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# FAMILY ENVIRONMENT, INTERPERSONAL COMMUNICATION, AND SMARTPHONE ADDICTION: DOES IT AFFECT CHILDREN'S EMOTIONAL DEVELOPMENT?

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# **ABSTRACT:**

An effort to increase early childhood emotional development cannot be separated by the various factors that influence it. This study aims to see the relationship between the role of the family environment, interpersonal communication, and smartphone addiction to children's emotions. Using survey research methods with SEM analysis techniques. Data analysis was carried out on 263 parents who had early childhood aged 4-6 years. Proportionate cluster random sampling was the sample selection technique in this study. The results study showed that the family environment partially directly affects children's emotional development, while smartphone addiction harms children's emotional development. Those were different in interpersonal communication, which does not influence children's emotional development. It indicates that if you want to improve the development of positive emotions in children, the main concern and priority in the improvement is always to create a harmonious family environment and reduce the level of smartphone addiction.

#### **INTRODUCTION**

Early childhood grows and develops in a diverse environment. It was starting from the macro and microenvironment(Santrock, 2017). One of the environments closest to children is the family environment. A family environment consisting of a father, mother, or other siblings provides various interactionpatterns and early childhood relationships. Parents who manipulate the family environment will positively influence children's development. Parents are the main actors in how early childhood grows and develops(Riza, 2016).

Along with the golden age of early childhood, the role of the environment also develops. The family environment impacts the learning process of early childhood in receiving experiences for the first time. However, many family environments do not yet have a positive role in child development, which in the end, the child's development will experience problems or disturbances(Shonkoff, Garner, Siegel, Dobbins, Earls, & McGuinn, 2012).

Apart from family environmental factors, aspects of children's emotional development can also be seen from parents' communication skills(Vaccari & Marschark, 1997;Bishop & Baird, 2001). Parents' communication skills have a role as a form of touch for children to receive various kinds of information and suggestions for children, both verbally and nonverbally(Darling & Hicks, 1982).

Not only the role of the family environment and interpersonal communication skills, but the child's habit of using gadgets or devices such as smartphones also becomes a serious problem if used excessively(Srivastava, 2005; Sumarni, Pertiwi, Rukiyah & Umam, 2019). Children who are too fond of playing with smartphones will harm children. The negative impact, for example, from a physical point of view, the child will be lazy to move, the eyes will experience interference, and the bodyweight is less than ideal due to lack of movement(Cumino, Vieira, Lima, Stievano, Silva, & Mathias, 2017). From an emotional point of view, it will also have an impact, for example, such as a child who is weak in concentration, lacks focus, hyperactivity, and if his desire is not obeyed, it will become excessive temper-tantrum(Emirtekin, Balta, Sural, Kircaburun, Griffiths, & Billieux, 2019).

The results show that the duration of children's use of digital technology affects children's difficulty giving dramatically up their gadget addiction(Gutiérrez, de Fonseca, & Rubio, 2016). One reason is that they often see parents interacting with digital technology devices so that even early childhood cannot deny that they will imitate and are often exposed to the influence of digital technology tools. The high interaction between adults and parents with digital technology can affect parents and children (Kildare & Middlemiss, 2017). Through this interaction, early childhood has become increasingly accustomed to utilizing and using digital technology.

The American Association of Pediatrics (AAP) conducted a study entitled "the domination of digital media use in the lives of today's children" (Vandewater, Rideout, Wartella, Huang, Lee, & Shim, 2007). And the result is that the media most used by children are smartphones, which are part of the Gadget. Children who actively use gadgets have almost doubled (from the previous 38% to 72%) (Holloway, Green, & Livingstone, 2013). And the most surprising thing is, it was found that the high activity of children under the age of 1 has started interacting with gadgets. One of the causes of this problem is the lack of supervision and assistance from parents. Parents have given the

freedom to children without "dialogical assistance" (Gökçearslan, Mumcu, Haslaman, & Cevik, 2016).

