

# Education Quarterly Reviews

**Agung, Iskandar, Widiputera, Ferdi, and Widodo. (2019), The Effect of The use of Gadget on Psychosocial, Socio- Emotional, Self-Reliance, Responsibility, and Students Learning Results in Elementary School. In: *Education Quarterly Reviews*, Vol.2, No.2, 276-291.**

ISSN 2621-5799

DOI: 10.31014/aior.1993.02.02.60

The online version of this article can be found at:  
<https://www.asianinstituteofresearch.org/>

Published by:  
The Asian Institute of Research

The *Education Quarterly Reviews* is an Open Access publication. It may be read, copied and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Education Quarterly Reviews* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of education, linguistics, literature, educational theory, research, and methodologies, curriculum, elementary and secondary education, higher education, foreign language education, teaching and learning, teacher education, education of special groups, and other fields of study related to education. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Education Quarterly Reviews* aims to facilitate scholarly work on recent theoretical and practical aspects of Education.



ASIAN INSTITUTE OF RESEARCH  
Connecting Scholars Worldwide



# The Effect of The use of Gadget on Psychosocial, Socio- Emotional, Self-Reliance, Responsibility, and Students Learning Results in Elementary School

Iskandar Agung<sup>1</sup>, Ferdi Widiputera<sup>2\*</sup>, Widodo<sup>3</sup>

<sup>1,2,3</sup> Center for Policy Research on Education and Culture, Research and Development Agency, the Ministry of Education and Culture, the Republic of Indonesia

\* Maastricht University, the Netherlands

Corresponding authors: safrusal.1958@gmail.com; ferdi.widiputera@maastrichtuniversity.nl; widowida2@gmail.com

## Abstract

This study aims to determine the impact of using gadgets on psychosocial, socio-emotional development, self-reliance, responsibility, and student learning outcomes. The focus of this study is elementary school students in urban areas with samples taken from six schools, three each in East Jakarta and South Jakarta in the Indonesian capital city, DKI Jakarta. The results showed that the use of gadgets had a significant influence on psychosocial, socio-emotional, self-reliance, responsibility development, then this variable became mediation which had a significant influence on student learning outcomes. Although it can have a positive or negative impact, it is difficult to limit the use of this gadget to students. For this reason, it is recommended that teachers be able to develop and utilize the use of gadgets in teaching and learning activities to students, encourage creativity, critical thinking, collaborative learning, and encourage problem solving learning. Every element in the school (headmaster, class teacher, guidance and counseling teacher, and others) must intensively explain to students about the impact of using positive or negative gadgets. Schools also need to work with parents to pay more attention to and control the use of gadgets by their children at home.

**Keywords:** Gadget, Psychosocial, Socio-Emotional, Self-Reliance, Responsibility, Student Learning Results

## Introducing

The advancement of digital technology, one of them gadgets, has become part of the daily lives of all walks of life. Various positive or negative things can be easily accessed through the gadget. On the positive side, the use of gadgets is very helpful and makes it easy to carry out various activities, for example in terms of building communication, seeking and exchanging information, obtaining various types of entertainment, conducting financial transactions / buying and selling, ease of using transportation services with on-line applications, and others. From the negative side, in the gadget there are various kinds of content that contains the spread of false news, violence, crime, murder, to pornography.

Dependence on gadgets also knows no age, not only among adults, but also children. Especially for children, the use of gadgets is more intended to obtain entertainment, such as playing games and watching videos on youtube. Based on a survey by Asian Parent Insight through the Mobile Device Usage Among Young Kids (2014), it was stated, that the majority of parents allow children to use smartphones / tablets not only for education, but also entertainment, the introduction of technology from an early age, and to keep children children stay calm. Similarly, Zaenudin (2017) argues, one of the reasons for the widespread use of technological devices in children is because parents make the devices they provide as caregivers for their children. Use of gadgets to look after their children. With the help of gadgets, parents can detect the location of the child's presence, thus providing psychological calm.

From the field it was found that the gadget was used by all levels of the child's age, starting from the age of 0-18 years. Various cases also show the phenomenon of the negative impact of the use of gadgets by children. One negative effect is low motor development and low creativity, where children tend to spend time in cyberspace. Children cannot theorize, cannot think critically, even difficult to solve problems (Jakarta Newspaper, 2018). Jessica (2018) concluded that there were 10 bad effects of gadgets on children, namely: addiction, stunted self development, risk of obesity, reduced rest periods and decreased school performance, psychiatric illness, aggression, senility, lack of social skills, radiation threats, and explanation of the effects of unsustainable gadgets.

On this basis this paper aims to determine the effect of using gadgets on children, especially elementary school students. Paper will examine the relationship of the influence of gadget usage (UGD) on psychosocial development (PSO), socio-emotional (EMS), self-reliance (SELF), and responsibility (RESP) of children, as well as its impact on student learning outcomes (SRL). Explicitly, UGD gadget is an exogenous variable that gives effect to PSO, EMS, SELF, RESP, and SRL as endogenous variables. Furthermore PSO, EMS, SELF, and RESP are exogenous variables that have an influence on SRL as endogenous variables. Reasons for variable selection, will be described in the next paragraph.

## **Literature Review**

### *Elementary School Age*

There are still differences regarding the understanding of children, especially in terms of age. The United Nations Convention on the Rights of the Child defines a child as a person under the age of 18, unless specified by the laws of the country concerned ([https://id.wikipedia.org/wiki/Konvensi\\_Hak\\_Hak\\_Anak](https://id.wikipedia.org/wiki/Konvensi_Hak_Hak_Anak)). But in Indonesia alone the law provides a different understanding of children. In Law No. 4/1979 concerning Child Welfare, children are people who have not reached the age of 21 years and have never been married, while in Law No. 23/2002 concerning Child Protection, the definition of child refers to someone who is not 18 (eighteen) years old, including a child who is still in the womb. In the Civil Code Article 330 says, children are everyone who is not yet 21 years old and is not married. According to Article 45 of the Criminal Code, a child is a person whose age has not reached 16 (sixteen) years. In Law No. 39/1999 concerning Human Rights is affirmed, children are every human being under the age of 18 (eighteen) and unmarried, including children who are still in the womb.

What does school-age children mean? At what age did a child start school and receive formal education from a teacher at school? Within this scope the school becomes a place of learning and children internalize the value of science and other values after the family. Schools become educational institutions are very important in shaping the personality and determining the quality of children in the future. Untario (2004) argues, the main characteristic of school age is that they display individual differences in many aspects and fields, including differences in intelligence, cognitive and language abilities, personality development and physical development.

School age was marked by the start of children entering elementary school, where children for the first time received formal education. Suryabrata (2008) mentions as an intellectual period or period of harmony for

children to attend school. However, Suryabrata did not say at what age the child is mature to enter elementary school, because maturity is not only determined by age, but by several factors that can influence it. According to Nasution (1993), the primary school age range is between six and twelve years. In the implementation of the 6-year compulsory education program by the Indonesian government starting in 1984, it was stated that children aged 7 - 12 years were required to do primary school education, and continued with a 9-year compulsory education program starting in 1994.

#### *Development of digital technology (Gadgets)*

The development of information and communication technology has resulted in the life of the world community that is getting closer, no longer limited by space and time. Globalization has resulted in increasingly open international life characterized by competitive situations in fighting for limited resources. Only countries that have quality human resources can take advantage of competitive situations to improve the welfare of their people (see: Ohmae, 1999; Spich, 1995; Albrow, 1996; Waters, 1995; Al-Rodhan, Agung, 2017).

