

# Knowledge, Parent's Attitude and Behavior toward Development of Adolescent Behavior in the Digital Era

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## Abstract

The digital age currently has significant influence on adolescent development in determining identity. Today many teenagers are stalled in bad behavior due to technological advances, especially in the use of online media. However, parents are not very responsive to the impact of online media, so that it may have impact to the quality of their generation in the future, especially the readiness to face the demographic bonus of 2020-2030. The purpose of this study is to describe adolescents in the digital era in Jambi City, their level of knowledge, attitudes, parental behavior and the development of adolescent behavior in the digital era to welcome demographic bonuses in Jambi City. Also, it is hoped to describe how to control the negative impact of the digital age on them and the influence of knowledge (education) levels, parents' attitudes and behavior towards the development of adolescents in the digital era. The results of this study show that teenagers in the digital age have not been able to utilize online media to improve their knowledge and achievements. Knowledge of parents in Jambi City is in the poor category but their attitude is in a fairly good category. The behavior of parents in Jambi City is in the good category. However, the development of adolescent behavior from the perceptions of parents in the cognitive dimension is in the poor category, while their personal and social development is in a fairly good category. Statistical results indicated that knowledge, attitudes and behavior of parents simultaneously and partially have significant effect on the development of adolescent behavior in the city of Jambi. Knowledge of parents is the dominant variable towards development of adolescent behavior.

**Keywords:** Knowledge, attitudes, behavior, parents, teens, digital era.

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## INTRODUCTION

To gain a productive age population, it is necessary to prepare quality teenagers. The quality of adolescents is seen in terms of education, health and nutritional adequacy. Related to the provisions of quality teenagers, parents must equip themselves with knowledge in providing education to children, so that they grow into adolescents who are qualified and able to contribute to the nation's development.

The digital age changes the adolescents. This era is characterized by rapid technological development so that all information is very easily accessible. With this situation, adolescents are very vulnerable to be influenced by the development of the technology which has led them to gain greater ease of information.

The adolescence age is an unstable period and influences attitudes and behavior. The digital age, with the advancement of information technology that uses internet networks, greatly influences the attitudes and behavior of teenagers. This technology is an integral part of their lives. Through online media, information, both positive and negative, can easily be accessed by them. Also they use this media to increase knowledge as well as to socialize.

Jewitt *et al.*, [1] research using qualitative concludes that the use of digital technology in learning can stimulate students to be more active and enthusiastic because it requires a more varied learning process. However, the other side of digital technology also holds potential issues. The research record shows that children change symptoms of addiction [2, 3], decreased psychosocial abilities [4].

Ekawati *et al.*, [5] study of sexual behavior among adolescents, especially among middle and high school students, revealed that around 59% of adolescents had held hands with the opposite sex, hugging around 36%, kissing around 39%, orally 9% , having sex around 10%, watching pornographic films 53% and masturbating 30%. Ekawati *et*

al., [5], data processed) also revealed that pronography is the cause of sexual behavior where the source is 72% from the internet.

The development of adolescent behavior towards the maturing process aged 10-24 years (according to National Family Planning Welfare Agency/NFPWA) needs supervision and assistance from parents, schools and the community. In order to prepare adolescents to be development capital and not burden the country, we need to direct them to utilize digital era technology to facilitate communication between friends and to increase knowledge that can improve morals and build creativity.

Information obtained in this digital era may be negative or positive. To counteract the effects of negative information such as promiscuity, narcotics and others, teenagers must be provided with relevant knowledge such as reproductive health, drugs (Narcotia, Alcohol, Psychotropic and Additive Substances), HIV-AIDS, Sexually Transmitted Infections (STIs) and ideal age of marriage. This is very important for every teenager to understand because it is very relevant to their future lives. Besides that, parents also need to understand that reproductive health knowledge is not a taboo. The initial survey in Kota Baru Subdistrict, Jambi City revealed that many parents had low levels of education, elementary and junior high school. This illustrates the ability of parents to guide the development of adolescent behavior and monitor them so as not to have negative behaviors that will damage their own future. In the Paal Merah sub-district, based on the initial survey, it was also found that some parents did not provide children with knowledge about Narcotics, HIV AIDS, STIs, the risk of early getting marriage because they considered them to be able to filter themselves, and that knowledge was obtained from school.

