

Mobile Phone Addiction: Smartphone Usage among Digital Natives With Disabilities In Indonesia

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Abstract—The development of ICT has led to significant changes in human behavior. This technology is not only usable by able-bodied people, but a variety of inclusive innovations in information and communication tools also makes it accessible to those with physical or cognitive limitations. This research uses a descriptive qualitative approach to describe patterns of utilization by the disabled as well as reconsider the definition of “disability” in this era of advanced information and communication technology. The author examines the phenomenon of smartphone addiction and incorporates the theoretical concepts of alienation and repressive desublimation into its analysis of research findings. The results show that the digital natives who are blind interpret smartphones equipped with a wide range of inclusive applications as tools that can improve their quality of life through mediating self-capacity development. The use of ICT greatly facilitates blind people’s capacity for group communication and accessing a variety of information, which thereby increases their dependency toward smartphones. Therefore, although the enhancement of media socialization by the use of smartphones is a positive development, this phenomenon has also led to widespread technology addiction.

Keywords—*smartphone addiction, internet addiction, digital natives, disabilities*

I. INTRODUCTION

Technology will always develop in a more sophisticated direction, and in recent years, there has been rapid technological development in the processing, storing, sending, and receiving of information. A number of experts have described the emergence of a communication and information revolution leading to the current era of digitalization, which is characterized by the rapid development and growing sophistication of technology. The digital era has gradually entered various fields of human life that were originally analogous or manual. Digital systems provide increased convenience and efficiency in various activities such as accessing and sharing information, along with a level of quality and practicality far beyond that achieved by analog systems. Therefore, various industries and institutions are now competing in the race to switch to digital systems.

In the field of education, many state and private universities have now established a digital presence. Thick books are now very easy to transport through electronic book (e-book) facilities accessed by various devices. In the past, students were required to print thick reams of paper to turn in their final assignments (thesis, thesis or dissertation); however, these are now beginning to be produced in digital form, and it is sufficient to provide soft files of the final assignment to the library staff at each college. Likewise, the

process of sending letters has been greatly simplified in the digital era, as electronic mail is much more quickly and easily sent and received both nationally and internationally without the sender worrying that the letter will not reach its destination, as we can see the status of the shipment through our various devices connected to the internet network.

The era of digitalization has been fueled by the development of information and communication technology that make it so great. In the context of this study, information and communication technology comprise various advanced software and hardware tools that are used by humans in receiving, managing, storing, and sending information, such as smartphones, computers, satellites, televisions, and others. Rogers (1986: 2) defined communication technology as “the hardware equipment, organizational structures, and social values by which individuals collect, process, and exchange information with other individuals.” The Indonesian people have seen that computer and smartphone technology is able to quickly and accurately process a myriad of data into information, coupled with the incorporation of telecommunications network technology that reaches all regions, such that a lot of large amount of work can be completed more productively and efficiently with no limitations imposed by distance.

A myriad of conveniences are offered to the Indonesian population, which is increasingly using information and communication technology. According to Press Release No. 53/HM/KOMINFO/02/2018 on February 19, 2018, the number of internet users in 2017 increased compared to the previous year, when the Indonesian Internet Service Providers Association (APJII, 2016) reported that the total internet user population of the country comprised 132.7 million people, or 51.8 percent of the total population of Indonesia (n = 256.2 million). This figure makes the number of internet users in Indonesia at least the fourth largest in the world. According to APJII (2018), the 2017 Internet User Penetration and Behavior Survey revealed that the number of internet users had reached 143.26 million people, equivalent to 54.68 percent of the total population of Indonesia. This change represents an increase of 10.56 million people from the previous year's results.

The greatest internet penetration is among the age group of 13–18 years, which is 75.5 percent. Samuel A. Pangerapan, the director general of Information Application at the Communications and Information Ministry of Indonesia, estimated that the number of internet users will further increase, as internet facilities in Indonesia will be more evenly distributed upon the completion of construction of the Palapa Ring in the near future. APJII Secretary

General Henri Kasyfi Soemartono claimed that the recent increase occurred due to infrastructure development, which made it easier for people to access internet services (Siaran Pers, 2018). Russel (2017) estimated that the number of internet users in Southeast Asia would reach 480 million by 2020 and suggested that 45 percent of that total group would comprise people living in Indonesia.

