THE INFLUENCE OF SMARTPHONES ON CHILD DEVELOPMENT: A PSYCHOLOGICAL AND EDUCATIONAL ANALYSIS

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ABSTRACT

The introduction of smartphones to children can have a significant impact and influence on children both physically and mentally. The impacts and influences can be both positive and negative influences on a child's development. Therefore, the supervision factor of parents and teachers is very necessary in protecting children from the influence of smartphones. smartphones can affect aspects of cognitive development, social-emotional, religious and moral values, language and physical-motor aspects of children. Appropriate and correct use of smartphones can be a stimulating medium that is able to develop all aspects of child development optimally in accordance with their age stages. On the other hand, excessive and unsupervised use of smartphones will also have a negative impact on children's development in the future. Many things affect children based on the review of educational psychology. Educational psychology is a branch of psychology that focuses on understanding how humans learn and teach in the context of education. It is a discipline that studies the cognitive, emotional, social and behavioural processes of individuals involved in learning and teaching. So, parents and teachers today must supervise their children's activities, especially in using smartphones, which are feared to have a negative impact on children's development later.

Keywords: *smartphone, child, educational psychology*

INTRODUCTION

Information technology is one of the things that will not be separated from human life. Because this information technology has existed for centuries and is still developing. Without information technology, humans would find it difficult to communicate and convey information. Technology makes people get information quickly and *update*, exchange information, and communicate remotely easily. Nowadays, all forms of technological developments are very easy to find, and can even be easily purchased because the price is so affordable for all people. One type of technology that has gone global in this day and age is the *smartphone*. *smartphone* is an electronic device that has various feature services and applications

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that present the latest technology that helps human life become more practical and has special functions. Nowadays, almost everyone uses *smartphones* starting from early childhood to adulthood.[1]

Basically, the *smartphone* itself is a tool that can facilitate a person in establishing communication with long distances. *smartphones* have a huge impact on cultural values, when the use of smartphones can no longer be controlled and also become an excessive dependence, it will bring negative trends to one's life, including children. Excessive use of *smartphones*, over time, will make children less concerned with the environment around them, become more lazy in doing activities, become less concentrated because they are only too focused on the *smartphone* in their hands.

So as the term people today, "*smartphones* bring the far away and keep the near away". This happens because when a child is engrossed in playing a *smartphone* he forgets about the time that has become a concept in his life. The use of *smartphones* clearly influences early childhood development, both physically and mentally. With a variety of interesting features and applications, most parents these days assume that *smartphones* can be a safe and easy to supervise playmate. So that the role of parents has now been replaced by *smartphones* that should be playmates. Children who habitually use *smartphones*, cognitively, will be able to develop their knowledge and thinking skills through games or features contained in their *smartphones*.

Likewise with the aspect of language development, they will be able to increase the recognition of new vocabulary in their smartphones. However, from the aspect of social development they will tend to socialise less with others due to being preoccupied with *smartphones*. Children who spend too much time playing *smartphones* rather than playing with peers can develop individualistic and egocentric traits and lack sensitivity to the surrounding environment.[2] Furthermore, from the aspect of physical-motor development, there is also a tendency to do less

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[1] Kusuma. Yuliandi and D. Ardhy Artanto. *Internet for Loved Children*. (Jakarta: PT Gramedia Widiasarana Indonesia, 2011), pp. 49.

[2] Jonathan, et al. *The Dangers of Gadget Radiation to Children*. (Surabaya: Pertra Surabaya Christian University, 2015), p. 117.

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activities that involve body movements. The use of smartphones in children from an early age requires supervision and balance so that children can develop all aspects of their development optimally as the stages of their developmental age.[3]

Uncontrolled use of *smartphones* can indirectly affect children's character development. Mulyasa (2012) argues that character education for early childhood has a higher meaning than moral education because it is not only related to right-wrong issues, but how to instill *habits* about various good behaviours in life so that children have the awareness and commitment to apply virtues in everyday life. A child who has been introduced to and instilled with character education since childhood is expected to become a habit when they grow up. Therefore, the active role of parents, educators and the community to jointly promote the values of character education in every opportunity, especially to early childhood both in the family and the community in the environment.

