

## The Effect of Using Gadgets on the Ability of Early Childhood Social Interaction in Raudhatul Athfal Dewi Anggrek Pekanbaru City

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**ABSTRAK.** Penelitian ini bertujuan untuk mengetahui apakah ada pengaruh penggunaan gadget terhadap kemampuan interaksi sosial anak usia dini di RA Dewi Anggrek Kota Pekanbaru. Penelitian ini merupakan penelitian kuantitatif dengan menggunakan teknik nonprobability sampling yang secara khususnya menggunakan purposive sampling. Instrumen pengumpulan data menggunakan angket, lembar wawancara, observasi, dan dokumentasi. Sedangkan untuk pengolahan data dilakukan melalui tahap uji normalitas, linier, dan homogen, selanjutnya dilakukan analisis data menggunakan uji regresi linear sederhana dengan tingkat kepercayaan 95% ( $<0,05$ ) Jumlah populasi yang diambil adalah keseluruhan anak usia 5-6 tahun di RA Dewi Anggrek kota Pekanbaru, dikarenakan populasi kurang dari 100 maka peneliti tidak mengambil sampel. Berdasarkan hasil data yang diperoleh dari penggunaan SPSS adalah nilai Sig. sebesar 0,948. Karena nilai sig.  $0.948 > 0.05$ , maka  $H_0$  diterima dan  $H_a$  ditolak yang berarti dalam penelitian ini tidak ada pengaruh penggunaan gadget terhadap kemampuan interaksi sosial anak usia dini di RA Dewi Anggrek Kota Pekanbaru.

**Kata Kunci:** Penggunaan Gadget, Kemampuan Interaksi Sosial, Anak Usia Dini

**ABSTRACT.** This study aims to decide if the use of gadgets has an impact on early childhood social interaction skills in RA Dewi Anggrek, Pekanbaru. This study is a quantitative study using the nonprobability sampling technique that specifically used purposive sampling. The data collection instruments used were questionnaires, interview sheets, observations, and documentation. Meanwhile, data processing was carried out through the normality, linear, and homogeneous test stages. After that, data analysis was carried out using a simple linear regression test with a confidence level of 95% ( $<0.05$ ) The total population taken was all children aged 5-6 years old in RA Dewi Anggrek Pekanbaru. Since the number of the population was less than 100, the researchers did not take samples. Based on the data obtained from the use of SPSS, the value of sig. was 0.948. Since the sig. was  $0.948 > 0.05$ ,  $H_0$  was then accepted and  $H_a$  was rejected. It indicates that in this study, there is no effect of using gadgets on the social interaction skills of early childhood in RA Dewi Anggrek, Pekanbaru..

**Keyword:** The Use of Gadget, Social Interaction Ability, Early Childhood

## INTRODUCTION

The problems encountered by the researchers at the beginning of the observations made at RA Dewi Anggrek were: some children were rude to beat their other friends like a spectacle that children often watch, namely mobile legend games, there are children at school who tell stories that the child is playing games and invites his friends to play games after school. From this problem the researcher wants to examine: 1) Is the use of gadgets for early childhood allowed, 2) How is the ability of early childhood social interaction, 3) Is there an effect of gadget use on early childhood social interaction abilities. In this study, researchers took the necessary data online or by distributing questionnaires directly in paper form which were then distributed to the child's guardian/parent to fill in as data to be processed by the researcher. To solve the problem the researcher is doing is to make parents, teachers, and children aged 5-6 years as research subjects. Then the researcher uses instruments in the form of questionnaires and observations, the questionnaire that will be distributed first must be tested first by experts in the field according to the variable to be studied. The expert questionnaire test was carried out by researchers for 2 revisions until they received a Fakar test letter attached in the attachment, as well as evidence before and after the expert test by the area of expertise in Learning Strategy / Multimedia. The researcher made the questionnaire a top priority to obtain valuable data to be processed using SPSS assistance. The purpose of this study was to find out whether there was an effect of using gadgets on the social interaction abilities of early childhood at RA Dewi Anggrek Pekanbaru City. A gadget is an electronic device or instrument that has a practical purpose and function, especially to assist human work. There are several kinds of gadgets that are used by children, including smartphones, laptops, tablet PCs, and video games. In this day and age, so many children use video games as alternative entertainment (Derry Iswidharmanjaya, dkk., 2014: 7).