Technology's users include people whose work becomes easier to do because of the help of a particular technology; however, for people with disabilities, technological innovation has made possible certain things or actions that were initially impossible for them to have or do at all. As Mary Pat Radabaugh stated in National Council on Disability, 1993 (cited in Deepti Samant Raja, 2016), "for most people, technology makes things easier, for people with disabilities, technology makes things possible."

The term "diffability" began to be widely used to replace the term disability in 1998. Literally, diffables are individuals with physical and / or cognitive or intellectual conditions that make their ability to carry out living activities different from those of most individuals. This condition is experienced by an individual from birth due to genetic anomalies, or they can arise during adulthood or growth and development due to causes such as illness, accidents, maltreatment, malnutrition, or other factors that cause permanent physical or mental impairment. Diffables are generally divided into five categories: 1) blind people, who have limitations in their vision; 2) quadriplegics, who have limitations on the use of their limbs; 3) deaf people, who have limitations in their sense of hearing; 4) mute individuals, who have limitations in speech; and 5) cognitively or intellectually disabled individuals who have limitations in their cognitive or intellectual functioning (Utami, 2015).

Data from WHO and the World Bank (2011) indicate that approximately 15 percent of the world's total population has special needs, and in many places, these individuals still experience many challenges to access the same rights as the general society, such as access to education, employment and inclusive public facilities, among others (Raja, 2016). Therefore, various countries around the world have begun to consider various solutions to help groups of people with special needs to develop their capacity through inclusive technology. Several efforts have been made by both private and government institutions to support the creation of inclusion technology in Indonesia, including Section 225 of the Telecommunications Law, which requires telecommunications equipment and service providers to produce goods and services that can be accessed by disabled groups.

This law aims to enable inclusion technology to open up a wide range of opportunities for people with disabilities to develop their own capacities. Diffable-friendly information and communication technology is becoming increasingly popular, as evidenced by the increasingly sophisticated software innovations designed to make it easier for diffables to utilize various kinds of information and communication technologies, such as smart voice.

Yaketunis Yogyakarta is one among a number of institutions engaged in social welfare on behalf of the visually diffabled. This school serves approximately 40 to 50 blind children and adolescents who come from various

regions in Indonesia. The students of Yaketunis Yogyakarta interact very closely with various technologies and the internet. Among its 23 (elementary school students and junior high school students), only two individuals do not possess a smartphone due to economic limitations. In addition, field observations confirmed that at least some students have access to and are able to use computers (Observation, August 2018).

In addition to the various auxiliary features that are increasingly available and easily accessible through the Google Play Store, Yaketunis Yogyakarta also provides Wi-Fi facilities. It is not uncommon to find that students play more often when they are out of school hours, when they engage in such activities as social media, accessing YouTube, and surfing on Google, among others. Research conducted by the Center for Communication Studies (PUSAKOM) UI in 2017 revealed that children and adolescents with disabilities, including those categorized as cognitively disabled and blind, engage more frequently and intensively in using social media through certain applications; for example, most people with disabilities use the tap system feature available on smartphones to produce sounds (e.g., Google TalkBack).

The study reported that many diffables view social media as a medium to link them to the 'real' world where they can move together with non-disabled children and adolescents. However, their high level of activity on social media carries risks to their safety due to the vulnerability of digital generation (digital natives) exposed to negative content. No one is able to resist and limit the spread of various internet products, and internet content can come from anywhere and anyone, and it is precisely the non-neutral character of technology that is so influential in determining the decision of diffables to choose certain technologies (machines) and media for interacting in the virtual world (Don Ihde cited in Supraja, 2014). For example, there are real risks such as violence and pornography, which can damage the brains of children, including those with special needs, by leading to personality changes, emotional disturbances, and moral damage. Moreover, social media also has latent effects that cause addiction, which in turn excludes children's common sense.

Administratively, a child is someone who is not yet 18 (eighteen) years old, including children who are still in the womb (Law of the Republic of Indonesia Number 23 of 2002 concerning Child Protection, Article 1 paragraph 1). Similarly, the World Health Organization (WHO) defines the age range of children is from the period in utero to the age of 19 years, and the Convention on the Rights of the Child (which was approved by the United Nations General Assembly on November 20, 1989 and ratified by Indonesia in 1990, Part 1 paragraph 1) defines children as individuals under the age of 18 (Ministry of Health, 2014).

