

The Smartphone Uses and Dependency Toward Emotional Intelligence on Generation Z

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ABSTRACT

Keywords:

Emotional
Intelligence;
Generation Z

Abstract: Advances in smartphone technology can now help workers in almost everything, from aspects of communication, entertainment, education, and so on. In some cases, while in the office workers usually use their smartphone to relieve their work stress during working hours. This study aims to analyze the effect of smartphone use and dependence on workers' emotional intelligence. This research is a quantitative research using the correlation analysis technique. The population in this study is Generation Z who are already working. Sampling was done by using the purposive sampling technique, to obtain a sample of 106 respondents. Data was collected using an instrument in the form of a questionnaire. The data that has been collected is then analyzed using multiple regressions. The findings show that the regression equation for this study is $Y = 0.043 - 0.07058(X1) + 0.883(X2) + e$. Based on these equations, it can be concluded that the use of smartphone has a negative effect on the emotional intelligence of workers, while dependence on smartphone has a positive effect on the emotional intelligence of workers.

Kata kunci:

Kecerdasan
Emosional;
Generasi Z

Abstrak: Kemajuan teknologi ponsel pintar sekarang dapat membantu pekerja hampir dalam segala hal, mulai dari aspek komunikasi, hiburan, edukasi, dan sebagainya. Dalam beberapa kasus, saat di kantor pekerja biasanya menggunakan ponsel mereka untuk meredakan stress kerja mereka pada saat jam kerja. Penelitian ini bertujuan untuk menganalisis pengaruh penggunaan dan ketergantungan ponsel terhadap kecerdasan emosional pekerja. Penelitian ini merupakan penelitian kuantitatif dengan menggunakan teknik analisis korelasi. Populasi dalam penelitian ini merupakan Generasi Z yang sudah bekerja. Pengambilan sampel dilakukan dengan menggunakan teknik purposive sampling, sehingga diperoleh sampel sebanyak 106 responden. Pengumpulan data dilakukan dengan menggunakan instrument berupa kuesioner. Data yang telah dikumpulkan kemudian dianalisis dengan menggunakan multiple regressions. Hasil temuan menunjukkan bahwa persamaan regresi untuk penelitian ini adalah $Y = 0.043 - 0.07058(X1) + 0.883(X2) + e$. Berdasarkan persamaan tersebut, dapat disimpulkan bahwa penggunaan ponsel memberi efek negatif terhadap kecerdasan emosional pekerja, sedangkan ketergantungan terhadap ponsel memberi efek positif terhadap kecerdasan emosional pekerja.

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Introduction

Technology improvement has helped the human kind in almost every sector, especially in the communicational technology. This gives a lot of easiness in the way of communicating and helps workers to keep in touch with their job anytime. Today, the advancement of smartphones can help workers to do almost everything, starting from communication, entertainment, education, and many more. In some cases, at the workplace, employees usually use their gadgets as a work-stress reliever in the work-time. Other than that, previous study stated that the use of smartphones in the workplace can make the information flow in an easy and fast way (Lanaj et al., 2014). Despite of

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those advantages, employees can easily get distracted by the gadget-checking activity. This checking habit can be influenced by people's daily life, the way people get trapped by watching their gadget for a long time (Oulasvirta et al., 2012). The activity of using gadget can give the feeling of addiction and it will affect people's focus (Duke & Montag, 2017). Some workers may start to have some symptoms like anxiety, withdrawal, and panic due to the addiction. Even though smartphones could give workers positive impact on their performance and productivity, the effect of smartphones addiction is inevitable for some workers (Li & Lin, 2019). It can be seen that the use of smartphone will increase the work efficiency in terms of the communication process which is one part of the emotional intelligence that is social skills. Meanwhile, the dependency on smartphones can be a barrier for the workers, since the dependency will bring up addiction-like symptoms that might disturb the working process. The addiction-like symptoms might affect the workers' emotion.

