Educating Smartphone Use in Early Childhood, Through Designing Parenting Books Illustrations

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\textbf{Abstract}: Smartphones are now experiencing rapid development; the primary function of mobile phones was created to facilitate communication. Then develop complete with various facilities like computers, making it easier and faster for humans to carry out all their activities. Everyone can easily use, including children, adults and parents, wherever and whenever they are. Information technology such as smartphones does have a positive impact; the other side has a negative effect, if not addressed wisely. Mobile phones that are misused can cause various problems such as addiction, physical and mental health disorders. If this is experienced by early childhood, it can disrupt the growth of children, both physically, emotionally and socially. Overcoming the negative impact of smartphones on early childhood, parenting books are needed for their parents. The book contains a guide to teach, limit the use of a good smartphone, to avoid the danger posed. This study uses a qualitative methodology with data collection techniques through observation, interviews, literature study. The results of this study are a parenting book for parents to educate their children to use smartphones wisely and well.

\textbf{Keywords}: early childhood, smartphone, book design

\section{1. Introduction}

This paper examines the use of smartphones for early childhood how parents can wisely reach smartphone use through guides and practical tips from a parenting illustration book. Books are still considered essential media based on excellence, have an extended life compared to information media such as smartphones that are still dependent on batteries. Besides that, books can also foster reading interest and motoric development of children, because children's books can scribble and cut it. The book can also maintain the emotional connection of children and parents, through telling stories from books that are read.

The use of smartphones today is unavoidable, although most of the people use smartphones to communicate, for work, business, information seeking or just entertainment. Almost everyone who uses a smartphone spends a lot of their time in a day. Everyone has placed a smartphone in such a way that it has its values and benefits for each, regardless of the positive and negative effects that arise.

Nowadays, smartphone users don't only come from among workers, but it has touched children and toddlers, they are sometimes introduced to smartphones in activities that they do every day. The use of smartphones is a shortcut for parents as a substitute or caregiver for their children.

Smartphones with various exciting features and applications are introduced and accompanied by children so parents can carry out activities calmly. Without worrying about their children wandering around, they are increasingly at home, which eventually makes them fussy and disrupts their parents' activities. Children can skillfully operate a smartphone and focus on other games or applications. Many parents today think that smartphones are capable of being safe and easy to play with. So the role of parents is now being replaced by smartphones that are supposed to be playmates \cite{1}

According to research from Current Biology (USA), parents often use smartphones when with children, this can affect the child's focus. Parental involvement in children is so low, like not having enthusiasm when playing with their children. This condition can cause problems for the growth of their children; therefore studies from Current Biology (USA) concluded that parents are expected to be serious when playing with their children without being punctuated by playing cell phones for the future of children. \cite{6}

Even though it is necessary to know that the period of development of susceptible children is at the age of 1-5 years, as an early childhood so often called the "Golden Age". At this time, all aspects of the development of intelligence, namely intellectual, emotional, and spiritual
knowledge, experience extraordinary events so that they will influence and determine further developments. When children are in the "Golden Age", all information will be absorbed quickly. They become reliable imitators, and they are smarter than we think, more intelligent than they look and will be the basis for the formation of character, personality, and cognitive abilities. So we should never underestimate children at that age. [3]

Smartphones not only harm children, because there are also positive effects, including in children's mindsets, helping to increase the ability of the right brain, regulating the speed of play, managing strategies in their game during proper supervision. But behind these advantages is more dominant in the negative impact that affects the development of children. One of them is radiation that can damage the nerve tissue and brain of children if children often use smartphones. Besides, it can also reduce the child's active power and the child's ability to interact with others. Children become more dividual with their comfort zones with gadgets so that they have a less caring attitude towards friends and even others. Therefore, it is vital to understand the influence of smartphones, especially for parents. [5]

To overcome the addiction to smartphones, there need to be a media that can be used as a reference for parents how steps for parents to wise to the technology, which indeed cannot be avoided today. Books are the right media besides being an excellent example for parents in educating children not dependent on smartphones. Books designed in such a way as to attract not only parents but also children. So that it can quickly provide understanding and restrictions on the use of smartphones for their children.

2. The Research Method

He research method used in this study is qualitative where this method describes the state of the subject or object of research at this time based on direct observations made to see the phenomena that occur appear as they are. Qualitative research is only describing research situations or events, not looking for relationships, not testing hypotheses or making predictions. This method focuses on observation and natural atmosphere. The researcher acts as an observer, only makes behavioural categories, observes the symptoms and records the reference book. Data collection in this study was conducted by interviews such as psychiatrists about child development and the dangers of smartphones in early childhood. Likewise, a literature study can be used as a basis for the content of a book that will be made a parenting guide.