According to Sulistyaningsih [6] the higher the education of parents, the better the way to care for children and consequently the development of the child concerned also runs positively. Conversely the lower the level of education of parents will be the lower the quality of their care, so that children's development may run poorly. Parents with low education have limited knowledge. In the digital era, the development of adolescent behavior is in desperate need of attention and supervision of parents to guide them in a positive direction. Children need to be supervised by parents, so that they do not fall into the negative digital age influence as found in the study [5]. The results of the study stated that adolescents who were carried away by the negative effects of the digital era had deviant behavior such as falling into promiscuity and smoking. Therefore parents must increase their knowledge, attitudes and good behavior so that they may be a model to their children.

### **Research objectives**

This study aims to determine: (1) the description of adolescents in the digital era in Jambi City, (2) An overview of the level of knowledge, attitudes, parental behavior and development of adolescent behavior in the digital era in welcoming demographic bonuses in Jambi City, (3) the level of knowledge, attitudes and behavior of parents towards the development of adolescents in the digital era.

## **LITERATURE REVIEW**

### **The Concept of Youth and Youth Development**

Adolescence is an important period in a person's life span. This period is also referred to as the transitional era, the period of change, the problematic age period, the period of seeking self-identity, the age of creepy (deraded), the period of unrealism, and the threshold towards maturity [7]. The age of adolescence is a period that shapes a person's identity, but at this time teenagers also often experience unstable psychological conditions. Questions arise in adolescents like who they are, and this identity question can arise during adolescence and lead to early maturity [8]. Erikson argues that in adolescence the main goal of all child development is the formation of self-identity [9].

### **Knowledge**

Knowledge, according to Notoatmojo [10], is the result of knowing, the answer of a question, "what". This knowledge occurs after people do sensing a particular object, sensing smell, taste and touch. The level of knowledge in the cognitive domain has 5 (five) levels [10] which are Know, Understand (Comprehension), Apply (Application), Analyze (Analysis) and Synthesize (Synthesis).

### **Attitude**

According to Azwar [15] the attitude consists of: (1) Receiving (Receiving) which means that people (subjects) want and pay attention to the stimulus given (object); (2) Responding, giving an answer if asked, working on and completing the task given is an indication and attitude, because the effort to answer the question or do the task, apart from whether the job is right or wrong, means that the person accepts the idea; (3) Respect (Valuing), inviting other people to work on or discuss a problem; (4) Responsible for everything chosen with all of the risks is the highest attitude.

## Behaviour

Behavior according to Sunardi [11] synonyms of activities, actions, performance, in other words behavior is all activities carried out by humans which are reactions to the environment. That behavior can be a reaction that is motoric, physiological, cognitive or affective. According to Notoatmodjo [12] the operational forms of behavior can be grouped into 3 types: (1) Behavior in the form of knowledge, namely by knowing the situation or external stimuli; (2) Behavior in the form of attitude, namely an inner response to circumstances or external stimuli; and (3) Behavior in the form of concrete actions against situations or external stimuli.

## Development of Youth

Behavior According to Yusuf [13] adolescents experience behavioral development, among others: (1) Development of cognitive behavior characterized by changes in mental abilities such as learning, reasoning, thinking and speaking methods. (2) Personality and Social Development which is a change in the way an individual relates to the world and expresses emotions uniquely, whereas social development means a change in dealing with others.

## Effect of Parents' Knowledge, Attitudes and Behavior on the Development of Adolescent Behavior

According to Notoatmojo [14] the factors that influence knowledge are age, sex, education, employment and information sources. And attitudes may be influenced by various factors including personal experience, the influence of other people considered important, cultural influences, mass media, educational institutions or religious institutions and the influence of emotional factors [15]. Knowledge, attitudes and behavior of parents will influence adolescent behavior. The results of the study on the influence of parental knowledge on the development of adolescent behavior in terms of cognitive abilities and personality and social development have not been found, but many research results have revealed that parents' knowledge, attitudes and behavior influence children's behavior. Research conducted by Yulinati [16] found that the knowledge, attitudes and behavior of parents in terms of the pattern of parenting, the application of democratic, permissive and authoritarian attitudes had a simultaneous and partial influence on the development of children's behavior. While the research results of Wahyuningsih [17] revealed a different matter where parental supervision has a negative influence on antisocial behavior. Supervision in this case is the same as the application dimension in the knowledge variable, and the behavioral dimension in acting on the behavior variable. This dimension has indicators that monitor the behavior of children in digital using computer information technology.

