



## **The Utilization of Digital Device during Pandemic Era**

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### **Abstract:**

This study aims to determine the level of teenage smartphone consumption in the Covid-19 pandemic era. The method used in this research is a descriptive survey method. This research method is useful for taking samples from the population and using a questionnaire as a data collection tool. Furthermore, the questionnaire will be distributed to 100 respondents who are adolescents aged 15 to 18 years. The results showed that adolescents tended to be consumptive towards using smartphones because it was based on individual needs, and during the pandemic of Covid-19, everything was completely online. Based on the research results, it can be concluded that smartphones among teenagers tend to be consumptive because of necessity.

**Keywords:** Digital Devices, Pandemic Era, Smartphone

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## **INTRODUCTION**

In 1992, the world's first smartphone was released; it is known as the IBM Simon. Since then, the use of smartphones has grown rapidly until now (Singh & Samah, 2018). Nowadays, smartphones have become an important part of fulfilling daily needs, especially in the era of the Covid-19 pandemic. In the era of the COVID-19 pandemic, smartphones are like things that cannot be separated from us because smartphones can provide what we want from entertainment, education, and much more that we can find in this digital media. The number of smartphone users in 2018 in Indonesia is more than 100 million users and will certainly increase every year (Singh & Samah, 2018). In Indonesia, adults with careers or jobs use smartphones for various needs, but teenagers also fulfill their needs using smartphones, especially during the Covid-19 pandemic (Kibona & Mgaya, 2015).

In 2019, data from the Digital Yearbook Report stated that the average daily time

Indonesian people use to use social media via smartphones is 3 hours 26 minutes. This figure beats the global figure, which has an average time of 2 hours 16 minutes. The study involved teenagers 15-18 years in Surabaya (Ahmed et al., 2020, Rambitan, 2015, and Pancani et al., 2019). According to Renanda Viorentika in her research in 2020, using a smartphone with excessive time can also affect mental health by 21.2% and with the remaining 79.8% influenced by other factors not studied (Kibona & Mgaya, 2015). E-learning has become an obligation as a teaching and learning process between teachers and students or lecturers and students in this pandemic era. That way, smartphone use has become something that cannot be separated from everyday life (Griffiths & Kuss, 2017). The increasing use of smartphones will continuously create new challenges, both positively and negatively (King & Dong, 2017). The positive impact we know from using smartphones is that educational institutions state that students can communicate with teachers or fellow students in school or lectures, share notes, and discuss assignments to be more productive in academic discussions (Statista. 2018). The level of addiction from using smartphones in playing games can reduce academic ability or affect student performance (Bajpai, 2016).

To control teenagers' smartphone use, special supervision or supervision from parents is needed to prevent abusive things that cause negative things. The tests carried out include test questions given in the form of a questionnaire, which then gets accurate research results. The descriptive survey method was used to measure the consumption level of adolescents using smartphones. The descriptive survey is a research method that takes samples as a data aid, which will then be included to obtain clear information about a problem in a study (Harkin & Kuss, 2020 and Harun et al., 2015).

## RESEARCH METHOD

This research used a descriptive survey method to determine the variables related to determine the level of teenage smartphone consumption in the Covid-19 pandemic era. Smartphones are a medium that can help humans by providing several menus. Every year, there are always new features provided by smartphones to help people do their work or fill empty time with various things in it. Increasingly sophisticated media can create dependency and may have unknown effects. Before looking at the level of consumptive smartphone consumption by adolescents during the Covid-19 Pandemic, this research was conducted on January 26, 2021, in Bandung with the respondents of adolescents aged 15 to 18 years. Teenagers consist of men and women who have smartphones.

## RESEARCH RESULTS AND DISCUSSION

### Questions for Research

The survey method research was conducted by asking several questions, as shown in Table 1. Questions related to the research discussed, namely the consumptive level of adolescents in using smartphones. 6 questions are given to determine the results of the consumptive level.

**Table 1.** Use case Diagram

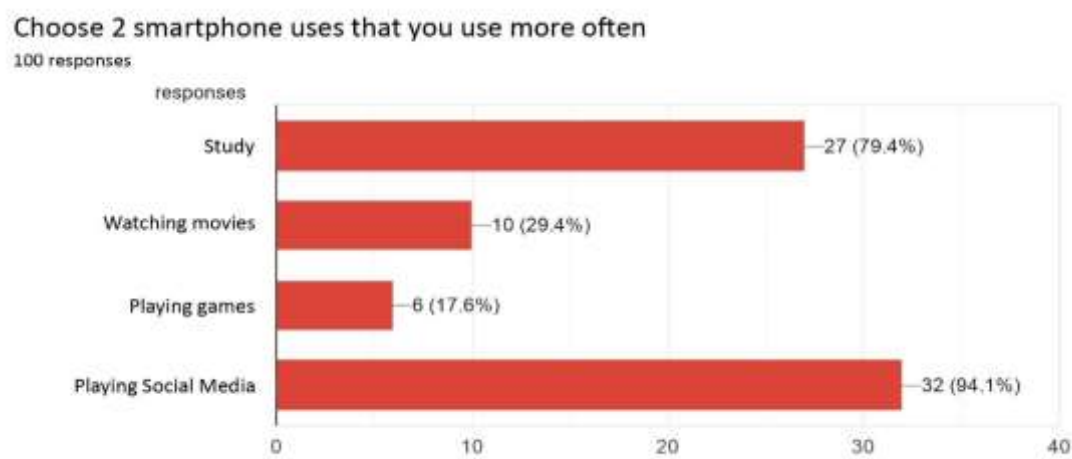
No	Questions	verification
1.	Choose your uses that you use more often	<input type="checkbox"/>
2.	How many hours a day do you use a smartphone?	<input type="checkbox"/>
3.	Are you actively using social media?	<input type="checkbox"/>
4.	Can you use your smartphone for a full day?	<input type="checkbox"/>
5.	Do you know the bad effects of using a smartphone excessively?	<input type="checkbox"/>

