The Effect Of Smartphone On Student Emotions

Otang Kurniaman, Eddy Noviana, Sherlina Ayu Pratiwi, Dea Sinta Maharani, Nofrico Afendi

Abstract: The purpose of this study was to determine that the use of smartphones can have an influence on student emotions. This type of research is a quantitative study with data collection methods using a questionnaire. The sample in this study was 78 students of PGSD FKIP Riau University. Data analysis techniques in this study used SPSS version 22.0 which was used to conduct data normality tests, significance tests, simple linear regression analysis and coefficient of determination. In the normality test, the data obtained is 0.05 which is 0.270 which means the data in this study contribute normally. The resulting significant test value is 6.106 with t count of 1.665 so it is known that the significance comparison obtained is 6,106 > 1,665 then there is an influence of smartphone usage on student emotions with simple linear regression equation Y = 41.878 + 0.548 and R-value of 0.57 then the coefficient value the resulting determination is 0.32. So it can be concluded the results of this study are that there is an influence of the use of smartphones on the emotions of students is 32% while the rest is influenced by other variables outside this study.

Index Terms: smartphones, emotions, students.

————————————————◆————————————————

1 INTRODUCTION

The development of technology is something that can not be avoided by humans. Currently, technological development has entered its heyday throughout the history of human life as evidenced by technology that has entered all aspects of human life (Julia, Kurnia, & Sudin, 2018). One example of global technological development today is the smartphone (Widiawati, 2014). The development of smartphones as a communication technology used by various groups in which the development of smartphones during the globalization era has made it easier for other people from different directions to communicate with each other (Daeng, Mewengkang, & Kalesar, 2017). At present, the need for smartphones as a means of communication is a major need in various communities both smartphones at affordable prices to smartphones at a price of tens of millions. According to research conducted by the Pew Research Center in 2012, as many as 88% of adults in America have cell phones (Muflih, Hamzah, & Puniawan, 2017) this shows that smartphones are one of the items that are highly needed in today's digital era. But along with the positive development of smartphone users, there are also negative impacts caused by excessive use of smartphones (Musdalifah, & Indriani, 2017). Smartphones can have many positive impacts on human life apart from the use of smartphones as a means of communication, nowadays smartphones can also be used to interact on social media, play online games, watch videos and others (Lestari, et al., 2015). The progress of the age in the field of technological science in the 21st century is growing rapidly. Various kinds of inventions with the aim of facilitating human space and scope are created one by one every year. This proves that the thinking power of the people and also the patterns of human behaviour are increasingly advancing and developing rapidly. Increasing the discovery to be more sophisticated is certainly not separated from the previous inventors (Al-Ayouby, 2017).

———————————————————

- *Otang Kurniaman, University of Riau, Faculty of Teacher Training and Education, otang.kurniaman@lecturer.unri.ac.id*
- *Eddy Noviana, University of Riau, Faculty of Teacher Training and Education, eddy.noviana@lecturer.unri.ac.id*
- *Sherlina Ayu Pratiwi, University of Riau, Faculty of Teacher Training and Education, rila.afrila@student.unri.ac.id*
- *Dea Sinta Maharani, University of Riau, Faculty of Teacher Training and Education, deasintamaharani1212@gmail.com*
- *Nofrico Afendi, University of Riau, Faculty of Teacher Training and Education, na.afendi89@gmail.com*

Students are among those whose lives cannot be separated from the use of smartphones, smartphone students can be used to support the learning process during the lecture. However, excessive use of smartphones will actually make students no longer focus on the learning process during the lecture, in addition to excessive use of smartphones can cause addictions that make the activities and social life of students themselves disrupted (Utaminingsih, 2006). The smartphone is one of the tools that has sophisticated technology. So everyone can easily communicate. Build creativity. Smartphones provide a variety of information that can also encourage students to be more creative. They will find it easier to find all the information and news needed by them, especially in terms of learning while playing or playing while learning (Hadiwidjodjo, 2014). Addiction to smartphone usage turns out to have a very big negative impact on students because it can shape students' mentality and personality to be insensitive to the surrounding environment while students at FKIP are students who are prepared to be educators who must have competencies as teachers, one of which is personality competence and social competence. Competencies related to behaviour and habits are formed from how students can build their emotions so that the personality and behaviour of students as prospective educators can be in accordance with the desired criteria. Therefore this study aims to see how much influence the use of smartphones on student emotions.

