

**ATINER's Conference Paper Proceedings Series**

MED2023-0299

Athens, 29 September 2023

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of Technology: The Elderly People Example in Turkey  
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Athens, 29 September 2023

ISSN: 2529-167X

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**ABSTRACT**

*Digital inclusion includes activities necessary to ensure fair access and use of information and communication technologies for participation in social and economic life. Three basic requirements are required for this; computer, internet access and, the ability to use internet tools. The main aim of government-based digital inclusion programs should be to increase the education of individuals and the level of "computer literacy" of society. During the COVID-19 pandemic especially individuals over the age of 65 have been forced to lead a restrictive life in Turkey. With the lack of socialization, elderly people have developed a much faster connection with digital technologies. However, with aging, a slowdown is observed in the information processing speed. They need to make more cognitive efforts to learn new information which created the concept of digital inequality based on age. The aim of this study is to determine the digital behavior levels of elderly people having different socio-economic levels in Turkey, based on the uses and gratifications theory. As a qualitative method, the reports published by TÜİK (Turkish Statistical Institute) and TİHEK (Human Rights and Equality Institution of Turkey) will be evaluated with a descriptive content analysis according to the uses and gratifications theory.*

**Keywords:** *Digital inclusion, digital technologies, COVID-19 pandemics, technology acceptance model, elderly people.*

## **Introduction**

Whereas we know quite a lot about what is lacking and for whom—which has become especially apparent during the current COVID-19 pandemic— there is less focus on what works to alleviate these inequalities and divides in a variety of cultural contexts. The aim of this thematic issue is to bring together scholarship on digital inclusion initiatives and research from various countries and in the context of numerous aspects, including different types of initiatives as well as different types of target audiences for these initiatives.

Digital divide and inequality research has a long history of focusing on who is using the internet and who is not (Norris, 2001; Rogers, 2001), differences in how people use the internet (Hargittai and Hinnant, 2008; van Deursen and van Dijk, 2014), who displays what kinds of internet skills (Hargittai and Dobransky, 2017), and how these differences in access, usage, and skills affect people from various different backgrounds (Gui and Büchi, 2019). In comparison to these publications that are available on digital inequalities and the issues they create, there is relatively little work on what kinds of motivations are trying to prevent these digital inequalities and inequities, who they work with, and whether they have the intended impact.

This study is trying to bridge this gap in the literature by collating studies and researches that are focusing on digital inclusion rates across various different populations, especially across elderly people in Turkey.

## **Literature Review**

### *Internet Usage*

Users of all ages use the Internet for many different purposes. Sharing information, communication, listening to music, watching films, reading newspapers and magazines, playing games, applying hospital procedures and bank transactions in the shortest way are some of them (Bak and Altıntop, 2019). The internet environment, which is a part of the daily lives of people of all ages, in other words, the virtual world contains many elements of interpersonal communication. Elements of interpersonal communication such as meeting new people, chatting, sharing ideas, and becoming a member of various groups seem to have moved to the internet (Şahin and Yıldırım, 2019).

### *Internet Usage in Turkey*

According to the results of the household information technology usage survey; it was observed that 94.1% of households had access to the Internet from home in 2022. This rate was 92.0 per cent last year. Internet usage rate among individuals aged 16-74 was 82.6% in 2021 and 85.0% in 2022. Internet usage rate of males was 89.1% and 80.9% of females in 2022.

**Table 1. Proportion of Contact with Public Authorities 2020-2021**

**Cinsiyete göre son 12 ay içinde kamu kurum/kuruluşlarıyla iletişimde İnterneti kullanma oranı ve yürütülen faaliyetler, 2020, 2021**  
 Proportion of contact or interact with public authorities or public services over the Internet in the last 12 months by sex, 2020, 2021

	Toplam Total		Erkek Male		Kadın Female	
	2020	2021	###	2021	###	2021
<b>E-devlet hizmeti kullanımı</b> Usage of e-government services						
<b>Özel amaçla kamu kurum/kuruluşlarıyla iletişimde İnterneti kullananların oranı</b> Contact/interact with public authorities/public services over the Internet for private purposes	51,5	58,9	62,1	67,6	41,1	50,2
<b>Yürüttükleri faaliyetler - Activities</b>						
<b>Kamu kuruluşlarına ait web sitelerinden bilgi edinme</b> Obtaining information from websites or apps	48,7	55,8	59,4	64,4	38,1	47,2
<b>Resmî formları indirme/ yazdırma</b> Downloading/printing official forms	24,5	27,7	30,6	33,7	18,5	21,8
<b>Çevrimiçi form doldurma</b> Submitting completed forms online	28,6	32,3	33,4	37,0	23,7	27,6

Source: TÜİK, [https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-\(BT\)-Kullanim-Arastirmasi-2021-37437](https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-(BT)-Kullanim-Arastirmasi-2021-37437) (Access date: 27.03.2022)

Table 1 shows the rates of public services that require the most internet use in Turkey in 2020 and 2021, when the pandemic made its impact felt.

