The Use of Gadgets During Learning from Home Between Extrovert and Introvert Personality Types in Elementary School Students

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Abstract

The Indonesian Government's policy during the covid-19 pandemic is Learning from home. This policy indirectly familiarizes students with various personality types to use gadget communication media. This study analyzes the use of gadgets while learning from home between extroverted and introverted elementary school students. The research was conducted by case study and the type of research is descriptive. The research instruments are interviews, observation, and documentation. The subjects are 2 extroverted and 2 introverted elementary students as key informants. Data from interviews and observations were analysed qualitatively. The results showed that both extroverted and introverted students used gadgets with duration of more than 3 hours (high duration). Activities carried out according to the direction of each school are reading, doing, collecting assignments, and looking for supporting reference sources. Both personality types also use smartphones for social media, browsing favourite topics, and online games. Both have in common not being able to manage time well. The difference is that introverted students have not been able to manage time because they cannot make decisions for themselves. Meanwhile, extroverted students have not been able to manage time because there are more online games and social media. Both personality types require good mentoring.

Keywords: Gadget, Learning from Home, Extrovert Personality Type, Introvert Personality Type

1. INTRODUCTION

Starting in 2019, in the city of Wuhan, China, it is known that there is a new coronavirus disease known as 2019-nCoV (Masonbrink & Hurley, 2020; Moreno et al., 2020). This disease attacks the respiratory tract organs and is part of a large family of viruses (Spinelli & Pellino, 2020). This infectious virus has signed such as influenza (Bostan et al.,
The current state of affairs is a critical public health issue and requires proactive action to protect the public (Phelps & Sperry, 2020). One of Indonesia's 230 other countries must take various anticipatory steps to protect the public (Mathieu et al., 2021). This is based on data up to April 16, 2022, as many, as 6.190.349 people died from 500.186.525 confirmed cases. This condition is predicted to continue to grow along with its spread in 230 countries. Indonesia recorded 155.820 deaths from 6.038.664 confirmed cases. The impact of the covid-19 virus affects various fields, including the field of education (Chowell & Mizumoto, 2020).

In the context of preventing and transmitting Covid-19, the Ministry of Education and Culture issued three circulars related to the prevention and handling of Covid-19. Among them is Circular Letter (SE) Number 4 of 2020 concerning the Implementation of Education Policies in the Emergency Period for the Spread of Coronavirus Disease (Covid-19), which among other things contains directions regarding the learning process from home. The home study policy is implemented while still involving teachers and students through Distance Learning (Suwandayani et al., 2021). The government's learning from home policy includes various provisions including a) learning from home through bold learning to provide meaningful learning experiences for students; b) Studying from home can focus on life-life education, including regarding the Covid-19 pandemic; c) learning activities and assignments from home may vary between students, according to their interests and conditions, including considering access/facilities to study at home; d) evidence or products of Learning from Home activities are given qualitative and useful feedback from the teacher, without being required to give quantitative scores/values (Ekowati & Suwandayani, 2021; Kurniasari, 2020; Rasmitadila et al., 2020).

As explained about learning from home through online learning, in principle students can access learning materials and resources without limitations of space and time (Jasinski, 2012). This includes students in elementary schools with various personality types, also doing learning from home. The main communication media is the gadget. Therefore, directly or indirectly, all students use gadgets in learning. Based on the results of direct interviews with 2 parents and guardians of 6th-grade students of SD Muhammadiyah 9 Malang City and SDN 2 Purwantoro Malang City stated that the use of this device has an impact on students. According to parents and guardians, most of the students' time is used using gadgets, both for studying and other activities. All students with various personality types, both introverts and extroverts use smartphones in their activities. Including elementary school students in Malang City who study from home (Ekowati & Suwandayani, 2021). Related to this personality type, it becomes important to be studied in more depth. Because the development of students in elementary school will affect their development at the next level.

In general, the use of smartphones for students with extrovert and introvert personality types is an important thing. The use of both can describe the learning process of each student's personality type. In the learning process, introverted students use gadgets for things related to all fantasies, dreams, and individual perceptions. So that when looking at an event that is happening in the community related to the COVID-19 pandemic, introverted students are more focused on themselves and tend to be slower in responding because of their individuality (Purba & Ramadhani, 2021). Meanwhile, someone who has an extroverted personality has a more personal understanding of objective experience, focuses attention on the outside world, tends to be active in interacting with people around him, and is friendly, so extroverts are better able to convey what they feel in various situations. However, the use of gadgets when studying from home has not been studied in more depth, especially for extroverted and introverted students in elementary school.