The exposure to digital media for children is increasing, not only found in public spaces but has entered the home environment(Livingstone, Mascheroni, Dreier, Chaudron, & Lagae, 2015).Previous research has shown that 70% of parents permit children to play with gadgets at home when they work at home(Rideout, 2011). And 65% of parents give their children devices calm their children in public places(Nikken & Schols, 2015). In the past ten years, the amount of time children spend in front of digital screens has increased by 2 ½ hours. Children spend an average of 8-9 hours a day on their cell phones, including streaming videos or merely playing games(Oblinger,& Lippincot, 2005).

The widespread use of digital technology in early childhood is the role of communication between parents and children(Marsh,Hannon, Lewis, & Ritchie, 2017). Communication is the process of delivering a message by someone to another to inform or to change attitudes, opinions, or behavior either directly orally or indirectly through the media(Southwell & Yzer, 2007; Effendy & Uchjana, 2001).

Excessive smartphone use behavior leads individuals to compulsively use smartphones (Takao, Takahasi, & Kitamura, 2009;Karim et al., 2020). Although it is widely argued that smartphone addiction is the same as addiction to other technological measures, smartphones are more dangerous because smartphones have a variety of unique features such as portability and ease of connectivity(Demirci, Orhan, Demirdas, Akpinar, & Sert, 2014).

Smartphone addiction has different addiction types, such as drugs or alcohol (Griffiths, 1998; Van Deursen, Bolle, Hegner & Kommers, 2015). Fun and joy appear to be conditions that can be disruptive to both adults and early childhood in the long term. Excessive smartphone use and the habit of always playing with smartphones will lead to compulsive use or even become addicted to smartphones (Zhang, Chen, & Lee, 2014). Other disorders, namely in the form of sleep problems, health problems, stress (Thomée, Harenstam, & Hagberg, 2011), and various other physical and mental development problems(Hadlington, 2015; Park & Park, 2014). When someone or even early childhood cannot get and use a smartphone, they mayhave nomophobia such as (1) inability to communicate with other people, (2) loss of connection or social ties with other people, (3) giving up at convenience (Yildirim, 2016).

This study will explain the research gaps that have not been addressed by previous research. Previous studies discussing smartphone addiction were in teenagers or adolescents. However, this research is more focused on smartphone addiction for early childhood. The novelty of this study is to examine the emotional development of early childhood in Cirebon. It is influenced by family environment variables, interpersonal communication mediated by smartphone addiction in early childhood-hoping to find the best solution in reducing the level of use of digital technology for early

childhood.And then, it shows providing understanding and efforts in terms of developing emotional aspects of early childhood. As well as contributing thoughts in the form of a grand theory about early childhood education, especially regarding the role of the family environment, interpersonal communication, and smartphone addiction that affect the emotional development of kindergarten children.

Erikson explained thateach child's development would have and follow the same path, but each child will experience different results (Erikson, 1968). Emotions result from individuals adapting and responding to specific contextual demands(Kostelnik, Gregory, Soderman, & Whiren, 2012). When someone is angry, they will show a flushed face and bulging eyes, their muscles will be tense, and the occasional shortness of breath(Gohm & Clore, 2002). Early childhood is elementary to flip emotion; that is, children will immediately change from crying to laughing, from laughing to crying, angry to smiling(B-Hurlock, 1956).

Bronfenbrenner (1979) explained that child development occurs in a series of conventional systems, consisting of a macroenvironmental system and a microenvironmental system. Through this microenvironment, children will develop through interactions, activities, and roles played by children in the environmental system (Bronfenbrenner, 1979). As stated by Papalia, Olds, & Feldman (2009), that in the family environment has a massive role in changing one's self, not only from the family environment, but in a larger setting, such as the environment in which they live, and the wider community.

Based on the conceptual description and theoretical framework above, this studyaims to fill in the gaps in previous studies that have not been studied much. It seeks to prove empirically whether smartphone addiction is a mediation between the influences of the family environment on children's emotional development. Then to prove whether parental interpersonal communication can affect the level of children's smartphone addiction? Which is then linked to the emotional development of early childhood.