When the changes between years are analyzed, it is seen that regular internet users increase every year. Therefore, the fact that people can easily access the Internet at home, on the street, at work, at school, in the bazaar, in other words everywhere, causes them to postpone many things and spend time on the Internet.

Social media channels used for online tools and websites, which are based on the Internet and Web 2.0, which are based on the creation and sharing of user-based content without time and space restrictions, which offer the opportunity to reach multiple audiences from multiple points, which enable users to share information and interests, are also used effectively.

Social media covers a wide range of media such as blogs (BlogSpot, WordPress), wikis (Wikipedia), social bookmarking websites (Delicious, Stumble Upon), business and social networks (Facebook, LinkedIn), microblogs (Twitter), photo and video sharing sites (Flickr, Instagram, YouTube), live broadcasting (Twitch, Periscope), gaming sites (World of Warcraft), etc. (Şeker and Taşan, 2021).

Sharing is a fundamental element of communication in social media and new media according to Mitchell (2014). It can be said that social media feeds people's inner desires such as sharing and being part of society (Shirky, 2010). In addition, social media provides opportunities such as cooperation, socialization, online learning, collective knowledge production, and getting away from the stress of daily life (Bryce, 2001).

New media not only affects children and young people but also other users and the number of individuals it affects is increasing day by day. Since social media is an environment where users share ideas and information on a wide range of topics from commerce to health, education to entertainment, it derives its power from its users. Therefore, social media is of great importance for both users and businesses.

*Digital Inclusion and Digital Inequalities*

While digital technologies continue to be renewed in many needs by promising convenience to their users, they can also become an increasing force of age, ethnic identity, gender, class and national/regional inequalities. As Uçkan (2003) quotes, "Technology is neutral. But democratic use of technology that is accessible to all, based on fair sharing and free circulation of information, can be a fruitful opportunity for economic and human development." Digital inclusion is a concept related to the democratic use of technology in Uçkan's quote. Digital inclusion includes activities necessary to ensure fair access to and use of ICTs for participation in social and economic life, including education, social services, health, social and community participation.

It consists of providing all citizens with the opportunity to access information and communication technologies (ICTs) on an equal basis. In other words, digital inclusion represents the democratization of technology. While digital inclusion is an idealized and aspirational concept, digital inequality is a concept that has become problematic and defines interpersonal gaps. In its most general definition, the concept of digital inequality/segregation refers to inequalities resulting from unequal access to computer and internet technologies (ICT), unequal use of these technologies for different reasons, and differentiation of the advantages derived from the use of these technologies.

Digital inequalities not only maintain and reinforce existing traditional inequalities but also produce new inequalities (Özsoy, 2020). Digital inequality is a concept that has been debated since the years when technology and Internet-based developments started to become a dominant factor in accessing information, services and resources. In the early days, the concept of digital inequality, which pointed out the problems in everyone's access to computers and the Internet, has started to gain a meaning that covers the different access barriers of all countries and individuals and aims to solve them with the increase in technological innovations. In this context, it will be necessary to divide the research on digital inequality into first, second and third level digital inequality research because limiting digital inequality to device ownership/internet ownership is a reductionist form of expression.

First level digital inequality research has focused on the problem of access, positioning those with internet access on the advantageous side of the divide. This level is a reflection of technological determinist approaches, the belief that access to technology will automatically bring with it the benefits to be derived from technology has led to the problem being reduced to the level of those who have access and those who do not. However, digital inequality is a complex and dynamic phenomenon (van Dijk and Hacker, 2003). Although the problem of access is relatively solved, access gaps are observed between developed and undeveloped countries and even between geographical regions within the same country.