On the other hand, the classification of extrovert and introvert personality types above can describe the communication and social interaction patterns of each student. The results of previous studies conducted by several researchers showed that students who were classified...
as introverts would be more oriented to internal stimuli than students who were classified as extroverts (Zafar & Meenakshi, 2012). Students who are classified as introverts will pay more attention to thoughts, moods, and reactions that occur within themselves. This makes individuals who are classified as introverts tend to be shyer, have strong self-control, have a fixation on the things that happen to them and always try to be introspective, seem quiet, unfriendly, prefer to be alone, and experience obstacles in their lives. The quality of the behavior displayed. Meanwhile, students who are classified as extroverts tend to appear more enthusiastic, easy to get along with, and seem impulsive in displaying behavior. Students who are classified as extroverts are those who dare to break the rules, have higher pain tolerance, and are more easily involved in a relationship (Codish & Ravid, 2012; Harbaugh, 2010).

Regarding the communication skills of these two personality types, the results research shows that there are differences in the intensity of communication through social networks between introverted and extroverted personality types in adolescents, namely the extroverted personality type has a high communication intensity compared to the introverted personality type (Widiantari & Herdiyanto, 2013). In addition, it can be stated that there is a relationship between the number of social networks and the intensity of communication through social networks, and there is no difference in the intensity of communication through social networks between men and women (Widiantari & Herdiyanto, 2013; Women, 2021).

The use of gadgets can meet individual needs in interacting with other people in their social environment. The intensity of communication carried out by individuals is related to the personality type that each student has, both extroverted and introverted personality types. Therefore, this research is very important, to consider teachers who teach using gadgets. By understanding the two personality types, it is hoped that the teacher will be able to provide the best service according to the needs of each student's personality. Based on the description above, this article aims to answer the use of gadgets while studying from home between extrovert and introvert personality types in elementary school students in Malang City by conducting case study research on three students. The hope is that it can provide practical benefits to assist schools in considering policies related to the use of gadgets for elementary school students while studying from home (Suwandayani et al., 2021). It can also directly or indirectly minimize the adverse effects caused by the use of gadgets for elementary school students.

2. METHODS

The research method is descriptive with a qualitative research approach. Qualitative data is a source of reasonable and processed human descriptions and explanations. With qualitative data, one can explain the chronology and explanation (Bloomberg & Volpe, 2019). This study describes qualitative data on the use of gadgets by extroverted and introverted students while studying from home. The research subjects were 2 extroverted students and 2 introverted students. Extroverted students are 1 grade 6 student and 1 grade 3 student at SD Muhammadiyah 9 Malang City with the initials AN, SA. The research subject data is presented in Table 1.

Table 1. The Research Subjects

<table>
<thead>
<tr>
<th>No.</th>
<th>Subject's Initials</th>
<th>School</th>
<th>Personality Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AN</td>
<td>Muhammadiyah 9 Malang City Elementary School</td>
<td>Extrovert</td>
</tr>
<tr>
<td>2</td>
<td>SA</td>
<td>Elementary School Purwantoro</td>
<td>Extrovert</td>
</tr>
<tr>
<td>3</td>
<td>ND</td>
<td>2 Malang City</td>
<td>Introvert</td>
</tr>
</tbody>
</table>
While introverted students are 1 grade 6 student at SD Purwantoro 2 Malang City who has the initials ND. The research subject is also the key informant in this research. The data collected in this study used interviews, observations, and documentation while studying from home in April-May 2021. The instruments used were interview guidelines and observation guidelines. Interviews were conducted with students, while observations were made when students were active learning from home, both in real activities and activities carried out on gadgets.