In fact, it should be known that the most sensitive period of child development is during the age of 1-5 years, as early childhood or preschool age, so it is often called the *golden age*. At this time all aspects of intelligence development, namely intellectual, emotional, and spiritual intelligence experience extraordinary development so that it will affect and determine further development.[4]

When children are in the *golden age* all information will be absorbed quickly. They become reliable imitators, they are smarter than we think, smarter 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. On this basis, it is important to instil character values in early childhood to maximise children's abilities and potential. Therefore, do not let us as parents and educators kill all the potential and creativity of children because of our ignorance.

Utilising this *golden age* period as a period of instilling character values, coaching, directing, guiding and shaping the character of early childhood. Therefore, by instilling character values from an early age, it is hoped that in the future children will be able to become human beings with good personalities so that

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[3] Kusuma. Yuliandi and D. Ardhy Artanto. *Internet for Loved Children*, pp. 50.
[4] Muhibbin Syah, *Psychology of Learning*, (Jakarta: PT. Rajagrafindo Persada, 2003), pp. 55

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they are beneficial to themselves, society, and the nation and state. Actually, *smartphones* do not only have a negative impact on children, because there are also positive impacts, including in the child's mindset, which is able to help children regulate the speed of play, process strategies in the game, and help improve children's right brain abilities as long as they are under good supervision.

However, behind these advantages is more dominant in the negative impact that affects the development of children. One of them is the radiation in *smartphones* that can damage children's nerve tissue and brain if children often use *smartphones*. In addition, 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 zone with *smartphones* so that they lack a caring attitude towards friends and even other people. Therefore, it is important to understand the influence of *smartphones*, especially for parents. So that children can be limited in their use and children's development can develop well and become active, intelligent, and interactive children towards others. Therefore, it is important to understand the influence of smartphones, especially for parents. So that children can be limited in their use and children can develop well and become active, intelligent, and interactive children towards others.[5]

Research Methods

Qualitative method is a method that focuses on in-depth observation. Therefore, the use of qualitative methods in research can produce a more comprehensive study of a phenomenon. This research uses library research methodology. Library research, commonly referred to as bibliographic research, is a methodological approach that involves utilising library resources to gather information and conduct scientific enquiry. Library research refers to the systematic collection of scientific literature from books or journals for the purpose of conducting a comprehensive and in-depth analysis by scrutinising the information contained in the literature.[6]

[5] Muhibbin Syah, *Psychology of Learning*, p. 56.
[6] Zed, M, *Library Research Methods*, (Yayasan Obor Indonesia, 2004), pp. 3.

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This research has two distinct components. Firstly, primary data refers to data obtained directly from books or literature that specifically addresses the issues of knowledge integration and learning difficulties in children and the impact of smartphone media use on children. The other type of data is referred to as secondary data. Secondary data refers to information obtained from books or scientific journals covering various educational topics, including the integration of science in the educational context. In this research, the author conducted a series of research steps. Initially, the researcher procures data in the form of primary or secondary data. Next, the facts and materials were thoroughly examined and used in a way that refined and enhanced the content of this article. Furthermore, the data obtained was subjected to descriptive analysis. In this case, the author endeavours to explain the material obtained from both primary and secondary sources. Furthermore, the data underwent synthetic analysis.

RESULTS AND DISCUSSION

A. smartphone

The definition of smartphone according to Marriam Webster is *an often small mechanical or electronic device with practical use but often though of as a novelty,* which means (a mechanical or electronic device with *practical* use but *often* known as a novelty.[7] In essence, what is meant by a smartphone is a tool or mechanical device that is new and easy to use both for communication tools or just to entertain yourself. smartphones in general are small electronic items that are designed in such a way as to make them the latest innovation, or it can be said to be a truly amazing invention of its time. smartphones come from English which means a small electronic device with various functions.

A smartphone is a medium used as a modern communication tool. This technology makes human communication activities easier. smartphone can also be interpreted as a small electronic device that maximises special functions. Among

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[7] Kursiwi, The *Impact of Gadget Use on Social Interaction in Fifth Semester Students of Social Studies Education Department*, *Faculty of Muhamadiah UIN Syarif Hidayatullah*, State Islamic University Syarif Hidayatullah Jakarta 2016.

