Behavior in Early Childhood (2-3) Years: A Case Study on the Use of Gadgets in Social Environments

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This study aims to find in-depth meaning regarding the behaviour of gadget-users in children aged (2-3) years. This study uses qualitative approach with a case study. This research uses qualitative data in the form of words, visual, and audio-visual documentation collected through participant, observation, and in-depth interviews about children's behaviour while using gadgets. The analysis of the data will be conducted according to Creswell. This includes providing raw data in the form of transcripts, field notes, and the researchers' own views, storing and organizing data to be analyzed, reading all data, coding, compiling themes and descriptions of the data, constructing between theme, interpretation and assigning meaning to the themes arranged so that a conclusion can be drawn. The study used three research subjects aged (2-3) years who use gadgets in their daily lives. The results showed that 1) Children assign other people as role models in using gadgets, 2) Child behaviour in a motoric physical aspect, demonstrates that children mimic the movements performed by the characters in the video, 3) Child behaviour in cognitive aspects, children learn from what that they see and practice in their activities. 4) Child social development is lacking, because when playing with gadgets, children focus on what they see and do not care about the state of their environment, 5) Development of children's behaviour in an emotional aspects is more likely to show an attitude of joy, anger, and temper tantrums. 6) Children use the YouTube application to view video content of children playing on the
playground, and animated videos of songs. 7) Children use gadgets for 30 minutes to 2 hours per use.

**Key words:** Child Behavior, Children Aged (2-3) Years, Gadgets.

**Introduction**

The rapid development of technology in the world todayis contributing to a variety of fields. Proof of the rapid development of technology is the number of gadget brands on the world market, and even in the Indonesian market. According to a survey conducted by Statista 2019 (The Statistics Portal), it is known that in 2016, the number of smartphone users reached 2.1 billion. It is estimated that cellphone users in 2019 will exceed the 5 billion mark. The number of smartphone users is also expected to continue to increase from 2.1 billion in 2016 to 2.5 billion in 2019 and 2.8 billion in 2020, with a renewal and breakthrough rate that will also continue to increase. In addition to adults, children in the early childhood demographicalso become users of this technology, contributing to its development. Based on a survey conducted by The Asianparent Insight and Samsung Kidstime in 2014, 98% of children in Southeast Asia use gadgets.

Based on preliminary observations made between 1-5 December 2018, the 3 children of this study, namely K (age 3.5 years), A (age 2.5 years), and I (age 2.3 years) it was witnessed that the children, in their daily life, often use gadgets with a duration of more than 1 hour in a day, with an intensity of use of more than 15 minutes per use. This contrasts with studies by The American Academy of Pediatrics and the Canadian Paediatrics Society, cited by Wulansari (2017) which provides screen time guidelines for the use of gadgets based on the age group of children. It is stated that children under 3 years are not given a gadget.

Some of the reasons parents give gadgets to children is because parents feel more secure leaving children with gadgets. This is because with gadgets, children are not fussy, so parents can do their work without being bothered by children. Based on the above problems, researchers are interested in conducting studies on the behaviour of the children of gadget users, with the primary research being conducted on the behaviour of gadget users in children aged 2-3 years in Palembang. Behaviour is an action that arises as a result of a stimulus from the environment. Nawi (2017) defines behaviour as a manifestation of the attitude of an individual or group of people in the form of actions, resulting from interactions with their environment.

Pavlov, Thorndike, and Skinner are quoted by Winther (2017), stating that human behaviour is formed through a habit (conditioning). While Kohler argues that with one's cognitive ability to learn and will gain an understanding will form a human behaviour itself. In addition, Bandura was quoted by Winther (2017) describing that behaviour is formed because of a model system.
Parents are models for children, children observe the behaviour of parents, and children imitate what they see. Suryana (2016) states that children in early childhood are unique individuals who experience patterns of growth and development of religion and morals, physical, cognitive, socio-emotional, creativity, language, and communication that are specific to the stages in which they pass.