To get a visual design of a good parenting illustration book also uses medote visual analysis, a comparison matrix. I am using books that have similarities in both themes and visuals. The matrix helps identify more balanced forms of the presentation by aligning the information in the way of images and writing. A model consists of columns and rows, giving rise to two different dimensions, concepts or a set of data. [8]. The three books used as a comparison are "The Book Educates Children According to Their Age", the book "The Best Way to Educate Children" and the third book titled "The Beauty Difficult to Be a mother."

3. Smartphone and Kids

In Indonesia, the rules for smartphone use in children are less socialised. Smartphone specifications categorised for adults can now be owned by teenagers and can be used by children. Today many school-aged children are bought sophisticated smartphones by their parents. Healthy children are children who do not stop moving, and this child should play more with their friends than playing with smartphones. [6]

The development of technology now makes many parents consider their children in giving digital tools, children given the opportunity to operate a smartphone. For some parents, smartphones provide benefits to their children. Can recognise colours, animals, vehicles, numbers, etc. using videos that are interesting in children's eyes (educative). Understand enough English words from the YouTube.14 application)

Many parents today think that smartphones are capable of being safe and easy to play with. So that gadgets that should be playmates now replace the role of parents. Even though it is necessary to know that the period of development of susceptible children is at the age of 1-5 years, as an early childhood so often called the golden age. At this time, all aspects of the development of intelligence, namely intellectual, emotional, and spiritual knowledge, experience extraordinary events so that they will influence and determine progress. [3]

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will be absorbed quickly. They become reliable imitators, and they are smarter than we think, more intelligent than they look and will be the basis for the formation of character, personality, and cognitive abilities. So we should never underestimate children at that age. Gadgets not only hurt children because there are also positive effects, including in children's mindsets, which can help children manage their speed of play, process strategies in games, and help.

Giving smartphones to children under the age of 2-3 years is not good because it affects the development of motor skills. Even before the age of 13, children should not be given a smartphone. According to Jesse Weinberger, Internet Safety Experts say that the longer parents refrain from giving smartphones to children, the better the child's development. [6] Following the negative impact of providing smartphones to children: Motor skills do not develop optimally, they damage the eyes, children become less interaction with people around. Therefore, it is crucial to understand the influence of smartphones, especially for parents. So that children can be restricted in their use and the development of children can develop well and become children who are active, intelligent, and interactive towards others. Parents also don't want their children to be left behind in terms of technology; regulation and supervision are essential.

Here's how to limit smartphone use to children suggested by the American Academy of Pediatrics (AAP): Keep the TV, smartphone and internet from the child's room.

Keep an eye on what your child is accessing when operating a smartphone. Never use a smartphone to calm crying or sleepy children. Use TV media, videos, and applications to discuss the values adopted by the family. Use the right rea- sons when limiting children from using TV, digital media and the internet.

Wulansari, in his book, also said that reading was not taught, but transmitted. They need examples at home. The following are activities that parents can do to foster an attitude of fondness for reading to children. Provide a family library at home. Before leaving for work and after work, read books to children. Because according to experts, read- ing books to children is equivalent to studying in a partici- pating school for at least ten days. Occasionally invite the child to visit the place told in the book. Let the child tell stories with his style, then appreciate by giving enthusiasm. Schedule a visit to the bookstore. Invite children to visit the library. They are doing the “Diet” of digital media. Be an example for you by getting used to positive activities daily. [6]

4. Parenting Illustrations Book

Excessive use of smartphones will adversely affect early childhood. Children spend their time with a smartphone will be more emotional, rebellious and lazy to do the daily routine, because it is fun using a smartphone. Even more worrying, children don't care about other people around them. They do not want to greet older people or others. When children experience symptoms as mentioned above, children can be said to be addicted or addicted. They will often waste time while playing smartphone.