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them are iphone and blackberry, as well as netbooks. Novitasi sari stated that the media allows a person to carry out a social interaction, especially to facilitate communication with one another.[8]

From the explanation above, it can be concluded that almost everyone uses a smartphone. smartphones become an attractive magnet and become an addiction, so communicating through cyberspace, becomes an obligation every day, and spends hours.

B. The impact of smartphone use on children

Smartphone dependence in children is caused by the long duration of smartphone use. Playing smartphones with a long duration and done every day, can make children develop towards an anti-social person. The impact of this is that it can make children individualistic, because children forget to communicate and interact with the environment around them. This can cause social interaction between children and society, the surrounding environment to decrease and even fade, parents must be more sensitive in choosing game media for children so that it does not have a negative impact on themselves, families and society[9] In addition, there are positive and negative impacts for children, including:

1. With the advancement of technology that is getting faster every day, it makes it easier for children to get information and easier to establish communication.

2. With the advancement of technology, children will find creative and challenging games. Children will be cool with existing games, and children's curiosity becomes more. This can be beneficial to children's creativity, because children will think about how to solve problems.

3. Lazy socialising

4. Not all smartphone use has a positive impact. excessive use of smartphones makes children become even to hang out. Because with the use of smartphones children are more tempted like fun to play.

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[8] Putri Pebriani, *Analysis of the Use of Gadgets on Social Interaction Skills in Early Childhood*, Tuanku Tambusai Heroes University, 2017, pp. 1.

[9] Uce, Loeziana "*The Urgency of Choosing Early Childhood Game Tools as a Stimulus for Children's Brain Development*" Journal of mudarrisuna 11.4 (2021): 738-750

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5. Decrease in sociability.

6. Children become unconcerned about the surrounding environment and do not understand the ethics of socialising and do not understand the ethics of socialising with the surrounding environment. Even more ironic is not being able to respect parents. Children always want to get things quickly without seeing the process.[10]

C. Smartphone Use and Character Development in Children

We often see that parents buy sophisticated smartphones with models that match the child's wishes. Parents who have careers outside the home often use smartphones to monitor activities and communicate with children at home, while mothers who stand by at home buy smartphones with the aim of distracting the child so as not to disturb the mother's activities in doing household chores. Initially, their goal may be successful, for communication and as a distraction. But over time the child will get bored and be more active to try other features and applications that are more interesting. Starting from here, children will be more focused on their smartphones and begin to leave their play world. Children will be more individualistic and insensitive to their surroundings.

Excessive use of smartphones is bad for children. Children who spend their time with smartphones will be more emotional, rebellious because they feel that they are being disturbed while playing games. Lazy to do daily routines. Even eating has to be bribed, because they are engrossed in using their smartphones. Even more worrying, if they no longer look right and left or care about the people around them, even greeting older people is reluctant. There are several negative impacts due to excessive use of smartphones on children's development that make children become addicted or addicted. Among them are:[11]

1. Time is wasted. Children will often lose track of time when they are playing with their smartphones. They waste time on activities that are not really

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[10] Mubashiroh, *Gadget Use and its Negative Impact*, (Faculty of Education, Universitas Negri Semarang, 2013), p. 3.

[11] Suwarsi. *The Effect of Gadgets on Child Development*. Yogyakarta, Seminar Results, 2016, p. 10.

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important, whereas the time can be utilised for activities that support the maturity of various aspects of their development.

2. Brain development. Prolonged use of smartphones in all daily activities will disrupt brain development. This can lead to obstacles in speech, as well as inhibit the ability to express their thoughts.

3. Many features or apps are not age-appropriate, poor in norms, education and religious values.

4. Disturbing health. The more frequent use of smartphones will disturb health, especially in the eyes. In addition, it will reduce children's interest in reading because they are used to pictorial and moving objects.

