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# **Original Research**

Characteristics of Internet, Smartphone, and Social Media Usage among Generation Z in South Jakarta after the COVID-19 Pandemic

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# **Abstract**

The amount of internet usage has increased following the COVID-19 pandemic in 2020. In order to reduce the transmission of COVID-19, the government implemented a policy mandating remote learning. Generation Z finds learning online at home enjoyable, and there is a growing trend of using the Internet for educational purposes. This study examined the characteristics of Internet, smartphone, and social media usage among Generation Z during the COVID-19 pandemic, which is expected to diminish by early 2022. A descriptive study was conducted, and data was collected through a survey of 50 respondents belonging to the Gen Z demographic, specifically aged 12-15 years, in South Jakarta. The research variables encompassed internet usage, smartphone usage, social media usage, and information regarding internet usage. The data analysis performed univariate analysis. The research results showed that the characteristics of Gen Z in South Jakarta are spending between 1 and 8 hours on social media. Most of them owned and used smartphones. Popular platforms for Gen Z were YouTube, TikTok, WhatsApp, Instagram, and Telegram. They posted photos, videos, and stories on social media but rarely trusted the information there. WhatsApp groups were also used for the learning process. Gen Z got information about internet usage from the people around them. To prevent the risks of excessive use of the Internet, smartphones, and social media, education for Gen Z still needs to be a concern.

Keywords: Gen Z, Internet, Smartphone, Social media

#### INTRODUCTION

Internet use increased rapidly in early 2020 when the world faced the COVID-19 pandemic (Feldmann et al., 2020). In Indonesia, the whole population remains at home. Most students are engaged in remote or online learning from their homes via the Internet due to the implementation of social distancing measures to prevent the spread of COVID-19 (Kemdikbud RI, 2020).

Generation Z (Gen Z) are people born between 1997 and 2012. In 2019, they were between the ages of 9 and 22 years. They already enjoy a lifestyle with digital communication devices like cell phones, smartphones, iPhones, and social media applications. Their lives are dominated by searching for online information (Dimock, 2019). Gen Z's communication style differs from the other generations (Raslie & Ting, 2021). The nature of Gen Z is unique. They have an innate comfort in enjoying the visual world. Since childhood, they have been

accustomed to digital devices and enjoy various conveniences through technology. However, they also have high social and cultural awareness and the ability to innovate according to the challenges of their time (Muliadi, 2020; Wood, 2023). They spend longer on social media than Millennials, Gen X, and Baby Boomers (Pratiwi, 2023a). However, Gen Z also needs to be given special attention because they tend to have worse levels of mental health (Pratiwi, 2023b).

There was a study involving 109 Gen Z respondents in Bandung about their experiences in the COVID-19 pandemic. The results of this study reveal that they have much time at home. They use their time to study remotely or online, clean the house, exercise, nap, and perform daily prayers. The rest of the time is used for playing games and interacting with social media. Their remaining time on social media is 3-6 hours a day (Hadita, 2022). The research conducted by the University of Indonesia revealed that the risk of internet addiction among adults in Indonesia increased during the COVID-19 pandemic (Siste et al., 2020). Gen Z can also experience internet addiction, smartphone addiction, and even gaming addiction due to excessive activity using all these devices, as is the case in South Korea. Even in South Korea, they built anti-internet addiction camps specifically to deal with young people who are addicted to the Internet, games, and smartphones (BBC, 2019; Lee et al., 2016).

In early 2022, the COVID-19 pandemic subsided, and Indonesia is gradually recovering from the impact of this infectious disease. However, efforts to prevent the transmission of COVID-19 are still being carried out with a comprehensive national immunization program (Aditama, 2022). Gen Z wants to return to normal activities and study as before (Hadita, 2022). What will be the level of utilization of the Internet, smartphones, and social media in 2022, following two years of online studying with the Internet, once COVID-19 is no longer a factor? The study addresses many vital questions: What is the extent of internet usage among Generation Z? Which electronic gadgets do they use for online browsing? What is their level of knowledge regarding internet usage? Lastly, how do they engage with social media platforms?