2 METHOD

This research uses quantitative research. The approach in this research is quantitative, which is a process of approaching knowledge discovery that uses numbers as data and tools to find the desired results. According to Sugiyono (2018) quantitative approach is research data in the form of numbers and analysis using statistics. Then the data obtained from the results of questionnaires filled out by respondents will be processed using numbers and will be tabulated using statistical formulas and detailed explanations. The population in this study were all students from the classes of 2016, 2017 and 2018. The population of this study amounted to 354 students.

TABLE 1
Number of PGSD Student Population for 2016-2018

No	Student Force	Class	Total
1.	2016	A	41
2.	2016	B	40
3.	2016	C	36
4.	2017	A	41
5.	2017	B	39
6.	2017	C	39
7.	2018	A	40
8.	2018	B	39
9.	2018	C	39
Total			**354**

The sample in this study amounted to 78 respondents or in other words the number of samples to be studied is the same as the total population. The sample is part of the number and characteristics possessed by the population (Sugiyono, 2018). The sample used in this study is random sampling, random sampling is a sampling technique from members of the population that is done randomly without regard to strata that exist in that population.

TABLE 2
Research Samples

No	Student Force	Class	Total	Samples Taken
1.	2016	A	41	10
2.	2016	B	40	9
3.	2016	C	36	7
4.	2017	A	41	10
5.	2017	B	39	8
6.	2017	C	39	8
7.	2018	A	40	9
8.	2018	B	39	9
9.	2018	C	39	8
Total			**354**	**78**

The data collection techniques used in this study are questionnaires. According to Sugiyono (2018), the questionnaire is an instrument for data collection, where participants or respondents fill in questions or statements given by researchers. Respondents who will answer questions or statements in the questionnaire are students of PGSD FKIP Riau University. Data in this study were processed using SPSS version 22.0 which was carried out by conducting data normality tests, significant tests (T-tests), simple linear regression analysis and coefficient of determination (R^2).

3 RESULT AND DISCUSSION
The research was carried out on May 14-18, 2019 at PGSD FKIP Riau University students in accordance with permission from the PGSD FKIP Riau University Study Program. Before conducting this research, the researcher first conducted a questionnaire validation by conducting tests on PGSD FKIP students of the University of Riau, 2016, 2017 and 2018. Retrieval of data was filled with a randomized system using a lottery number where each person could fill 2 different questionnaires namely a questionnaire about smartphones consisting of 30 items and a questionnaire about emotions consisting of 30 items. The data in this study were processed using SPSS version 22.0 which aims to conduct a normality test, a significant test (T-test), a simple linear equation test and a coefficient of determination test. The output of the data processing can be seen in the following table:

TABEL 3
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		78
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	4.55050014
Most Extreme Differences	Absolute	.113
	Positive	.113
	Negative	-.081
Kolmogorov-Smirnov Z		1.000
Asymp. Sig. (2-tailed)		.270

a. Test distribution is Normal.

b. Calculated from data.

Based on the table above it can be seen that the output of the normality test is 0.270 and the output data is greater than 0.05 or with the equation 0.05 < 0.270 so that the research data is normally distributed and can be used for further hypothesis testing.

TABLE 4
Significant Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	41.878	7.102		5.897	.000
smartphone	.548	.090	.574	6.106	.000

a. Dependent Variable: emotion

Based on the table above it can be seen that the results of the output of the processing of significant test data (T-test) amounted to 6.106. Based on the hypothesis formula if t arithmetic is greater than t table then there is a significant influence between the independent variable and the dependent variable, the comparison obtained from this significant test is 6.106 > 1.665, this proves that there is an influence between the use of smartphones on the emotional development of students.

TABLE 5
Simple Linear Regression Equations

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	41.878	7.102		5.897	.000
smartphone	.548	.090	.574	6.106	.000

a.   Dependent Variable: emotion

139

Based on the SPSS output data from the simple linear regression equation above it can be seen that there is a constant value of (a) 41,878 and a regression coefficient (b) 0.548 which is then obtained by a simple linear regression equation as follows: Y = 41.887 + 0.548. From the regression equation, it can be concluded that there is an influence between the use of smartphones on the emotional development of students.