- 
6. Are you aware that since the covid-19 pandemic, you have been using your smartphone more often than doing after activities? ☐
- 

According to the data in Table 1, these questions represent the researcher in seeing the consumptive level of adolescents. The selection of questions was made carefully to produce good and correct data. Then the data will be inputted and make as a result. The results are shown in Figure 1.

### Smartphone use

The results are shown in Figure 1; there are four choices given which then be chosen by the youth. The options consist of studying, watching movies, playing games, and playing social media. Each respondent can choose two statements given.

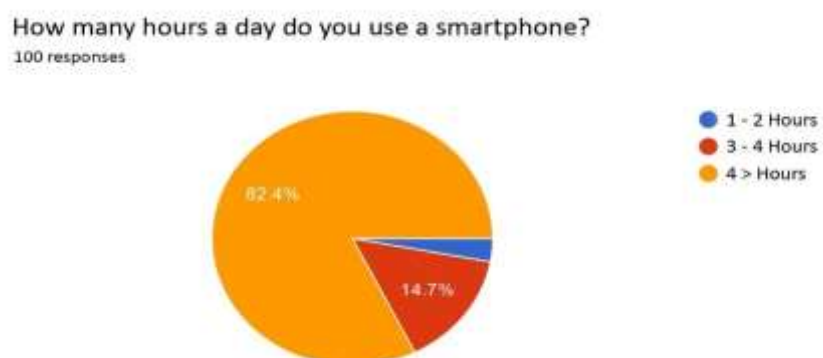


**Figure 1.** Smartphone use

From the choices given by using a questionnaire, it is shown in Figure 1 that the highest activities carried out by teenagers in using smartphones are playing social media and learning. Then, the other two lows are watching movies and playing games. It can be concluded that during the pandemic, most of the teenagers used smartphones to play social media.

### Smartphone Usage Time

To find out how much time teenagers use smartphone media, we can see in Figure 2. This is an illustration through survey research conducted to obtain results about the average time used by teenagers. With these results, it can create new knowledge in the pandemic era.

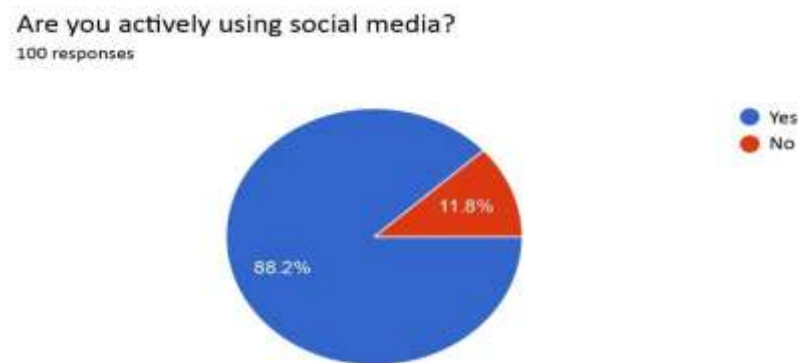


**Figure 2.** Shop page

We can see the explanation in Figure 2 that teenagers use an average of more than 4 hours using smartphones a day. More than four hours as much as 82.4%, 3 to 4 hours 14.7% and 1 to 2 hours 2.9%. That way, we can find out that many teenagers spend their time using smartphones. Smartphones have now influenced all the activities we go through.

### Use of social media

Figure 3 will explain whether teenagers are more likely to use smartphones for social media. Because in this completely online era, it can be known without social media, it seems that they will be left behind by a lot of interesting information about existing life. Thus, research on the use of social media in the pandemic era is carried out so that we know whether many teenagers use social media or not.