In general, children who are categorized as early childhood have characteristics that broadly include a great curiosity drive where this curiosity arises, since the child can know the world through their five senses. Curiosity is one tool for children to find new experiences, the more experience, the faster the child can adjust to the environment. Curiosity in children arises from things that attract their attention (Aisiyah, 2017). A graph of children’s curiosity can be seen in Figure 1.

**Figure 1. Sensitivity of children's curiosity about something new**

Children (2-3) years old will more quickly imitate what people do and what they see from their environment, because children are the best imitators and recorders. In line with the opinion of Shelov and Hannemann who stated that:

“toddler is a great imitator, he will eagerly participate in anything you’re doing around the house” (Shelov & Hannemann, 1997).

In other words, children are good imitators, they will be enthusiastic in emulating whatever parents do around their homes. It was stated in Permendikbud number 137 of 2014 that
children aged (2-3) years had the ability to imitate others in using goods. In this case, it was easy for children to imitate the adults around them in using gadgets.

Based on these characteristics that exist in early childhood, it becomes evident that introducing gadgets to children will have a variety of impacts and will trigger an increase in children's curiosity about what is on the gadget. In addition to triggering an increase in children's curiosity about what is and what can be done by these gadgets, introducing gadgets to children at a very early age, and with improper intensity, it is likely to have an adverse impact on children.

In this globalized era, technology has developed rapidly. An indicator of the rapid development of technology is the many outstanding brands of gadgets on the market. Husnan (2013) states that gadgets are small electronic items that are designed in such a way as to make it a new discovery that is truly amazing in its era. Miller (2018) states that:

“gadget is a technology tool that is currently growing rapidly which has a specific function such that smartphone, iPhone and Blackberry”.

Based on the description above, it can be concluded that the gadget is an electronic device that has a practical purpose and function with a variety of special functions. This multifunctional capability makes it a truly amazing invention. In its development, it has held various forms, for example smartphones, tablets, laptops, iPhone, iPad, television, among others. The rapid development of technology cannot be denied. The use of technology, in this case, including the use of gadgets has reached various demographics of people from all fields, ages, jobs, education and economic levels. In fact, frequently found from among early childhood to adults, as well as from low to upper classes.

In relation to the duration or time span of gadget use, The American Academy of Pediatrics and the Canadian Paediatrics Society cited by (Wulansari, 2017) have provided screen time guidelines for the use of gadgets based on age groups of children, as follows:

a. Children under 3 years old should not be given permission to play gadgets including TVs, smartphones or tablets.

b. Children aged 3 years to 4 years are advised to use the gadget for less than one hour a day.

The time limit set by The American Academy of Pediatrics and the Canadian Paediatrics Society described above is expected to be a reference for parents in giving time limits on the use of gadgets for children.

Starburger is quoted by Montrieux, Vanderlinde, Schellens, & De Marez (2015) arguing that children are only allowed to be in front of the gadget screen in a period of approximately 1
hour every day. This statement is supported by Sigman's opinion, quoted by Montrieux et al. (2015) stating that the ideal duration of pre-school age children in using a gadget is 30 minutes to 1 hour in one day.

Based on the description above, it can be clearly seen that time limits are needed in providing opportunities for children to use gadgets to minimize the level of addiction for the children themselves. For this reason, there is a need for discipline and assistance by parents when children use gadgets, because the excessive use of gadgets can trigger negative impacts and gadget addiction from an early age. Gadgets, with a variety of sophistication, provides various benefits if used in the right way. To get optimal benefits and minimize the negative impacts that will be caused, the role of parents is needed. The following addresses the positive impacts of the use of gadgets on children, according to Handianto and cited by Sigdel (2017):

- a. The development of imagination,
- b. Train intelligence,
- c. Increase self-confidence,
- d. Develop skills in reading, mathematics, and problem solving.

In addition to having a positive impact on the use of gadgets, facilitating children with gadgets also has a negative impact. According to (Heyes, 2018), some of these impacts, among others, can be becoming a closed person, disturbed eye health, impaired hand health, sleep disturbances, aloofness, violent behaviour, exposure to radiation, mental disruption due to lack of wise use of gadgets.