In line with the development of information and communication technology, the use of gadget technology is increasingly being used by all levels of society in the form of tablets, cellphones, smartphones, and net books that are connected to the internet network. The invasion of digital technology is difficult to stem, and has created a new atmosphere that covers various aspects of life. Currently, the use of digital technology is developing in various aspects of work (government, private), such as: public services, business services in the fields of transportation, travel, food and beverages, health services, online commerce (e-commerce), and so on. In the field of government, the use of digital technology has been developed to facilitate the provision of services to the public, such as filling in annual taxes, making passports, storing data and information, and so on.

#### *Challenges of 21st Century learning*

Including in the field of education, inevitably must adjust to the development of global life and the use of information and communication technology. The challenge of 21st century education is to produce quality human resources who master science and technology; reading - writing - counting, creative, critical thinking, being able to communicate with various parties, and conveying thoughts / ideas, able to collaborate in solving increasingly complex problems; and having national insight (NIE, 205; ISTE, 2005; Pearlman, 2006; Agung, 2011).

Agung (2017) argues that current and future learning requires teachers to have various abilities, ranging from developing independent and complete learning plans, communicating interestingly - pleasantly - effectively in delivering learning material, to utilizing digital technology in learning. The latter is also meaningful, that students are also required to be able to use digital technology in learning, in the form of laptops / notebooks and gadgets. This can encourage active students to make digital technology a source of learning, develop creative and innovative attitudes, communicate thoughts and ideas actively, develop collaborative learning through problem solving approaches, build analytical and reflective thinking, and so on. All of this will shape the competency of students who master, utilize, and develop science and technology that will be the capacity and readiness to face the challenges of global competition.

#### *Impact of Using Gadgets*

A gadget is a small electronic device that has a special function. Gadgets always appear with more advanced technology that makes users easier, more comfortable, and more practical. As an activity, it is certain that the use of gadgets in students will have a positive or negative impact. Positive impact will be obtained if students can use gadgets positively, such as making it a source of knowledge and learning, developing programs, developing creativity, communicating innovative thoughts / ideas, and so on. Conversely, it tends to have a negative impact if the time and use of gadgets is not controlled just for playing games, entertainment, chatting with peers, and so on.

Various studies show the positive and negative effects of using gadgets in children's lives. Ayuningtyas and Adullah (2016) showed the positive impact of internet use (one of them through gadgets) by elementary school students in South Korea. In this country students are very active in finding correct, or valid information. Demonstrations or scientific illustrations can be searched like on google or youtube. Students usually seek information about social phenomena by being watched by the teacher. Demonstrations or scientific illustrations can be searched like on google or youtube. Students usually seek information about social phenomena by being watched by the teacher. One of the negative effects was expressed by Jessica (2018) above. The impact concerns various aspects, both child psychology, sociology, self-reliance, responsibility, and even health. This paper feels the need to conduct a study of the effect of using gadgets on children, especially elementary school students. The assumption is that the use of gadgets that are less monitored tends to have a negative impact on children and children's learning achievements. In this paper the influence of the use of gadgets will be focused on psychosocial, social-emotional aspects, self - reliance, responsibility, and learning achievement.

### *Psychosocial development*

Sherif and Sherif (1993) argued, psychosocial is a science that studies the experiences and behavior of individual humans in relation to social stimulation situations. Myers (1990) argues, social psychology is knowledge about how people think, influence, and relate to other people. Baron and Byrne (2006) argue, social psychology is a field of science that seeks understanding of the origin and causes of thoughts and behavior of individuals in social situations. From various opinions expressed by social science and psychology experts it can be concluded that psychosocial is a branch of social science that seeks to understand individual behavior in a social context.

Psychosocial person increases with age. Erikson (1993) divides one's psychosocial development into eight stages. Human personality develops in a predetermined order, built on each of the previous stages. During each stage, individuals solve psychosocial crises that can get positive or negative results to develop trust. Failure to complete a stage can resolve the reduced ability to complete the next stage. In the opinion of Erikson (1993), children of primary school age (6-12 years) are categorized in the fourth stage, namely industry vs. inferiority. The industry builds when children are encouraged to take the initiative, so they begin to feel diligent (competent) and confident in achieving goals. But if this initiative is not encouraged and limited by parents or teachers, then children tend to foster inferiority and doubt their own abilities.

Various studies show that the use of gadgets tends to influence the psychosocial development of individuals. Trinika (2015) found that there was an influence of the use of gadgets on psychosocial development of the feet. The same was found also by Swatika (2016), Chusna (2017), and Sapardi (2018) regarding the relationship of the influence of the use of gadgets to psychosocial development of children. Witarsa et al (2018) showed that gadgets not only affect the mindset or behavior of adults, but also affect the behavior of children, especially elementary school students, in social interactions. Dependence on gadgets in children is caused by the length of time in using gadgets. Playing gadgets with a long duration and done every day, can make children develop towards anti-social.

### *Socio-emotional development*

Emotional is related to feelings or thoughts, while social relates to society. In simple terms, it can be said that socio-emotional development is a process of growing a person to achieve maturity of feelings and thoughts in dealing with the community environment (Chaplin, 2008; Goleman, 2003).

Children's socio-emotional development is very important, because it relates to the child's ability to adjust to his social environment, especially in relation to peers. Hurlock (1980) argues, there are four criteria for social adjustment that must be owned by a child, namely: the child's real appearance can meet the expectations of the group and become members who are accepted in groups, adjust to various groups in their environment, show other people's pleasant attitudes in social participation, and satisfaction with the roles played in groups.

Socio-emotional development leads to two things, namely: the ability to adjust or isolate from their peers. According to Hurlock, there are two types of isolation (1980), namely (1) voluntary isolation is withdrawal from groups because they are less interested in participating in group activities; (2) intentional isolation because it is rejected by the group and its presence is not needed.

Various phenomena show, the use of gadgets by children brings their own pleasure so forgetting their association with their peers. Children are absorbed in using gadgets, less concerned with the social environment, and angry when disturbed. The Novitasari and Khotimah study (2016) shows that the use of gadgets has an impact on children's social interactions. Wahyuni (2018) concluded, the use of gadgets in children will affect the ability of social interaction and appear to be less concerned with the surrounding environment. Desiningrum et al (2017) and Suhana (2017) shows that the use of gadgets contributes effectively to socio-emotional intelligence variables.

### *Self-reliance*

Self-reliance can be interpreted as an effort on your own abilities (<https://www.merriam-webster.com/dictionary/Self-reliance>). Self-reliance is to free yourself from the bonding and dependence of others. Steinberg (2002) argues, self-reliance is the ability to do and take into account actions taken by someone, and to build supportive relationships with others. Shaffer (2002) argues, self-reliance as the ability to make decisions and make himself a source of self-emotional strength so as not to depend on others. According to Parker (2006), self-reliance is the ability to manage all that is owned, manage time, walk and think independently, accompanied by the ability to take risks and solve problems, do not need the approval of others when going or doing something new, does not require detailed and ongoing agreement on how to achieve the final product. From this opinion it can be concluded, that self-reliance is the ability to act on its own account and to be RESPONSIBLE for the action, the ability to make decisions and manage his own life without excessive dependence on parents, and the ability to maintain supportive relationships with others.