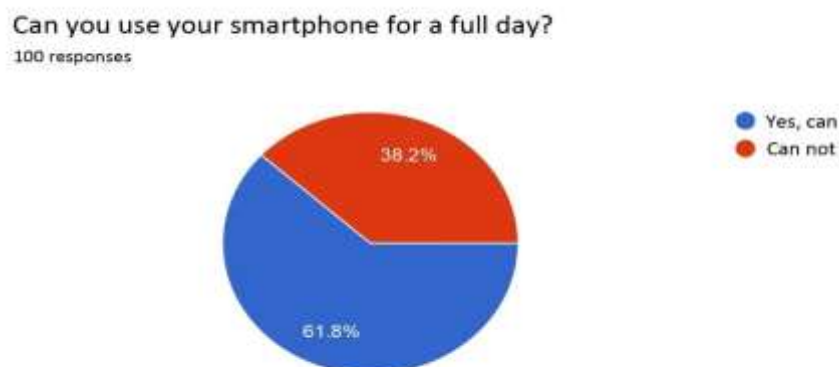


**Figure 3.** Use of social media

Figure 3 provides an explanation that many teenagers use social media to fulfill their daily needs. 88.2% of teens tend to use social media, and the remaining 11.8%. This indicates that in this pandemic era, teenagers are very interested in the use of social media.

### Full day of smartphone use

To determine whether teenagers can use smartphones for a full day, we can see in Figure 4. In this pandemic era, many teenagers feel bored quickly while at home and are limited to leaving the house. For that, it seems like a smartphone can be present and accompany everyday life. With the research conducted it can be seen the answer to the objectives under study

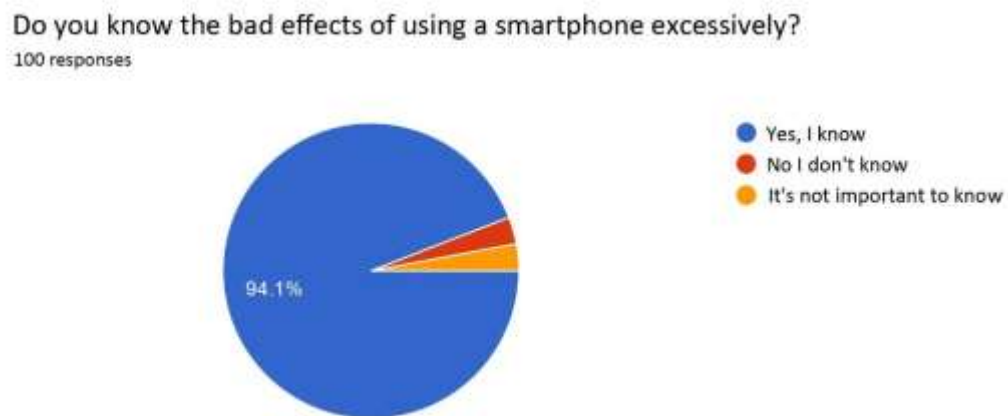


**Figure 4.** A full day of smartphone use

From Figure 4, it is shown that many teenagers spend all day using smartphones. 61.8% for those who voted for yes and 38.2% for those who voted for no. The pandemic era has created social limitations for adolescents who still want to know many things, making smartphones a place to find pleasure in knowledge and so on.

### **Know the bad effects of smartphone use**

Figure 5 will show whether teens are aware of the adverse effects of smartphone use. Negative effects can occur if someone does something excessively. The same is the case if someone used a smartphone excessively, and it will have a negative impact such as blurred eyes and others.



**Figure 5.** Knowledge regarding negative effects of smartphone use

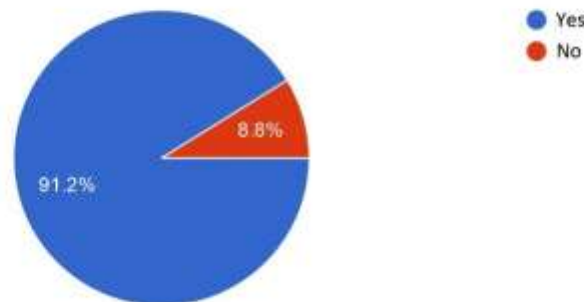
We can see that 94.1% of 100% of teenagers are aware of the adverse effects of excessive smartphone use. Even though they are aware of this, many teenagers still find it difficult to change the excessive usage patterns of smartphones. For now, the separation between humans and smartphones is a difficult thing.

### **Use of smartphones during the Covid-19 pandemic**

Figure 6 provides insight into teenage smartphone use during the Covid-19 pandemic. With the presence of the covid-19 pandemic, many people or teenagers carry out their activities using smartphones. It seems that at this time, everything we can find is only in the grasp. With smartphones, many teenagers forget about the time to do other activities.

Are you aware that since the Covid-19 pandemic you have been using your smartphone more often than doing other activities?

100 responses



**Figure 6.** Use of smartphones during the Covid-19 pandemic

In Figure 6, we can see that 91.2% of teenagers voted yes. During the Covid-19 pandemic, teenagers spend more of their time using smartphones than other activities. 8.8% answered no to 100 respondents.

Based on the data that has been obtained, we have found the results of the respondents, and it can be seen that this research is in the form of an addition to previous research where research conducted by Renanda Viorentika, which contains the effect of excessive smartphone use, will affect mental health. The comparison between the two studies is where Renanda's research only focuses on the impact of smartphones, while this study is to find out whether teenagers tend to use smartphones.

## CONCLUSION

Based on the results, it can be concluded that the application that the researchers built can facilitate and increase the effectiveness of online grocery shopping activities during the Covid-19 pandemic. It is because all systems can be integrated and automated. From our perspective, many aspects can be developed from designing this application in the future.

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