In her research, Chusna stated that many negative impacts will arise when children are absorbed in playing gadgets, including difficulty to socialize, inhibited motor skills, and changes in behaviour. For this reason, the role of parents in supervising, controlling, and paying attention to children's activities is very important (Bush, Health, & Institutes, 2007). Figure 2 provides information that maximal human brain development occurs at under 5 years of age.
Research Methodology

Types of research

This study uses qualitative research with a case study approach, where researchers focus on finding in-depth meaning about the behaviour of children 2-3 years old in using gadgets. According to Creswell what is meant by case study research is:

“a case study is an exploration of a 'bounded system' or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context. case study research is a qualitative research approach in which the investigator explore a bounded system (a case) or multiple bounded system (cases) over time through detailed, in-depth data collection involving multiple source information (e.g., observations, interviews, audio-visual material and document and reports), and reports a case description and case-based themes.”(Miller, 2018)
The study was conducted in the Palembang region, Indonesia. This region includes Jalan Peltu Tulus Yahya Nomor 1213, rt/rw 14/05, kelurahan 2 ilir, kecamatan ilir timur II Palembang, jalan Pramuka perumahan Taman Sari kec. Alang-alang lebar Palembang dan di Jalan. Rawasari No. 2442 20 Ilir D II Kemuning Palembang, Indonesia. The time of the research was conducted in February 2019 - March 2019. However, the time of the study can change depending on the data obtained, because the researchers only stop making observations if the data obtained is saturated and can provide meaning so that conclusions can be made.

The focus of this research is the behaviour of children in using gadgets, the forms of gadget use by children aged (2-3) years, and duration of use of gadgets by children (2-3) years.

Research subjects are people who are used to provide information about the situation and conditions of the research setting (Ghavifekr & Rosdy, 2015). In this research, no sample is needed, the concept of the sample is only used in the first stage, namely, the selection of research problem settings. The number of samples used is relatively small and the sample is chosen according to the purpose of the study. This means determining the sample with certain considerations. In this case, the person who is considered to know best about the use of gadgets in children, are the people are expected to know about the context associated with social situations. This includes parents and the child itself (Diani, Irwandani, et al., 2019).

In order to achieve the intended outcomes of this study, the appropriate criteria for informants as research subjects in this study are as follows:

a) Parents who have children (2-3) years of age where the child uses gadgets.

b) Children (2-3) years old who have used gadgets in their daily lives.

In accordance with the criteria in the selection of informants as subjects in this study, researchers chose three children aged (2-3) years who have used gadgets in their daily lives and their parents as a source of data. In case study research, cases cannot be equated with examples or samples that represent a population. A case is an issue that is studied so that it will reveal an understanding of the case involving one or more individuals (Habibie et al., 2019). This study involves 3 children with the same case to express an understanding of the behaviour of children who use gadgets in Palembang.

Types and Sources of Data in this research is qualitative, in the form of words obtained from observations and interviews. Sources of data in this qualitative study consisted of two sources of data, namely:
**Primary data** in this study are in the form of words obtained from the observation of participants, which are children aged 2-3 years who use gadgets, and interviews with parents of children who use gadgets at age 2-3 years.

**Secondary data** consists of media, websites, internet, and official documents from an institution. The researcher uses secondary data to strengthen the findings and complete the information collected from in-depth interviews and participant observation.

**Data collection procedures** in qualitative research are conducted through observations, in-depth interviews, and documentation (visual and audio-visual)(Hartinah, Sholikhakh, et al., 2019). For this study, data collection was carried out through interviews, observations, and documentation.

**The interview** component of this study used a process of in-depth interviews with parents of the child participants, conducted by researchers. Questions were asked in regards to the behaviour and use of gadgets in their children who are aged between 2-3 years. This interview was conducted by holding face-to-face meetings between researchers and parents. This approach allowed researchers to obtain information about the behaviour of the children who use gadgets that could not be identified observation. In the interview process, a recording device was used to record the conversations so that when described in the interview format, there is no addition or subtraction of information obtained from the interview.

**Observation** is the recording activities that were carried out systematically. For this study, these took the form of participant observation. This means that the researcher participates directly in the activities of the children who are the target of the research, but does not cause changes to the activities being carried out by children.