5. Loss of interest in play or other activities. This will make them more individualistic or solitary. Many of them spend their weekends playing on their smartphones instead of playing with their friends or playing football in the field with their friends.

Excessive use of smartphones in children will have a negative impact because it can reduce concentration and increase children's dependence on being able to do various things that they should be able to do themselves. Another impact is the increasingly open access to the internet in smartphones that display everything that should not be seen by children. Many children begin to get addicted to smartphones and forget to socialise with their surroundings, which has a psychological impact, especially a crisis of confidence, as well as on the physical development of children.

D. Parental Supervision in the Use of Smartphones

The profit and loss of introducing smartphones to children ultimately depends on the readiness of parents in introducing and supervising children when playing smartphones. Therefore, parents need to be reminded of their important role in their children's use of smartphones. Parents need to apply a number of rules to their children in using smartphones. To be able to use smartphones effectively, parents should be able to understand and explain the content on smartphones. Without assistance from parents, the use of smartphones will not focus on what parents teach. Usually it will deviate from what parents teach. Firstly, give children the opportunity to learn to use smartphones for learning and interaction from an early

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age. Because the use of smartphones at this time is something that cannot be avoided at this time and in the future.[12]

Secondly, choose an app that suits the needs of children. Adjust to the age and ability of the child. All games, social media, videos must pass parental supervision. Because elements of violence and pornography are vulnerable or easily found in various content. Then explain wisely every function of the content on the smartphone. Children are able to understand that with smartphones we can interact as needed either with fellow family members or with residents around the neighbourhood. All of these communications can use social media that has been used. Parents should know more about all the content on their children's smartphones.

Third, place the smartphone in a public space. Sometimes parents take pride in being able to put a smartphone in their child's room. This is actually dangerous because parents find it difficult to monitor their children's smartphone activities. Choose a comfortable chair or table to play smartphone. because the habit of playing smartphone with sleeping position is not good for eye health.

Fourth, regulate the duration of smartphone use. Don't let your children get carried away with smartphones. Parents must be able to emphasise the time limit for smartphone use to their children. Then parents set an example of using smartphones positively. Because every child who is now proficient in using smartphones initially imitates parents. Therefore. Parents must be able to set a good example in using smartphones from the start.[13]

Fifth, help children make their own decisions. Sometimes children want to create a new atmosphere but don't dare to communicate with their parents. Here, parents should always invite discussions and even tell stories so that children can display or be creative with the ideas that are in their minds. Also instil the fear of God so that if there are no parents he knows that God is watching and seeing what is done. And this can make children make their own decisions without thinking badly.

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[12] Suwarsi. *The Influence of Gadgets on Children's Development*, p. 11.
[13] Suwarsi. *The Influence of Gadgets on Children's Development*, p. 13.

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E. The Urgency of Educational Psychology for Parents and Teachers

According to some experts, educational psychology is a sub-discipline rather than psychology itself. One of the experts who considers educational psychology as a sub-discipline of *applied* psychology is Arthur S. Reber, a professor of psychology at Brooklyn College, University of New York City, University of Brithis Colombia Canada and also University Innsbruck Austria. In his view, educational psychology is a subdiscipline of psychology related to educational theories and problems that are useful in the following matters, namely:

1. Application of learning principles in the classroom.
2. Curriculum development and renewal.
3. Aptitude and ability testing and evaluation.
4. Socialisation of processes and the interaction of these processes with the empowerment of the use of the cocnitive domain
5. Organisation of teacher education.

More simply and practically, Barlo defines educational psychology as: .... *a body of knowledge grounded in psychological research which provides a repertoire of resources to aid you in functioning more effectively in the teaching learning process*. Educational psychology is a body of knowledge grounded in psychological research which provides a repertoire of resources to assist you in functioning more effectively in the teaching and learning process. The emphasis of this definition outwardly revolves around the process of student-teacher interaction in the classroom. [14]

As for what is stated by experts about educational psychology, it can be concluded that educational psychology is a branch of psychology that in the description and research emphasises more on the problems of growth and development of children, both physical and mental, which are closely related to educational issues, especially those that affect the process and success of students. [15]

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[14] Muhibbin Syah, *Educational Psychology with a New Approach*, (Bandung: Remaja Rosdakarya, 2007), pp. 71.