#### **METHOD**

This research uses a quantitative approachwith a survey method. This study uses primary data obtained from the subject directly by distributing online questionnaires using Google Form. The population was all parents of students who attended Kindergarten (Kindergarten) throughout Cirebon City, which were spread over five districts. The population of this research comprised 2.776. The criteria chosen to be the sample were parents of students who have early childhood aged 4-6 years (groups A and B), who are actively attending kindergarten in the academic year 2019-2020, collected 263 respondents or subjects as shown in Table 1. The samples were determined using a stratified random sampling technique. The samples were determined from the number of parents of students in each sub-district. Finally, the sample allocation was chosen from each kindergarten (TK) selected according to the number of samples per district randomly (random sampling).

No	District in Cirebon	Kindergarten name	Number of		
	City		Samples for		
			Each Institution		
1	Harjamukti	TK Negeri Pembina	46		
2	Lemahwungkuk	TK Al Ghifari	38		
3	Pekalipan	TK AlamAisyiah	23		
4	Kesambi	TK BaitulMakmur	10		
5	Kejasan	TK Tunas Karya	26		
6	Harjamukti	TK IT Assunnah	52		
7	Lemahwungkuk	TK IT MutiaraBangsa	22		
8	Pekalipan	TK Kristen	33		
		TerangBangsa			
			263		

**Table 1.**Population and Sample

This study'svariables consisted of one exogenous variable: the family environment ( $\eta$ ), and three endogenous variables. The classification of endogenous variables is divided into two types of endogenous variables, namely endogenous intervening variables, namely interpersonal communication ( $\xi$ 1) and smartphone addiction ( $\xi$ 2), and endogenousdependent variables, namely children's emotional development ( $\xi$ 3).



Figure 1. Theoretical Models

The instrument for each of these variables has been adapted by translating into Indonesian, then paying attention to aspects of cross-cultural adaptation so that the instruments used can measure what should be measured (valid) and reliable (Beaton, Bombardier, Guillemin, & Ferraz, 2000). The steps taken include: 1) forward translation; 2) expert panels; 3) back translation; 4) pre-testing; and 5) final version.

The family environment instrument was first developed by Robertson & Hyde(1982), which consisted of 10 subscales. Then set and tested its validity

level byLoveland-Cherry, Youngblut, & Kline Leaidy(1989).Finally, we used an adapted family environment instrument, using the version from Sundar Sarma & Talukdar(2016). The Cronbach alpha level is.79, and the test reliability is.75. Whereas in this study, the Cronbach alpha value was obtained of 0.85 (Table 2.).

Interpersonal communication has an instrument proposed byBienvenu & Stewart (1976), which has five dimensions. This measurement uses the Rating Scale developed byCampbell & Akdemir (2016). The Cronbach alpha level is.748, and the test reliability is.821. Whereas in this study, the Cronbach alpha value was obtained of.77 (Table 2.).

Smartphone Addiction uses the SAS (smartphone addiction scale) instrument developed by Kwon, Kim, Cho, & Yang(2013). During its development phase, the internal consistency test (Cronbach's alpha) was.967. By using a Likert scale, which is between 1 = never, and 4 = always. Whereas in this study, the alpha Cronbach value was.88.

The last one is an instrument of children's emotional development developed byBriggs-Gowan, Carter, Irwin, Wachtel, & Cicchetti (2004). Instrumen ITSEAInfant-Toddler Social Emotional Assessment (ITSEA)has six dimensions. The alpha Cronbach's emotional development instrument in this study amounted to.81 (Table 2).