Steinberg (2002) distinguishes self-reliance into three types, namely: emotional independence, behavioral independence, and value independence. Emotional independence is an aspect that relates to changes in relationships with someone, especially parents, where children develop feelings of individuation and try to break away from childish ties and dependence on parents. Independence acts in relation to the ability to change opinions and suggestions from other people in the right conditions, choose decisions to be made based on their own judgment and reach their own conclusions or final decisions in behaving. The independence of values is related to moral views, issues recognizing politics, ideology, and religion.

The condition of independence (emotions, behavior, and values) is influenced by various aspects, both from the family environment, friends, society, and the use of gadgets. Just look, in today's life where a child is faced with the life of a busy parent, it requires more independent attitudes and behavior. Supported by the development of the online business-based world, it requires children to use gadgets effectively to go to school, order food, deliver goods, and so on. Sari and Mitsalia (2016) found that there was a positive influence between the use of gadgets and the social personality of pre-school children. The gadget conditions children's self-reliance, such as: ordering food on-line, chatting with study friends, memorizing the Qur'an, knowing English vocabulary, entertainment facilities, understanding foreign language messages in gadgets, and sharpening children's intelligence. From field observations obtained, children in urban areas are now used to using gadgets for their on-line transportation services from home to school and vice versa, to the location of tutoring, to friends' homes, and others.

### *Responsibility*

The definition of responsibility is expressed in various versions by experts. From a legal point of view, responsibility is more interpreted as a result of the consequences of one's freedom of action related to ethics or morals (Hamzah, 2005). Other experts argue, responsibility is human awareness of the obligation to realize its role, or responsibility as a person's behavior in reacting to the environment (Soemardjan, 1964; Spraedly, 1989).

Adiwiyoto (2001) defines responsibility as making appropriate and effective decisions. It should be related to normal social boundaries and expectations that are usually given to improve human relations, safety, success, and their own welfare. Effective means a response that allows children to achieve goals whose end result is stronger self-esteem, for example if they will learn the group must get permission and account for their behavior to parents.

The Responsibility of the child will be formed along with its growth and development. In school- age children, given their primary role as students, of course the main responsibility is to undergo and pursue education seriously. According to Adiwiyoto (2001), a student who has responsible characteristics can be shown through several things, such as routine learning, respecting rules at school, doing assignments from the teacher at school or at home, being able to concentrate, and so on. Outside the context of education, in everyday life children also have other responsibilities, such as caring for personal belongings, disposing of garbage into the trash, sweeping and being involved in cleaning the house, and so on.

How does the use of the device affect the realization of children's responsibilities? The results of Prabowo's (2016) study show that children's responsibilities tend to be low, such as: not tidying up beds, rejecting jobs ordered by parents, and ignoring religious activities. Even Young and Rodgers (1998) found that the use of gadgets can lead to children's addiction, so they often lie to support their addiction. When becoming an addict, children often fail to complete their duties and obligations. Declining learning achievements will be said by lies, not caused by gadget addiction.

## **Research methods**

### *Population and Sampel*

This paper is part of the implementation of research in January 2019 for elementary students in two urban areas (East Jakarta and South Jakarta) in the capital city of DKI Jakarta. The study was carried out for two weeks in two municipal regions, with each of the three primary schools (two public schools and one private school) determined as "good" as a sample, and from each school 20 students of class VI were obtained as samples through a purposive random technique. The purposive criteria aimed at students are ownership of gadgets in the form of tablets, cellphones, smartphones, and netbooks connected to the internet, while random refers to everyone who meets these criteria. It is possible that the number of students who own and use gadgets in class VI is more than 20 people, but the study only took 20 people as samples with equal opportunities for each person. Determination of student samples is carried out by the class teacher. The total sample of students is 120 people.

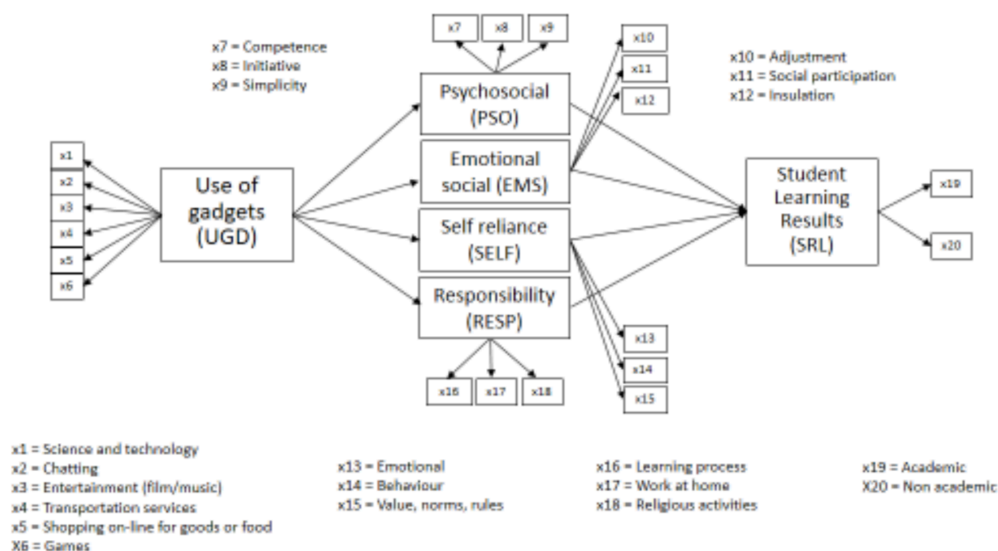
### *Type and Analysis Data*

Primary data in this study were obtained from distributing questionnaires to student samples, supported by the results of interviews with principals, teachers, and parents of students belonging to the school committee organization. Especially the questionnaire, before the trial was conducted to determine the level of validity and reliability using product moment test from Pearson and Cronbach Alpha with the help of the SPSS 24.0 version program. The minimum validity criteria for the validity test is  $= 0.361$ , and the reliability test is  $\geq 0.6$  (Soegiyono, 2010). From the results of the tests obtained, that most items of statements or questions in the study proved to be valid and reliable, so that they met the requirements to be applied.

Analysis used Structural Equation Modeling (SEM) using Lisrel 8.80 program. SEM can be done, because the number of samples meets the minimum requirements of 100 respondents (Kusnendi, 2009; Haryono, 2013).

### Theoretical model

Theoretical model: The effect of the use of gadget on psychosocial, socio emotional, self reliance, responsibility, and students learning results in elementary school



### Hypothesis

- The use of gadgets (UGD) has an influence on the psychosocial development of students (PSO) The use of gadgets (UGD) has an influence on the socio-emotional development of students (EMS)
- The use of gadgets (UGD) has an influence on the self-reliance (SELF) of elementary school students
- The use of gadgets (UGD) has an influence on student responsibility (RESP)
- Psychosocial development (PSO) has an influence on student learning outcomes (SRL) Socio-emotional development (ESM) has an influence on student learning outcomes (SRL) Self reliance (SELF) has an influence on student learning outcomes (SRL)
- Responsibility (RESP) has an influence on Student learning outcomes (SRL)

### Findings

#### Respondents description

Based on the results of questionnaires obtained answers as much as 63.33% of male students and 36.37% of female students. The age of respondents is between 11-13 years old, with the highest number being 12 years old. Most of the work of parents (57.5%) is recorded in the formal sector, as government employees, military and police, and some (42.5%) in the non-formal sector ranging from entrepreneurs (large and medium), shop vendors and on the market, workers in private companies, up to politicians). Most of the students (72.50%) said they came from families with fathers - working mothers, while 27.50 percent of students said only one (father or mother) worked for a family's daily living.

