

TREN KEPEMILIKAN GAWAI SISWA SEKOLAH DASAR DI PULAU JAWA: TINJAUAN HASIL SURVEY

*Trends of Smartphone Ownership in Elementary Schools in Java
Island: A Review of Survey Results*

Indra Suhendra¹, Tatat Hartati², Rahman³, Lina Marlina Nur Rizkiya⁴

¹²³⁴Universitas Pendidikan Indonesia

Jl. Dr. Setiabudi No.229, Isola, Kec. Sukasari, Kota Bandung, Jawa Barat 40154

ABSTRACT:

Keywords:

technology; smartphone;
elementary education

Kata kunci:

teknologi; gawai; sekolah dasar

This study aims to investigate the trends of smartphone ownership among primary school students in Java Island. The research method used was a survey using a questionnaire as a data collection instrument. The research respondents were students from grades 1 to 6 in several schools on Java Island. The survey results showed that smartphone ownership among primary school students varied depending on their grade level. Most students in grades 1 and 2 used smartphones owned by their parents, while in grades 3 to 6, the percentage of students who owned personal smartphones increased. It was found that approximately 8.7% of grade 1 students owned personal smartphones, while in grade 6, as many as 82% owned personal smartphones. These findings indicate that the ownership of smartphones among primary school students in Java Island is increasing as students progress to higher grade levels. This may be due to changes in students' needs and interests in using technology and peer influence. Although most students still use smartphones owned by their parents, the percentage of students who own personal smartphones increases in higher grades. The results of this study can serve as a reference for those who want to develop policies or programs related to smartphone usage among primary school students. In this case, schools or parents can consider the importance of education and supervision in using smartphones for students, especially those who already have personal smartphones.

ABSTRAK:

Penelitian ini bertujuan untuk menginvestigasi tren kepemilikan gawai, khususnya smartphone, di kalangan siswa Sekolah Dasar di Pulau Jawa. Metode penelitian yang digunakan adalah survei dengan menggunakan kuesioner sebagai instrumen pengumpulan data. Responden penelitian adalah siswa kelas 1 hingga 6 dari beberapa sekolah di Pulau Jawa. Hasil survei menunjukkan bahwa kepemilikan gawai di kalangan siswa SD bervariasi tergantung pada kelas mereka. Mayoritas siswa kelas 1 dan 2 menggunakan smartphone milik orang tua, sedangkan pada kelas 3 hingga 6, persentase siswa yang memiliki smartphone pribadi semakin meningkat. Ditemukan bahwa sekitar 8,7% siswa kelas 1 memiliki smartphone pribadi, sedangkan pada kelas 6, sebanyak 82% siswa memiliki smartphone pribadi. Temuan ini menunjukkan bahwa kepemilikan smartphone di kalangan siswa SD di Pulau Jawa semakin tinggi seiring dengan kenaikan kelas siswa. Hal ini mungkin disebabkan oleh perubahan kebutuhan dan minat siswa dalam menggunakan teknologi, serta pengaruh dari teman sebaya. Meskipun mayoritas siswa masih menggunakan smartphone milik orang tua, persentase siswa yang memiliki smartphone pribadi semakin tinggi pada kelas yang lebih tinggi. Dalam hal ini, pihak sekolah atau orang tua dapat mempertimbangkan pentingnya pendidikan dan pengawasan dalam penggunaan smartphone bagi siswa, terutama mereka yang sudah memiliki smartphone pribadi.

INTRODUCTION

The COVID-19 pandemic has significantly impacted the world of education, both in terms of teaching and learning. One of the main effects of the pandemic is the emergence of the need for technology in the process of distance or online learning (Firmansyah & Kardina, 2020;

Martoredjo, 2020; Purwanto dkk., 2020). Many schools and universities worldwide have switched to online learning to ensure that students can continue to learn and develop even from home (Maulidiyah, 2022).

This has resulted in more rapid technological developments in the field of education, such as the

development of online learning platforms, technology-based learning applications, collaborative software, and more (Belawati, 2019; Warsita, 2017; Yuliani dkk., 2020). The need for this technology has driven technology companies to continue developing their products and services that focus on education.