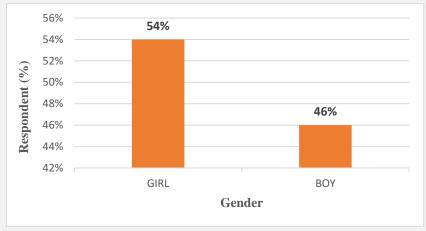
The internet penetration rate in Indonesia is increasing from 2022 to 2023, reaching 78.9% (Azizah, 2022). Cell phone ownership also followed this development (BPS, 2020). In DKI Jakarta, 82.63% of the population accesses the Internet, and 98.55% of users use smartphones (Kemkominfo RI, 2019). excessive internet use hurts Gen Z, especially those who are still teenagers. For this reason, this research aims to describe the behavior of using the Internet, smartphones, and social media among Generation Z in South Jakarta. The results of this research will help understand the behavior of Gen Z. They will be valuable input in efforts to prevent the negative impacts of using the Internet, smartphones, and social media.

#### **METHODS**

The design of the study was descriptive. A survey method was employed to collect data, with a sample size of 50 respondents. The respondents are individuals from the Gen Z cohort, specifically aged between 12 and 15 years, residing in South Jakarta. The respondents were selected using a purposive sampling method. Respondents were given the option to participate voluntarily. The variables focused on in this research were internet use, smartphones and social media, and information about how to surf the Internet properly. The survey was conducted in April 2022, when the COVID-19 pandemic began to subside. The research instrument is a question sheet in the form of open and closed questions consisting of 4 groups: Internet use, smartphones, social media, and information on Internet use. Respondents were asked to answer questions according to current conditions. The data analysis performed was a univariate analysis and was presented in the table.

## **RESULTS**

The respondents for this research were 50 people from Gen Z who lived in South Jakarta. Respondents consisted of 27 (54%) girls and 23 (46%) boys aged 12-15 years (Figure 1). Most Gen Z have one smartphone and access the Internet for 1-8 hours a day using wifi; 40% use the Internet for 1-4 hours, and 44% use the Internet for 4-8 hours. Generation Z frequently used WhatsApp and Telegram as means of communication. YouTube, TikTok, and Instagram were their favored social media platforms (Table 1).



Data source: Primer data

Figure 1. Characteristics of Respondent Based on Gender

**Table 1**. Characteristics of internet and smartphone use types of social media that were popularly used

Item	N	%
<b>Duration of accessing the Internet a day</b>		
1 - 4 hour	20	40%
4 - 8 hour	22	44%
> 8 hour	8	16%
Internet access facilities		
Wifi	46	92%
Internet credit	3	6%
Hotspot	1	2%
Number of smartphone owners		
0	3	6%
1	36	72%
>=2	11	22%
Communication applications that are often used every day		
WhatsApp	49	98%
Telegram	1	2%
Favorite social media		
YouTube	21	42%
Tik Tok	14	28%
Instagram	7	14%
Others	8	16%

Data source: Primer data

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Gen Z likes to be on social media daily. They often share stories and post photos and videos on social media. Social media was a means for them to find entertainment and learning materials. They rarely seek information through social media, and when they get information from social media, they seldom believe it (Table 2).

Table 2. Daily activities on social media

Item	N	%
Opening social media daily		
Very rarely	5	10%
Seldom	5	10%
A little often	21	42%
Often	19	38%
Trusting information from social media		
Very rarely	10	20%
Seldom	20	40%
A little often	15	30%
Often	5	10%
Seeking entertainment through social		
media		
Very rarely	2	4%
Seldom	2	4%
A little often	10	20%
Often	36	72%
Posting photos on social media		
Very rarely	3	6%
Seldom	6	12%
A little often	10	20%
Often	31	62%
Posting videos on social media		
Very rarely	4	8%
Seldom	5	10%
A little often	9	18%
Often	32	64%
Writing stories on social media		
Very rarely	2	4%
Seldom	6	12%
A little often	3	6%
Often	39	78%
Loking for learning materials on social media		
Very rarely	1	2%
Seldom	7	14%
A little often	22	44%
Often	17	34%

Data source: Primer data

The majority of Gen Z individuals acknowledge their proficient use of the Internet. They also get this information from parents and siblings (98%), teachers (98%), and peers (66%), with the percentage of teachers and parents or family members at home being more significant than that of peers (Table 3).