The majority of student respondents are births in the capital city of DKI Jakarta, and only a small percentage say they are born outside this area. Among them are due to following parents as civil servants, soldiers, or police who frequently move assignments from one area to another (between provinces or between regencies / municipalities). Even so, almost all of the respondents answered that they did not use the language of the ethnic group of parents, but Indonesian in communicating in their daily family environment and with peers.

The income level of parents, even though most students say they don't know, but from the answers to ownership of other items (for example: self-owned homes, private cars, motorbikes, air conditioning, TV, refrigerators,



laptops / notebooks, etc.) seem categorized capable family. As many as 48.33% of the student respondents stated that they had a shuttle from home to and from school to carry out the learning process, by subscribing every month to someone who provides shuttle services, use of on-line transportation services, or others. As many as 53.33 percent of students said they had activities outside the home after school, to take part in tutoring, traditional dance studios, sports clubs, and so on.

### *Confirmatory factors analysis (CFA) results*

#### *Validity Test Results*

Latan (2012) suggests that Confirmatory Factor Analysis (CFA) is conducted to test the dimensionality of a construct or variable. CFA needs to be implemented as a test of validity and reliability to determine whether indicator variables really form the latent variables studied (Haryono, 2013). Validity test is done to find out whether the question items meet the standardization value of the factor. If the value of the standard loading factor is greater than 0.5, the question item is valid (Ghozali, 2011). Table 2 shows that all items in the statement or indicator in this study are valid, because they have a loading value which is greater than 0.5.

Table 2. Validity CFA Results

Variable	Indicator	loading factor	Conclusion
Use of Gadgets (UGD)	X1	0.77	Valid
	X2	0.72	Valid
	X3	0.61	Valid
	X4	0.71	Valid
	X5	0.71	Valid
	X6	0.70	Valid
Psychosocial (PSO)	X7	0.84	Valid
	X8	0.78	Valid
	X9	0.79	Valid
Socio-Emotional (EMS)	X10	0.82	Valid
	X11	0.83	Valid
	X12	0.73	Valid
Self Reliance (SELF)	X13	0.71	Valid
	X14	0.74	Valid
	X15	0.68	Valid
Responsibility (RESP)	X16	0.68	Valid
	X17	0.70	Valid
	X18	0.68	Valid
Student Learning Results (SRL)	X19	0.71	Valid
	X20	0.72	Valid

#### *Goodness of Fit (GOF) Test*

Structural model analysis in SEM begins with testing the suitability of the overall model which is seen based on the Goodness-of-Fit Index (GFI) indicator of LISREL output (Hair et al, 2006). Overall, a summary of the critical values from the model compatibility test can be shown in table 3.

Table 3. GOF Test Results

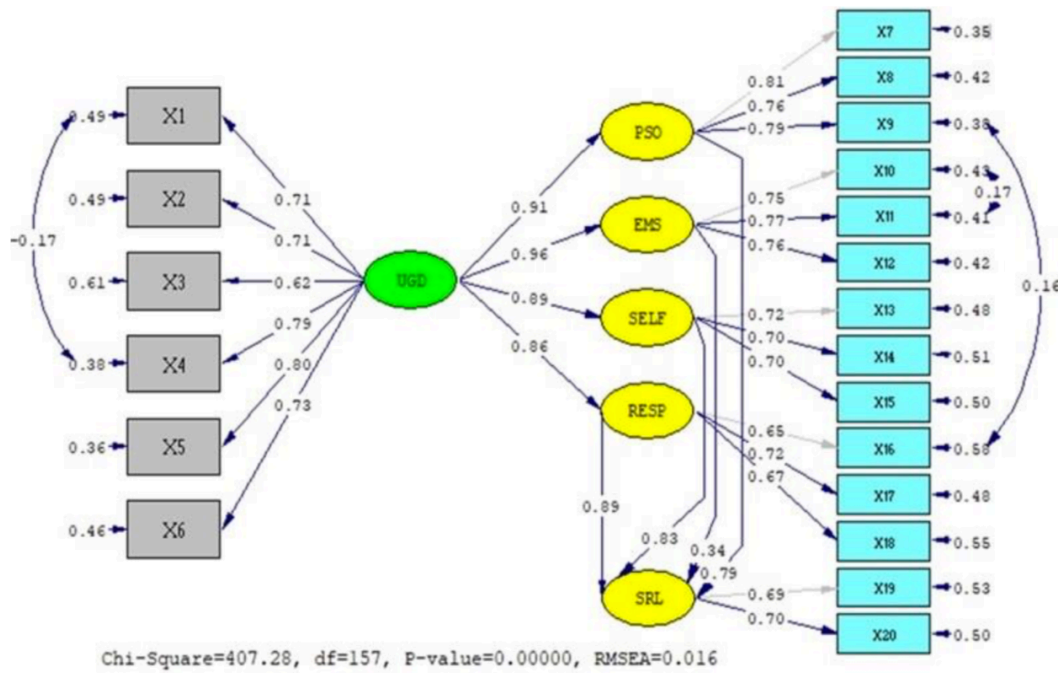
Size Degree of Match	Value	Acceptable level of compatibility	Conclusion
<i>Goodness of Fit Indices (GFI)</i>	0.95	$GFI \geq 0,9$	Good Fit
<i>Root Mean Square Error of Approximation (RMSEA)</i>	0.016	$RMSEA \leq 0,08$ (good fit)	Good Fit
<i>Normed Fit Index (NFI)</i>	0.93	$NFI > 0,90$	Good Fit
<i>Adjusted GFI (AGFI)</i>	0.96	$AGFI \geq 0,90$	Good Fit
<i>Comparative Fit Index (CFI)</i>	0.96	$CFI > 0,90$	Good Fit
<i>Incremental Fit Index (IFI)</i>	0.96	$IFI > 0,90$	Good Fit
<i>Relative Fit Index (RFI)</i>	0.92	$RFI > 0,90$	Good Fit

The model match test results show that RMSEA is smaller than 0.08; therefore, it is said to be a good fit model. In addition, the results of testing CFI, IFI, NFI, RFI, GFI, and AGFI meet the suitability of the model in which each value is greater than 0.90 showing data good fit.