## RESEARCH METHODS

This research is descriptive and verifacative research. The population used is parents and adolescents who have junior and senior high school education. The sampling technique consists of two strata. The first strata is the determination of the number of sample from sub-district locations and the second strata of determining the sample for respondents (one representing parents and adolescents). For sub-districts, random sampling techniques are used, determined by the Slopin formula. With these techniques the selected sub-districts are Telanaipura District, Lake Sipin, Pelayangan, Paal Merah, Alam Barajo, South Jambi, Jambi Market, and Kotabaru. For the sample of respondents amounting to 522 consisting of 261 parents, represented by one parent only, and 261 adolescents who are still in junior high and senior high school education (one family). The sampling technique is purposive sampling. The analytical method used is descriptive quantitative. To find out the magnitude of the influence between variables path analysis (path analysis) was used.

## RESULTS AND DISCUSSION

### Youth Picture in the Digital Age in Jambi City

Various applications are owned by teenagers in digital settings as shown in Figure-1.

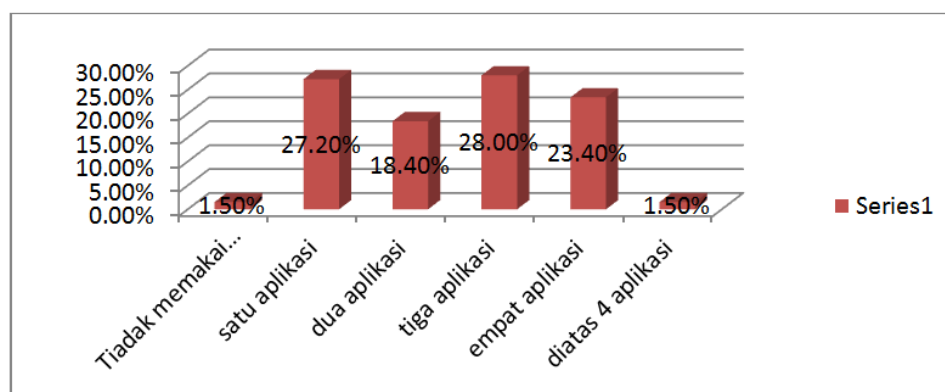


Fig-1: Various Uses of Applications by youth in the Digital Age in Jambi City

Figure-1 shows that teenagers in the digital age in obtaining information use internet media or online media with various applications, only about 1.5% do not use the application. The Cellphone used is not an Android ones. About 27.2% of adolescents use 1 (one) application, that is, on average using Whatsapp (WA) around 19.2%, online games around 8%. Those using 2 (two) applications on average have WA and Facebook (Fb) and it was around 18.4%. And those using 3 (three) applications in the form of WA, Fb and Instagram (Ig) was around 28%. Teenages who used 4 applications, WA, IG, FB and Youtube, or WA, IG, FB, and other applications such as webtoon, game, typewriter, music are as much as 23.4%. Overall, almost 98.5% of teenagers in the digital era use online or internet media for their daily activities. The data represents a common sight in our society when witnessing youth activities surfing on social media.

The time for using online media or the internet through cellphone based on findings in the field (recognition of adolescents in Jambi City) may be described as follows: around 30% teenagers every day use cellphone for 1-3 hours; 49.4% spend 4 - 6 hours, around 13.0% use it as long as 7-9 hours; and those who use above 9 hours as much as 6.1%. Respondents who did not provide the time to use mobile phones to enjoy online media or internet were around 1.5%.