**Table 3**. Sources information about good internet use

Item	N	%
Knowing how to use the Internet properly.		
Yes	48	96%
No	2	4%
Peers provide information about how to use the		
Internet		
Yes	33	66%
No	17	34%
The teacher provides information about how to		
use the Internet		
Yes	49	98%
No	1	2%
Parents or siblings at home provide		
information about how to use the Internet.		
Yes	49	98%
No	1	2%

Data source: Primer data

#### DISCUSSIONS

Gen Z's life is synonymous with the Internet, smartphones, and social media. The results of this research are facts that prove this. Gen Z spends 1-8 hours enjoying the Internet with their smartphone and interacting online with social media. Research data shows that 40% of Gen Z use 1-4 hours for social media, and 44% use 4-8 hours. They get easy internet access with wifi facilities. We can find almost the same conditions in other places (Maulidina & Ridho, 2020; Restu, 2023).

Excessive internet use will risk internet addiction in users and decrease their quality of life (Jeong et al., 2020). This risk will be more significant for children and adolescents (Nurbaiti, 2022a; Kurniasanti et al., 2018). The brain in adolescence is in a rapid development process to reach maturation. Excessive internet activity can disrupt brain development (Nurbaiti & Djauhari, 2021). For this reason, efforts to prevent excessive internet use among Gen Z, many teenagers, need attention (Nurbaiti, 2022b).

Smartphones are used by 94% of Gen Z in South Jakarta. Among them, 22% have two or more smartphones. Besides computers, laptops, or tablets, smartphones are commonly used in conjunction with the Internet (Maulidina & Ridho, 2020). Smartphone use among teenagers also triggers smartphone addiction. This device makes it easier for users to immerse themselves in the pleasure of touch (Need for Touch), primarily as more and more social media can be accessed via smartphone (UNAIR News, 2020)

WhatsApp is loved by 98% of Gen Z. Their choices are YouTube (42%) and TikTok (28%) as the applications they like. WhatsApp is a unique feature when used in group communication. During the Covid-19 pandemic, WhatsApp groups became an alternative study space. In one group, they can share files or images in the WhatsApp group (Nurbaiti, 2022b; Putri et al., 2022).

Gen Z uses social media to communicate and seek entertainment. They like to share stories, photos, and videos via social media. Some of them even use social media to facilitate learning activities. YouTube and TikTok are very popular with Gen Z. Surveys in America note that 1 in 5 teenagers often access these platforms (Restu, 2023). This research also shows that Gen Z in South Jakarta likes YouTube and TikTok.

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TikTok is a popular choice for Gen Z. This social platform contains short, entertaining videos that accommodate their need for personal expression. Around 60% of TikTok users come from Gen Z (Muliadi, 2020). Gen Z can build positive things using TikTok as a medium for education and social activity (Firamadhina & Krisnani, 2021).

Gen Z likes to communicate and seek entertainment through social media, so they are the main target for online advertising. However, Gen Z is not a group that is easily tempted by advertisements because they are aware of what they need (Acoba, 2018; Utamanyu & Darmastuti, 2022).

Another fact about Gen Z is that some of them have a consumerist lifestyle. An example is the impulsive purchase of online products (Khairunnisa et al., 2023). Gen Z still needs direct social interaction, especially in the education process. Face-to-face communication and interaction can overcome shortcomings when studying online during the COVID-19 pandemic (Szymkowiak et al., 2021).

This research shows that Gen Z correctly obtains information about using the Internet from teachers (98%), parents and family members (98%), and peers (66%). Education on internet use is an essential process for all of us. Many parties can take part in protecting Generation Z so that they can use the Internet wisely. Steps can be taken, including families making rules for internet use at home, teachers socializing good internet usage in the school environment, and the government issuing policies supporting a wise internet environment (Kurniasanti et al., 2019).

Research by Zsila and Reyes (2023) has found that social media addiction can negatively impact the mental health of Generation Z individuals. Excessive social media use has been linked to depression, anxiety, loneliness, self-harm, and even suicidal thoughts. Research findings also suggest that passive use of social media, such as scrolling endlessly on TikTok or Instagram, may be associated with decreased well-being over time (Zsila & Reyes, 2023). Excessive social media use is also associated with anxiety, depression, low self-esteem, poor sleep, lack of motivation, and poor social skills (Pantic, 2014).

## **CONCLUSIONS**

Gen Z's Internet, smartphone, and social media use in South Jakarta were similar to the characteristics of other Gen Z currently. Their lives go hand in hand with using the Internet, smartphones, and social media. They usually spend 1-8 hours on social media using smartphones and Internet. They often enjoy using YouTube, TikTok, Instagram, WhatsApp, and Telegram. They post photos, videos, and stories on social media, but they rarely trust the information there. Gen Z obtains information about internet use from the people around them. To prevent the risks of excessive internet use, smartphones, and social media, educational efforts for Gen Z need to continue.