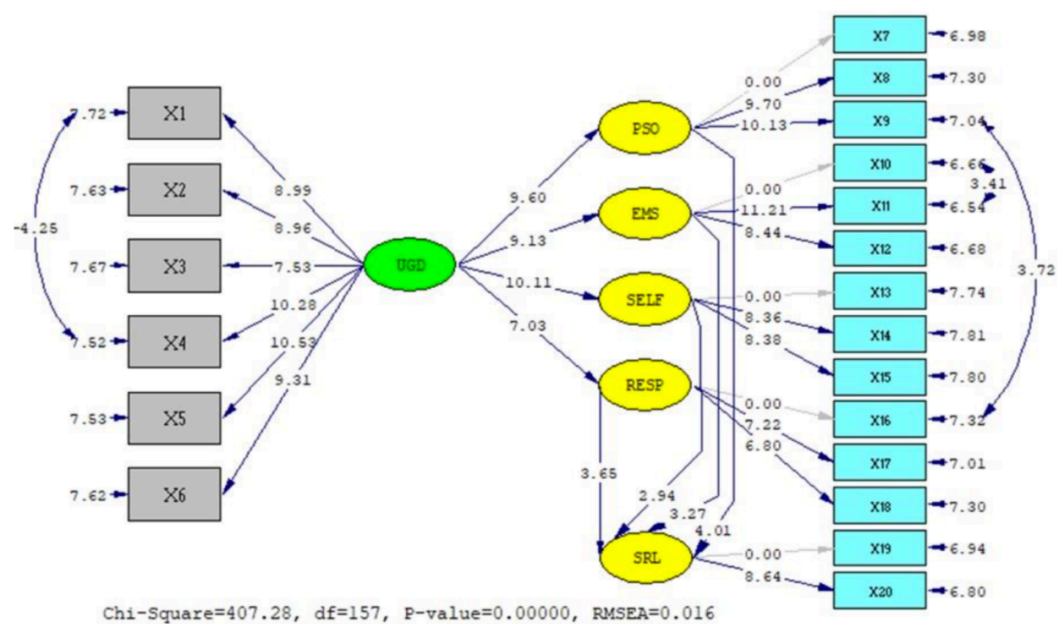
*Structural Model Results*

Data processing results can be seen in the structural equation modeling (SEM) as follows.

**STANDARDIZED SOLUTION**



**T-VALUE**



Hypothesis tests are conducted by examining at the critical value (CR) at a 95% confidence level or a 5% error. The CR value received is 1.96 (Hair, et.al, 2006). Table 4 shows eight hypotheses are accepted by obtaining a value of t which is greater than 1.96.

Table 4. Hypothesis Test Results

No	Hypothesis	Loading	T-Value	Kesimpulan
1	Used of Gadget (UGD) toward Psychosocial (PSO)	0.91	9.60	Hypothesis accepted
2	Used of Gadget (UGD) toward Socio-Emotional (EMS)	0.96	9.13	Hypothesis accepted
3	Used of Gadget (UGD) toward Self-Reliance (SELF)	0.89	10.11	Hypothesis accepted
4	Used of Gadget (UGD) toward Responsibility (RESP)	0.86	7.03	Hypothesis accepted
5	Psychosocial (PSO) toward Student Learning Results (SRL)	0.79	4.01	Hypothesis accepted
6	Socio-Emotional (EMS) toward Student Learning Results (SRL)	0.34	3.27	Hypothesis accepted
7	Self-Reliance (SELF) toward Student Learning Results (SRL)	0.83	2.94	Hypothesis accepted
8	Responsibility (RESP) toward Student Learning Results (SRL)	0.89	3.65	Hypothesis accepted

In table 4 shows that the highest coefficient value of the impact of using gadgets on students is directed at socio-emotional variables (0.96), followed by psychosocial variables (0.91), self- reliance (0.89), and responsibility (0.86). This situation shows that the use of gadgets has the greatest impact on children's social emotions, in the form of ignorance with the surrounding environment, being disturbed and tends to be angry to feel disturbed, not giving a positive response to an activity, and others.

Psychosocial (PSO), socio-emotional (EMS), self-reliance (SELF), and responsibility (RESP) variables have a significant influence on student learning results (SRL). The variable that gives the highest coefficient value to the student learning results (SRL) is the responsibility variable (RESP) of 0.89, followed by self-reliance (SELF) 0.83, psychosocial (PSO) 0.79, and socio-emotional (EMS) 0.34. Implicit, the use of gadgets in students who are responsible and self-dependence, in the sense of being able to direct students' initiative and creativity on positive matters, has the highest influence on student learning results (SRL). On the other hand, although the use of gadgets has a high influence on socio-emotional, but students are quite able to suppress emotionally in carrying out their learning outcomes.

## Discussion

### *Use of Gadget*

The use of gadgets as exogenous variables has at least six indicators. From the results of the data processing, it was found that the highest contribution of the indicator of the use of gadgets by students was for on-line goods and / or food-beverage expenditure with a value of 0.80; followed by ordering transportation services (0.79); games (0.73); become a source of science and technology (0.71); chat with peers or others (0.71); and to look for film / music entertainment (0.62).

The results show that the use of gadgets by students is more focused on consumption and lifestyle needs, such as shopping for goods (clothing, bags, jackets, jewelry, etc.), food and beverage, and even new forms of game software. Some students have not used it to support educational needs, such as making learning resources, finding references, buying books, enriching scientific insights, and others. Though studies conducted by a number of parties show, that gadgets can be effective learning media and have a significant influence on student learning outcomes (Rosalia, 2017; Susanti, 2018; Nurmallasari and Wulandari, 2018).

### *Use of gadgets toward socio-emotional development (0,96)*

The use of gadgets has a significant influence on the socio-emotional of students, especially in socializing with the environment in family, social, and peer relationships. Socialization can be interpreted as a person's learning process towards the values, norms and rules of his social environment (see: Horton and Hunt, 1999; Berger and

Luckmann, 1966; Soekanto, 2002; Koentjaraningrat, 2009; Spraedly, 1989). Or socialization is a mental and behavioral process that encourages a person to learn to understand his social environment, and then make reference to the manifestation of behavior. In this study the contribution of values in the indicators of socio-emotional development did not show significant differences between indicators of social participation (0.77), adjustment (0.76), and insulation (0.76).

Gadget influences encourage self-adjustment and social participation in the environment. A student tends to establish a good and harmonious relationship with his/her friend. Gadgets can be used well by students for their socio-emotional development according to the maturity level to connect with other people. It can be concluded that social emotional development in students has the ability to manage positive emotions in socializing or in holding social interactions. Wolfinger, Raymod, and Rosenstone (1980) argue that empathetic socio-emotional development, affiliation of two-way communication or cooperation, resolution of conflict resolution, and the development of positive habits of manners, politeness, and responsibility.

Conversely, the influence of the use of gadgets can be negative towards the socio-emotional development of students, one of which is the inability to control themselves and tend to be temperamental. The use of gadgets keeps children from the surrounding environment, is less able to participate and manage interactions with others, and tends to isolate themselves from association with their peers. Students isolate themselves, and become less restrained and tend to behave aggressively if they feel disturbed, in the form of physical attacks (nonverbal) or words (verbal), such as anger, swearing, hitting, pinching, kicking, and others.

#### *Use of gadgets toward psychosocial development*

The use of gadgets has a significant influence on psychosocial students. In this psychosocial variable, the contribution of indicators used in this study is less revealing a difference in scores, namely competence of 0.81, simplicity of 0.79, and initiative 0.76.

Various opinions were expressed by experts regarding the notion of competence. Robbins (2004) argues, competence is a person's ability or capacity of intellectual abilities and physical abilities. From this conception it is clear that competence is the harmony between intellectual and physical development. In the context of psychosocial development, Erickson (1993) divides individual psychosocial development based on age categories into eight stages, namely: stages of trust vs. mistrust (age 0 - 11/2 years), autonomy vs. shame (11/2 - 3 years), initiative vs. . guilt (3-5 years), industry vs. inferiority (5-12 years), identity vs. role confusion (12-18 years), intimacy vs. isolation (18-40 years), generativity vs. stagnation (40-65 years), ego integrity vs. despair (over 65 years).

Psychosocial development of categorized elementary students in stage four: industry vs. inferior. According to Erickson (1993), in this stage the child has begun to do logical thinking and has entered school age, and faces the demands in himself and from the outside which is increasingly widespread. Conflict at this stage is feeling as someone who is capable vs. feeling inferior. If the ability to face environmental demands is respected, it will develop a passion for productivity (industry), if on the contrary there will be feelings of inferiority. From this study the use of gadgets can shape the psychosocial development of students towards industry competency or inferiority.