Variables and Indicators	SL	T-	<b>R</b> <sup>2</sup>	α	ρ	AVE
		Values				
Family Environment (η)				.85	.67	.35
X.1: Relationship-Kohesi	.77		.59			
X.2:Relationship-Ekspresi	.45	4.86***	.21			
X.3:Relationship-Konflik	.68	5.97***	.47			
Interpersonal Communication $(\xi 1)$				.77	.74	.43
Y1.2:Ability	.65	6.45***	.43			
Y1.3:Skill Experience	.87	6.18***	.76			
Y1.4:Emotion	.62		.38			
Smartphone Addiction				.88	.86	.55
(ξ2)						
Y2.1:Daily-life Disturbance	.63		.40			
Y2.2:Positive Anticipation	.76	7.87***	.58			
Y2.3:Withdrawal	.86	8.49***	.74			
Y2.4:Cyberspace-Oriented	.76	7.92***	.57			
Relationship						
Y2.6:Tolerance	.67	7.15***	.45			
Emotional development (ξ3)				.81	.70	.44
Y3.1:Externalizing Domain	.61		.37			
Y3.2:Internalizing Domain	.61	5.66***	.37			
Y3.3:Disregulation Domain	.76	6.41***	.58			

**Table 2.** The Adaptation Result Instrument and the grid For Each Variable

Note: \*\*\*p <.01 (t>2.58), \*\*p <.05 (t>1.96), \*p <.10 (t>1.65).

Note 2: SL=Standardized Loading;  $\alpha$ = Cronbach's alpha;  $\rho$  =composite construct reliability; AVE = average variance extracted (Fornell & Larker, 1981).

### Analysis Technique

This study uses Structural Equation Model analysis techniques. SEM is a multivariate statistical technique and is a powerful method of analysis. The analysis carried out is to test the hypothesis and test the model to explain each variable's causal relationship then analyzed it based on a theoretical basis. Furthermore, the data obtained were analyzed in various goodness-of-fit indexes used to evaluate the model's suitability.

Before data analysis and model testing, several research assumptions must be tested that must be fulfilled. That includes missing data, sample size, data normality, outliers, multicollinearity, and residual values (Tabachnick, 2007). Based on this initial test, it was found that in this study, it was confirmed that there was no missing data. The total sample size has met the ratio between the number of samples and the parameters, which is at least 10: 1 (Kline, 2016). The data normality test has also been fulfilled by looking at the value of skewness and kurtosis, which is less than 1.

And finally, namely determining the outlier data. Considering the two experts' proportions, the researcher determined that the minimum sample was 263 to anticipate outliers' data or outlier data. Data is declared normal with a value of c.r (critical ratio) of 1.133, fulfilling the requirements for data normality, namely -2.58 < c.r < 2.58. There is no more data that must be discarded because all data are free outliers (Hair, Black, & Anderson, 2010). After testing the assumptions, the measurement model analyzed data from 263 subjects, remaining after 28 had been removed from the data set.

In structural equation modeling, various kinds of suitability indices are used in evaluating fit models by looking at the chi-square value in the study.Kelloway (2015)states that a Chi-Square value of more than 5 indicates a high goodness-of-fit between the data and the model. The Chi-Square value obtained in this study is> 5.Browne & Cudeck(1992)identified that the RMSEA value is less than.08, indicating that the model is fit; in this study, the RMSEA value is 0.035.

# FINDINGS AND DISCUSSION

#### **Findings**

This study uses a two-stage approach to interpreting the theoretical construct and its relationship. Namely the first, we took measurements of the model first. Then the second one evaluates the model with a structural model to test the hypothesis. Model making is assisted by using AMOS 22 software. The measurement model is declared fit if it meets the criteria described in the goodness of fittable.

Convergent validity determines that the indicator items must have a high proportion of variance (Hair *et al.*, 2010). To examine each construct

indicator's convergent validity must have a loading factor value greater than.50(Hair *et al.*, 2010). Thus, we eliminated or removed indicators from each construct that had a low factor loading (<0.5) (except.45). Therefore, after eliminating indicators, all path coefficients from each latent variable to indicator are relatively high (ranging from.45 to.86 for the Standardized Coefficient) and significant (Sultan, Rohm, & Gao, 2009).