Data from interviews and observations were analyzed qualitatively. The data analysis step is carried out following the steps below. (1) Data encoding. In this step, all notes collected from observations and interviews are read back and tagged with words or phrases that can represent the important information contained in each note. The coding is written with the pattern "Data collection/research subject/Date". For example, if it says W/SE/050421, it means an interview with extroverted students on April 5, 2021; (2) Write and reflect on the data in depth. All raw data that has been collected and labeled must be shown and converted into information that can be understood by the reader. During the rewriting process, reflections are also made on the notes. Any ideas, reactions, or insights that arise during this process of reflection are recorded (Bloomberg & Volpe, 2019); (3) Sorting of data based on the content and pattern of information. Based on the information generated in the second step, then all records are sorted and sorted. From this step, all the data that has been collected is arranged into a more orderly sequential description; (4) Look for similarities and differences for further analysis; (5) Generalization of results. At this stage, various data are grouped into several groups. Thus, the large amount of data that has been obtained can be reduced to a small number of analytical units. Then, all the analytical units are linked to each other into a framework. This framework is used as the basis for formulating general concepts; (6) Finally, the sixth step relates the generalization results to references and theories. At this stage, each general concept generated from the fifth stage is linked to existing concepts or results from previous studies. Through this step, all the points written in the fifth step will be more meaningful.

3. RESULTS AND DISCUSSION

Result

A gadget is a gadget or instrument that has a practical purpose and function that is specifically designed to be more sophisticated than the technology created before. A gadget can also be interpreted as an electronic gadget or instrument that has a practical purpose and function, especially to help humans work. This gadget also has an important role in human life to communicate, increase relationships, and increase insight and knowledge, including learning during learning from home. The use of gadgets in this study is interpreted from the duration of the use of the gadget and the description of use. The duration can be divided into four, namely: high use, namely the intensity of use of more than 3 hours a day, moderate use, namely the intensity of use of about 3 hours a day, and low use, namely the intensity of use of fewer than 3 hours a day.

When studying from home, every student needs a gadget, both for study and other purposes. Of the 3 subjects of this study consisting of 2 types of extroverts with the initials AN, and SA and 1 type of introvert with the initials ND, all four have personal gadgets. That is, the gadget is used by each individual and is not shared with others. Based on the results of observations in the range of April – May 2021, 3 subjects have used gadgets with a duration of more than 3 hours. Both introverts and extroverts. This means that with a duration of more than 3 hours, the four of them have a high intensity in using gadgets.
At the time of more in-depth observations regarding the use of these high-intensity gadgets on the four research subjects. It is known that 1 introverted student uses more than 3-4 full hours to study during online learning. Gadgets are used as primary media in communicating with teachers and other students. In addition, to do assignments, look for other reference sources and use the gadget to browse schoolwork materials and collect assignments given by the teacher. Surfing activities in cyberspace through parental assistance. If there is something that is not understood, ND students do not immediately look for answers using a gadget, but ask first and ask for approval from their mother. And when they have finished all their study assignments, ND students use their gadgets to browse their favored recipes.

On the other hand, this ND student also uses social media such as Instagram. For students who find it difficult to pour out their hearts, the use of Instagram is used to view school announcements and course places. Never use social media to share thoughts or what is often called a vent. Almost no status updates related to self-expression are carried out or felt. ND students, always do the same routine regarding the use of gadgets, when they finish studying and fulfill other obligations while studying from home, students no longer use gadgets in daily activities. ND students mostly do activities to hone skills according to their mother's directions, such as making flower vases from used materials, bags from used materials, and others. ND students still have to be directed by parents in terms of time management. Not because he is complacent to play, but does not dare to make new decisions in his daily life.

It is different from 2 other students with extroverted personality types, namely AN and SA students. The duration of using the gadget is more than 3 hours, even reaching 8 hours a day. Depends on the rules in each family. For both, the use of gadgets is not only for studying. But also, for other activities, namely social media, browsing in cyberspace, and playing more games. When working on assignments during learning from home, the duration of study according to the schedule of each school is about 1-3 hours. Both AN and SA students use gadgets to interact with the teacher, colleagues, and teaching materials from the teacher. Looks like the Figure 1.