The multifunction of smartphones has lead the users to utilize the smartphones as their daily-use tools. This habit effectively brings up the side effect of smartphone use, which is the smartphone addiction (Deursen et al., 2015). Though, the use of smartphones can be beneficial for both employees and the firm, especially when they have to do their work from home (Lanaj et al., 2014). Smartphone today has become the most important thing for some people. It turns out that among generations X, Y and Z, the generation that indicates to have the smartphone addiction is generation Y. This can happen since generation Y was grown alongside with the growth of the technology itself (Zhitomirsky-geffet & Blau, 2016). The smartphone uses and dependency in this study have a wider scope of activity and function than just the activity called cyber loafing. Cyber loafing refers to the utilization of internet in this case through smartphone during the work-time for non-work purpose (Siew et al., 2017). In this study, the smartphone use and dependency in the workplace refer to the utilization of smartphone for both work and non-work related activities. Smartphones (in term of its communicational function) may help workers enhance their social skill (Che et al., 2017; Park et al., 2013). In the further utilization of smartphone, workers will stick to their smartphones most of the time. This will bring up addiction-like symptoms that affect their emotion (Che et al., 2017; Oktan, 2011).

Some of the previous study resulted in inconsistency for the relation of emotional intelligence and smartphone use, even smartphone dependency. The inconsistency is happening because there was a research that used emotional intelligence as the independent variable (Cho & Lee, 2017) and other study that used emotional intelligence as the dependent variable (Che et al., 2017; Cho & Lee, 2017; Li & Lin, 2019; Sun et al., 2018). Due to the inconsistency of previous research whether emotional intelligence is an independent variable or dependent variable, this research will try to fill the gap for similar studies. Therefore, this study will answer whether emotional intelligence act as dependent variable to employees in Indonesia specifically generation Z. Moreover, there have been only few researchers doing the research on smartphone use toward the emotional intelligence for workers, most of them used kids or adolescents as their object of research (Che et al., 2017; Cho & Lee, 2017; Sun et al., 2018). Based the research gap, this current study will test the effect of the smartphone use and dependency on workers' emotional intelligence. Things that are happening today with the growth of the smartphones technologies, it is estimated that there are 3.5 billion smartphone users in the worldwide in the year of 2020 (Park et al., 2013). Meanwhile, in Indonesia 54.68% of the total population are active internet users and 75.50% of them are generation Z (Kominfo, 2018). This means that the existence of smartphone has bigger effect toward younger generation in Indonesia. By the year of 2019 there was 93% of smartphone penetration in Indonesia (Rizkia, 2019). This means that Indonesians are familiar with the use of smartphone. In Indonesia, 93.46% of the smartphone use intention is for communication when they are connected to internet (Fauzi & Paolo, 2018). This can indicate the smartphone use for Indonesian. There are 57% of the total global population that is connected to the internet, one of the way to do that is through smartphones. The average time of the people being online in one day is 6.5 hours. Smartphone penetration in Indonesia was estimated to increase by 1.4% each year starting from 2018-2023 (Databoks, 2019). In Indonesia, about 66% of the adolescents do not aware of their time management when they are using smartphone (Septania, 2018). This might cause a problem faced by

the younger generation in Indonesia. The average internet use in Indonesia is 8 hours 36 minutes in one day (Websindo, 2019). There are 93.9% of the internet users in Indonesia that access internet through smartphones, and they access it every day (Haryanto, 2019). This study aims to examine the smartphone usage and dependency influence workers' emotional intelligence in the workplace. This research will answer, what effect that smartphone use and dependency will have toward workers' emotional intelligence. Beside, this current study can help companies to make the right regulations regarding the use of smartphone in the workplace. The other purpose is to help companies in the making of recruitment regulations regarding emotional intelligence, since the object of this research are generation Z and they are the generation that will be the future of the companies.