At this stage a child will also compare himself with peers. Shaffer (2005) says, at this age stage peer relationships are very important for school children, where they also begin to care about their appearance and position compared to their peers. Peer groups will get greater meaning and will be the main source of children's self-esteem. The use of gadgets influences the psychosocial development of children, so it is necessary to avoid psychosocial development of children which leads to simplification of thinking, namely the emergence of perceived failure compared to friends, underachievement, lack of success, and so forth which will bring inferiority.

Children will also learn to read and write, additions, and do things themselves. Therefore children need to be encouraged to take the initiative, start diligently, discipline, and believe in their ability to achieve goals. If this initiative is not encouraged and tends to be limited, children will not reach their own potential. The use of gadgets has a significant influence on psychosocial children, especially aspects of this initiative. That influence can lead to two opposite sides: strengthening or weakening student initiative.

#### *Use of gadgets toward self-reliance*

This study resulted in the use of gadgets having a significant influence on students' self-reliance. There does not appear to be a significant difference in the contribution of the indicators used in the variable self-reliance. Although emotional indicators have the highest value (0.72) in contributing to the self-reliance variable but tend not to differ greatly from the indicators of behavior and values / norms that recorded a contribution value of 0.70. This situation shows that there are quite close relationships from emotional indicators, behaviors, and values, as suggested by Steinberg (1993).

The influence of the use of gadgets on emotional autonomy of children (students), can be in the form of dependence or disengagement from other people's emotional support. The gadget itself is neutral, can be positive and negative. The impact of using gadgets can create emotional independence reduce or strengthen dependence on parents, be more responsible or less caring, and so on. In other words, the impact of the use of gadgets on children's emotional independence is expected to be independent, ie the release of children's emotional bonds without having to always have emotional dependence from parents for certain activities that can be done alone. The use of gadgets also affects the independence of student behavior. This means that the use of gadgets can lead to the ability to make choices and make decisions with confidence, and not be influenced by others, or vice versa. The ability to make decisions will bring students independence to choose alternative solutions to problems and be responsible for their decisions. That behavior is done by not being influenced by other people, peers, or their own parents, because decisions are made with confidence and are based on needs. But on the contrary, students who are not able to make decisions will be completely dependent on others, feel less self-confident, and tend to obtain services to meet their needs. Olivia (2000) argues that it is not easy for children to fight for their independence, especially the difficulty in terminating infantile ties that have developed and enjoyed comfortably for a long time. Parents themselves often do not want to release the knots of emotional ties to children, and are considered as rebellion or resistance if the child does not follow his wishes.

The influence of gadgets on self-reliance is related to autonomy values. Value independence is the ability of individuals to reject pressure or demands of others relating to beliefs about values, norms, and principles about right and wrong. The influence of gadgets on these indicators can be seen through students' cognitive changes, especially related to values, norms, and principles in accordance with what they believe, not because of the value system provided by parents. Steinberg (1993) said that this could be caused by increasing rational power and developing the ability of individual hypotheses. Independence of values brings changes to individual conceptions about aspects of life.

#### *Use of gadgets toward responsibility*

The effect of using gadgets on student responsibilities can be positive or negative. Positive if the use of gadgets can encourage and develop student responsibility, both to support the obligation to study at home and school, work on assignments at home, and others. Negative if the use of gadgets ignores their obligations and responsibilities, where students become complacent and spend time playing games, care less, tend to shirk tasks / jobs given by parents, become aggressive if they feel disturbed, and are lazy to learn, and so on. Nurchayati (2016) found that the use of gadgets raises dependence on children, so children always want to use, even by lying. Setianingsih et al (2018) suggested that gadget addiction can affect children's brain development because excessive production of dopamine hormone disrupts the maturity of the cortex's prefrontal function, namely controlling emotions, self-control, responsibility, decision making and other moral values.

Explicitly, how to increase the positive impact of using gadgets, and vice versa minimize negative impacts. The use of gadgets must be a medium in developing students' responsibilities. Gadgets can cause addiction to children, so they tend to be less responsible for their obligations and duties, get pleasure in a one-way pattern, inhibit social interaction, lazy to learn, and others. However, Juandi (2019) argues, the use of gadgets can also bring up children's responsibilities, such as seeking information or knowledge, looking for topics that are appropriate to the subject matter in school, facilitating communication with parents, strengthening friendships, and so on.

*Responsibility, self-reliance, psychosocial, socio-emotional toward student learning results*

The model framework here does not see the direct effect of using the gadget (UGD) on student learning outcomes (SRL), but through mediating psychosocial (PSO), socio-emotional (SEM), self-reliance (SELF), and responsibility (RESP) variables. From testing the data obtained, that the mediating variable has a significant effect on student learning outcomes, with the largest coefficient value being responsibility (0.89), followed later by self-reliance (0.83), psychosocial (0.79), and socio-emotional (0.34).

These results also show that the use of gadgets that are able to stimulate and develop student responsibility, especially for the benefit of supporting the learning process (seeking knowledge, teaching materials, etc.), has a positive influence on achieving good learning outcomes (academic and non-academic). Conversely, the use of gadgets that are less able to stimulate and motivate students (for example: more are used to meet game addiction), will lead to weak learning responsibilities and tend to achieve low learning achievement. Helmi and Agustina's study (2017) concluded that the use of gadgets that are positive for learning outcomes if students are responsible as a media adds learning insights. Rozalia (2017) suggests, if students are less responsible and play too much gadget it will have an impact on learning achievement, but if students use gadgets that are responsible for increasing knowledge it will result in increased learning achievement. Harahap et al (2018) stated that the use of gadgets can have good or bad effects on students. If the decision about it is used as a responsibility, for example to fulfill the need to find learning materials, increase knowledge, etc. will get good learning outcomes. Dependence on targeted gadgets and being able to be used as media can support student learning achievement.

The next mediating element of the effect of using gadgets on student learning outcomes is independence, namely the ability of the gadget to build confidence and attitude of independence. Independence in using gadgets determines student learning outcomes: if students are free to meet the addictive needs of playing games, they will get unsatisfactory learning achievements; if it leads to freedom that is responsible for using gadgets to determine and add insight into knowledge, learning processes, or other constructive ones, it will lead to satisfying learning achievement. The independence needed is the ability to develop learning processes that are free from emotional ties, such as: new children learn if parents are anxiously sanctioned, new children learn if parents read textbooks, or new children learn when parents help with task completion given by the teacher. Self-reliance also refers to student behavior in carrying out the rights and obligations of learning, as well as consistency in applying values and norms related to the learning process, such as: the use of gadgets in collaborative learning, finding learning materials, searching for discussion material, completing assignments, summarizing the essence of books, etc. Saefullah et al (2013) suggested that there was a significant positive relationship between learning independence and learning achievement attitudes. This means, the better the learning independence attitude students have, the better the learning achievement achieved by students. Egok (2016) concludes, that there is a relationship between critical thinking skills and learning independence with learning outcomes. Suit et al (2017) shows that student independence consists of aspects of self-confidence, being able to work alone, respecting time, having a competitive desire to progress, be responsible and able to make influential decisions on student learning outcomes. This means that the use of gadgets that are motivated by students' independence in fulfilling the learning process will have a positive effect on learning outcomes.