The internet world can have both positive and negative impacts on users. Lack of digital literacy among information and communication technology users is one of the factors that make certain groups of users less wise in engaging in actions and behaviors in various media. Children are particularly susceptible to exposure to negative influences, as evidenced by data reported by BPS (2014) showing that many Indonesian children are using the internet inappropriately, including 80 million children who have accessed online pornography. Various institutions and media

have launched several cases relating to children's behavior in using the internet. For example, the Indonesian Child Protection Commission (KPAI) reported that there were approximately 1200 reports of cases of pornography and cyber-crime that mainly targeted in the period from 2014 to 2016 (Triastuti, 2017). The growth in such cases is in line with the increasing number of children using the internet (CNN Indonesia, 2017).

Digital natives, particularly those who are still children, have become the focus of attention by various stakeholders in national and international circles. This "micin generation" is spearheading internet penetration in Indonesia (APJII, 2018); digital natives were born and raised with the swift information and digital era, and they thirst for new things. This generation also has its own uniqueness when compared to previous generations, such as easier acceptance of technology and the gaining of digital literacy at a younger age.

The author assumes that digital literacy is becoming increasingly important among internet users today, not merely as a complementary set of knowledge, but rather as a shared priority in order to educate internet users, particularly children and including those with disabilities or not. For this reason, the author chose the digital natives of Generation Z as subjects in this study, with a specific focus on people with disabilities (blind) under the age 19 years. As cited by one of the Fisipol Professors at Gadjah Mada University (Partini, 2017), Tapscott (2009) categorized humans into four generations, namely:

1. The older generation belongs to the Baby Boomers born in 1946–1964. The Baby Boomers generation has not been in touch with communication and information technology.
2. Generation X: people born from 1965 to 1976. Generation X members have better technological skills; however, their mindset tends to be in line with that of the Baby Boomers.
3. Generation Y: people born from 1977 to 1994. Generation Y members are better able to utilize technology and online media; this generation is often referred to as the "digital generation."
4. Generation Z: people born after 1995. Generation Z members were born when information technology began developing rapidly and shifted to become a primary social need.

Generations Y and Z are referred to as the first "digital natives." According to Prensky (2001), a digital native is a member of a generation that grew up surrounded by computers, cellphones and other devices that are always connected online. The presence of digital natives shifts the prevailing cultural value system, ethics and social and professional order. The digital natives have formed their own lifestyle as a "look down generation", in which their social interactions become mediated engagements, as the physical reality is replaced by a virtual hyper-reality that becomes a reference for action (Partini, 2017). Digital natives can be clarified into several categories, namely:

- a. Generation Y members born from the 1980 to 1994;
- b. All members of Generation Z (born from 1995–2010);
- c. All members of the "Alpha" Generation born after 2010.

Through the current research, the author sought to engage in a deeper examination into the phenomenon of blind digital natives' intensive use of devices. Specifically, this study considered how blind individuals interpret the presence of smartphones in today's era of disruption and linked their use of these devices to the issue of media socialization and technology addiction. The writer wants to invite readers to interpret the words of children in this paper. This research examines the impact of technology and media socialization not only on children who live without physical or mental limitations, but also particularly focuses on those with special needs (blind people).

II. LITERATURE REVIEW

A. Smartphone Addiction

The concept of smartphone addiction forms the basis of theoretical framework used in this research as an analytical tool for examining the phenomenon of blind groups in using devices (smartphones) in Yogyakarta. Smartphone addiction is an addiction behavior in which the level of connectedness to such devices becomes a social problem characterized by feelings of withdrawal when not using the smartphone and difficulties in the performance of daily activities, or as a disruption of impulse control. In other words, smartphone addiction constitutes excessive cell phone use behavior that can be considered among other non-intoxicating impulsive control disorders (Bian & Leung, 2014; Karuniawan, 2013). According to Chiu, smartphone addiction has a lighter risk than alcoholism or drug addiction (NAFZA). Yuwanto (2013) asserted that smartphone usage rises to the level of addiction when a person cannot control their desires, which can cause a negative impact on the individual concerned (Karuniawan, 2013). The increasing numbers of technology and internet users in Indonesia has given rise to the need to engage in further research on smartphone addiction. Data shows that 60% of 132.7 million internet users in Indonesia use smartphones as their preferred information and communication technology (Indonesian Digital Landscape, 2018).