Methods

This research uses quantitative analysis to answer the research question. The type of the quantitative analysis that will be used is correlation analysis. This research will be focused on generation Z, so the population that will be chosen for this research is generation Z that has already entered the work-life. Generation Z are people who were born between 1996 and 2012, which means in the range between of 8 and 24 years old (Dimock, 2019). The sampling method that will be used in this research is purposive sampling. The criteria of the samples can be concluded into, workers that regularly use smartphone in range of age between 20 and 24 (considered as generation Z that have working experience). The area of research is Jogja, Solo, Salatiga, and Semarang. There are 106 respondents that involved in this research. All of the respondents are workers from Generation Z. The characteristics of the respondents shown in Table 1.

Table 1. Characteristic of The Respondents

Characteristic Of The Respondents		Frequency	Percentage
Gender	Male	50	47%
	Female	56	53%
	Total	106	100%
Age Group	>20	1	1%
	20-22	37	35%
	23-24	68	64%
	Total	106	100%
Positions	Accountant	3	3%
	Staff	86	81%
	Other	17	16%
	Total	106	100%
Department	Accounting	24	23%
	HR	24	23%
	Marketing	25	24%
	Sales	4	4%
	Customer Service	6	6%
	Other	23	22%
Total	106	100%	
Length Of Work	<1	34	32%
	1-3	72	68%
	4-6	0	0%
	>6	0	0%
Total		106	100%

The data will be taken through questionnaire that will be spread to the respondents. Therefore, this research will use primary data. The questionnaire will be spread through online

platform and this research will use scaled questions questionnaire. It will be measured by 5 scale, which are strongly disagree, disagree, neutral, agree, and strongly agree. The questionnaire will be distributed to a certain group of people consist of the generation Z that have experience in the workplace. *In order to measure the Likert scale range of the average respondent's answer, the category is shown in Table 2.*

Table 2. Table of Category

Range	Category
4.20 – 5.00	Very High
3.40 – 4.19	High
2.60 – 3.39	Moderate
1.80 – 2.59	Low
1.00 – 1.79	Very Low

This research uses two independent variables and one dependent variable, the data analysis technique that will be implemented in this study is multiple regression. The data analysis process will be helped by SPSS v21 application. The process started with the validity and reliability test, to test whether the questionnaire is valid and reliable or not. Then, continue to the classical assumption tests which consist of linearity test, independence of error, normality test, equal variance test, and multicollinearity test. After all the data pass the classical assumption tests, the process continues to the multiple regression test.

Results and Discussion

The pre-test was started by the validity test. In this test, data will be classified as valid if the $\text{sig} < \alpha = 0.05$. The result of the test show that all variables' significance is more than 0.05, this means that the data is valid. The next test is the reliability test using the Cronbach Alpha value. The data will be reliable if the value of Cronbach Alpha > 0.60 . The result of the test show that the data is reliable, because the Cronbach Alpha's value is 0.780. The first test to be done is the normality test, this test will show whether the data is normally distributed or not. This study is using Kolmogorov Smirnov method. Based on the result of the test, the data is classified as normally distributed since the sig is 0.058 which is higher than 0.050. The next test is the heteroscedasticity test. This test is aimed to check whether the variable has heteroscedasticity problem or not. The test result show that the data has no heteroscedasticity problem. The third test is linearity test, the aim of this test is to check whether the variables have a linear relationship or not. This current study is using scatter plot as the method. The result showed that the dot spreading randomly, which means that it is linear. The last test is the multicollinearity test, it is done to know whether there is no multicollinearity between each variable or not.

In this study, smartphone use is divided into two dimensions. Those dimensions are "communication" and "entertainment". The mean interval for smartphone use is 4.125 with the highest mean for the statements is 4.5 in the "In work-time, smartphone use help workers to receive the latest information in all sectors outside the company easily.", which is the part of the communication dimension. This variable has total mean that classified as "high" referring into the mean interval category. The smartphone dependency variable is divided into two dimensions. The first one is "smartphone checking activity" and "then smartphone usage time management". Total mean for the smartphone dependency variable is 3.60, this is classified as high mean according to the mean interval category. Smartphone dependency variable has the lowest total mean compared to the other variables.