Then the next is, the reliability value for each construct must be at least.70. Whereas in this study, the reliability of the measurement model was carried out by calculating the Cronbach alpha value (from.77 to.88) and composite construct reliability (from.67 to.86).

Finally, the Average Variance Extracted (AVE) value for each construct must be more than.50 (Fornell & Larker, 1981; Hair *et al.*, 2010). The AVE value in the three constructs of this study (FE, IC, ED) is lower than.50, except for smartphone addiction (SA) alone, which has an AVE value of 0.55 (Table 2). However, although the three constructs have a value lower than 0.50, they have a composite reliability value higher than.60, so that the convergent validity of the construct is still adequate (Fornell & Larker, 1981).

Table 3 shows the correlation matrix, mean, standard deviation, skewness, and kurtosis. The normal distribution test for each variable indicates that all of them have skewness and kurtosis values smaller than 1. So it can be said that all data are normally distributed, and further data analysis can be carried out. Furthermore, table 5 also shows a significant relationship between family environment, interpersonal communication, smartphone addiction, and emotional development.

**Table 3.** Correlations Among Construct, Means, Standard Deviation, Skewness, Kurtosis, (N = 263)

Construct	1	2	3	4	М	SD	Skewness	Kurtosis
(FE) Family Environment	1.00				44.94	4.14	226	.064
(IC) Interpersonal	.46	1.00			38.07	3.43	.718	.209
Communcation								
(SA) Smartphone Addiction	.32	.16	1.00		52.36	6.37	568	.239
(ED) Emotional Development	.58	.41	.59	1.00	46.81	5.22	.107	.281

Testing for discriminant validity using the AVE value is done by comparing the AVE's root value for each construct with the correlation between constructs and other constructs. It is recommended that the AVE value be more significant than 0.50 (Hair et al., 2010), based on Table 2 above, it shows that the root value of the AVE for each construct is greater with the correlation between and other constructs. So it can be concluded that it has good discriminant validity. After testing the validity and reliability of the measurement model, the goodness of fit is retested. The results of the goodness, as shown in table 4, and the research fit model, as shown in Figure 2.

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The goodness of Fit Index	Cut-Off Value GOF Indices	Value	Result
Chi-Square	Chi-Square,	85.496	Fit
	(low expected)		

Probability	≥.05	.116	Fit
RMSEA	$\leq .08$	.035	Fit
GFI	≥.90	.934	Fit
AGFI	≥.90	.902	Fit
CMIN/DF	$\leq 2.00$	1.204	Fit
TLI	≥.95	.974	Fit
CFI	≥.95	.980	Fit



Figure 2. Research Fit Model

The path coefficient of the relationship between family environment, interpersonal communication, and children's emotional development can be written about the structural equation as follows:

 $\begin{array}{l} Y1 = 0.261 X \\ Y2 = 0.209 X + 0.026 Y1 \\ Y3 = 0.242 X + 0.200 Y1 + 0.445 Y2 \end{array}$ 

#### **Table 5.**Hypothesis Testing Estimation

Model Hypothesis			SL	C.R.	Р	Significance
				(t-		(acceptance)
				value)		
Family	$\rightarrow$	Emotional	.36	2.836	.005**	Significant
Environment		Development				
Interpersonal	$\rightarrow$	Emotional	.17	1.608	.108	Not
Communication		Development				Significant
Smartphone	$\rightarrow$	Emotional	.45	4.064	***	Significant
Addiction		Development				
Family	$\rightarrow$	Smartphone	.31	2.511	.012**	Significant
Environment		Addiction				
Interpersonal	$\rightarrow$	Smartphone	.02	.203	.839	Not
Communication		Addiction				Significant
Family	$\rightarrow$	Interpersonal	.46	3.855	***	Significant
Environment		Communication				