It is different from the result of study that have conducted in several cities in South Korea and China. For example, Lee, et al (2018) surveyed 490 male junior high school students in a study of the potential susceptibility of adolescents to smartphone addiction and related negative psychological impacts. The results indicated that adolescents identified as having symptoms of smartphone addiction exhibited more emotional behaviors and experienced greater problems with low confidence and poor communication with their parents compared with teenagers who showed more moderate patterns of smartphone usage.

Research conducted by Seong-Soo Cha & Bo-Kyung Seo (2018) mapped patterns of smartphone usage of junior high school students in 17 cities in South Korea with the aim of identifying characteristics of smartphone addiction and predicting which factors triggered junior high school children to be exposed to addiction symptoms. They found that 30.9% of the junior high school students were at risk of being exposed to smartphone addiction symptoms. Teens spend more time surfing the Internet, accessing social media, and playing games, and the latter two behaviors were identified as factors that can particularly influence teenagers to become affected by smartphone addiction symptoms.

Marcuse's concept of repressive desublimation is quite relevant as a supporting concept to a theory of smartphone addiction. Repressive desublimation occurs when humans lose the ability to imagine policy alternatives beyond those offered by the existing system. In this context, many technology users (users) are made increasingly helpless by the presence of technology; in other words, they have reached a state of technological dependency, which is caused by oppressive characteristics. Technologies are created to help facilitate human life; however, they have increasingly come to control human life due to the variety of conveniences offered therein (Hardiman in Supraja et al., 2014). Thus, humans are increasingly weakened and trapped in systems of technological control.

Technology is a commodity that is very beneficial for capitalists, and they will continue to make new technologies that can bring them benefits. Smartphone addiction is a side effect caused by social construction; technology creates a space of meaning that reduces humans' critical power to the social world. Therefore, smartphone addiction can be a factor that leads individuals to transform the real world into a virtual world where they think that they can do whatever they please (Pierce, 2006, p. 61).

Karl Marx's (1863) concept of alienation can also be used to explain smartphone addictions. The phenomenon of someone feeling alienated from the real world in which they live fits the basic definition of alienation, although Marx uses this concept in the context of economic production. Alienation is very relevant to the question of why some people use technology so intensively that they feel more free in cyberspace than in the real world (Pavón-cuéllar, 2018, p. 319). This alienated situation arises from social elements or media such as family, peers, school, environment, and mass media. Individuals who feel alienated from one or more of these social media will attempt to switch to other media in order to validate their existence. The ease of access to alternative social media provided by technologies such as smartphones will cause alienated individuals to become readily exposed to smartphone addiction.

III. METHODOLOGY

This study used descriptive qualitative methods by analyzing various references from existing sources. According to Yin, 2003 (cited in Wahyuni, 2012), qualitative research involves an in-depth understanding of human behavior and the reasons that govern behavior, and it examines the reasons underlying various aspects of behavior. A qualitative approach was used in this study to help describe and analyze the meaning of information and communication technology in the form of smartphones for blind people younger than 19 years of age. Interviews and observations were carried out in August to September 2018 with a total of 4 people with visual impairments, namely; (1) R (male, 16 years) a blind person, (2) A (male, 17 years old) a low vision person, (3) F (male, 17 years old) a blind person, (4) FS (female, 14 years old) a low vision person. A qualitative approach can provide a clear explanation of the phenomenon of blind people who are using smartphones intensively. To support the analysis, the author used various primary and secondary data sources, such as journals, scientific articles, magazines, newspapers, and official news that are relevant to the issues raised in this paper. After

collecting the data, the researcher then reduced it to be verified, classified and analyzed.

The data collecting techniques used in this study were interviews, observations and documentation. Interviews were conducted with blind people who used smartphones intensively, then the researchers observed the situations and circumstances experienced by members of the diffable group that were subjects in this study. The results of the interviews and observations were then analyzed together with the documentation that was obtained from various sources.