Table 3. Emotional Intelligence Mean Interval

Emotional Intelligence		Mean	Category
Emotions Management and Understanding			
1	Workers with high smartphone usage intention find it hard to control their emotion in the workplace.	4	High
2	Workers with high smartphone usage intention cannot understand others' feeling and the situation well.	4	High
Emotion As A Thinking Booster			
3	Workers will take decision without an emotion consideration.	4	High
4	The way workers learn, can be influenced by the emotion.	4	High
Emotions Interpretation			
5	Workers cannot receive what others trying to deliver through emotion well.	4	High
6	Workers tend to avoid the interaction with the others since they find it hard to construe others' feeling.	3	Moderate
Average Emotional Intelligence		3.83	High

Table 3 show that emotional intelligence variable is divided into three dimensions. The dimensions are "emotions management and understanding", "emotion as a thinking booster", and "emotional interpretation". The total mean for emotional intelligence variable is 3.83. This number is classified as "high" in the mean interval category.

Table 4. Hypothesis Testing Results

X Variable	Y Variable	Unstandardized Beta	Sig.	Adjusted R ²	Summary
Smartphone Use	Emotional Intelligence	-0.07058	0.022	0.730	Affecting
Smartphone Dependency	Emotional Intelligence	0.883	0.000		Affecting

The result of the hypothesis testing can be seen in the table 4. The *sig.* value from X_1 is 0.022, this means that smartphone use is affecting the emotional intelligence since the value is less than 0.05. Smartphone dependency in the hypothesis testing resulted with 0.000 value of *sig.* this means that smartphone dependency also affecting emotional intelligence because the value is less than 0.05. The effect of both independent variables can be seen from the table. In this study smartphone use affecting emotional intelligence negatively with value -0.07058. This means that when the smartphone use is increasing, it will decrease the emotional intelligence (negatively affected). Meanwhile, smartphone dependency affecting emotional intelligence positively, smartphone dependencies will increase the emotional intelligence. The regression function of this study is $Y = 0.043 - 0.07058(X_1) + 0.883(X_2) + e$. Table 4 show the value of the adjusted R^2 that is 0.730. This means that emotional intelligence can be explained by smartphone use and smartphone dependencies by 73.0%. The other 27.0% of emotional intelligence will be explained by the other variables

Discussions

The questionnaire of this study regarding emotional intelligence was stated in negative form, so that the positive/negative effect of X variables will have different meaning for emotional intelligence variables. In the equation can be seen that X_1 has negative effect toward emotional intelligence variable, this show that in work, smartphone use can help workers enhancing their emotional intelligence. Meanwhile, smartphone dependency with its positive effect toward the emotional intelligence variable will worsen the worker's emotional intelligence. Since the emotional intelligence variable stated in the negative statement, the smartphone dependency should have positive effect on the emotional intelligence in this study. As the previous study stated that dependency can have effect on self-management, the result from the current study show that the statement is true (Che et al., 2017). The different effect of both variables show that smartphone can be useful in the workplace with normal use and maximization of smartphone utilities will be helpful for workers.

There are 98% of the respondents use their smartphone as a communication tool during work-time. This result support the statement that said most of Indonesian will use their smartphone to communicate while they are connected to the internet (Fauzi & Paolo, 2018). The respondents mostly used chat application, such as *WhatsApp*, *Line*, and *E-mail*. This research found that 50% of the respondents use their phone for more than 7 hours, 45% are using for 4-7 hours and 5% of the respondents are using smartphone for 1-3 hours in a day. The mean interval of the smartphone use in the communication dimension has the highest value which is 4.5, this is included in the "very high" category. This support fact that the use of smartphone in the workplace will make the information flow faster and easier (Lanaj et al., 2014). The effect of the smartphone use and addiction is inevitable to the workers emotional intelligence as stated in the previous study (Li & Lin, 2019).