TABLE 6
Determination Coefficient Test

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.574[a]	.329	.320	4.58034

a. Predictors: (Constant), smartphone

Based on the SPSS summary output table above, it can be seen that the R-value is 0.574 and the R-square (R2) value is 0.329. Then based on the results of the coefficient of determination test obtained a coefficient of determination of 0.329 or 32%. This shows that the influence of using a smartphone contributes to the emotional development of students by 32% while the rest is influenced by other variables not examined by researchers. The use of smartphones contributes to the emotional development of a student. This means that the smartphone's relationship to the emotional development of the student is an addiction and lack of control. Students prefer to interact with smartphones compared to others. This is because it is easier, faster and more convenient to interact in using a smartphone than to meet in person which is difficult to do due to each other's activities and activities. Interactions carried out using a smartphone also without having time and distance restrictions (Musdalifah., & Indriani, 2017). Addiction here can be said with excessive behaviour (excessive) feel the need to use a smartphone by increasing the amount of time that reaches satisfaction. Repeatedly to control, reduce or stop using the smartphone but failed (Rahmandani, et al, 2018). They feel depressed, depressed, or angry when trying to refrain from spending time with their smartphone. The world is changing rapidly due to advancements in the e-technology domain (Noviana, Kurniaman, & Huda, 2018). In this advanced and competitive world, it is impossible to break away from the presence of technology and one example is the use of smartphones (Rinawati, 2019). Smartphones are more likely to be hand-held computers to configure daily schedules, store large documents, to watch videos, listen to music, chat with friends, social networking sites, video conferences and more than humans can think of (Umardulis, 2019). Addiction is considered by WHO as a dependency, as the continuous use of something for relief or stimulation which often causes emotion when it is absent. The two main categories of addiction involve substance addiction or "behavioural addiction is abstract addictions but have a negative effect on the human brain. Smartphone addiction is similar in many aspects to internet addiction (Heni, & Mujahid, 2018). Secondly, based on the definition of Internet addiction, smartphone addiction has been defined as excessive use of a smartphone that disrupts the daily lives of users. In addition, excessive use of a smartphone can cause mental or behavioural problems. This can cause maladaptive behaviour difficulties, interfere with performance at school or at work, reduce real-life social interactions, neglect personal life, mental preoccupations, change mood experiences and can also cause relationship disorders. Each of them might indicate potential interference. Forms of social interaction within the family that are influenced by the use of smartphones can change the function of the family itself. Where the behaviour between parents, or parents to children in their care is not fully integrated, where communication, closeness, support and involvement of parents are no longer felt or done to the maximum. So that children's socialization and emotional support that arises cannot be controlled optimally, for that role as a parent contributes so valuable in controlling smartphone usage so that it is wiser in its use.

4 CONCLUSION
The influence of smartphones on students' emotions is influenced by the normality of the data obtained is 0.05 which is 0.270 which means the data in this study contribute normally. The resulting significant test value is 6,106 with t count of 1,665 so it is known that the significance comparison obtained is 6,106> 1,665 then there is an influence of smartphone usage on student emotions with simple linear regression equation Y = 41,878 + 0.548 and R-value of 0.57 then the coefficient of determination the result is 0.32. So it can be concluded the results of this study are that there is an influence of the use of smartphones on student emotions by 32%. To anticipate the use of smartphones in a negative direction requires control from the family and lecturers as educators who play a role in learning.

Acknowledgments

REFERENCES
[1] Anas, S. (2011). Pengantar Evaluasi Pendidikan. Jakarta: Rajawali Pers.

[2] Al-Ayouby, M. H. (2018). DAMPAK PENGGUNAAN GADGET PADA ANAK USIA DINI (Studi di PAUD dan TK.Handayani Bandar Lampung). Skripsi. http://digilib.unila.ac.id/27131/3/SKRIPSI%20TANPA%20BAB%20PEMBAHASAN.pdf.

[3] Daeng, I. T. M., Mewengkang, N. N., & Kalesaran, E. R. (2017). Penggunaan Smartphone Dalam Menunjang Aktivitas Perkuliahan Oleh Mahasiswa Fispol Unsrat Manado. e-journal "Acta Diurna", VI(1), 1-15.

[4] Fadhilah. (2011) Relevansi logika sosial konsumsi dengan budaya konsumerisme dalam perspektif epistemology jean baudrillard. Jurnal Kybernan, 2, (1), Maret 2011.

[5] Hakikim, M,I. (2017). Pengaruh penggunaan gadget terhadap perilaku sosial. Skripsi. Santri Al-luqmaniyyah, Yogyakarta.

[6] Heni., & Mujahid, A. J. (2018). PENGARUH PENGGUNAAN SMARTPHONE TERHADAP

PERKEMBANGAN PERSONAL SOSIAL ANAK USIA PRA-SEKOLAH. Jurnal Keperawatan Silampari, 2(1), 330-342.