IV. FINDING

A. *The Utilization of Smartphones among Blind Groups*

Professor Tarek M Khalil (cited in Harsono, 2014), a management of technology expert and professor at Miami University in the United States (US), defined developed countries as those that are able to utilize technology to create prosperity for their nation, whereas underdeveloped countries are lagging behind in their ability to leverage technology into wealth. The main technology of this century is ICT technology (information and communication technology). Many countries have used ICT very effectively to transform themselves into developed nations in a relatively short period of time. One issue that needs to be emphasized is that it is not the technology that creates prosperity, but rather the appropriate and effective uses of technology. For this reason, it is important to know what factors are important in supporting the creation of a nation's prosperity. Professor Tarek M. Khalil identified six factors that could support the creation of a nation's prosperity, namely capital, public policy and environment, markets, natural resources, labor, and technology. An important lesson obtained from the above paragraph is that a country is advanced if it is able to utilize technology to compete globally. At the macro level, developed countries that are positioned as technology producers benefit from all value chains, ranging from hardware and software production, trade in ICT products, the provision of ICT services, the use of ICTs for governance, and the sale of content (information, music, films, games, animation, and various application software. As one of the many developing countries that are positioned as technology consumers, Indonesia should be able to utilize information and communication technology to increase productivity and efficiency, both in the realm of government and in various sectors (Harsono, 2017).

In the context of the above, the position of Indonesian society at the micro level is as technology consumers in a developing country. The state has an obligation to build equitable network infrastructure facilities to enable all citizens to access information. As mandated by Law number 8 of 2016 concerning people with disabilities, such individuals have the same rights and treatment as other Indonesian citizens. Article 24 letter B guarantees people with disabilities the right to express, communicate, and obtain information. Accordingly, the government has encouraged all relevant parties, including the Ministry of Communication and Information (Kemenkominfo) and the Ministry of Research Technology and Higher Education (Kemenristek Dikti), to collaborate to build accessibility for people with disabilities by creating an information society without differentiating between groups.

For this reason, the author aimed to explore the role of information and communication technology in the daily lives of members of the Yaketunis Blind Groups Yogyakarta group. Based on the researchers' direct observation in August 2018, it was clear that the individuals at Yaketunis Yogyakarta were aware that they are living in the digital era, and they have also realized that information and communication technology represents a means and infrastructure for developing their capacity. They can gather the latest information through their smartphone screens, albeit with the help of some blind helper features embedded in the technology.

Some people at Yaketunis Yogyakarta reported that they use smartphones largely with the help of the Google TalkBack feature, whereas others had also downloaded other diffable-friendly applications. During interviews, they demonstrated how they activated the TalkBack facility on the author's cellphone. For example, **R** (16 years) stated:

Untuk bisa menggunakan smartphone ini kami menggunakan fitur talk back yang ada di pengaturan smartphone masing-masing (Interview on September 14, 2018).

To be able to use this smartphone, we use the return talk feature on each smartphone (Interview on September 14, 2018).

As explained above, due to several features that make technology more accessible, blind people are increasingly free to find and absorb the latest information through their smartphones. As **A** (17 years) reported:

Biasanya saya suka mencari berita olahraga di google. Apalagi kalau ada pertandingan bola. Selain itu saya juga biasanya mendapatkan berita-berita di media sosial seperti facebook dan broadcast dari WhatsApp (Interview in August 2018).

Usually I like to look for sports news on Google. Especially if there is a soccer match. In addition, I also usually get news on social media such as Facebook and broadcasts from WhatsApp (Interview in August 2018).

A's statement was supported by **FS** (14 years), who stated that:

Melalui Google talk back kami bisa mendengarkan berbagai informasi dan pengetahuan baru dari google, facebook, Instagram, twitter dan lain-lain. tapi saya sudah tidak menggunakan twitter lagi, malah sekarang suka main Tik Tok. Talk Back akan membantu kami membaca setiap halaman yang kami sentuh (Interview on September 14, 2018).

Through Google talk back we can listen to a variety of new information and knowledge from Google, Facebook, Instagram, Twitter and others. but I don't use Twitter anymore, instead I now like to play Tok Tok. Talk Back will help us read every page we touch (Interview on September 14, 2018).