The average value of smartphone use variable is the highest if it is compared with the other variable. It is because worker can use smartphone for a work-related utilization. The average mean value for smartphone dependency is the lowest average from all the variables based on the data result. According to the data, smartphone dependency that workers face during the work-time is not so strong since it's just categorized as "high" in the average mean value. This happens because 97% of the respondents use their smartphone on chat applications, chat applications are usually used for information sharing activity. Information sharing is included in the smartphone section. The effect of smartphone use and smartphone dependency have a quite big role in workers' emotional intelligence. This effect can be seen in the hypothesis testing result table, the adjusted r^2 of the research is 0.730. What cause the adjusted R^2 high is because the employee is overreacted. The employee feels like phones are the extension of themselves. Smartphones are now so much more than phones. With the existence of it, it enables employees to make calls and also send texts, surfing the internet, checking social media and personal email, taking photos and videos, playing video games, checking the weather, catching up on news, shopping, and still so many more during company time (Binnford, 2017).

This study has done the variable testing, those variables are smartphone use, smartphone dependencies, and emotional intelligence for generation Z workers. The result shows that both variables has significant effect toward emotional intelligence. Both variables affecting the emotional intelligence in different ways. Smartphone use has negative effect toward emotional intelligence, meanwhile smartphone dependencies has positive effect toward emotional intelligence. From the hypothesis testing can be concluded that smartphone utilization will affect workers' social skill which included as part of emotional intelligence (Che et al., 2017). Thus, it can be concluded that by using smartphone in a long time and dependent on it can affect the emotional intelligence in a bad way. Therefore, it is suggested that workers used their smartphone in needed time since emotional intelligence is very much needed while working. The result of this study can be used to help the human resource department on a company to make regulation regarding the utilization of smartphone in work-time, such as the maximization of the smartphone utilization in information and data sharing among colleagues within the companies. The human resource department should be aware with the workers' smartphone utilization in the workplace, since smartphone can be both

booster and barrier for workers' emotional intelligence. This study was implemented toward limited respondents in small region. The questionnaire was spread through online platform.

The other limitation is that the definition, dimensions and measurement indicators used in this research was taken from various resources, even though there are some adjustment that already taken. Both independent variables, smartphone use and smartphone dependencies are having big influence toward the dependent variable. Even though, the independent variable can be explained by the dependent variable by seventy-three percent, there still another variable that may affect the emotional intelligence. Those variables are not yet mentioned in this research, such as motivation and self-awareness in the workplace. It will be better if the further research can add more variables that may affect the dependent variable of this study in a positive way. Those variables are such as perception, understanding, and regulation of emotion (Schutte & Loi, 2014).

Conclusion

Thus, it can be concluded that by using smartphone in a long time and dependent on it can affect the emotional intelligence in a bad way. Therefore, it is suggested that workers used their smartphone in needed time since emotional intelligence is very much needed while working. The result of this study can be used to help the human resource department on a company to make regulation regarding the utilization of smartphone in work-time, such as the maximization of the smartphone utilization in information and data sharing among colleagues within the companies. The human resource department should be aware with the workers' smartphone utilization in the workplace, since smartphone can be both booster and barrier for workers' emotional intelligence. This study was implemented toward limited respondents in small region. The questionnaire was spread through online platform. The other limitation is that the definition, dimensions and measurement indicators used in this research was taken from various resources, even though there are some adjustment that already taken. Both independent variables, smartphone use and smartphone dependencies are having big influence toward the dependent variable. Even though, the independent variable can be explained by the dependent variable by seventy-three percent, there still another variable that may affect the emotional intelligence. Those variables are not yet mentioned in this research, such as motivation and self-awareness in the workplace. It will be better if the further research can add more variables that may affect the dependent variable of this study in a positive way.

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