Psychosocial development is one of the mediations that have a significant influence on the achievement of student learning outcomes, academic and non-academic. The use of gadgets that are compatible with psychosocial development of elementary school students will shape the ability, initiative, and simplification of

mindset to support the learning process. Latifah et al (2018) concluded that psychosocial development plays an important role in stimulating nerves and muscles and has an influence on student learning outcomes. Boty and Handoyo (2018) show that there is an influence of creativity on the learning outcomes of elementary school students. This means that the use of gadgets that stimulate psychosocial development in the form of competencies according to age, initiative and creativity will have a positive effect on student learning outcomes.

The last one is the socio-emotional development is a mediating variable that has a significant influence on student learning outcomes. The use of gadgets that are able to develop an attitude of self-adjustment, social participation, and not isolate themselves, will become the basic capital for students to realize collaborative learning with peers. Children will be happy, because they can learn in groups and complete learning difficulties together. Conversely students who tend to isolate themselves from association with peers, it will be difficult to interact, communicate, and get learning assistance. Putriana (2013) shows, how study groups encourage student motivation and influence learning achievement. Yulaeha and Rusdi (2016) suggest, there is the influence of small group discussions on student learning outcomes. Explicitly, the use of gadgets must be able to become an instrument of socio-emotional development so that it can become a basis for supporting learning processes and outcomes. Agung (2017) argues, that the challenge of education in the 21st century is the development of learning through mastery and use of digital technology to design learning programs that try to adapt relevant learning experiences, encourage learning of active and creative students; developing a learning environment that makes it easy for students to fulfill their curiosity, collaboration of students using digital tools and resources, conveying relevant information and latest ideas to students, exemplifying and facilitating the use of digital devices to search, analyze, and evaluate various information support learning.

## Conclusion

Gadgets technology is an instrument that can have a positive or negative impact, depending on the user. The results showed that the use of gadgets had a significant effect on psychosocial, socio- emotional, self-reliance and student responsibility. Furthermore, the four variables also have a significant influence on student learning outcomes. Positive or negative impact that is caused on student learning outcomes is determined by the definition of what the gadget is used by students. If more gadgets are used to meet the needs of playing games all day by students, for example, learning time will also be consumed and lead to the achievement of learning outcomes that are less satisfying. If the use of gadgets is more responsible, raises the initiative's independence and creativity, encourages self-adjustment and collaborative attitude, utilizes to find material / material / reference, adds insight into knowledge, etc. will support the achievement of student learning outcomes.

It is difficult to limit the use of gadgets by elementary students, moreover a challenge in 21st century learning. Gadgets are indeed multi-functional can be used for various purposes, ranging from online shopping, playing games, interaction and communication, meeting entertainment needs, and so on. In the lives of students, it is necessary to find ways in which students can use gadgets to support the learning process, such as: being a learning resource, reference sources, enhancing knowledge insights, communicating ideas, etc. The latter is said to require teachers to develop and utilize the use of gadgets in teaching and learning activities to students, encourage creativity, critical thinking, collaborative learning, and encourage problem solving learning. In addition, every element in the school (principals, class teachers, guidance and counseling teachers, and others) must intensively explain to students about the impact of using positive or negative gadgets. The school also needs to work with parents to pay more attention to and control the use of gadgets by their children at home.

## References

- Agung, I. The Development of Character Education And Its Implementation As Educational Unit In Indonesia, The Office of Educational Research and Dvelopment: Ministry of National education. 2011; Vol. 3.
- Agung, I. (2017). Competence and Professional Teachers: 21st Century Perspective, Oration of Research Professor, Jakarta: LIPI - MOEC.
- Adiwiyoto, A. (2001). Training Responsible Children, Jakarta: Mitra Utama.
- Albrow, M. (1996). The Global Age. [http://www.globalizacija.com/doc\\_en/e0013glo.htm](http://www.globalizacija.com/doc_en/e0013glo.htm).

- Al-Rodhan, N. R. F. (2006). Definitions of Globalization: A Comprehensive Overview and a Proposed Definition, GCSP.
- Berger, P. L., T. Luckmann (1966), *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Garden City, NY: Anchor Books.
- Boty, M., Handoyo, A. (2018). Relationship between Creativity and Learning Outcomes of Class V Students of Indonesian Language Courses at Mi Ma'had Islamy Palembang, *PGMI Scientific Journal*, Vol. 4 (1), 41 - 55.
- Chaplin, J. P. (2008). *Complete Dictionary of Psychology*, Jakarta: Raja Grafindo Persada
- Chusna, P. A. (2017). The Influence of Media Gadgets on the Development of Child Character, *Research Dynamics, Religious Social Communication Media*, Vol. 17 (2), 315 – 330.
- Criminal Code of the Republic of Indonesia.
- Desiningrum, D. R., Indriana, Y., Siswati. (2017). Intention of using gadgets and emotional intelligence in early adolescents, *Proceedings of the Scientific Gathering X Indonesian Developmental Psychology Association*, Semarang: 22-24 Agustus, 65 - 71.
- Egok, A. S. (2016). Critical Thinking Ability and Learning Independence with Mathematics Learning Outcomes, *Basic Pendidikan Journal*, Vol 7 (2), 185 - 198.
- Erickson, E. H. (1993). *Childhood and Society*, Publisher: W. W. Norton & Company
- Ohmae, K. (1999). *The Borderless World: Power and Strategy in the Interlinked Economy*, London: Harper Collins.
- Oliva, A. (2000). Personal, Social, and Family Correlates of Emotional Autonomy in Adolescence. *Departamento de Psicología Evolutiva y de la Educación Universidad de Savilla*.
- Fitria Ayuningtyas, F., Abdullah, A. Z. (2016). Healthy and Good Internet Use for Elementary School Students in Dharma Karya UT, South Tangerang. *Proceedings of the Teacher's National Scientific Meeting (Ting)*, VIII, 400 – 410.
- Goleman, D. (2003). *Emotional Intelligence*, Jakarta: Gramedia.
- Novitasari, W., Khotimah, N. (2016). The Impact of Using Gadgets on Social Interaction for Children Aged 5-6 Years, *Lotus PAUD Journal*, Vol. 05 (03), 182-186.
- Zaenudin, A. (2017). Gadget Addiction Risk in Children. <https://tirto.id/risiko-kecanduan-gadget-pada-anak-anak-ctga>. Accessed 23 Januari 2019.
- Hamzah, A. (2005). *Legal Dictionary*, Ghalia Indonesia.
- Harahap, R. S., Elly, R., Safiah, I. (2018). The Effect of Using Gadgets on Learning Outcomes of Class V Students of SD Negeri 12 Banda Aceh, *Scientific Journal of Primary School Teacher Education*, Vol. 3 (1), 119 - 126.
- Helmi, Agustina, N. A. (2017). The Effects of Using a Gadget for the Students' Study Result at SDN 1 Loktabat Utara Banjarbaru Subdistrict, *Pahlawan Journal*, Vol. 10 (1), 13 pages.
- Horton, P. B., Hunt, C. L. (1999). *Sociology*, Erlangga Publisher.
- [https://id.theasianparent.com/hasil-survey-smartphone-yang-mengejutkan?utm\\_source=article-bottom&utm\\_medium=copy&utm\\_campaign=article-share](https://id.theasianparent.com/hasil-survey-smartphone-yang-mengejutkan?utm_source=article-bottom&utm_medium=copy&utm_campaign=article-share) diakses 23 Januari 2019
- <http://www.augustafamily.com/kids-RESPonsibilities-expectations-age-appropriate-chores/>. Diakses 18 Februari 2019
- [https://id.wikipedia.org/wiki/Konvensi\\_Hak-Hak\\_Anak](https://id.wikipedia.org/wiki/Konvensi_Hak-Hak_Anak)
- <http://www.augustafamily.com/kids-RESPonsibilities-expectations-age-appropriate-chores/>
- <https://www.merriam-webster.com/dictionary/self-reliance>.
- Human Rights Law Number 39 of 1999 concerning Human Rights.
- International Society for Technology in Education. (2008). *National Educational Technology Standards (NETS•T) and Performance Indicators for Teachers*, ISTE.
- Jakarta Newspaper. (2018). <http://www.koran-jakarta.com/dampak-buruk-gadget/>
- Juandi, A. (2019). Be aware of the bad effects of `gadget` for children, *Elshinta.com*. <https://elshinta.com/news/134073/0000/00/00/waspadai-dampak-buruk-gadget-bagi-anak>.
- Koentjaraningrat. (2009). *Introduction to Anthropology*, Jakarta: Gramedia. Law No. 23 of 2002 concerning child protection
- Law of the Republic of Indonesia Number 4 of 1979 concerning Child Welfare
- Latifah, Alfiani, D. A., Andini. (2018). Effect of Psychosocial Development on PPKn Learning Outcomes of Class IV MIN Students in Cirebon City, *Al Ibtida: Journal of MI Teacher Education*, Vol. 5 (2), 249 – 260.
- Nasution, A. H. (1993). *Educational Psychology*, Jakarta: Rajawali Press.
- NIE. (2005). *A Teacher Education Model for 21st Century*, The National Institute of Education Singapore.
- Nurchayati, Z. (2016). The Impact of Using Gadgets on Underage Children on Family Communication in Character Formation, *Research Journal of Social Sciences*, Vol. 17 (1), 1411-5344.