[15] M. Dalyono, *Educational Psychology*, (Jakarta: Rineka Cipta, 1997), pp. 34.

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The non-negotiable necessity for every competent and professional parent and teacher is to carry out their profession in accordance with the situation of the students. In this case, without reducing the didactics and methodics of psychology as a science that seeks to understand human conditions and behaviour, including students who are different from each other, is very important for teachers at all levels of education. These levels of education include 9 years of compulsory basic education and 3 years of secondary education organised in schools and madrasahs.

Psychologists and education experts generally believe that two children (even twins) never have the exact same response to a teaching and learning situation at school. They are likely to differ in terms of innate, physical maturity, intelligence, and physical skills. Children, like other children, are relatively different in personality as seen in their appearance and ways of thinking or solving problems.

Education is also an environment where individuals interact with each other. In this interaction between individuals, both between teachers and students and between students and other students, psychological processes and events occur. The events of this educational psychology process are very necessary to be understood and used as a basis by teachers in treating students appropriately.

Educators, especially school teachers, are highly expected to have if not master the psychology of education that is very adequate in order to educate students through the teaching and learning process that is effective and effective, knowledge of educational psychology for teachers plays an important role in organising education in schools.

Psychological knowledge about students in the teaching and learning process is not only needed by prospective teachers or teachers who serve in formal education institutions. Lecturers in higher education, even parents and those involved in the world of formal education such as kyai and caregivers in pesantren, pastors and priests in churches, and instructors in educational institutions and vocational training, in principle also need knowledge of educational psychology.[16]

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[16] Abd Rachman Abror, *Educational Psychology,* (Yokyakarta: Tiara Wacana Yogya, 1993), p. 29.

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Returning to the issue of teaching and learning and its relationship with educational psychology, the first element in the implementation of a system anywhere is the teaching and learning process. In the midst of this educative process, whether in formal or non-formal education, there is a figure called a teacher. The source of knowledge that can help or assist teachers in managing teaching and learning is practical psychology, educational psychology.

Of course, there are other sources that are also related to the teaching and learning process. A competent and professional teacher's understanding and ability to utilise educational psychology techniques is non-negotiable.

Whether you are a prospective teacher or an in-service teacher, there is no need to view educational psychology as the sole repository of correct and definitive answers to the educational problems you face. On the contrary, you need to know that in educational psychology there are a series of stocks of information about theories and practices of learning, teaching and learning to teach that you can choose from. [17]

CONCLUSIONS

Smartphone use can provide benefits such as access to information and education, and can also have negative impacts if not used wisely. Here are some considerations from an educational psychology perspective, namely: *Firstly*. Impact on cognitive development: smartphones can affect children's cognitive development, especially if used excessively. Too much time spent in front of a screen can hinder a child's ability to develop in aspects such as social skills, problem-solving and creativity. *Second*. Effect on sleep quality: Smartphone use, especially before bedtime, can disrupt children's sleep quality. Sleep disruption can affect their concentration and ability to learn at school. *Third*. Impact on learning motivation: Children who spend too much time on smartphones may be less motivated to study or pursue physical and social activities. This can have an impact on their academic achievement.

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[17] M. Ngalim Purwanto, *Educational Psychology*, (Bandung: Remaja Rodaskarya, 2004), pp. 66.

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Fourth, inappropriate content: Parents and caregivers need to monitor the content accessed by children on smartphones. Inappropriate or violent content can affect a child's emotional development and trigger anxiety or aggressive behaviour. *Fifth*, Social interaction: Excessive smartphone use can reduce time spent on in-person social interactions with peers and family. This can impact the development of communication and relationship-building skills. *Sixth*, Judicious use: Educational psychology encourages parents and caregivers to teach children the wise use of smartphones. This includes setting screen time limits, ensuring that content accessed is age-appropriate, and setting positive examples in the use of technology, and *Seventh*, Educational utilisation: smartphones can also be used positively in children's education. Educational apps, online learning resources, and software designed for learning can help children in the development of academic skills.

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