The behavior of adolescents using mobile phones to access internet utilizes various applications, most of which are social media. Their activities are mostly for chatting with friends through Facebook, Instagram, Youtube or enjoying games on line, tiktok, webtoon, soccergame. If they are not directed properly, then the use of online media or the internet will disrupt the ability of adolescents to maintain school performance. This is in accordance with the recognition of parents saying that: about 6.5% of their children do not have achievements in school; around 43.3% of parents do not agree with the statement that children's achievement is increasing by using social media; 29.1% of people say quite agree that social media is able to increase achievement; 17.2% of parents agree that social media is able to improve children's achievement; and about 3.8% of parents strongly agree that social media (online) improves teenagers' achievements today.

The statement of parents claiming that the impact of the digital era influenced children's performance was in accordance with field findings, where children who became respondents had an achievement of around 14%, both achievements in schools and out-of-school ones such as sports and dance and others. In addition, with the communication through the WA application and other applications, teens often gather, especially with peers. Based on their recognition, almost 33% of teenagers gathered in cafe, 22% at friends' homes and only a few, around 6%, gathered in the study places such as schools, sports training center and others.

Based on statements from parents about the use of social media (online / internet), on average about 54% of teenagers' achievements are still in the sufficient category. This means that adolescents have not been able to use online media to support their studies. This is due, based on the findings of the respondents' answers, that online media are used more for fun activities, namely conversing and browsing pictures through Instagram and Facebook, watching via Youtube, playing games online and listening to music.

The habit of teenagers in Jambi City is currently using online media or internet more for pleasure than for increasing their knowledge. The use of online media or internet for learning facilities such as working on school assignments is done only when they are doing school work, the rest is for on line or internet to play, watch and chat so that it affects the level of children's knowledge. If it is not supervised by parents, it is feared that there will be an impact on health, playing game addiction and pornography.

If it is associated with various adolescent knowledge that must be known and understood to be able to protect themselves from things that can damage the soul, their level of knowledge can be seen in Table-1.

**Table-1: Level of Adolescent Knowledge in the Digital Age**

Knowledge level	Know	Did not know
Knowledge of reproductive health	59 (22,6%)	202 (77,4%)
Knowledge about drugs	207 (79,3%)	54 (20,7%)
Knowledge of HIV-AIDS	140 (53,6%)	121 (46,4%)
Knowledge about STIs	52 (19,9%)	209 (80,1%)
Knowledge of Ideal Marriage Age	103 (39,5%)	158 (60,5%)

Source: Respondent (Data processed 2018)

Table-1 above shows adolescents in Jambi City better know Napzah (Narcotics, Alcohol, Psychotropic and Addictive Substances) and HIV-AIDS more than reproductive health, STIs (Sexually Transmitted Infections) and ideal age for marriage. The information should be more intensely given by the related office by utilizing social media through Whatsapp, Facebook and Instagram because, based on the research results, teenagers in Jambi City spend more time on the application.

## Level of knowledge, attitudes, behavior of parents and the development of adolescent behavior in the digital era to welcome the demographic bonus in Jambi City

### Analysis of Parents' Level of Knowledge Variables

The description of the knowledge variables of parents in Jambi City in the digital era were measured with 4 (four) dimensions, namely dimensions of knowing, understanding, application, and synthesis. Each of which can be seen in Table-2.

**Table-2: Variable Categories of Parent Knowledge in Jambi City**

Dimention	Percentage	Chategory
Knowing	51%	Parents knowledge Not good
Understanding	57%	Parents knowledge Quite good
Application	53%	Parents knowledge Not good
Synthesis	58%	Parents knowledge Quite good
Knowledge Variables	55%	Parents knowledge Not good

Source: Processed data result (2018)

Table-2 explains that in the dimensions of knowing applications in online media used by today's children, parents on average have a lack of knowledge. Thus they are not familiar with the various types of online media applications or internet that provide a means to play, such as games, music, and youtube and a means to socialize such as Whatapps, Facebook, Instagram, Line and others. Such a lot facilities, if parents do not know the technology, it is feared they do not know what their teenagers have done, both positive and negative activities. Parents must provide knowledge to children so that they are able to protect themselves from the influence of social media and may develop their critical thinking.

The use of cellphones in the digital era is very much in need of parental supervision. The demands of the education world require parents to provide internet facilities by using cellphones for school assignments, but parents are required to know and understand what happened to their teenagers when using them, including the time of their use and monitoring the applications used. Therefore parents are required to have knowledge to understand the condition of adolescents in the digital age where children are psychologically still unstable and very easily affected.