According to the data of the 2018 report titled "Measuring the Information Society" prepared by ITU; four out of every five people in developed countries are online, this number shows that internet penetration in developed countries has

reached the saturation level. According to the same report, 45 per cent of individuals in developing countries use the internet, while in the world's least developed country, four out of five people do not yet use the internet (ITU, 2018). Although the access gap is almost completely solved for developed countries and partially solved for developing countries, considering the distribution of access to the world population, the impact of technological access, one of the dimensions of global digital inequality (Driori, 2010), on global inequality is still visible today. The second level of digital inequality research focuses on much more than access, and Van Dijk draws a framework for the second level of digital inequality.

Van Dijk (2005, 2013) states that the four main barriers affecting digital inequality are motivation, access, skills and usage. Lack of access to computers and the internet means that material access cannot be provided. The lack of user-friendliness of the tools or the low level of education of the individual prevents the provision of skills access. Usage access, on the other hand, is related to both the opportunities to use computers and the Internet and online practices that differ according to demographic characteristics (van Dijk and Hacker, 2003: 1; van Dijk, 2005: 20-21). Even in cases where physical access to new communication technologies is provided and one has the necessary motivation and skills to use them, access to use may not be achieved. Not preferring to use them, working in jobs where these technologies are not needed, or various factors that shorten the time spent with these technologies may limit usage access. In addition, the level of education may also differentiate the websites visited (van Dijk and Hacker, 2003: 1; van Dijk, 2005: 20-21, 107, 111; van Dijk, 2012: 202). In addition, the continuity of use, skills, knowledge, literacy, and breadth of use are factors that affect the degree of the digital divide (Tsatsou, 2016: 404) or the efficiency of use. Therefore, the question of who has access is as important as the rate of access to understand the distribution of digital inequality. Studies reveal that socio-demographic inequalities are the determinants of the access gap. It is known that urban dwellers are on the advantageous side of access compared to rural dwellers, men compared to women, young people compared to the elderly, and those with higher levels of education and income compared to those with lower levels.

Van Dijk, who has been working on digital inequality for twenty-five years, draws a policy perspective for the solution of problems in developing countries in his paper evaluating "Closing Digital and Social Gaps in the Covid-19 Process". Since social inequality is increasing in many parts of the world, digital inequality must be solved (Van Dijk, 2021: 6).

van Dijk attaches particular importance to motivational access. According to him (2012: 197), the process of using new technologies starts with motivation. The motivation to have a computer and internet connection is the antecedent of physical access. As mentioned earlier, first level digital divide studies have focused on the access dimension of these barriers, while second level studies have focused on skills and usage barriers. While skills affect whether individuals use the internet even if they have access to it and how they use it if they do, differences in the ways of using the internet affect the level of possible opportunities to be obtained from internet use (Özsoy, 2020).

According to Van Dijk (2002); one of the main inequalities is the inequality in access to Internet skills and the advantages provided by the network. In other words, skills, motivations and usage are defined as the main causes of the gap. According to Van Dijk, all of these four basic barriers are indispensable; motivation, access and skills are necessary but not sufficient for actual and active use. Duration and frequency of use, diversity and number of applications used, broadband and narrowband usage, active and creative use including content production are the determinants of usage (van Dijk, 2013). Many sociodemographic factors play a role behind these 4 barriers, and it has been found that sociodemographic factors are important not only for access but also for usage.

The sociodemographic variable that affects the usage gap the most is education, followed by age and gender (van Deursen and van Dijk, 2015). Unlike the first and second level research that deals with internet access, usage and skill levels, third level research investigates the social consequences of ICT use, digital stratification (Ragnedda, 2017), and the tangible benefits derived from this use (Helsper et al., 2015).

One of the groups frequently mentioned in the digital inequality literature is the elderly. They have found a place in the literature both in terms of device ownership and physical skills and motivation, and since we are moving towards a world where the population is getting older, it is necessary and important to examine the concept of digital inequality in the context of the elderly.

#### *Aging and Elderly People*

While the distance taken by inanimate assets over time is defined as 'ageing' or 'wear and tear', the term 'ageing' is preferred for living assets. Because although the aging process of living organisms over time is a process involving wear and tear, repair and reconstruction mechanisms are in operation. For this reason, "ageing" is the distance that every living being takes over time and ends with death (Beğer and Yavuzer, 2012).