In addition, it also uses the gadget to download, work on and collect assignments. At the time of completion of the assignment, this extroverted student has the freedom to browse cyberspace. Both through google and YouTube, both directly without asking parents or teachers directly looking for supporting reference sources. These AN and SA students tend to not put forward their schoolwork during learning from home. So here is the role of each parent in managing their time in learning and completing assignments. AN and SA students when completing assignments, also want to finish their assignments as soon as possible in learning. This is because the motivation for using gadgets is more often to play online games with other friends and use social media. AN and SA students use social media to interact and add friends. It is also used to express themselves and their feelings. In general, the total duration is more than 3 hours, even reaching 16 hours a day. The results of observations during April-May 2021, on average, both of them update their social media status, both WhatsApp and Instagram every two days. An example of a status update is presented in Figure 2.

The expression on the WA status above shows that the person concerned is not happy, there is a mismatch that occurs. This makes it easier for parents to understand the child's feelings. And become one of the inputs in assisting students during learning from home. In addition to using gadgets for social media, SA and AN students also surf on YouTube as it is mandatory for both of them. AN and SA students have differences when using YouTube accounts. An initial AN students tend to browse the lives of Indonesian students abroad, surf-related to aircraft manufacturing, and study life abroad. Meanwhile, SA students browse
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more related to online games. Even now, the two of them have joined the team several times to participate in online game competitions. At the end of April 2021, participate in online game competitions to reach the provincial level finals. In general, both are looking for information related to things they like. The four subjects of this study used gadgets productively, but still according to the direction, guidance, and support of their parents. This is because the four subjects tend to lose track of time when using a device other than surfing. The use of the four research subjects' devices is according to Table 2.

Table 2. Use of Gadgets While Studying from Home

<table>
<thead>
<tr>
<th>No</th>
<th>Subjects</th>
<th>Personality Type</th>
<th>First 1-3 Hours</th>
<th>After the First 1-3 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AN</td>
<td>Extrovert</td>
<td>Downloading activities, doing assignments, looking for other reference sources, and using the device to browse schoolwork materials and collect assignments</td>
<td>Use for social media, youtube, online games, status updates, and surfing preferred information</td>
</tr>
<tr>
<td>2</td>
<td>SA</td>
<td>Extrovert</td>
<td></td>
<td>Spend more time on online games</td>
</tr>
<tr>
<td>3</td>
<td>ND</td>
<td>Introvert</td>
<td></td>
<td>Looking for favorite recipes</td>
</tr>
</tbody>
</table>

The four subjects have the weakness of not being able to manage time well. Parental assistance is one of the keys to the positive use of gadgets and has a positive impact on these three subjects.

Discussion

Technological advances are currently increasingly rapid and sophisticated. Various kinds of advanced technologies have been created that directly or indirectly provide major changes in human life in various fields (Lestari, 2018). This is because the demands of the development of human life are oriented to everything practical, effective, and efficient. One of the technologies in question is gadgets (Arissandi et al., 2019; Wardani & Ayriza, 2020). Gadgets are no longer a luxury. But the gadget has turned into the primary technology that modern humans need. Now everyone around the world must have a smartphone (Safrizal et
Not only workers who need gadgets, but almost all groups including teenagers who are still in high school as well as children and toddlers have used gadgets in their daily activities. A gadget can be interpreted as an electronic device or instrument that has a practical purpose and function, especially to help human work. Devices play an important role in human life to communicate, increase relationships, add insight and knowledge, education or business (Jasinski, 2012; Rasmitadila et al., 2020). To the results of the research above, gadgets among 6th-grade elementary school students also have an important role, namely to study during learning from home (Ekowati & Suwandayani, 2021; Suwandayani et al., 2021). In addition, gadgets are used to find supporting references in learning, using social media, browsing in cyberspace, and playing online games. When doing assignments during BDR, the duration of study according to the schedule of each school is about 1-3 hours. Both extroverted (AN, SA) and introverted (ND) students use gadgets to interact with the teacher, peers, and teaching materials from the teacher.

The use of gadgets for extroverted students further strengthens their characteristics. As students who tend to focus their thoughts on external objects, they have a readiness to accept external events, and a desire to influence and be influenced by events that occur around them (Harbaugh, 2010; Zafar & Meenakshi, 2012). However, the data from this study, specifically the characteristics related to the need to be involved and enjoy busyness in learning, tend to be weak. The last two characteristics appear strong in application to areas other than learning. Among them, namely online games or playing social media that can accommodate self-expression. In this case, the characteristics of extroverted students are appropriate. But the allotment of personality is not only for learning. But for other activities. In this case, the teacher has an important task and role in facilitating students in learning. The learning package needs to be made attractive and able to bring out the various potentials of students (Peppler et al., 2020; Safrizal et al., 2021). In learning, students are given space to express themselves. At least, schools also have an important role to play in improving the quality of teachers so that they can have the expected abilities while studying from home.