Knowledge related to digital technology is a very important for parents in solving adolescent issues today, especially the impact of the digital era, especially the children's moral awareness in cyberspace interaction. The average education of their mothers is 52% senior high, followed by 17% junior high, and elementary school as much as 16%. Only 13% of mothers with a bachelor education. And those who did not go to school are 2%. The education of the father is 52% senior high, followed by bachelor 21%, junior high school 13%, elementary school 13% and not study 1%. This means that there are still parents who have low knowledge while children will use social media in their daily lives. If this condition is not handled well, negative impacts cannot be avoided. Therefore, parents' knowledge in addressing the phenomenon of using computer information technology must be government concern.

In the dimension of understanding knowledge, parents are good enough, they already understand the dangers of using cellphone too long. They also understand the existence of school assignments that required the use of internet and understand that computers can also display pornographic sites. However, if viewed from the description of adolescents in the digital era based on the respondent's answer, it was found that the usage time of the cellphone was quite long they are between 4 – 6 hours, 7-9 hours which count about 13% and above 10 hours is around 6.1%. When viewed from adolescent activities, where the average teenager goes home from school at around 16.00 and learning activities between 1-3 hours, it means that the rest can be assumed for gadgets to socialize in the media online and play games or other types of applications. The long use of gadgets may damage health as revealed in the Fauziah [19] study, which suggests that online games cause the eye health of the apostles, heart health decreases, weight decreases due to eating loss, and can cause adolescents to be malnourished. For that reasons, parents need to understand the consequences of using cellphone too long and try to monitor its use.

In the dimension of knowledge of gadget applications, parents turn out to be less good. This is evidenced by the number of teenagers who use mobile phones for a long time and parents have not been able to avoid the dependence of children from cellphone to access various applications online, which resulted that they did not understand the development of children's activities on social media. Likewise, the dimension of synthesis of knowledge of parents is not good. This is because many parents do not understand the teenagers activities online in the digital era so that not all of them are able to guide how to use online media.



### Variable Analysis of Parents' Attitudes

The description of the attitude variables of parents in Jambi City in the digital era, was measured with 4 (four) dimensions, namely accepting, responding, appreciating and being responsible. And they belong to the category of fairly good attitudes. This can be seen through the values of each dimension in Table 3 below.

**Table-3: Variable Categories of Attitudes of Parents in Jambi City**

Dimension	Percentage	Category
Acceptance	62%	Quite good attitude of parents
Response	56%	Quite good attitude of parents
Respect	59%	Quite good attitude of parents
Responsible	52%	Quite good attitude of parents
Parent attitude variable	57%	Quite good attitude of parents

Source: Processed data result

Based on Table-4 above, it can be concluded that the attitude of parents in Jambi City in facing the development of children's behavior is quite good. The attitudes are reflected in: accepting the desire of the child to have a cellphone to fulfill their needs, respond to the use of cellphone and the time to use it which was too long. However, they did not care about the use of cellphone, so that the time spent was more for socializing with peers, playing game applications, and watching movies. This will, among other things, have an impact on children who increasingly have friendship networks with both known and unknown friends.

Based on findings in the field, only about 17.6% of teenagers spend time at home after school or on holiday, and around 33% of them hang out at cafes, 43.7% play at friends' houses and 5.7% spend time at school. To anticipate this, parents must supervise and know their activities outside home, whatever they do. Parents should also know who the friends are, good or not. The digital age gives information so fast that most teenagers tend to be easily influenced to do positive and negative things.

The attitude of parents to respond to drugs, HIV-AIDS, STIs and early marriage is still not good. Parents should be more vigilant and cautious about adolescent relationships to avoid them. Parents must always control the behavior of children so that they are not trapped in a bad environment. This is supported by a report from the research results of Bukit *et al.*, [18] which stated that around 35% of teenagers in Muaro Jambi District were married at an early age because of being pregnant before marriage.

### Analysis of Parent Behavior Variables

The description of the behavior variables of parents in Jambi City in the digital era were measured through 3 (three) dimensions, namely the dimensions of knowledge, behavior and action. This behaviors were reflected in the values of each dimension in Table-4.