In order to maximize the observational activities carried out, researchers followed the daily activities carried out by the child in a certain time, paying attention to each incident, and listening to what is said, then record everything related to the use of gadgets by the child as a field note. This activity is carried out intensively to gather the data, establish an understanding of the environment in which the children live, and various matters relating to the use of gadgets in children.

**Documentation** is a crucial part of research activities. which are intended to complete data from various data collection procedures performed. Documentation in the form of an interview sheets, archives, field notes, photographs, recordings, and videos have all been used for this study.
Qualitative research instruments make researchers as the main instrument in research. In qualitative research, the main instrument is the researcher himself (Sugiyono, 2015: 400). Based on this opinion, the researcher acts as the main instrument, as well as the data collector. The researcher is assisted by recording devices including cameras to visually document the data collection process.

**Figure 3. Steps of qualitative data analysis(Hartinah, Suharso, et al., 2019)**

Data Analysis Techniques are used in this study to analyze existing data. Creswell’s data analysis techniques with descriptive analytic methods are used. This means that data analysis is carried out continuously until the data is saturated and added with the latest data sources. Qualitative data analysis, according to Creswell, can be seen in Figure 3. Based on the chart, the stages of qualitative data analysis include: providing raw data in the form of transcripts, field notes, and researchers' own views, storing and organize data to be analyzed, reading all data, coding, arranging themes and data descriptions, constructing between themes, interpretations, and giving meaning to themes arranged so conclusion can be drawn. Before conducting data analysis activities, all raw data, observations, interviews, and documentation were prepared by the researcher. The raw data from the results of interviews were transcribed, observational data was stored in the form of photographs, videos, and memos. Data was stored in the form of documents. This study generated a great deal of data, therefore, data storage was completed carefully and to a high standard to ensure that no data was lost.
Organizing and Preparing Data for analysis took the form of interview sheets, field notes, and documentation. The data to be analysed was arranged based on the date of data collection, the source and type of data, and the description of the data. Field note sheets are collected by date, so they can be arranged, and the findings will be obtained from existing data.

a. Read or Look at All the Data
The researcher read all the data available, to understand the context of the research conducted. By reading all the data, the researcher would gain an understanding of the available data. The researcher can choose important components of the data and set aside data not related to the study. After selecting important data, the researcher takes the next step, which is to categorize the data.

b. Start Coding All of the Data
Coding is the process of marking data that has been grouped. Coding is done manually. In this study, researchers categorized the data into several categories including observational data or field notes coded (CL), interview data coded (CW), and documentation data coded (CD).

c. Used Coding Process to Generate a Description
Coding allows researchers to establish the themes of research data, which becomes a finding. After coding, a research findings theme is obtained. This theme will then be described and carried out the next stage, namely the relationship between themes.

d. Interrelating Theme
The next step is to look for relationships between themes that have been categorized. This allows the researcher to construct relationships between them. The data has been arranged and categorized, then linked so that it is possible to draw a conclusion. The data is presented narratively.

e. Interpreting the Meaning of Theme
After the field data are collected and analyzed, a comprehensive picture of the conditions under this study is obtained. The results of connecting between these themes are interpreted so that they can be understood in relation to one another. Findings can be in the form of descriptions or pictures of objects that were previously deemed irrelevant, but after examination became relevant to the study.

Validation of Data (Valid Data) is important evidence or information in the research conducted. The main data sources in qualitative research is words. Other data such as documents are used as additional data. Validity is the accuracy between the data reported by
the researcher. Creswell and Miller state that validity is a strength in qualitative research, based on determining whether the findings are accurate from various points of view, both from the point of view of researchers, participants and readers (Lestari et al., 2019). Thus, the data is said to be valid if there are no differences between the data reported. The data checking techniques (Figure 4) used in this study include, (1) extension of participation, (2) observer perseverance, (3) triangulation.

**Figure 4. The data checking techniques**

![Validation of Data](image1)

**Extension of participation**, in this case, is the implementation of data collection which was planned for one month. If the planned time has not yet reached its saturation point, then there will be an extension of time in the field. For this research, the time used is in accordance with the planned time, so that it does not extend participation.