Note: \*\*\*p < 0,01 (t>2,58), \*\*p < 0,05 (t>1,96), \*p < 0,10 (t>1,65). Note 2: SL=Standardized Loading, S.E = Standar Estimate, C.R= T Value, P= Probability /Significance

Structural equation models are used to evaluate structural models. Based on table 5 above, it can be concluded that there is a positive influence between the family environment and children's emotional development. Evidenced by the t value of 2.84 ( $\gamma = .36$ ). Interpersonal communication does not affect children's emotional development, as evidenced by the t value of 1.61 ( $\gamma = .17$ ). We also conclude that smartphone addiction positively affects children's emotional development, as evidenced by the T value of 4.06 ( $\gamma = .45$ ). Then, the family environment has a positive influence on smartphone addiction. Evidenced by the t-value of 2.51 ( $\gamma = .31$ ). Furthermore, interpersonal communication does not have a positive effect on smartphone addiction. It can be seen at the t-value of 2.20 ( $\gamma = .02$ ). Then the final hypothesis is that the family environment has a positive influence on interpersonal communication. Evidenced by the t-value of 3.85 ( $\gamma = .46$ ).

Table 6. Squared Multiple Correlations

Variable	Estimate
Interpersonal Communicaation	.214
Smartphone Addiction	.102
Emotional Development	.538

The R Square value of the child's emotional development is.538 or 53.8% (Table 6). It means that the family environment, interpersonal communication, and smartphone addiction can explain variations in children's emotional development variables by 53.8%.

# DISCUSSION

# Family Environmenttowards Emotional Development

The analysis of the first hypothesis resulted in the finding that the family environment has a direct positive influence on children's emotional development. Based on these findings, it can be concluded that the family environment directly influences children's emotional development. Children who are educated and cared for in a democratic family environment will develop more positive emotions. A positive relationship between family members, such as each family member, provides positive support to other family members. In the sense of being harmonious with each other, resulting in children's emotions in internalizing domains such as depression, withdrawal, and anxiety will be reduced. One of the findings from his age(Ackerman, 1958)explains that a child gets extreme events or experiences depending on how the family interacts. Several research experts in the family environment also show the same thing: the influence of the home environment on the development of toddlers is mostly determined by adequate stimulation from parents and the surrounding environment(Agrina, Sahar, & Hariyati, 2012).A similar thing was expressed bySchacht, Cummings, & Davies (2009)that children who are chronically exposed to a family environment that is less harmonious and prolonged will have an impact on children's emotions.

It could be disturbed, or children's self-regulation becomes problematic(E. M. Cummings & Merrilees, 2010). Especially in boys in externalizing domains such as anger and aggression(E. Cummings, Goeke-Morey, & Papp, 2004; Davies & Lindsay, 2004).

#### Interpersonal Communication towards Emotional Development

The second hypothesis analysis results result in the finding that Interpersonal Communication does not have a significant influence on the development of Early Childhood Emotions. This result is not in line with previous studies. Whereas one of the goals of interpersonal communication in the family is to find thechild's character, however in empirical studies, it shows that parents' interpersonal communication has less impact on children's emotions, especially on the personal character of the child. Hartley(1999) identified thatthe variety of interpersonal communication skills, one of which is nonverbal, verbal, and reinforcement skills and others from parents to children, is still not proven to affect children's emotional quality, such as thinking skills (Karim & Hartati, 2020). The next theory refuted by this study results is that of (Frydrychowicz, 2005), which explains that interpersonal communication is an essential factor in psychological development between message recipients and message givers. However, in this case, parents' interpersonal communication skills do not significantly impact children's emotional development.