**Table-4: Categories of Parent Behavior Variables in Jambi City**

Dimension	Percentage	Category
Knowledge	51%	Parent behavior which is not good
Attitude	82%	Parent behavior which is quite good
Action	65%	Parent behavior which is quite good
Parental behavior variable	66%	Parent behavior which is quite good

Source: Data Results

In table-4 above, it is explained that in general the behavior of parents in the city of Jambi in the current digital era is in a fairly good category, only behavior related to knowledge that is still not good. Parents must know how to behave with children so that they do not intimidate children and the teenagers are not stressed by the behavior of parents.

### Analysis of Youth Behavior Variables

The description of adolescent behavioral variables in the City of Jambi in the digital era was measured through 3 (three) dimensions, namely the dimensions of cognitive behavior and dimensions of personal development and development of adolescent behavior. Percentages for each dimension and category can be found through Table-5.

In Table-5 above, it is illustrated that the development of adolescent behavior from the perception of parents is in a fairly good category. In the digital age, cognitive behaviors of adolescents are in the category of development of bad behavior, where children's critical abilities are reduced. If seen from the description of adolescents in Jambi City, teenagers spend a lot of time using cellphones, playing with peers. The habit of spending time using cellphones for online activities can lead to uncritical behavior, eventually arising traits that only mimic for example speaking styles, dress and

others. Supported by field findings, the children's language today is sometimes not understood by parents. This may cause adolescents no longer filter out what they saw, but just imitating it so that their ability to think the merits of the digital era is not adequate if not accompanied and guided by parents. This is feared to reduce their level of creativity.

**Table-5: Variable Categories of Development of Youth Behavior in Jambi City**

Dimension	Percentage	Category
Cognitive behavior	50%	Poor behavior development
Personal development and social development	67 %	The development of adolescent behavior is quite good
Variable of adolescent behavior development	59%	The development of adolescent behavior is quite good

Source: Data Results (2018)

Findings on the speed of thinking ability, showed that adolescents in Jambi City were in the behavioral development with the category "lacking". The category of adolescent development with lack of critical and rapid thinking ability is evidenced by the fact that there were very few teenagers in Jambi City who have good achievements in school, that is, only around 14.4% have good ones both at school and outside. This is supported by the findings in the field where teenagers spend a lot of time with peers, only 10% use it for study, around 15.7% provided no response, 67% claim to only talk, confide and joke, and 6, 9% for dating. For the dimensions of personality and social development as well as the ability to get along and socialize with the environment, from an emotional perspective in general they are quite good.

#### **Analysis of the Effect of Knowledge Levels, Attitudes and Behavior of Parents on the Development of Adolescent Behavior in the Digital Age**

The results of data processing found that simultaneously and partially the knowledge, attitudes and behavior of parents had a positive and significant influence on the development of children's behavior. In other words, the better the knowledge, attitudes and behavior of parents, the better the development of adolescent behavior. Partially the dominant variable affecting the development of adolescent behavior is parental knowledge.

**Table-6: Effect of Knowledge Knowledge, Attitudes and Behavior of Parents on the Development of Simultaneous and Partial Adolescent Behavior**

Effect			Effect coefficient	R <sup>2</sup>	Error Standard	t <sub>value</sub>	t <sub>table</sub>
Knowledge	→	Development of Youth Behavior	0,448	0,2007	0,09	38,133	1,96
Attitude	→	Development of Youth Behavior	0,291	0,0847	0,11	22,336	1,96
Behavior	→	Development of Youth Behavior	0,348	0,1211	0,08	33,819	1,96
<b>R<sup>2</sup> (Simultaneous) = 0,989 = 98,9%</b>							
<b>F<sub>value</sub> = 7593,646</b>							
<b>F<sub>table</sub> = 2,65</b>							

Source: processed primary data (2018)

#### **Simultaneous Test Hypothesis**

- H<sub>0</sub>: b<sub>1</sub> = b<sub>2</sub> = b<sub>3</sub> = 0, meaning that there is no significant influence between variables of knowledge, attitudes and behavior of parents towards the development of adolescent behavior
- H<sub>a</sub>: b<sub>1</sub> ≠ b<sub>2</sub> ≠ b<sub>3</sub> ≠ 0, meaning that there is a significant influence between the variables of knowledge, attitudes and old behavior towards the development of adolescent behavior.