Moreover, the COVID-19 pandemic has also accelerated the adoption of technology in the education environment, which was previously more conservative in terms of technology (Muskania & Zulela, 2021). Schools and universities that were previously reluctant to use technology are now forced to use it so that students can continue to learn from a distance. This also allows teachers and lecturers to improve their technical skills to teach students more effectively.

However, the COVID-19 pandemic has also highlighted that the digital divide remains a problem that needs to be addressed in education (Faatin & Rusnilawati, 2022). Not all students have access to the necessary technology, such as fast internet connections and adequate devices (hifzul Muiz & Sumarni, 2020; Purnama & Rani, 2021; Wahyuningsih dkk., 2021). Therefore, efforts are needed to ensure that all students have

equal opportunities to access technology in education.

Distance learning has become the primary alternative for schools worldwide to continue the teaching and learning process during the COVID-19 pandemic (Altiparmak & Cebecioglu, 2022; Çaliskan, 2022; Doz & Doz, 2023). However, one of the challenges elementary school students face in distance learning is the limitation of devices they have to access learning materials. Schools sometimes require students to have smartphones to participate in distance learning effectively (Adhari dkk., 2022; Sakti, 2021). This has become a polemic, especially for parents who cannot afford to buy smartphones for their children.

On the other hand, using smartphones by elementary school students is only sometimes harmful (Faisal dkk., 2020). In addition to accessing distance learning, smartphones can also be used as learning aids, such as obtaining additional information through the internet or taking notes for school assignments (Wahyuningsih dkk., 2021). However, proper supervision and regulation from schools and parents are required in the use of smartphones to avoid negative impacts on child development, such as

addiction to gadgets or exposure to age-inappropriate content.

Post-COVID-19 pandemic, the use of smartphones among elementary school students is still a relevant topic to be discussed (Fahlevi, 2022). Although face-to-face learning has resumed, using smartphones remains essential in daily life. However, concerns still arise regarding the uncontrolled use of smartphones among elementary school students. The lack of parental supervision can harm children, especially regarding the influence of the accessed content (Setyawan dkk., 2019).

Excessive use of smartphones can cause children to lose interest in outdoor activities and experience mental health problems (Setiawati & Fithriyah, 2020; Tinambunan dkk., 2021). In addition, social media addiction in children can cause them to feel isolated from the natural social environment and make it difficult for them to interact directly with others. Therefore, parents need to pay attention to their children's use of smartphones, especially among elementary school students who are still in the process of character and mindset formation. Parents should provide adequate supervision and limit their children's smartphone usage time to avoid excess (Anggraini,

2019; Mazdalifah & Moulita, 2021; Ulya dkk., 2021).

In the post-pandemic period, the use of smartphones among elementary school students needs to be wisely regulated (Hasançebi dkk., 2022; Lemov, 2022, 2022). Educators and parents must ensure that the use of smartphones among students remains focused on positive activities and supports the teaching and learning process without sacrificing children's physical and mental health (Ferri dkk., 2020; Indrawati dkk., 2020; Maity dkk., 2021).

The study on the trend of smartphone ownership among elementary school students in Java Island is essential to research to be conducted. This is because smartphones are becoming more widespread, including among students. Smartphone ownership by students can affect their learning behaviour, mental health, and social interaction. Therefore, understanding the trend of smartphone ownership among elementary school students can provide helpful information for policymakers and stakeholders in education.

Through this research, it will be known to what extent the development of technology has influenced student behaviour in

owning and using smartphones. In addition, this research will also provide a clearer picture of what factors influence smartphone ownership among elementary school students. This can help policymakers make policies and programs more appropriate and in line with student needs.

The results of this research can also help teachers and schools understand the proper way to optimise the use of smartphones for students. In addition, parents can also understand the positive and negative impacts of smartphone ownership on their children. Overall, the study on the trend of smartphone ownership among elementary school students in Java Island is critical and relevant to be conducted. By understanding the trend of smartphone ownership among elementary school students, we can better understand how technological developments affect students' education and mental health and how to optimise the use of smartphones for students properly.