**The persistence of the observer** refers to the level of detail in observing what is happening in the field. This allows the researcher to anticipate that there will be no data that is forgotten or not covered carefully. The researcher makes use of supporting media, namely, the camera. To increase perseverance, researchers check the data that has been found and provide an accurate and systematic description of the data about what is observed. Through increasing perseverance in the field, the degree of validity of the data is also enhanced.

**Triangulation** is a cross-examination of various data used, namely from interview, observation, and documentation of the data. Triangulation is not intended to seek the truth, but to improve researchers' understanding of the data and facts that they have. Researchers use source and time triangulation. Source triangulation is done by checking the data obtained through several sources. Time triangulation is done by checking with interviews and observations in different times or situations.
Research Results

The findings of this study will describe the findings established from the data. This will be presented in accordance with the focus of research and the results of data analysis that has been conducted. Data exposure is obtained from observations and / or interviews and other descriptions such as photos and videos. Following is the description of data exposure in the research that has been conducted:

1. Child Behavior Themes in Cognitive Aspects
In the cognitive aspect, the behavior exhibited by children 2-3 years old who are gadget users and are children learning and imitating what they see and practice this in their activities.

2. Themes of Child Behavior in Physical Motor Aspects
In the physical aspects of motoric, the behavior shown by children 2-3 years old using gadgets imitates movements that can develop their fine and gross motor skills. Fine motor skills are the development of a child's skills in coordinating their fingers to hold objects. Gross motor skills are the formation of a child's skills in doing movements that involve coordination between members of the body using large muscles. This includes walking while standing on tiptoe, jumping, among others.

3. Themes of Child Behavior in Social Aspects
In the social aspect, the behaviour exhibited by children who are 2-3 years old and are gadget users is related to how the interaction and sensitivity is shown by children to their environment.

4. Themes of Child Behavior in Emotional Aspects
In the social aspect, the behaviour exhibited by children who are 2-3 years old and are gadget users is related to a situation in order to achieve a personal satisfaction or welfare when dealing with the environment.
Information on Child Identity Data

**Child Identity Data Source 1**
- **Name**: K. A. H.
- **Gender**: Female
- **Father name**: J. R
- **Mother name**: D. S.

**Child Identity Data Source 2**
- **Name**: M. G. T.
- **Gender**: Male
- **Father Name**: T. K.
- **Mother Name**: N. P.

**Child Identity Data Source 3**
- **Name**: A. A. K.
- **Gender**: Male
- **Father Name**: F. A.
- **Mother Name**: S. S. D. P.

**Forum Group Discussion (FGD)** forms of Use of Gadgets in Children 2-3 Years. From the data collected, it is known that forms of gadget usage in children 2-3 years of age contributes to children's behavior. Children aged 2-3 use gadgets to view animated video content, videos of foreign children's songs, videos available on the YouTube app, upin-ipin, and other cartoon shows aired by television stations.

According to the mother of "DA" at the time of the interview (March 8, 2019 at 3:00 p.m. - 3:20 p.m.), the forms of using gadgets for her child are as follows:

“*My Children was watching upin-ipin, other cartoons like that on television, if YouTube watch videos of children, cartoons, songs like that.*” (CW1,K39)

From the interview, it is known that the use of gadgets in children is only used for watching videos and cartoons. The second subject is the mother "NP" (March 19, 2019 at 4:00 p.m. - 5:00 p.m.). The form of using a gadget for her child is as follows:

“*My Children was watching, as cartoons or children play in the playground.*”
(CW2, K64)

From the results of the interview above, the researchers concluded that children aged 2-3 only use gadgets to watch.

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The third subject of the mother "SS" at the time of the interview (March 23, 2019 at 4:00 p.m. - 4:30 p.m.), stated the form of using the gadget to her child as follows:

"Youtube is all. (CW3, K41). Because he watched British content, not Indonesia."(CW3, K38)

From the results of the interview, the researchers concluded that the form of gadget usage in Naka was only used for watching videos, both cartoons and children who were playing.