Hypothesis testing simultaneously uses F test statistics with the provision of reject H<sub>0</sub> if F<sub>value</sub> is greater than F<sub>table</sub>, or vice versa accept H<sub>0</sub> if F<sub>value</sub> is smaller or equal to F<sub>table</sub>.

From table F for the 0.05 level of significance and free degree (3: 256), the value of F table is 2.65. Because from the results of the study it was obtained F<sub>value</sub> (7593, 646) and greater than F<sub>table</sub> (2.65), then at the error rate of 5% it was decided to reject H<sub>0</sub> so that H<sub>a</sub> was accepted. So based on the test results with a confidence level of 95%, it was concluded that the knowledge, attitudes and behavior of parents together (simultaneous) had a significant effect on the development of adolescent behavior in Jambi City at 98.9%, the remaining 1.1% was influenced by other variables that have not been studied in this study.

The magnitude of the influence of parent knowledge variable both directly and indirectly on the development of adolescent behavior in the city of Jambi can be explained as follows:

- Direct influence of parents' knowledge (X<sub>1</sub>) on the development of adolescent behavior (Y)

$$X_1 \rightarrow Y = PyX_1. PyX_1 = 0.448 \times 0.448 = 0.200704 = 20.07\%.$$

- The influence of parents' lack of knowledge on the development of adolescent behavior (Y) through parental attitude variables (X<sub>2</sub>) and parental behavior (X<sub>3</sub>) as follows

$$X1 \rightarrow Y \text{ through } X2 = PyX1.rX1X2.PyX2 = 0.448 \times 0.821 \times 0.291 = 0.1070 = 10.70\%$$

$$X1 \rightarrow \text{through } X3 = PyX1.rX1X3.PyX3 = 0.448 \times 0.690 \times 0.348 = 0.1075 = 10.75\%$$

The total influence of parental compliance both directly and indirectly on the development of adolescent behavior is 41.52%. The attitude of parents as shown in the table above has a positive path correlation of 0.291 with a  $t_{\text{count}}$  of 22.336 and  $t_{\text{table}}$  1.96. Partial testing of the influence of parental attitudes toward the development of adolescent behavior can be tested through a  $t_{\text{count}}$  greater than  $t_{\text{table}}$  with a 5% error rate (two-way test). The  $t_{\text{value}}$  is greater than  $t_{\text{table}}$ , meaning that there is a significant influence on the variable attitudes of parents towards the development of adolescent behavior.

The magnitude of the influence of parental attitude variables both directly and indirectly on the development of adolescent behavior in the city of Jambi can be explained as follows:

- a. Direct influence of parents' attitudes (X2) on the development of adolescent behavior (Y)
 
$$X2 \rightarrow Y = PyX2.PyX2 = 0.291 \times 0.291 = 0.0847 = 8.47\%.$$
- b. The influence of not a parent's attitude towards the development of adolescent behavior (Y) through the parent knowledge variable (X1) and parental behavior (X3) as follows.
 
$$X2 \rightarrow Y \text{ through } X1 = PyX2.rX2X1.PyX1 = 0.291 \times 0.821 \times 0.448 = 0.1070 = 10.70\%$$

$$X2 \rightarrow \text{through } X3 = PyX2.rX2X3.PyX3 = 0.291 \times 0.758 \times 0.348 = 0.0760 = 7.61\%$$

The total influence of parental attitudes, both directly and indirectly, on the development of adolescent behavior is 26.78%. The behavior variable parents have a positive path correlation of 0.348 with a  $t_{\text{value}}$  of 33.819 and  $t_{\text{table}}$  1.96. Partial testing of the influence of parental behavior on the development of adolescent behavior can be tested through a  $t_{\text{value}}$  greater than  $t_{\text{table}}$  with 5% error rate (two-way test). Because the results of the  $t_{\text{value}}$  are greater than  $t_{\text{table}}$ , there is a significant effect of the variable parent behavior on the development of adolescent behavior.