Friends with visual disabilities are able to overcome the normal limitations imposed by distance by using certain applications on their smartphones, such as Go-jek. During observations at Yaketunis in August 2018, the author witnessed a boy wearing a high school (SMA) uniform exiting an ojek vehicle he had ordered online. This is apparently not an unusual occurrence; during the author's

interviews with several other blind people, they confirmed that they usually ordered motorbikes online from the nearest bus stop to their school because the distance to the school was about two kilometers. According to **R** (16 years):

Jarak halte trans jogja yang terdekat dari sekolah itu sekitar dua kilometer, sehingga lumayan juga kalau saya tempuh dengan berjalan kaki. Sehingga, saya biasanya memesan ojek online untuk mempermudah gerak saya menuju ke sekolah (Interview on September 14, 2018).

The distance from the jogja trans stop closest to the school is about two kilometers, so it is quite good if I travel on foot. So, I usually order motorbikes online to make it easier for me to go to school (Interview on September 14, 2018).

R's behavior was not uncommon among the students. As reported by Gandapurnama on August 10, 2018 when he met his informan (**RK**, 21 years), a student who attended school at the same time was residing at the Bina Netra (PSBN) Wyta Guna Social Institution in Bandung, West Java. Based on their observations, Riza and other blind students also easily adapted to increasingly sophisticated technological devices. The blind also use smartphones to facilitate communication with others, as quoted by detik.com:

Ini nih, banyak group WhatsApp. Kalau mau tahu siapa yang kirim pesan tulisan, tinggal didengarin aja suaranya ke telinga (Interview on September 14, 2018).

Here, many WhatsApp groups. If you want to know who sent the message, just hear the voice to the ears (Interview on September 14, 2018).

Riza's statement was supported by **FS** (14 years):

Bisa menelpon orang tua melalui aplikasi WhatsApp, atau mengirim pesan kepada teman-teman melalui group WhatsApp. Sama halnya seperti mengirim dan menerima pesan text melalui media sosial lainnya (Interview on August 2018).

Can call parents through the WhatsApp application, or send messages to friends through the WhatsApp group. It's the same as sending and receiving text messages through other social media (Interview on August 2018).

Based on the results of the observations and interviews reported above, blind people in Indonesia enjoy positive benefits from various disability-friendly application facilities. However, it is important to realize that the diffable realize the potential negative impacts associated with their use of such technology. During their observations at the Yaketunis Blind Groups Yogyakarta, researchers found that students ubiquitously carried their smartphones, and they seemed to find it to be "cool" to play with the devices during some activities. Some students acknowledged that smartphones can also lead them to neglect obligations such as schoolwork or resting according to the hours established by the institution, among others. For example, **F** (14 years) and **FS** (14 years) agreed with **A** (17 years), who reported that:

Biasanya ketika bangun tidur saya membuka smartphone untuk mengetahui jam untuk sholat subuh. Kalau untuk berhenti bermain smartphone biasanya tergantung sudah mengantuk atau belum. Tetapi biasanya tidak lebih dari jam 00.00 WIB, kecuali besoknya libur. Biasanya kalau libur bisa lebih dari jam segitu. Lumayan untuk sekedar

mendengarkan youtube, mendengar berita terkini, mengerjakan tugas sekolah dengan berselancar di google, WhatsApp-an (bermedia sosial) dan lain-lainnya. Kadang saya merasa tidak bisa mengatur waktu kalau sudah memegang smartphone, membuka facebook dan Youtube. ini dulu saya rasakan ketika baru memiliki smartphone. tapi kemudian saya memutuskan untuk menyelesaikan kewajiban saya dulu, seperti mengerjakan tugas, baru setelah itu bermain smartphone sepuasnya (Interview on September 14, 2018).

Usually when I wake up I open a smartphone to find out the hours for morning prayer. If you stop playing a smartphone, it usually depends on being sleepy or not. But usually no more than 00.00 WIB, except for the next day off. Usually if the holiday can be more than that much hours. Not bad for just listening to youtube, hearing the latest news, doing school assignments by surfing on Google, WhatsApp (social media) and others. Sometimes I feel I can't manage the time when I have a smartphone, open Facebook and Youtube. I felt this first when I had a smartphone. but then I decided to complete my obligations first, like working on a task, then after playing smartphone as much as possible (Interview on September 14, 2018).