**Duration of Use of Gadgets in Children (2-3) Years** is the length of time using gadgets for children 2-3 years old. According to the mother of "DS", the duration of using the gadget to her child is as follows:

"Not necessarily, of course he wants. Most if you play cellphone like that an hour right, if you watch TV if he wants to watch upin-ipin until it runs out yes he watches upin-ipin until it runs out."(CW1, K25, K26, K27)

From the results of the interview above, the researchers concluded that the duration of gadget use in children was 1 hour at a time.

The second subject of the mother "NP" states that the duration of use of the gadget for her child is as follows:

"Not necessarily, sometimes from a full battery to run out. If you give a time limit of half an hour to one hour. But if the father does not."(CW2, K29)

From the results of the interview above, the researchers concluded that children use gadgets with a duration of 30 minutes to 2 hours for one use.

The third subject of the mother "SS" states the duration of using the gadget for her child is as follows:

"Sometimes it can take a long time, 30 minutes to 1 hour, if you want to sleep watching while nursing until you fall asleep."(CW3, K20)

From the above interview, it was concluded that the duration of gadget use in children is 30 minutes to 2 hours for one use.
Discussion and Conclusion

As the world develops, it will affect the development of existing technology. Existing technologies will become increasingly sophisticated, with no exception to the types of gadget technology. Currently, the development of technological types of gadgets is very rapid, with many emerging and sophisticated types of gadgets. This causes everyone to compete to have this sophisticated item. This desire for technology ranges from low to high economic circles, ranging from children to adults who are familiar with the existence of these gadgets.

Sophisticated technology and gadget type will influence the behaviour of children. This is because there are positive behaviours and negative ones that may develop depending on what the child sees as children aged 2-3 years are more sensitive to imitation. As stated by Ramadhani, Umam, Abdurrahman, & Syazali (2019), toddler-aged children are children who are in a time of imitation, and are the best imitators, so they will imitate what they see. In line with Kartadinata's opinion, cited by Sagala, Umam, Thahir, Saregar, & Wardani (2019) which states that children are constantly imitating what they see and hear from their environment. This imitation is used as a form of learning by children. Providing an example is an important thing in providing education in early childhood years.

Behaviour during early childhood is in the process of formation. In addition to genetic factors, environmental factors are also very influential on the formation of a child's personality. Early childhood is imitative or imitating. Children will imitate what they see and feel from their environment because children do not know the limits of right and wrong, good and bad, as well as appropriate and inappropriate (Syazali et al., 2019).

One aspect of early childhood behaviour is the social emotional aspect (Diani, Herliantari, Irwandani, Saregar, & Umam, 2019). In general, socialization is a mental process and behaviour that encourages a person to adjust and to fill the desires that originate from within. Social development is a process of learning from the behaviour that is imitated from within the family and following examples of what they see in their environment.

The process of planting social values in children moves through three stages starting from birth to adulthood. These can be defined as imitation, identification and internalization (Kasayanond, Umam, & Jermsittiparsert, 2019). Imitation means that children imitate the behaviour, attitudes, and perspectives of adults in activities that children see intentionally. Identification means the process of equating the social behaviour of those around them. The last step is internalization, which is the process of planting and absorbing values. In other words, determining a social value that exists in a person so that these values are embedded in him.
In addition to social aspects of children's behaviour, there are emotional aspects. Emotion itself means something that pushes against something. For example, happy emotions encourage us to laugh. In general, emotions have a function to achieve a personal satisfaction or well-being when dealing with the environment (Kasayanond et al., 2019). As for the factors that influence the emotional development of children, these include the role of maturity and the role of learning. The development of endocrine glands affect emotional states in childhood. This influences the role of learning and includes learning methods that will support children's emotional development, such as learning by trial and error, learning by imitating, learning by equalizing, learning by habituation and training.

Various forms of emotions in early childhood include affection (affection), anxiety (anxiety), attachment (attachment of affection), jealousy, depression, destruction (children who tend to damage objects), phobias, joy, hypersensitivity (emotional sensitivity and excessive feelings, like being easily hurt and showing excessive responses to the attitudes of others), impulsivity (ie an immediate reaction without thinking or acting on the basis of impulse), shy, angry, daydreaming, nail biting, delirious, thumb sucking, nightmares, bedwetting, insecurity, separation (stress), stress, fear, and temper tantrum that is the anger of children when the desire is not fulfilled.