METHOD

The research methodology used in this study is a survey using a questionnaire as the data collection instrument (Creswell, 2002; Creswell dkk., 2007; Creswell & Poth, 2016;

Safaruddin dkk., 2018). The study population is elementary school students in Java Island, with the research sample taken from several schools representing grades 1 to 6. The number of respondents taken is 23 for grade 1, 40 for grade 2, 33 for grade 3, 81 for grade 4, 115 for grade 5, and 268 for grade 6.

The questionnaire used in the study contains questions about smartphone ownership among elementary school students. The data collected from the questionnaire were analysed using descriptive techniques. The results of the data analysis were presented in the form of a table containing information on the number of students who have their smartphones, the number of students who use smartphones owned by their parents, and the number of students who do not have smartphones at all.

Using the survey methodology, the researchers were able to obtain information about the trend of smartphone ownership among elementary school students in Java Island. However, it should be noted that the results of this research may only represent part of the population of elementary school students in Java Island, as the research sample was limited to only a few schools or classes. Therefore, further and more

representative research is needed to obtain a more comprehensive picture of the trend of smartphone ownership among elementary school students in Java Island.

RESULT AND DISCUSSION

After collecting data from respondents through the survey method, the next step is to analyse the survey results to find patterns and trends in smartphone ownership among elementary school students in Java Island. To achieve this goal, the researcher processed the data obtained from the questionnaires filled out by the students. The data processed included calculating the percentage of smartphone ownership owned by the students and their parents and observing the differences in the level of smartphone ownership between grades. Additionally, the researcher analysed the possible factors that influence the trend of smartphone ownership among elementary school students, such as demographic factors, technology skills, and cultural factors. The results of this analysis are expected to provide a more comprehensive overview of the trend of smartphone ownership among elementary school students in Java Island.

Here is an overview of the ownership of gadgets among students:

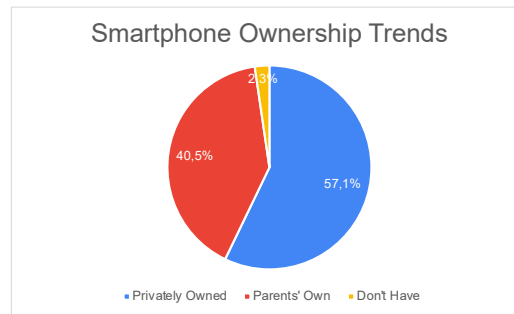


Figure 1: The trend of device ownership among students

(Source: Data Processing Results)

Based on the data provided, it can be seen that the majority of elementary school students in Java Island have access to smartphones. Of 560 students, 57.14% have smartphones, while 40.54% of other students have smartphones owned by their parents. Only a small number of students (2.32%) do not have smartphones.

This indicates that in recent years, access to technology has become more affordable and easily obtainable in Indonesia. The use of smartphones is increasingly widespread in various segments of society, including among elementary school students. In this digital era, access to technology and the internet can enrich educational experiences and allow students to access resources and information online, improving the quality of their learning outside the classroom.

However, having access to smartphones only sometimes

guarantees effectiveness and success in learning. There are several challenges in managing the use of smartphones by students, especially in reducing the risk of disturbance or excessive dependence on technology. In addition, the technology access gap between capable and incapable students is often closely tied to economic factors. Economic disparities among students can significantly impact their ability to access and utilize technology effectively for learning purposes. Students from economically disadvantaged backgrounds may lack access to personal computers, reliable internet connection, or necessary software and devices, putting them at a disadvantage compared to their more financially privileged peers. As a result, these students may struggle to engage in online learning, access digital resources, or participate in interactive educational platforms. This technology access gap exacerbates existing educational inequalities, hindering the quality of learning and further widening the achievement gap between students of different economic backgrounds. Bridging this gap and ensuring equitable access to technology is crucial for providing all students with equal opportunities to thrive in their educational journey.