Meanwhile, limiting the use of gadgets is adjusted to the age group recommendations. The American Paediatric Society (2010) has published screen time guidelines as follows: 1) Children under 2 years of age should not be allowed to play with gadgets alone, including TVs, smartphones, and tablets; 2) Children aged 2 years to 4 years less than 1 hour a day; 3) Age 5 years and over should be no more than 2 hours a day for recreational use (other than the need for study). Back to how parents supervise children. Of course, everything has a risk. The use of gadgets in children who are not ready to receive exposure to gadget light can cause eye damage and other health problems.. (Tri suhardi, esti utami, 2019: 28). The bad effects of using gadgets on children include: 1) being a closed person; 2) brain health is disturbed; 3) impaired eye health; 4) impaired hand health; 5) sleep disturbance; 6) likes to be alone; 7) violent behavior; 8) waning of creativity; 9) exposed to radiation; 10) cyberbullying threats (Tri suhardi, esti utami, 2019: 28).

The other negative impacts include: disturbing health, can interfere with children's development, being prone to crime, can affect children's behavior. As for the first: disturbing health, gadgets can affect human health because the effects of radiation from technology are very dangerous for human health, especially in children aged 12 and under. Excessive radiation effects can cause cancer. Second: interfere with child development. Third, prone to crime. Fourth: can influence the child's behavior (Indiana sunita, dkk, 2017: hal 58-59). Even though the benefits derived from this advanced technology are enormous, the dangers are no less great for its users, especially those who are concerned with gadgets. Therefore, parents and educators as the closest parties to children, are obliged to protect the future of children by protecting sites that are not suitable for consumption by children. Meanwhile, in this study, researchers used the main theory, namely the theory of Albert Bandura, known as the social learning theory. The basic idea of this theory has been developed since the 1940s by various experts such as Miller and Dollard (1941). Then it was developed by Albert Bandura and Walter (1963). The focus of this theory is how children learn social behavior. Such as cooperating, and sharing, or negative behavior such as fighting, arguing, and attacking.

Shows on television and various other phenomena that children see will become models for children. Often we are not aware that among good models there are also good models and

there are also bad models. Therefore, teachers and parents must pay attention to these models and explain which models should be imitated and which models should not be imitated (Slamet Suyanto, 2005: 105-113). Children may play games that feature violence and aggressiveness. Many educational experts claim that games that contain violence can trigger aggressive and sadistic behaviors in children. besides that, what is no less worrying is if children open porn sites. Therefore parental guidance is a must (Ahmad Fanani, 2008: 2-4). In society, language means something that relates to other people or society. Social can also mean like to pay attention to public interests, such as like to help, donate, and so on. The main area of social development is friendship. In friendship, children want to be able to play as much as possible with their friends. The social experience that children have can be seen from the responses they have in friendship. Children also begin to understand that the function of friendship is to share, provide support, and take turns. In friendship, children will also get social experience. From an early age, these social experiences play an important role in determining the child's future social relationships (Novan Ardi Wiyani, 2014: 123-127).

According to Plato, potentially (nature) humans are born as social beings (zoon political). Meanwhile, Muhibin said that social development is the process of forming a social self (a person in society), namely an individual in a family, culture, nation, and so on. Meanwhile, Hurlock stated that social development is the acquisition of the ability to behave by social demands (Ali Nugraha, 2004: 1 dan 18). Humans are social creatures, therefore children need to be introduced to good social skills from an early age, so without realizing that children have interacted well, both with parents, peers, and younger people. Paying attention to the child's social development will have an impact or influence on the child's future in making relationships with other people. The function of socialization itself for children is to help children find a place in their social life (Soelaeman, 1994: 91) Social interaction according to Sukanto, who was quoted by Wahyu Novitasari, is social relations that concern the relationship between individuals, individuals with groups, and groups with groups. Social interaction will occur if there is social contact and communication. Social interaction is the key to all social life, therefore without social interaction, there will be no life together. In early childhood social interaction is needed because children are taught how to live in society, and children are taught various roles which will later become self-identity. In addition, when carrying out social interactions, children will get various information around them.

In the Indonesian Dictionary, children are defined as humans who are still small, namely those who are only six years old. If interpreted in language, early childhood is a term for children aged between 0-6 years. Normatively, a child is defined as someone born up to the age of 6 years (Wahyu Novitasari, dkk., 2016: 1). Early age is a very valuable time to instill religious, nationalistic, ethical, moral, and social values that are useful for the next child's life. Early childhood education is a form of early childhood education unit which is essentially education organized to facilitate the overall growth and development of children or emphasize the development of all aspects of the child's personality. Early Childhood Education is an effort to provide stimulation, soar, nurture, and provide learning activities that will produce abilities and skills in children.