Students at Yaketunis Blind Groups Yogyakarta admitted that they felt affected by symptoms of smartphone addiction. Social media engagement, listening to YouTube and surfing the internet were all identified as activities that made it difficult for them to balance their time between using smartphones and participating in other activities. In the context of Karl Marx's theory, individuals can become alienated by their surroundings when they cannot control their smartphone usage. However, in the opinion of the writer, students at Yaketunis Blind Groups Yogyakarta realize that they are exposed to smartphone addiction, and they try their best to use smartphones to better their lives.

B. The Role of Media Socialization on Blind Groups in Utilizing Smartphones

1) Family: the First Social Institution

The family is the first socialization institution encountered by each individual. Through family, people obtain various kinds of information in the form of values that are considered good in the community, and this value socialization prepares an individual to be part of their society (Hutchby & O'Reilly, 2010, p. 49). As with other individuals, blind children are prepared by their families with the socialization of values that are considered good in the society so that they can be accepted in it.

As with others, the role of the family is very important to blind people because the family has various functions that are very important to shape a person's character. The family serves various affective, supporting and socialization functions that are critical in helping a person to become part of their society (Niska, 1999, p. 138). When one of the functions of the family falters or is absent, this will cause various problems in the participation of the individual in the society.

Blind people's families provide the affection they need in their own ways, thus creating a strong bond that provides them with a support system. Recognition given by family through affection and support toward blindness is very

important. The unfair treatment of a blind person by their own family can have very negative consequences.

Affection and support given from families to blind members is an important element in the socialization process that prepares an individual to be accepted in the society. The general public will accept individuals who have personalities that are not destructive or do not deviate from the good values established in society.

Many blind people assume that they do not need special attention from society related to their situation, as they can fulfill various information needs using a smartphone. In this case, the performance of the family in carrying out its functions is reduced (Derks et al., 2015, p. 1045). The decline in the performance of the family's role in carrying out its functions can greatly affect a person's personality. In this context, smartphone addiction among blind individuals can be a time bomb that will ultimately lead to destruction.

C. The Power of Social Construction among Peer Friends

As social actors, each individual interacts with others in order to fulfill various needs. Other individuals or groups with whom a person interacts can come from various sources. Peers are one of the socialization media outside the family in which blind people can interact and actualize themselves (Cekaite & Björk-Willen, 2013, p. 174188). Throughout the day, the blind students who were subjects in this research spent a lot of their time with peers. The time allocation between smartphone usage and spending time with friends cannot be said to differ significantly because sometimes the inclusive school program they attended provided them with many opportunities to interact with friends in person. However, they always used smartphones when they were alone.

Peers become a realm in which blind people can freely interact without seeing social status or class, which provides an area of support for them to actualize themselves and create their identities. The process of socialization in the peer group runs horizontally, such that each individual can convey whatever is on their minds, be it in the form of ideas or criticism (Beier, 2014, p. 73). In the environment of peers, the presence of a smartphone can both bring people closer and create social distance. People, including those who are blind, can access almost any kind of information using a smartphone, which can create distance from their peers.

Individuals tend to tailor their behaviors to the situation around them. If individuals make friends with people who like to walk and play, then it is likely that they will also spend their time walking and playing (Beier, 2014, p. 73). As with the blind, various existing groups of friends have different hobbies and pleasures. The phenomenon of smartphone addiction is also a part of their lives because blind people's dependence on smartphones to access information encourages them to search for anything with their devices. Due to the breadth of internet access, even when spending time with their friends, they usually spend a great deal of time listening to videos from YouTube or playing mobile games.

Construction built in the area of peers is closely attached to the blind because of the intensity and quality of the time allocated to such relationships. However, the author observed that even when they were gathered together, smartphones still attracted their attention more than chatting with their

friends. A variety of features make blind people susceptible to the phenomenon of smartphone addiction hindering their friendships. It is undeniable that smartphones help blind people to meet their daily needs; however, the side effects of smartphone addiction cannot be underestimated. In this case, the friendships of the blind students who were subjects of this research helped bring their smartphone usage to the level of addictive behavior because the construction built through these devices formed the glue of their interactions. When they spent time together, they tended to play with their smartphones, and when they separated they tended to use their devices to converse with friends using the chat application, play games, and listen to YouTube, among other activities.