Aging is inevitable and is a process of physiological, psychological, cellular and molecular changes that reduce most of the body's functions (Amarya et al., 2018). Briefly, ageing can be defined as a progressive and widespread impairment in functions that leads to a decrease in adaptive response to stress and an increased risk of age-related diseases (Karan & Tufan, 2010). To summarize, we can say that ageing is a complex, dynamic, variable and multifactorial process (Göktürk et al. 2021) caused by genetic and environmental factors.

The causes of ageing have been of interest to mankind since ancient times. Today, research on this subject continues unabated and it is known that more than 300 theories have been produced about the causes of aging. Theories of aging are divided into three classes in the literature: biological, sociological and psychological theories. Biological theories of aging show how aging is constructed in the individual dimension, social theories of aging show how aging is positioned in society in a broad context, and psychological theories of aging show the changing emotional states and behaviors in old age (Görgülü, 2022). Although almost every ageing model focuses on a single mechanism related to ageing, it

does not seem possible to explain ageing with a single mechanism since it is a very complex event (Karan and Tufan, 2010). Aging criteria vary according to societies, industrialization and what individuals do in life and social life, as well as sectors with the digital age (Tuncer, 2020).

Old age is defined as the state of being old and showing the effects of increased age. It is the process of change and transformation in the time period from the end of the reproductive period to death after reaching adulthood in terms of biological functions for living things (Beğer and Yavuzer, 2012). Old age is a process that includes the period after adulthood and before death. It refers to the continuation of the development in the later periods of life and the transformation it brings about in individuals. Like other periods of life, it is inevitable and inclusive for all individuals. It is a process that individuals experience sooner or later, with or without problems, depending on the characteristics carried by heredity, nutrition, environmental conditions and cultural norms (as cited in Şeker and Taşan, 2021). According to the World Health Organization (WHO), the age group chronologically 65 years and older is defined as the elderly. Individuals in this group are divided into three categories: young-old if they are between 65-74 years old, middle-old if they are between 75-84 years old, and old-old if they are 85 years old or older (WHO, 2007).

Although old age is considered as a natural process that causes a decline in the physiological and psycho-social activities of the individual, it can be defined as being functionally dependent in the fulfilment of daily life activities. With a broader definition, old age is also defined as the decrease in the ability to adapt to changing life conditions and the potential to balance between internal and external factors and as a result, the probability of death increases (as cited in Meriç, 2022).

However, old age is a dynamic phenomenon, changing from time to time, from culture to culture and from person to person. For this reason, the views expressed about old age are also relative and inevitably subject to change (Kaygusuz, 2008). In countries where life expectancy is high, the likelihood of a 60-year-old individual starting to experience old age seems to be much less compared to their peers in countries where life expectancy is low. For this reason, while 65 years of age is taken as a basis in statistics for European countries, it can be considered normal that 60 years of age is accepted as the threshold in countries with low life expectancy (Gül, 2018, p. 111). In Turkey, the threshold is 65 years of age (Yılmaz, 2018). The Law No. 2022 "Law on the Granting of Monthly Pension to Needy, Infirm and Destitute Turkish Citizens who have reached the age of 65" can be given as an example. Law No. 5510 on "Social Security and General Health Insurance Law" stipulates that the minimum retirement age, which is currently 58 for women and 60 for men, will gradually increase and will be 65 for both women and men by 2048 (Sinav, 2020).

Along with the changes in the social and social structure of the population, there is a significant increase in the proportion of the elderly population in parallel with the development of universal policies such as development and development and changes in the field of medicine (Meriç, 2022). The 5% increase in the world's elderly population every year is an indication that the elderly are the fastest growing group among all populations (WHO, 2020).



It is also known that the elderly population is increasing rapidly in Turkey, which has a higher rate of young population compared to other European countries. In Turkey, the ratio of the population aged 65 and over to the total population has increased by approximately 22% in the last 5 years and according to 2019 data, it is 9.1%; it is predicted that this ratio will exceed 10% in 2023, 16.3% in 2040 and 20% in 2050. By 2050, it is estimated that the number of people in need of daily health care or care will be approximately 6.6 million and Turkey will surpass developed European countries such as Germany, England and Italy, which have an older population structure, in the next 25 years (TÜİK, 2020). At the same time, according to the projections of the World Health Organization between 1970 and 2025, the expected proportion of elderly people is determined as 624 million with 22.3%; it is stated that approximately 1.2 million people will be aged 60 years and over in 2025 and 80% of the elderly population, which will reach 2 million in 2050, will live in developing countries (Beğer and Yavuzer, 2012).

