler, or preschooler can be monotonous, leaving even the most seasoned parents feeling worn out (Sardi & Suryana, 2022). Children may suffer if their parents are too preoccupied with their phones to give them their full attention. Researchers, however, have acknowledged the necessity for additional extensive longitudinal multi-method studies. This review has the potential to outline future research topics in the field of parental smartphone use in early childhood, which may then be used to better educate parents of young children on their smartphone usage and, if necessary, establish preventative measures.

3.3. Strategies for Ensuring Gadget Responsibilities

The purpose of this analysis is to compile the existing data on these issues and offer useful recommendations for parents to follow when counseling their children about safe smartphone use. There have been reports of parents spending long periods of time on their phones when out and about with their children, and of parents doing the same while at home. It's puzzling that some parents use their phones and tablets excessively while their kids are around. Taking on parental responsibilities at a young age is a significant mental struggle. Even the most seasoned parents might tire of the daily grind of caring for an infant, toddler, or preschooler (Sardi & Suryana, 2022). When parents are too engrossed in their devices to give their whole attention to their children, everyone loses. But scientists know they need to undertake more in-depth, long-term research using different approaches. Hopefully, attempts to educate parents of young children on the hazards of smartphone usage and, if required, implement preventative interventions, may be aided by this study's identification of future research subjects in the field of parental smartphone use in early life.

4. CONCLUSION

There are hazards associated with smartphone use among young people, and the WHO has now acknowledged them. The World Health Organisation (WHO) has issued recommendations for parents and teachers to follow in order to ensure that children of all ages, but especially the youngest, use electronic media safely and responsibly. Two to four year olds should not spend more than an hour a day in front of a screen. The authors also pointed out several gaps in our knowledge of the subject. Since "long-term repercussions can be difficult to detect and ethical constraints hamper experimentation," they conclude that further research is unlikely. Because of this, it's likely that we won't be able to fully assess the risks that cell phones pose to youngsters. The negative effects of smartphone use on children's development could have unforeseen sources. Parents should examine their own smartphone habits before worrying about their kids'. Parents should monitor how much time they spend on their own smartphones to set a good example for their kids. Parents should give some thought to the smartphone habits they are demonstrating for their children. Heavy smartphone use among young people may pose health problems, which has been highlighted in recent years. Researchers, writers, and broadcasters are increasingly concerned about young people. As a result,

Future research should use observation and interviews to better understand the impact of screen time on children's social development. Researchers can compare the results of the group using digital devices to those of the group not using digital devices by including a control group in the study. The unique effect that electronic gadgets have on the social development of young children can be better understood with this information.

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