- Nurmalasari, Wulandari, D. (2018). The Effect of Gadget Use on Achievement Levels Private Vocational School of One Saturday Private Vocational School, Pakisjaya Karawang, *Journal of Knowledge Science and Computer Technology*, Vol. 3 (2), 111 – 118.
- Pearlman, B. (2006). 21st Century Learning in Schools – A Case Study of New Technology High School in Napa, CA. *New Directions for Youth Development*.
- Prabowo, A. (2016). The Influence of Gadgets on Children in the Interaction of Muslim Family in Yogyakarta's Winong Kotagede Housing, *Sunan Kalijaga State Islamic University*.
- Putriana, S. (2013). The Effect of Group Learning and Student Learning Motivation on the Learning Achievement of Class VIII Students of State Middle School 23 Purworejo, *Oikomomia Journal*: Vol. 2 (4), 325 - 329.
- Robbins, S. P. (2004). *Essentials of Organization Behavior*. New Jersey: Prentice-Hall International Inc.
- Rozalia, M. F. (2017). Intensity Relationship Using Gadget With Learning Achievement of Basic V Vocational School Students, *Elementary Thinking and Development Journal*, Vol. V (2), 722- 731.
- Saefullah, Siahaan, P., Sari, I. M. (2013). Relationship Between Attitude of Learning Independence and Learning Achievement of Class X Students in Portfolio-Based Physics Learning, *Journal of Wahana Pendidikan Fisika 1*, 26-36.
- Sapardi, V. S. (2018). Relationship between the Use of Gadgets and the Development of Preschoolers in Budi Mulia Islamic Early Childhood Kindergarten / Kindergarten, *Menara Ilmu Journal*, Vol. 12 (2), 137 – 145.
- Sari, T. P., Mitsalia, A. A. (2016). The Effect of Using Gadgets on the Pre-School Child's Social Personal at TKIT Al Mukmin, *Profesi Journal*, Vol. 13 (2), 72 – 77.
- Setianingsih, Ardani, A. W., Khayati, F. N. (2018). The Impact of Using Gadgets on Preschool Children Can Increase Risk of Attention and Hyperactivity Concentration Disorders, *GASTER Journal*, Vol. XVI (2), 191 - 205.
- Shaffer, D. R. (2005). *Developmental Psychology Childhood and Adolescence*, Brooks/Cole Publishing Company.
- Sherif, M., Sherif, C. W. (1956) *An outline of social psychology*, Publisher: Harper.
- Soekanto, S. (2002). *Introduction to Sociology*, Jakarta: Gramedia.
- Soemardjan, S. (1964). *Setangkai bunga sosiologi: buku bacaan untuk kuliah pengantar sosiologi*, Lembaga Penerbit FEUI.
- Spich, R. (1995). Globalization Folklore: Problems of Myth and Ideology in the Discourse on Globalization”, *Journal of Organizational Change Management*, Vol. 8 (4), 6-29, p. 7.
- Spraedly, J. P. (1989). *Anthropology: The Cultural Perspective*, Publisher: Waveland Pr Inc.
- Steinberg, L. (2002). *Adolescence*. New York: McGraw Hill Companies, Inc.
- Suhana, M. (2017). Influence of Gadget Usage on Children’s Social-Emotional Development. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, vol. 169. Atlantis Press.
- Suid, Syafrina, A., Tursinawati. (2017). Analysis of Student Independence in the Learning Process in Class III of SD Negeri 1 Banda Aceh, *Pesona Dasar Journal*, Vol. 1 (5), 70 - 81.
- Suryabrata, S. (2008). *Educational Psychology*, Jakarta: Raja Grafindo Persada.
- Susanti, A. D. (2018). The Effect of Using Gadget in Learning Activities to Improve Students ' Learning Outcomes in Class XI IIS State 1st High School, Seputih Mataram, Bandar Lampung: University of Lampung.
- Swatika, P. (2016). The Effect of Using Gadgets on the Development of Child Psychology, *Holistika: PGSD Scientific Journal*, Vol. ... (...), 49 – 54.
- The Civil Code of the Republic of Indonesia.
- Trinika, Y. (2015). Effect of Using Gadgets on Psychosocial Development of Preschool Children (3-6 years) in TK Immanuel Christian Private School 2014-2015 Academic Year, *ProNers Journal*, Vol. 3 (1).
- Untario. (2004). Definition of School-age Children. <http://untario.psychologymania.com>. Retrieved 12 March 2019.
- Wahyuni, S. I. (2018). Impact of Using Gadgets on Early Childhood Social Interaction Capabilities, *Al Hikmah Proceedings on Islamic Early Childhood Education*, Vol. 1, 463-472.
- Waters, M. (1995). *Globalization*, London: Routledge.
- Witarsa, R., Hadi, R. S. M., Nurhanik, Haerani N. R. (2018). The Effect of Using Gadgets on Social Interaction Abilities of Primary School Students, *Pedagogik Journal*, Vol. VI (1), 9 – 20.
- Wolfinger, Raymond, E., Rosenstone, S. J. (1980). *Who Votes?*, Yale University Press.
- Young, K. S., Rodgers, R. C. (1998). *Eastern Psychology*, Eastern Psychological Association.
- Yulaeliah, W., Rusdi, A. (2016). The Influence of Application of Small Group Discussion Methods on Class V Student Learning Outcomes in Social Sciences Subjects in Ibtidaiyah Nurul Huda Madrasah Air Sugihan District Ogan Komering Ilir, *PGMI scientific journal*, Vol. 2 (2).