In this context, efforts need to ensure that students use smartphones wisely and responsibly. Furthermore, it is crucial to implement appropriate digital skills training programs for both students and teachers, as well as develop supportive policies that encourage the effective and efficient use of technology in the learning process. Providing comprehensive training on how to utilize technology wisely and responsibly can empower students to navigate the digital landscape effectively, ensuring they are equipped with the necessary skills to access and evaluate online information, collaborate digitally, and utilize educational resources available on various platforms. In this regard, digital education is crucial in creating an innovative and skilled younger generation in the current digital era. Online learning, learning applications, and other digital platforms can help students acquire the knowledge and skills needed to face the future. However, special attention must be paid to ensuring that access to technology and the internet helps achieve better educational goals. The following is a summary of the trend of smartphone ownership among elementary school students in Java Island, Indonesia, based on grade level. Data were obtained through a survey using a questionnaire as a data

collection tool from students in grades 1 to 6 in several schools in Java Island:

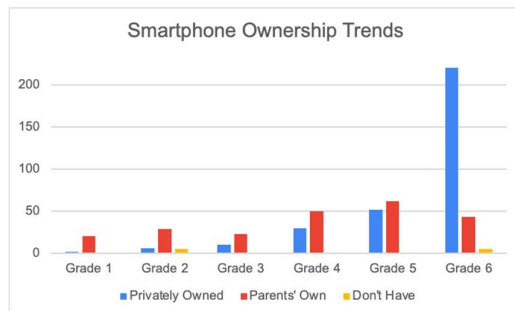


Figure 2: Trends in smartphone ownership among elementary school students by grade level.

(Source: Data Processing Results)

From a total of 23 respondents from grade 1, only 2 of them have their smartphones (8.7%), while 20 have smartphones owned by their parents (87%), and one student still needs to get a smartphone at all (4.3%). From a total of 40 respondents from grade 2, 6 students have their smartphones (15%), while 29 have smartphones owned by their parents (72.5%), and five students do not have smartphones at all (12.5%). From a total of 33 respondents from grade 3, 10 students have their smartphones (30.3%), while all 23 grade 3 students have smartphones owned by their parents (69.7%), and there are no students who do not have smartphones. From a total of 81 respondents from grade 4, 30 students have their smartphones (37%), while 50 have smartphones owned by their parents (62%), and one student does not have a smartphone at

all (1.2%). From a total of 115 respondents from grade 5, 52 students have their smartphones (45.2%), while 62 have smartphones owned by their parents (53.9%), and one student does not have a smartphone at all (0.9%). From a total of 268 respondents from grade 6, 220 students have their smartphones (82%), while 43 have smartphones owned by their parents (16%), and five students do not have smartphones at all (1.9%).

The analysis of the graph above shows several significant findings. First, there is an increase in the number of students who have personal smartphones as their grade level increases. Second, most grade 1 and 2 students use smartphones owned by their parents, while in grades 3 to 6, the percentage of students who have their smartphones is increasing. This finding indicates a change in the pattern of smartphone ownership among elementary school students. Third, there is a significant difference in smartphone ownership between grade 1 and grade 6. In grade 1, only about 8.7% of students have their own smartphones, while in grade 6, 82% have their own.

This analysis provides a clear picture of the trend of smartphone ownership among elementary school students in Pulau Jawa, Indonesia.

This can be an essential reference for relevant parties to develop appropriate programs or policies for using smartphones among students.

CONCLUSION

Based on the survey results, it was found that smartphone ownership among elementary school students in Java Island showed significant variation depending on their grade level. The survey showed that most students in grades 1 and 2 tended not to have their smartphones but instead used their parents' phones, while in grades 3 to 6, the percentage of students who owned a smartphone increased. Specifically, it was found that only 8.7% of grade 1 students owned a smartphone, while in grade 2, 15% of students owned a smartphone. However, in grade 3, around 30.3% of students owned a smartphone, and all students in that grade had access to their parent's phones. In grade 4, 37% of students owned a smartphone; in grade 5, 45.2% owned a smartphone. In grade 6, it was found that the majority of students, 82%, owned a smartphone.

Although these survey results provide an initial overview of smartphone ownership trends among elementary school students in Java Island, there are several factors to

consider when interpreting the survey results. First, the sample used in the survey was limited to only a few schools or classes and did not represent the entire population of elementary school students in Java Island. In addition, the survey did not consider differences in economic levels and technology accessibility among students that may affect smartphone ownership among elementary school students.

In developing policies or programs related to the use of smartphones among elementary school students, these survey results can provide an initial reference and help stakeholders better understand smartphone ownership trends among elementary school students in Java Island. However, further research is needed that is more extensive and representative to obtain a more comprehensive picture of these trends.

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