Children who are often and too long in the use of smartphones, in all daily activities will disrupt brain development. Obstacles faced such as the ability to speak (not smooth communication), and inhibit the ability to express his thoughts. The number of features or applications that are not by early childhood, poor in the values of norms, education and religion. Disrupting health, the more frequent use of smartphones will interfere with health, especially in the eyes. Also, it will reduce children's interest in reading because they are accustomed to pictorial and moving objects. [2]

Another impact is to reduce concentration and increase dependence on children to be able to do things that they can do themselves. The more open internet access in the gadget that displays everything that should not be seen by children. This can raise ethical and norm issues. Children can grow and prematurely. They will not know the rules that are around them. What is seen is witnessed on a smartphone as if the condition is right and they are photographing it. Such as scenes of violence, mutual ridicule, and events that are not following ethical manners.

Children who are starting to become addicted to smartphones and forget to socialise with their surrounding environment have psychological consequences causing a crisis of confidence as well as physical development of children. The electromagnetic wave radiation from a smartphone is not visible. The effect is not felt directly. For this reason, parents must wisely supervise and select the
game instruments used by children while playing. The habit of children playing smartphones today is undeniable. But it's proper always to be able to limit the time playing the smartphone. This is done so that children can get to know the environment and surrounding friends. Playing activities are the main activities of children who seem to start.

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To guide parents to the dangers of smartphones, as described above, a practical guidebook was made using many illustrations or cartoon images. To give a light and funny visual impression. Books use pastel colours with easy to read font types and the use of simple sentence language, this makes it easier for readers to receive information quickly. Books are packaged in sizes smaller than standard books to be able to carry around easily.

The parenting guidebook made is based on three books that are used as references such as the first book "The best way to care for children", the second book "The difficulty beautiful of nurturing children" and the third book "Educate Children in the Age". Designing a guidebook for parents: teach their children to be able to use smartphones wisely. The book intended was entitled "When Children Start to Know Smartphone". The book is designed to contain the experience of children first getting to know a smartphone, and there are particular guidelines for parents so that children avoid the detrimental use of smartphones and provide direction that smartphones can generate many benefits for children in their lives now because they are all digital. The book designed consists of 4 chapter, namely: First Digital Era, both Positive and Negative Smartphones, The Third Anti-Addiction Smartphone, and the last Teach It to Child. The content of the previous book is the one that parents must know in educating their children. Figure 1.

![Figure 1. one part of the book chapter](source: Personal Documentation)

The book designed is intended for parents aged 25-35 years who will have children or who have children. In educating children, parents always try to be creative so that their children can have an active and intelligent mindset; then parents still teach their children to be able to recognize colours, numbers and letters, then can colour, draw and write. Assistance through digital media and print media is always sought by parents to fulfill these activities. In this situation, parents are aware of the visual presented to each press, especially in the book media. Books with a large number of images accompanied by each page that is the full colour to be desired by parents.

![Figure 2. Book cover Source: Personal Documentation](source: Personal Documentation)
For other media, there will be a child development table and a smartphone usage scheduling format that can be discussed by parents and children. The book will also add a child developing psychology table, the purpose of which is to include this table so that parents understand the child's development, and monitor any recent developments in their child. Then an empty table will also be provided in books such as journals filled by parents around indications of children using technology, especially when using smartphones. Supplied like a page that contains the activities of children in a day using a smartphone for how long, every day whether it increases or decreases, and includes an indication that the child should not depend on using a smartphone.

The message to be conveyed in the book is that parents understand that early childhood or golden age are very vulnerable to the negative impact of a smartphone. How parents can address or introduce smartphones to their children wisely. They are parenting smartphone book designed to contain knowledge about the development and formation of early childhood. The danger of smartphones in early childhood is also how parents' tips on educating early childhood not to be addicted to smartphones or other devices. The book is designed simply by displaying lots of images from the text to avoid boredom. Images made using cartoons to make the book seem entertaining are funny, light and informal.

5. Conclusion

Smartphone use in early childhood needs more attention from parents. Do not let the smartphone be a substitute for playmates for children, given the negative impact caused by smartphones when the child has begun to become addicted. Children can experience physical, mental, and social disorders as well as health, especially the eyes due to radiation that is raised by smartphones.

Books as a media in the digital age are still a reliable medium to help find the best solution in educating children in early childhood. The goodness or characteristic of the book media is one of them as a connecting media or elucidating parents in conveying messages or information to early childhood, such as parents reading stories to their children through books. Then the book can be scribbled for children's motoric needs.

Parenting illustrating books to educate children to use a smartphone wisely is a book containing tips, so parents are always reminded of the positive and negative effects that are raised by smartphones. Not that the child is not allowed to know or play a smartphone at all. Also reminded by this book, parents can keep the golden age of early childhood experienced in his life once, indeed guarded and do not let the students grow up without character.

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