## **METHOD**

The basic collection technique uses a questionnaire and observation. The population is taken from the purposive sampling which has the following criteria: Children aged 5-6 years; Children who can use gadgets Children whose parents are allowed to use gadgets The sample is part or representative of the population studied. Because the population is less than 100, the researcher does not take samples. This research is a quantitative study using a nonprobability sampling technique that specifically uses purposive sampling by entering the age category and focusing on children who can use gadgets. while the data processing procedure was carried out through the normality, linear and homogeneous test stages, then data analysis was carried out

using a simple linear regression test with a confidence level of 95% ( $\alpha < 0.05$ ). After the data is collected then analyze the data using the SPSS program. The first thing to do is to test the normality of the data, then linearity, and finally homogeneity. Once this is known, the next step is to analyze the data using simple linear regression. Simple linear regression is a statistical method that functions to test the extent of a causal relationship between the causal factor variable (X) and the consequential variable.

The steps in carrying out a simple linear regression analysis: Determine the purpose of carrying out a simple linear regression analysis; Identification of causative factors and effect variables; Perform data collection; Calculate  $X^2$ ,  $Y^2$ ,  $XY$  and the total of each; Calculate a and b based on the formula above; Make a simple linear regression equation model; Make predictions or forecasts on causal factor variables or effect variables.

## RESULT AN DISCUSSION

Based on the data analysis techniques in the previous chapter, the research step is to fill in the tabulation of data obtained from both data collection techniques from questionnaires and observations attached to the appendix. Furthermore, the researcher processed the data through the normality, linear, and homogeneous test stages. The normality test is a statistical test conducted to find out how the data is distributed. A linearity test is a requirement in simple linear regression analysis and its function is to find out the form of the relationship between the independent variable and the dependent variable. While the homogeneous test is a test of whether the variances of 2 distributions or more are the same, to find out whether the data in variables X and Y are homogeneous or not.

**Table IV.2 Normality Test**

|                                  |         | One-Sample Kolmogorov-Smirnov Test |            |
|----------------------------------|---------|------------------------------------|------------|
|                                  |         | Unstandardized Residual            |            |
| N                                |         | 21                                 |            |
| Normal Parameters <sup>a,b</sup> |         | Mean                               | .0000000   |
|                                  |         | Std. Deviation                     | 5.36238853 |
| Most Differences                 | Extreme | Absolute                           | .177       |
|                                  |         | Positive                           | .100       |
|                                  |         | Negative                           | -.177      |
| Kolmogorov-Smirnov Z             |         | .812                               |            |
| Asymp. Sig. (2-tailed)           |         | .525                               |            |

a. Test distribution is Normal.

b. Calculated from data.

Based on the table above it is known that the value of Asymp Sig. (2-tailed) is 0.525 greater than 0.05, it can be concluded that the data is normally distributed.

**Table IV.3**  
**Linieraiity Test**

| Test of Homogeneity of Variances |               |            |        |         |       |        |     |
|----------------------------------|---------------|------------|--------|---------|-------|--------|-----|
| SKOR_Y                           |               |            |        |         |       |        |     |
| Levene                           |               |            |        |         |       |        |     |
| Statistic                        | df1           |            | df2    |         | Sig.  |        |     |
| 1.346                            | 4             |            | 9      |         | .326  |        |     |
| ANOVA Table                      |               |            |        |         |       |        |     |
|                                  |               |            |        | S       |       | M      |     |
|                                  |               |            |        | um      | of    | ean    | ig. |
|                                  |               |            |        | Squares | f     | Square |     |
| S                                | Betwe         | (Co        | 3      | 2       |       |        |     |
| KOR_Y                            | en Groups     | mbined)    | 26.071 | 1       | 9.643 | .071   | 467 |
| *                                |               | Line       | .1     | .1      | .1    |        |     |
| SKOR_X                           | arity         |            | 34     |         | 34    | 005    | 946 |
|                                  |               | Devi       | 3      | 3       | 3     |        |     |
|                                  |               | ation from | 25.938 | 0       | 2.594 | .177   | 408 |
|                                  |               | Linearity  |        |         |       |        |     |
|                                  | Within Groups |            |        | 2       | 2     |        |     |
|                                  |               |            | 49.167 |         | 7.685 |        |     |
|                                  | Total         |            |        | 5       |       |        |     |
|                                  |               |            | 75.238 | 0       |       |        |     |

Based on the table above, the Deviation from the Linearity value is 0.408, which is greater than 0.05. It can be concluded that there is a significant linear relationship between the variable use of gadgets and children's social interaction abilities.

**Table IV.4**  
**Homogeneity Test**

Based on the table above, it is known that the value of Sig. is 0.326 greater than 0.05, it can be concluded that the variance of data using gagged on children's social interaction abilities is the same or homogeneous.