### *Digital Inequalities and Ageing*

For the elderly who have spatial dependencies due to health problems caused by old age and have difficulty in leaving home, it can be thought that the use of the Internet offers some opportunities in the context of expressing themselves and communicating with the social environment. It can be suggested that the use of the internet provides advantages such as staying in daily life, maintaining communication with the social environment, meeting with friends or relatives who do not have face-to-face communication, accessing news sources, and obtaining information (Şahin and Yıldırım, 2019).

**Table 2.** *Proportion of Elderly People Using the Internet in Turkey*

Ages	2016	2018	2020	2021
65-74	8.8%	17.0%	27.1%	32.5%

Source: "Turkey Elderly Rights Report", Human Rights and Equality Institution of Turkey, <https://www.tihk.gov.tr/kategori/pages/pdf/zff5ok.pdf>. p.20.

It is observed that the rate of internet usage by elderly individuals in Turkey has increased in recent years. Accordingly, the rate of internet use among individuals in the 65-74 age group increased from 8.8 per cent in 2016 to 17.0 per cent in 2018 and increased to 32.5% in 2021 (Table 2).

Internet and social media environments, which appear as an alternative occupation for middle-aged and elderly individuals who are socially isolated and do not have many options in finding an occupation for themselves, can play an important role in both socializing these individuals and leading a more enjoyable and perhaps better quality daily life (Tekedere and Arpacı, 2016). In addition to using the internet and digital technologies as a means of communicating with friends and relatives, elderly individuals are also used for support purposes to facilitate their daily lives by elderly individuals who have various difficulties due to their physical and mental age (Kandemir, 2020). Thus, Şentürk (2017) mentioned that the elderly use social media due to the motivations of the elderly to

be included in a group, to be able to interact with their friends at any time regardless of physical disabilities and to communicate with their old friends, not to remain insensitive to social developments, to keep up with the socialization innovations brought by modern times, and to obtain news and information.

As stated by Cangöz (2009), a slowdown is observed in the information processing speed of individuals with aging. Thus, the process of learning new information is prolonged and individuals need to make more cognitive effort to learn new information. This framework defines the relationship between age group and digital technology use as digital natives, digital immigrants, digital hybrids. He categorized the factors that will affect inequality within generations for digital migrants, in other words, those who meet technology late, as kidnapers, forced adopters and enthusiasts (as cited in Tuncer, 2020). Unlike digital natives who have met these technologies at birth and learnt to use these new technologies throughout their development process, digital migrants need to participate in the learning process in order to use these technologies. As a result of this information, it is possible to say that older individuals with slow information processing speeds will be slow in using new technologies (Kandemir, 2020).

The elderly population is often neglected, fueled by prejudices that older individuals are distant from new communication technologies (as cited in Uysal, 2020). Even though the rate of technology adoption of the elderly population in Turkey and in the world, is low compared to other population groups, the rate of use of digital technology by the elderly population is increasing day by day compared to previous years (Uysal, 2020). It is widely accepted that the elderly in developed countries are more prone to the use of smartphones and other new media technologies than the elderly in other countries (Zain, 2020). Anderson and Perrin (2017) found that approximately 42% of individuals aged 65 and over use smartphones in the USA, a country recognized as a leader in the adoption of technology worldwide (as cited in Zain, 2020). In Turkey, the first level digital inequalities faced by the elderly with regard to access problems stem from the fact that elderly individuals mostly use old model phones given second-hand by their children or grandchildren and that these devices lack some functions (Tuncer, 2020).

Another important factor in the use of technology by elderly individuals is the technology acceptance processes of elderly individuals. Adapting to, learning or applying technological developments gives meaning to the active ageing processes by ensuring the integration of elderly individuals into society. Individuals who are born in the same years and integrate with the period they live in social and cultural terms show behaviors belonging to the period they live in. For this reason, it can be said that the acceptance and application of digital technologies by the elderly vary compared to young people (as cited in Bayram and Arıcı, 2021).

According to the results of the study conducted by Özsungur (2018) on the effects of technology acceptance and use on successful aging in the elderly, the majority of elderly individuals seek the help of someone who they think has a good command of the subject to solve the problems they encounter during mobile internet use. Only 22.1% of the participants stated that they tried to solve the problem themselves. According to Özsungur (2018), this situation can be considered

as an indication that elderly individuals need support regarding mobile internet use and care about receiving support.