In terms of learning from home, the use of gadgets by extroverted students has an accompaniment effect. Devices can also be the cause of the decline in direct communication with people and the surrounding environment. Attention and concern for the surrounding environment are reduced. As the results of previous studies revealed that dynamic and reciprocal communication was felt to decrease in quality and quantity in face-to-face interactions (Prayitno & Ayu, 2018; Widiantari & Herdiyanto, 2013). Students tend to prefer using gadgets rather than chatting with people around them. The use of gadgets can have a negative impact such as causing a person to become a closed person it can affect the quality of interpersonal relationships (Codish & Ravid, 2012; Harbaugh, 2010). In this case, the use of gadgets without proper assistance can place the personality of extroverted students leading to being introverted toward the real world around them. These data strengthen the statement that personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to his environment (Purba & Ramadhani, 2021). This statement implies that personality is a dynamic organization within the individual of the psychophysical system that determines his unique adjustment to his environment. Therefore, integration between schools, the environment, and parents is an important factor that minimizes the negative impact of using gadgets (Fujita et al., 2019).

In addition to extroverted students, the research data also reveals the use of gadgets in introverted students (ND). In terms of duration of device use, ND students also use gadgets in high intensity. The use of gadgets by introverted students is different from that of extroverted students. In terms of the learning process from home, introverted students tend to be quiet, passive, not easy to get along with, and very dependent on the people closest to them (parents). Introverted students are less able to make decisions, although on the positive side...
they are conscientious, calm, and controlled. The high intensity of using gadgets is one of the consequences of not having the courage to make decisions and tending to wait for directions from parents who accompany them. In other words, students have not been able to manage themselves to learn well. The facts obtained, both personalities use gadgets in high intensity. Extroverted students use gadgets to a small extent for studying and mostly for social media, browsing cyberspace, and playing online games. Meanwhile, introverted students use high-intensity devices to study and wait for parental direction. In general, individuals who are classified as introverts will be more oriented to internal stimuli (Codish & Ravid, 2012). The learning management of these two personality types is a major concern that teachers must consider in providing various tasks and materials for learning.

Efforts can be made by integrating education between schools, the environment, and parents. Parents can prevent or reduce the use of gadgets in students by providing information or health education to students about the positive use of gadgets. Educational interventions regarding the use of gadgets from various parties, especially in the family environment, which includes providing education, guidance, and assistance to children, especially by parents, are very necessary for the development of the students themselves. Meanwhile, teachers or school policymakers can arrange and present learning according to the needs of students (Sinta, 2019). In addition, parents can provide proper and correct assistance in the use of devices according to the child's developmental stage (Ekowati et al., 2021). Both parties can provide good assistance if it is supported by a good environment.

4. CONCLUSION

The use of gadgets while studying from home between extrovert and introvert personality types in elementary school students in Malang City is carried out in high duration/intensity. For introverted students, most of the time is devoted to studying from home. The length of time is since in terms of the learning process from home, introverted students tend to be quiet, passive, not easy to get along with, and very dependent on the people closest to them (parents). Introverted students are less able to make decisions, although the positive side is conscientious, calm, and controlled. It can be concluded that introverted students have not been able to manage themselves to study well. As for extroverted students, using the device is divided into 2 sessions. Session one is for learning and session two is for expressing oneself on social media, surfing the internet, and online games. The use of gadgets by extroverted students also gives rise to other influences. The use of gadgets is one of the causes of the decline in the quality of direct interaction and communication with people in the surrounding environment. In addition, there has also been a decrease in attention and concern for the surrounding environment. Students enjoy using gadgets more than interacting with the people around them. In the end, this condition places extroverted students into closed individuals so that it can affect the quality of interpersonal relationships. In this case, the use of gadgets without proper assistance can make extroverted students' personalities lead to being introverted toward the real world around them. Therefore, teachers and stakeholders in schools need to create, present and evaluate learning that is interesting for students and able to accommodate the needs of both personality types well.

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