## **REFERENCES**

Acoba, G. (2018). *Gen Z: Generasi yang Sulit Dipahami*. Nielsen.Com. https://www.nielsen.com/id/insights/2018/gen-z-the-elusive-generation/

Aditama, T. Y. (2022). Dua Tahun Pandemi COVID-19. *Dua Tahun Pandemi COVID-19 EJKI*, *10*(1). https://doi.org/10.23886/ejki.10.157.1

Azizah, N. (2022). Survei APJII: Penetrasi Internet Indonesia 2022-2023. Tekno.Republika.Co.Id.

BBC. (2019). South Korean internet addiction camp: What is life like there? https://www.bbc.co.uk/newsround/48855182

BPS. (2020). Statistik Telekomunikasi Indonesia 2019. In Badan Pusat Statistik (Issue 3).

- Dimock, M. (2019). *Defining generations: Where Millennials end and Generation Z begins*. http://www.pewresearch.org/fact-tank/2019/01/17/where
- Feldmann, A., Gasser, O., Lichtblau, F., Pujol, E., Poese, I., Dietzel, C., Wagner, D., Wichtlhuber, M., Tapiador, J., Vallina-Rodriguez, N., Hohlfeld, O., & Smaragdakis, G. (2020). The Lockdown Effect: Implications of the COVID-19 Pandemic on Internet Traffic. *Proceedings of the ACM SIGCOMM Internet Measurement Conference, IMC*, 1–18. https://doi.org/10.1145/3419394.3423658
- Firamadhina, F. I. R., & Krisnani, H. (2021). Perilaku Generasi Z Terhadap Penggunaan Media Sosial TikToK: TikTok Sebagai Media Edukasi dan Aktivisme. *Share: Social Work Journal*, 10(2), 199. https://doi.org/10.24198/share.v10i2.31443
- Hadita, A. (2022). Perilaku Gen Z pada Masa pandemi Covid-19. *SOSIAL: Jurnal Penelitian Ilmu-Ilmu Sosial*, 23. http://sosial.unmermadiun.ac.id/index.php/sosial
- Jeong, Y. W., Han, Y. R., Kim, S. K., & Jeong, H. S. (2020). The frequency of impairments in everyday activities due to the overuse of the Internet, gaming, or smartphone, and its relationship to health-related quality of life in Korea. *BMC Public Health*, 20(1). https://doi.org/10.1186/s12889-020-08922-z
- Kemdikbud RI. (2020). Mendikbud Terbitkan SE tentang Pelaksanaan Pendidikan dalam Masa Darurat Covid-19. *Kemdikbud*, 1–3. https://www.kemdikbud.go.id/main/blog/2020/03/mendikbud-terbitkan-se-tentang-pelaksanaan-pendidikan-dalam-masa-darurat-covid19
- Kemkominfo RI. (2019). Survei Penggunaan Teknologi Informasi dan Komunikasi DKI Jakarta.
- Khairunnisa, I., Manajemen, J., Ekonomi dan Bisnis, F., Tanjungpura, U., Hadari Nawawi, J. H., Pontianak, K., & Barat, K. (2023). Generasi Z, Pemasaran Sosial Media, dan Perilaku Pembelian Impulsifnya pada Produk Fashion. *Management Business Innovation Center* 2023, 17–29.
- Kurniasanti, K. S., Assandi, P., Ismail, R. I., Nasrun, M. W. S., & Wiguna, T. (2019). Internet addiction: A new addiction? In *Medical Journal of Indonesia* (Vol. 28, Issue 1). https://doi.org/10.13181/mji.v28i1.2752
- Lee, K. E., Kim, S. H., Ha, T. Y., Yoo, Y. M., Han, J. J., Jung, J. H., & Jang, J. Y. (2016). Dependency on smartphone use and its association with anxiety in Korea. In *Public Health Reports* (Vol. 131, Issue 3, pp. 411–419). https://doi.org/10.1177/003335491613100307
- Maulidina, R., & Ridho, K. (2020). Internet dan Metamorfosa Generasi Digital: Analisa Perbandingan Perilaku Penyebarluasan Berita Hoax Lintas Generasi. *Jurnal Studi Jurnalistik*, 2(2), 133–145. https://doi.org/10.15408/jsj.v2i2.18920
- Muliadi, B. (2020). What The Rise of TikTok Says About Generation Z. Forbes.
- Nurbaiti. (2022a). *Buku Adiksi Internet* (M. Suhardi & R. P. Murtikusuma, Eds.; 1st ed.). Pusat Pengembangan Pendidikan dan Penelitian Indonesia (P4I).
- Nurbaiti. (2022b). Potret Aktivitas Belajar Mahasiswa Vokasi Kesehatan di Masa Pandemi Covid-19. 7(2). https://doi.org/10.30998/sap.v7i2.13596
- Nurbaiti, & Djauhari, H. (2021). *Otak Pembelajar: Menyelami Ilmu Neurosains untuk Memahami Bagaimana Otak Manusia Bekerja* (Setiadi Istanto, Ed.; Pertama). Media Edu Pustaka.
- Nurbaiti, N. (2022c). Buku Panduan Edukasi Cegah Adiksi Internet.
- Pantic, I. (2014). Online social networking and mental health. *Cyberpsychology, Behavior and Social Networking*, 17(10), 652–657. https://doi.org/10.1089/cyber.2014.0070