Children find it very easy to imitate the behaviour, words, habits, and other attitudes of what they see and hear in their environment. This time is a vulnerable period for children, because if we show behaviour, attitudes, and habits or say something wrong, it will be imitated by children. This can cause adverse effects on children's behaviour. It is not only the behaviour, attitudes, and words that parents, and others show to children that can have an effect. Watching videos that children see on their gadgets will affect children's behaviour. This is because the child will see things that would interest them and they are able to do it, then the child will imitate what they see in the video.

Although children do not yet understand what they are imitating, whether it is something good or not, it is expected that parents should provide appropriate understanding so that children are able to understand it. Providing an understanding will affect the child's development, in this case, on the child's behaviour. The following are the behaviours shown by children who use gadgets:

**Children make parents and others around them as role models**

In daily life, children who live in a gadget literate family are no longer surprised by the existence of gadgets. When children see other people using gadgets, the children will also use gadgets. As in Permendikbud number 137, it is said that children 2-3 years old can imitate others in using goods. This is a child's behaviour in cognitive aspects.
Children mimic the movements of what they see

A child in their early childhood years is the best copycat and will copy new and interesting things. When children see videos of children who are jumping up and down, the child also mimics jumping around. This can help the child's motor development. In another form, when the cartoon shows the behaviour of spouting food, then the child imitates spouting food when they eat. This is a negative behaviour, so parents must provide understanding to children.

Children feel happy when watching videos

By watching videos, children can respond and react to things that are interesting and fun for the child. The child will smile when they see the cartoon video they consider funny, and the child will laugh when the video he sees laughs.

The child whines and cries when the gadget used dies

Children who are happy when watching will cry and whine when the gadget is dead or taken by others. Children will show irritated behaviour when something is disturbing. This happens because children who are accustomed to using gadgets will have difficulty controlling their emotions. As according to Radesky, an expert from the University of Michigan, United States, quoted by Prasetya (2017), children do not have the ability to express their frustration through words, so that they will tend to express their frustration through body movements or with loud voices.

Children practice what they see

With cognitive abilities, children will form behaviour by learning from what they see. When a child sees a video of a child playing a playground, the video shows a child using a bracelet to enter the playground, so when a child is invited to a playground, he will ask for a bracelet because they see from the video, this shows that the child learns from what they see.

Children calm when watching and using gadgets

Children will enjoy the activities they like. In this case, the child likes to use gadgets to watch. The child will look calm when watching, they will not care about the surroundings. Even when the child is called, they do not turn around.
Conclusion

Based on the results of research that has been conducted regarding the behaviour of gadget users in children aged 2-3 years in Palembang, it can be concluded as follows:

- Children make other people role models in using gadgets,
- The child's behaviour in the physical aspects of motoric, the child imitates both gross and fine motoric movements performed by the characters in the video,
- Children's behaviour in cognitive aspects, children learn from what they see and practice their activities,
- Child social development is lacking, because when playing gadgets, children focus on what they see and do not care about the state of the environment
- The development of children's behaviour in emotional aspects is more likely to show an attitude of joy, anger and temper tantrum.
- Children use the YouTube application to view video content of children playing on the playground, and animated videos of songs.
- The child uses the gadget for 30 minutes to 2 hours for one use.

Recommendation

- We recommend that children 2-3 years of age are not given a gadget, especially a smartphone. Children are better directed to play using educational toys and directed to activities that can develop language, cognitive, motor, and social skills.
- Parents must be wiser in facilitating children with various types of gadgets. Even though parents are busy, it is better to take the time to play and communicate with children, so that children do not feel lonely and inattentive.
- Parents must keep watching and accompanying children when playing gadgets.
- There must be a commitment between family members in providing time limits in using gadgets.
- For further researchers, it is expected to conduct research on the relationship between the use of gadgets on aspects of child development.

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REFERENCES


Syazali, M., Putra, F. G., Rinaldi, A., Utami, L. F., Widayanti, Umam, R., & Jermsittiparsert, 403