**Table IV.5**  
**1. Descriptive Analysis**

| Variabel          | um | Minim | Maxi | M | Std. Deviation |
|-------------------|----|-------|------|---|----------------|
| Penggunaan Gadget | 1  | 28    | 43   | 3 | 4.278          |
| Interaksi sosial  | 1  | 64    | 84   | 7 | 5.363          |
| Total             | 1  |       |      |   |                |

Based on the table above, it can be seen that the 21 children obtained a minimum value of the variable use of gadgets (X) of 28 and a maximum of 43 and a minimum value of the variable social interaction ability of children (Y) of 64 and a maximum of 84.

2. Linear Regression

**Table IV.6**  
**Variables Entered/Removed<sup>a</sup>**

| Model | Variables Entered   | Variables Removed | Method |
|-------|---------------------|-------------------|--------|
| 1     | SKOR_X <sup>b</sup> |                   | Enter  |

a. Dependent Variable: SKOR\_Y

b. All requested variables entered.

Based on the table above, explains the variables entered and the method used, in this case, the variables entered are variable X as the independent variable and Y as the dependent variable and the method used is the enter method.

**Table IV.7**  
**Model Summary**

| Model | R                 | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|-------------------|----------------------------|
| 1     | .015 <sup>a</sup> | .000              | 5,502                      |

a. Predictors: (Constant), SKOR\_X

Based on the table above, explains the magnitude of the correlation/relationship/R value, which is equal to 0.015, so it can be said that if there is a relationship between variable X and variable Y, the total relationship is equal to 0.015. Then from the output, it is obtained a coefficient of determination or R Square of 0.000 which implies that the effect of the independent variable (X) on the dependent variable (Y) is 0%. this means that the gadget usage variable cannot explain the effect of the child's social interaction ability variable.

**Tabel IV.8**  
**ANOVA<sup>a</sup>**

| Model      | Sum of Squares | df | Mean Square | Sign. |
|------------|----------------|----|-------------|-------|
| Regression | ,134           | 1  | ,13         |       |

|          |         |    |     |     |     |                  |
|----------|---------|----|-----|-----|-----|------------------|
| gression |         |    | 4   |     | 004 | 948 <sup>b</sup> |
| Re       |         |    |     | 30, |     |                  |
| sidual   | 575,104 | 19 | 269 |     |     |                  |
| To       |         |    |     |     |     |                  |
| tal      | 575,238 | 20 |     |     |     |                  |

a. Dependent Variable: SKOR\_Y

b. Predictors: (Constant), SKOR\_X

• Based on the output, it is known that the count is 0.004 while the significance level is 0.948. Because of the value of sig. 0.948 > 0.05, then according to the basis of decision-making in the f test it can be concluded that the hypothesis is rejected, or in other words the Gadget usage variable has no effect.

**Tabel IV.9**  
**Coefficients<sup>a</sup>**

| Model             | Unstandardized Coefficients |            | Standardized Coefficients |  | Sig.     |
|-------------------|-----------------------------|------------|---------------------------|--|----------|
|                   | B                           | Error Std. | Beta                      |  |          |
| (Constant)        | 73.212                      | 10.422     |                           |  | .025 000 |
| Penggunaan Gadget | -.019                       | .288       | -.015                     |  | .067 948 |

a. Dependent Variable: Social Interaction Skills

The output of the coefficient section is known to be a constant value) of 73,212 while the value of X(b) is -0.019 so that the regression equation can be written:

$$Y = a + bx$$

$$Y = 73,212 + (-0,019)X$$

A constant of 73.212 means that the consistent value of variable Y is 73.212

The value of the regression coefficient X is -0.019, it is stated that every time the value of X is added, the value of Y increases by 1%. -0.019 the regression coefficient is negative so it can be said that there is no effect of variable X on variable Y. (The negative meaning here is that this number is negative -0.019 not positive 0.019). Based on the table above, it is known that the Sig value is 0.948, greater than the probability of 0.05, so it can be concluded that the X variable does not affect the Y variable, meaning that there is no influence between the use of gadgets on children's social interaction skills.

## CONCLUSION

As for what can be concluded based on the analysis of data processing, it can be seen that there is no undeveloped social interaction ability in early childhood at RA Dewi Anggrek (BB), namely 0%. While the effect of using gadgets from 21 children has an average of 36% and social interaction skills have an average of 72.52%. From the results of this study, regarding the title of the effect of using gadgets on the social interaction abilities of early childhood, there is no influence between variable X on variable Y. This is based on the results of research conducted at RA Dewi Anggrek, Pekanbaru, that based on the results, the Sig value is 0.948. Because of the value of sig. 0.948 > 0.05, it is concluded that the hypothesis is rejected or in other words the

Gadget use variable has no effect, meaning that  $H_0$  is accepted and  $H_a$  is rejected, which means that in this study there is no effect of using gadgets on social interaction abilities of early childhood at RA Dewi Anggrek Pekanbaru. Based on the results of this study, cooperation between teachers and parents is needed in monitoring children's development, especially in the use of gadgets which are increasing rapidly and being used even more by children in play activities.