# Smartphone Addiction towards Emotional Development)

The third hypothesis analysis results result in the finding that Smartphone Addiction has a direct effect on children's emotional development. Based on these findings, it can be concluded that children's emotional development is directly affected by Smartphone Addiction in early childhood. Addiction is different from alcohol addiction-habits like this show excessive children's behavior in using smartphones. Children who often use smartphones will ignore their play environment to be more fun playing with smartphones than playing with their peers. In line with what Griffiths expressed, such behavior is known as phubbing, which is the negative effect of Smartphone Addiction(Essau, 2008). This is in line with Kwon (2013)that the factors that can explain a child being affected by Smartphone Addiction are based on behavior changes, such as children's daily life, children's anxiety, and others. Meanwhile,Imron(2017) argue that child who is often in contact with gadgets can affect social-emotional development. In line with the research conducted by Chiu(2014) and Chang (2019), which states in the study that smartphone addiction disorder is one reason for shifting stress in an individual.

# Family Environment towards Smartphone Addiction

The fourth hypothesis analysis results result in the finding that the family environment has an impact on the level of Smartphone Addiction in early childhood. It appears that the level of Smartphone Addiction in early childhood will be influenced by how the family environment is formed. A family environment that shows democratic values provides freedom, responsibility, and communicates openly with each other will impact the low level of children's Smartphone Addiction. Theoretically, the family environment at home can provide a sense of love, security, and adequate

stimulation to children. Children raised in a family that respects each other and provides motivation and open affection can reduce the child's habit of spending time alone without any interaction with other family members. Family members who always routinely invite their children to vacation together and establish a controlled organizational system will reduce the level of children's smartphone use. Besides research conducted by Kim & Jahng (2019), children realize that they will foster a sense of togetherness or bonding with other members by doing recreation together.

#### Interpersonal Communication towards Smartphone Addiction)

The fifth hypothesis analysis results result in the finding that the level of Smartphone Addiction in early childhood is not influenced by interpersonal communication. The results of this study differed from some experts, such as Joseph De Vito (1994). He said that the process of influencing influence is a process that is psychological and still provides opportunities for the formation of togetherness. It can be concluded that the form of interpersonal communication skills in the form of verbal and nonverbal language cannot be used as an excuse for children not using smartphones. Early childhood will continue to use smartphones even though parents have quite good interpersonal communication skills. In general, the quality of interpersonal communication, such as a sense of openness, empathy, and mutual support, cannot guarantee that early childhood will follow their parents' orders not to use smartphones excessively. It is reinforced by Treenholm and Jensen (2003) 's viewpointthat interpersonal communication is dyadic communication, which occurs between two individuals who give and receive information so that a relationship can create meaning.

#### Family Environment towards Interpersonal Communication

The results of the sixth hypothesis analysis resulted in the finding that the family environment affects interpersonal communication. This study's results are in line with the opinion of some experts that the quality of a good relationship between children and parents in the family can have a positive impact on parents' interpersonal communication(Wahyuti & Syarif, 2016). It is then further explained from the results of research by Searight, Thomas, Manley, &Ketterson (1995) that the results of communication between parents and children are a very important aspect of the family's educational process. A family environment that supports each family member to communicate openly will help children open up and share well. Interpersonal communication also plays an essential role in harmonious family relationships, where parents act as children(Situmorang, teachers and friends for 2016). Treenholm& Jensen(1995)states that interpersonal communication is a communication that provides information and receives information so that a relationship can create meaning. The above statement correlates with the family environment, such as the relationship ability in the dimensions of the family environment. The better the relationship between each family member, the better the family member's interpersonal communication.

#### CONCLUSION

First, this study has proven that early childhood smartphone addiction can significantly affect children's development. Early childhood smartphone addiction occurs due to several factors, one of which is the family environment's role. One of the keys is the role of parents. Parents' role is very vital and strategic because they are the first in terms of children's education, especially the development of children's emotions. Suppose parents want to improve the emotional development of their children. In that case, there must be a role for a positive family environment and reduce the intensity of children's use of gadgets or smartphones.

Second, this study shows us that parental interpersonal communication does not significantly affect children's smartphone addiction levels. Then, it directly indicates that interpersonal communication has no impact on children's emotional development. Thus, this finding implies that parents' interpersonal communication skills are not a factor in the high level of children's smartphone addiction and children's emotional development.

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