[7] Hadiwidjodjo. (2014). Dampak Positif Penggunaan Gadget Bagi Anak, Di unduh pada 21 April 2106 dari http://www.satuharapan.com/life/8-dampak-positifpenggunaan-gadget-bagi-anak.

[8] Julia, J., Kurnia, D., & Sudin, A. (2018). The Impact of Social Media on Communication Politeness: A Survey of Prospective Primary School Teacher Students. Mimbar Sekolah Dasar, 5(3), 125-130. doi:http://dx.doi.org/10.17509/mimbar-sd.v5i3.14492.

[9] Lestari., Riana, A. W., & Taftarzani, B. M. (2015). Pengaruh Gadget Pada Interaksi Sosial Dalam Keluarga. PROSIDING KS: RISET & PKM, 2(2), 204-209.

[10] Muflih., Hamzah., & Puniawan, W. A. (2017). Penggunaan Smartphone dan Interaksi Sosial Pada Remaja di SMA Negeri I Kalasan Sleman Yogyakarta. Idea Nursing Journal, VIII(1), 12-18.

[11] Musdalifah., & Indriani, N. (2017). The Intensity Effect of Smartphone Usage on Social Interaction Students of Politeknik Negeri Samarinda. SNITT- Politeknik Negeri Balikpapan, 144- 147.

[12] Noviana, E., Kurniaman, O., & Huda, M. N. (2018). Pengembangan Aplikasi Bimbingan Tugas Akhir Mahasiswa Berbasis Website Pada Program Studi Pendidikan Guru Sekolah Dasar FKIP Universitas Riau. Primary: Jurnal Pendidikan Guru Sekolah Dasar, 7(1), 1- 12.

[13] Prakorso, P. (2013). Pengaruh Penggunaan Gadget Pada Mahasiswa Dan Hubungannya Dengan Prestasi Mahasiswa (Studi Kasus Mahasiswa FMIPA UNLAM). Kalimantan Selatan. Universitas Lambung Mangkurat.

[14] Rahmandani, F., Tinus, A., & Ibrahim, M.M. (2018). ANALISIS DAMPAK PENGGUNAAN GADGET (SMARTPHONE) TERHADAP KEPRIBADIAN DAN KARAKTER (KEKAR) PESERTA DIDIK DI SMA NEGERI 9 MALANG. Jurnal Civic Hukum, 3(1), 18-44.

[15] Rinawati. (2019). Upaya Peningkatkan Kemampuan Guru dalam Penggunaan Teknologi Informasi dan Komunikasi (TIK) melalui Kegiatan Workshop di TK Kecamatan Sungai Lalak. Jurnal PAJAR (Pendidikan dan Pengajaran), 3(4), 800-807. DOI: http://dx.doi.org/10.33578/pjr.v3i4.7477.

[16] Sukardi. (2015). Metodologi Penelitian Pendidikan. Jakarta: PT Bumi Aksara

[17] Sukmadinata. (2011). Pengertian Emosi.Bandung: Remaja Rosadakarya.

[18] Sundusiyah, A. (2012). Perkembangan Teknologi Informasi Komunikasi. Bandung: Universitas Pendidikan Indonesia.

[19] Sunyoto, S. (2011). Analisis regresi untuk uji hipotesis, Yogyakarta. Caps

[20] Sugiyono. (2010). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R & D. Bandung: Alfabeta.

[21] Sugiyono. (2018). Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, R&D. Bandung: Alfabeta.

[22] Sugiyono. (2018). Pengertian Populasi Dan Sampel. Bandung: Alfabeta.

[23] Utaminingsih, I. A. (2006). PENGARUH PENGGUNAAN PONSEL PADA REMAJA TERHADAP INTERAKSI SOSIAL REMAJA (Kasus SMUN 68, Salemba Jakarta Pusat, DKI Jakarta). Skripsi. https://repository.ipb.ac.id/jspui/bitstream/123456789/1187/4/A06iau.pdf.

[24] Umardulis. (2019). Peningkatan Kompetensi Guru Menggunakan Teknologi Informasi dan Komunikasi (TIK) dalam Pembelajaran di Sekolah Dasar melalui Supervisi Klinis. Jurnal PAJAR (Pendidikan dan Pengajaran), 3(4), 870-878. DOI: http://dx.doi.org/10.33578/pjr.v3i4.7539.

[25] Widiawati. (2014). Pengertian Gadget. Jakarta: Rineka Cipta