- Pratiwi, F. S. (2023a). *Survei: Gen Z lebih lama di Medsos dari Generasi Lain*. Dataindonesia.Id. https://dataindonesia.id/internet/detail/survei-gen-z-lebih-lama-main-medsos-dari-generasi-lain
- Pratiwi, F. S. (2023b). *Survei: Kesehatan Mental Gen Z lLebih Buruk dari Generasi Lain*. Dataindonesia.Id. https://dataindonesia.id/internet/detail/survei-gen-z-lebih-lama-main-medsos-dari-generasi-lain
- Putri, N. P. A., Kadek, N., Ayu, N. P., & Widnyana, I. W. (2022). Pemanfaatan Teknologi Informasi Yaitu Grup WhatsApp oleh Gen Z Dalam Pembelajaran Daring Pada Era Society 5.0. *Prosiding Pekan Ilmiah Pelajar*. https://e-journal.unmas.ac.id/index.php/pilar/article/view/4450
- Raslie, H., & Ting, S. H. (2021). Gen Y and Gen Z Communication Style. *Estudios de Economia Aplicada*, 39(1), 1–18. https://doi.org/10.25115/eea.v39i1.4268
- Restu, I. (2023). Gen Z Sudah Candu Akut, Tak Bisa Lepas Tik Tok-You Tube. Cnbcindonesia.Com. https://www.cnbcindonesia.com/tech/20231217181930-40-498040/gen-z-sudah-candu-akut-tak-bisa-lepas-tiktok-youtube
- Siste, K., Hanafi, E., Sen, L. T., Christian, H., Adrian, Siswidiani, L. P., Limawan, A. P., Murtani, B. J., & Suwartono, C. (2020). The Impact of Physical Distancing and Associated Factors Towards Internet Addiction Among Adults in Indonesia During COVID-19 Pandemic: A Nationwide Web-Based Study. Frontiers in Psychiatry, 11. https://doi.org/10.3389/fpsyt.2020.580977
- Siste, K., Hanafi, E., Sen, L. T., Kyana, S., & Lie, P. A. (2022). The Indonesian Internet Addiction Questionnaires. In *Handbook of Substance Misuse and Addictions*. https://doi.org/10.1007/978-3-030-67928-6\_170-1
- Szymkowiak, A., Melavic, B., Dabic, M., & Jeganathan, K. (2021). Information technology and Gen Z. *Technology in Society*, 65. https://www.sciencedirect.com/science/article/abs/pii/S0160791X21000403
- UNAIR News. (2020). *Intensitas Kecanduan Smartphone di Kalangan Remaja*. http://news.unair.ac.id/2020/07/12/intensitas-kecanduan-smartphone-di-kalangan-remaja/
- Utamanyu, R. A., & Darmastuti, R. (2022). Budaya Belanja Online Generasi Z dan Generasi Milenial dI Jawa Tengah (Studi Kasus Produk Kecantikan di Online Shop Beauty by ASAME). *Scriptura*, *12*(1), 58–71. https://doi.org/10.9744/scriptura.12.1.58-71
- Wood, S. (2023). *Generation Z as Consumers: Trends and Innovation*. NC State Institute, Institute for Emerging Issues.
- Zsila, Á., & Reyes, M. E. S. (2023). Pros & cons: impacts of social media on mental health. In *BMC Psychology* (Vol. 11, Issue 1). BioMed Central Ltd. https://doi.org/10.1186/s40359-023-01243-x