The influence magnitude of parent behavior variables both directly and indirectly on the development of adolescent behavior in the city of Jambi can be explained as follows:

- a. Direct influence of parent behavior (X3) on the development of adolescent behavior (Y)
 
$$X3 \rightarrow Y = PyX3.PyX3 = 0.348 \times 0.348 = 0.1211 = 12.11\%$$
- b. Indirect effects of parental behavior on the development of adolescent behavior (Y) through the variable knowledge of parents (X1) and parental attitudes (X2) as follows:-
 
$$X3 \rightarrow Y \text{ through } X1 = PyX3.rX3X1.PyX1 = 0.348 \times 0.690 \times 0.448 = 0.1076 = 10.76\%$$

$$X3 \rightarrow \text{through } X2 = PyX3.rX3X2.PyX2 = 0.348 \times 0.758 \times 0.291 = 0.0768 = 7.68\%$$

The total influence of parent behavior both directly and indirectly on the development of adolescent behavior is 30.55%. Based on the value of the influence of each independent variable (parental knowledge, attitudes and behavior) on the dependent variable (development of adolescent behavior) partially it can be concluded that the second hypothesis is proven, namely that parental knowledge is more dominantly affecting the development of adolescent behavior by 41.52% compared to the attitudes and behavior of parents.

Parents, with their knowledge skills, must be able to overcome the negative effects of the digital era, by limiting the time of using cell phone, understanding and knowing what activities of teenagers in online media, knowing who their best friends in the online media. Parents must have a high level of concern for the various applications used by teenagers. Parents need to identify programs / applications that have educational content and can have a positive impact on adolescent behavior. Moreover, the results of this study indicate that the attitude of parents in responding to drugs, HIV-AIDS, STIs and marriages of ideal age is still in the category of bad level, 55%. No choice, parents have to do various ways to change attitudes. It is the task of parents in preparing children to face the digital era. Parents must continue to increase knowledge through non-formal education. Moreover, the level of education of parents in this research is mostly from high school level.

## CONCLUSIONS

Based on the results of the discussion in this study, it can be concluded:

- The picture of teenagers in today's digital era is that they spend more time using media online; teenagers have not been able to use online media to improve their achievements, they used the media to socialize with peers (just for having fun). With such a situation they are vulnerable to the negative effects of social media such as pornography and promiscuity. Meanwhile there are not many teenagers who know about reproductive health, sexually transmitted infections, and the ideal age of marriage and its consequences.



- Parents' knowledge about online media in Jambi City is in the poor category, causing them to be less concerned with the impact of online media for teenagers
- The attitude of parents in Jambi City is in a fairly good category. This means that parents are willing to accept advances in technology by providing gadgets for adolescents to obtain information.
- The behavior of parents in Jambi City is in the fairly good behavior category. Although they still do not understand social media and its applications, they have shown caring behavior when children use the media too long.
- The development of adolescent behavior from the perception of parents on the cognitive dimension is in the category of bad behavior. In cognitive behavior related to ability and creativity, they have not utilized the advancement of IT for achievement. This can raise concerns that future generations do not have the capacity to compete both in terms of morals and academic achievements in welcoming bonus demographics 2020-2030
- Knowledge, attitudes and behavior of parents simultaneously and partially have a positive effect on the development of adolescent behavior, where knowledge is the most dominant variable affecting adolescent behavior. The lack of knowledge possessed by parents especially in overcoming the impact of the digital era will result in unwanted teen behavior.

### Recommendations

- Programs need to be made at the sub-district level to train parents about how to know and learn online media and various applications available in it, know how to use gadgets, how to protect children's gadgets or laptops from pornographic sites, how to check sites that has been visited by children and so on.
- Strengthening family resilience through strengthening religious education that can be carried out by RT recitation, marawis programs which are mobilized by RT and PKK mothers.
- Synergizing the work program between the BKKBN Jambi Province, the Child and Women's Empowerment Service in Jambi City, the District, and the RT in Jambi City so that they can reach all areas in Jambi City. The target of this program is parents and adolescents to increase their knowledge about how to use social media in their daily lives so as to avoid negative impacts.
- Watching programs, at sub-district level, about the impact of the digital era on the development of adolescent behavior.
- Expanding the planned-generation work program through juvenile PIK by synergizing sub-district programs, urban villages to target parents to have knowledge about how to control the negative impacts of advances in information technology.

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