## REFERENCE:

- Ahmad Fanani, 2008, *Anak Cerdas dengan Dunia Maya*, Jogjakarta: Image Press
- Ali Nugraha, 2004, *Metode Pengembangan Sosial-Emosional*, Jakarta: Universitas Terbuka
- Dalam <https://teknikelektronika.com/analisis-regresi-linear-sederhana-simple-linear-regression/>
- Derry Iswidharmanjaya, dkk, 2014, *Bila si Kecil Bermain Gadget*, Buku Online, Yokyakarta: Bisakimia
- Indiana sunita, <sup>1</sup>Indiana sunita, dkk, 2017, *Yes Or Not Gadget buat Si Buah Hati*, Yokyakarta: Deepublish
- Musfiroh, 2008. *Cerdas Melalui Bermain, Mengasah Intelligence pada Anak sejak Usia Dini*. Jakarta: Grasindo.
- Novan Ardi Wiyani, 2014, *Psikologi Perkembangan Anak Usia Dini*, Yogyakarta: Gava Media
- Payne. Gregory. V., dkk. 2012. *Human Motor Development A Lifespan Approach*. New York: McGraw-Hill Companies, Inc. Pendidikan Nasional.
- Rahyubi, Heri. 2012. *Teori-Teori Belajar dan Aplikasi Pembelajaran Motorik*. Bandung: Nusa Media.
- Riduwan. 2011. *Belajar Mudah Penelitian untuk Guru-Karyawan dan Peneliti Pemula*. Afabeta. Bandung.
- Riva, Iva. 2012. *Koleksi Games Edukatif di dalam dan Luar Sekolah*. Yogyakarta: FlashBooks.
- Slamet Suyanto, 2005 *Dasar-Dasar Pendidikan Anak Usia Dini*, Yokyakarta: Hikayat Publishing
- Soelaeman, 1994, *Pendidikan dalam Keluarga*, Bandung: Alfabeta
- Suciati, 2015. *Bahan Ajar Pendidikan dan Latihan Profesi Guru*, Semarang: PLPG. UU Sisdiknas No.
- Sujarno, dkk. 2011. *Pemanfaatan Permainan Tradisional dalam Pembentukan Karakter Anak*. Yogyakarta: Balai Pelestarian Nilai Budaya.
- Sujarwo, dkk. 2015. Kemampuan Motorik Kasar dan Halus Anak Usia 4-6 Tahun. *Jurnal Pendidikan Jasmani Indonesia*. Jurusan Pendidikan Olahraga Fakulras Ilmu keolahragaan Universitas Negeri Yogyakarta.
- Sujiono, dkk. 2005. *Metode Pengembangan Fisik*. Jakarta: Universitas Terbuka Departemen
- Sujiono, Y. N. 2009. *Konsep Dasar Pendidikan Anak Usia Dini*. Jakarta. Universitas Negeri Jakarta.
- Sugiono, 2007. *Metode Penelitian Administrasi*. Alfabeta. Bandung.



Suryabrata, S. 2007. *Metode Penelitian*. Jakarta: Raja Grafindo Persada.

Suwito H. A, 2003. *Permainan Tradisionalsebagai Upaya Pendekatan terhadap Konsep Pendidikan Jasmani yangIdeal*. Skripsi. Yogyakarta: FIK UNY.

Suyadi, 2009. *Psikologi Belajar PAUD*. Yogyakarta: Bintang Pustaka

Abadi.

Tri suhardi, esti utami, 2019, *Ayah dan Bunda Mengatasi Kecanduan Gadget pada Anak*, Semarang: Syalmahat Publising

Wahyu Novitasari, dkk, 2016, “Dampak Penggunaan Gadget terhadap Interaksi Sosial Anak Usia 5- *Jurnal 6 Tahun*”,dalam *PAUD Teratai*, Vol.05 No.03

Zumailatul, M. 2014. *Pengarub Permainan Tradisional Engklek terhadap Kemampuan Motorik Kasar Anak Kelompok A Tk Dharma Wanita Persatuan Kemangi Gresik*. (online).  
ejournal.unesa.ac.id diakses pada tanggal 12 Januari 2015.