D. The Power of Social Construction among Peer Friends

Schools are educational institutions that carry out educational functions for each individual. Education is important and must be owned by everyone. Education can help blind people find their identity, gain knowledge, and achieve goals. One of the functions of the school is to guide the careers of its students (Austin, 2002, p. 94).

Schools have a strict reward and punishment system to educate every student. Every existing rule aims to improve the quality of each student by enhancing both soft- and hard skills. One important value that is socialized in schools is the importance of applying discipline. Socializing the importance of discipline for blind students in inclusive schools is a long process that must be supported by various other parties such as family and peers. A student who is tardy will be given the appropriate punishment. However, school also shows that despite high levels of discipline, students can earn achievements and receive prizes.

The use of smartphones in schools continues to grow over time. In the early period of mobile technology development, several schools in Indonesia forbade students to carry and use cellphones. However, as technology has progressed more rapidly, some schools have begun to involve the use of smartphones in the teaching and learning process with the aim of reducing the negative effects of smartphone addiction among students. Schools hope to direct students to learn how to use smartphones for more useful activities than playing games or watching pornography (Cha & Seo, 2018).

While in school, blind students are preoccupied with various tasks given by the teacher, which are very diverse and require hard work and time from the student. However, the use of smartphones to complete these tasks further supports the phenomenon of smartphone addiction among blind students, this is the school's efforts to control the use of smartphones among their students (Bengtson et al., 2013, p. 143).

E. The Power of Social Construction among Peer Friends

As a vehicle for socialization, mass media has very significant power to shape public opinion. Various kinds of information can be obtained through mass media with hardly any space or time limit. Information from other parts of the world and different time zones can be accessed easily. With a smartphone that provides voice control features to help blind people, information from the mass media can be accessed by simply moving fingers or using voice controls.

The power of mass media and the ease with which blind people can access it make it very effective in shaping character. Various social constructions in mass media will shape their mindsets. As a force in social construction, mass media has a very strong influence on a teenager's sense of self. In this context, mass media can be very useful in shaping the personality as well as destroying of the adolescent (Beaudoin, 2014, p. 544).

YouTube was one of the most popular mass media among the blind students who were subjects of this research. The students can use this platform to obtain the latest information from news that can be heard via YouTube videos, and they also enjoy listening to comedy, puppet shows, and other forms entertainment that they can access by listening. The new knowledge they gain from the mass media is unconsciously absorbed and manifested in their daily behavior.

The amount of information that can be accessed through the mass media makes it a very effective socialization force for blind people's personal growth; however, it also strengthens the phenomenon of smartphone addiction. They reported frequently listening to YouTube videos when they are alone, and it was not uncommon for them remain awake late into the night. Ultimately, the socialization provided by mass media among these students was the emergence of a feeling of dependence on smartphones with various kinds of features that are reserved. The convenience provided by smartphones strongly supports blind people in accessing information from mass media.

V. CONCLUSION

The increasingly ubiquitous nature of information and communication technology must be accepted by all users in all parts of the world, including digital natives and persons with disabilities in Indonesia. ICT innovations are increasingly inclusive, thus enabling diffable groups such as the blind students at Yaketunis Yogyakarta to do things that were previously impossible for them to do, such as listen to a variety of up-to-date information, travel from one place to another with little effort, or communicate with other ICT users with the help of diffable group helper applications. Many diffable people therefore interpret ICT as a bridge that can connect them to better lives and help them to develop their capacities.

However, ICTs, which were originally created to help facilitate people's activities, have come to emerge as an oppressive force that controls the decisions and actions of its users. This phenomenon was experienced by those blind students at Yaketunis Yogyakarta who experienced smartphone addiction, who have become dependent on smartphones to do things they could not achieve without the help of this technology. They need ICTs for various activities, such as knowing the time, learning the latest information, traveling from one place to another, and developing their own capacity, among others.

The phenomenon of smartphone addiction among blind people is caused by social construction built through various socialization media. The dependence of blind people on the use of smartphones is reinforced by existing social controls exerted by family, friends, schools, and mass media. The rapid development of smartphone technology has greatly facilitated blind people in accessing various forms of

information, which has increased their technological dependence. In this manner, the existing socialization media can serve as a control such that smartphone usage leads to positive outcomes; however, it also results in increased technological dependency.

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