According to the findings of a study conducted by Becerikli (2013) titled "The Use of New Communication Technologies in Terms of Intergenerational Communication: According to the findings of the study titled "An Evaluation on the Older Age Group", today, the older age group spends more time at home due to reasons such as ailments related to old age and loss of physical strength, but they can use many communication tools such as mobile phones, desktop computers and laptops for long periods of time and frequently during the time they spend at home. The older age group can use these tools alone and form an independent user profile.

### **Methodology/Materials and Methods**

The uses and gratifications approach we have chosen in our study is appropriate because we are talking about an active audience that both produces and consumes content in web 2.0 technology, while at the same time providing us with a study model and enabling us to shape our research questions. Within the framework of the uses and gratifications approach, old age, ageing and the relationship of the elderly with the internet / social media have been the focus of the study.

The aim of the study is to determine which motivations elderly individuals have for using social media based on the uses and gratifications approach, to determine their usage behaviors and to reveal the satisfaction obtained as a result of these behaviors.

In line with this purpose, the following questions were sought to be answered:

- a) Which social media applications do elderly individuals use the most?
- b) Through which technological devices do elderly individuals connect to social media applications?
- c) Do elderly individuals experience any difficulties when using technological devices and social media applications? What are these difficulties if they do?
- d) What needs do elderly individuals use social media applications and the internet to meet? e) What satisfactions do elderly individuals achieve with the use of social media and the internet?

### **Results**

The increase in Internet usage rate (Table 2) among the elderly in 2021 is considered closely related to the COVID-19 pandemic period. Due to measures such as staying at home during the COVID-19 period, the most important factor that keeps the elderly connected with life is the internet and the virtual environment. However, this process has also brought digital inequalities for the

elderly who cannot access the internet and thus brought violations of rights to the fore.

### *Daily Life Practices in Pandemic*

Individuals over the age of 65, who were among the risky and restricted groups for most of the pandemic period, felt left behind from their social lives regardless of parameters such as education level, and their lives turned into a routine. With the decrease in their ties with their physical social lives during the pandemic, an increase in the duration of internet use was observed, and the internet has become an unchangeable life routine of people. On the other hand, the rate of internet use varies greatly between elderly men and women. While the proportion of elderly men using the internet was 40.0% in 2021, the proportion of elderly women was 25.9% (TÜİK, 2022). The pandemic is a period of digital inequalities in general. However, it is understood that these inequalities are more severe for older women.

These findings reveal that it is fundamental to plan sensitive to gender equality based efforts to protect and strengthen the rights of the elderly, in our country.

World and Turkey Perspective in Digital Health Report published by EY underlines “age tech” which improve tracking, connectivity life of elderly people in order to increase their life quality.

This shows that the pandemic process has increased the digital skills of older individuals with device ownership and that people have adopted digital and made it a permanent part of their lives. For example, an elderly person who is a middle school graduate, housewife, described the situation as follows (EY, 2023):

*"For the last 2 years, almost every day has been the same routine, before the pandemic, we used to get together with relatives and friends frequently. Now I spend my free time watching TV, solving word puzzles on the phone and telephoning with my children."*

Another participant, a faculty member, said:

*"We normally meet with my university friends every month, but we have not been able to do so for 2 years, we will have a meeting in May. At the moment, we communicate every day through WhatsApp groups or our 67 graduates group on Facebook."*

In the light of these findings, we can state that they carried out most of their social activities in their daily lives through social media and the internet during the pandemic period.

### *Device Ownership*

The selected participants in referred reports have a smartphone with internet access and some of them also have various technological devices such as tablets/ computers that they use for work or pleasure. In addition, only 3 out of 10 participants (TIHEK, 2022) do not have an internet connection at home, but these people also maintain their social media and internet presence through the internet on their phones. When asked why they do not have a connection, an elderly participant who is a housewife, stated that she does not need an extra bill and that the internet on her phone is enough for her. In terms of device ownership, the participants are in an advantageous position from the perspective of first level digital inequality studies. However, as stated in the institutional framework, device or internet access ownership is not the only obstacle to digital inequality, there are many criteria such as motivation, skills, etc. as listed by Van Dijk.

### *Reasons for Internet Use of Elderly People*

It would be an incomplete understanding to say that the use of the Internet and digital technologies is only a tool that facilitates communication with friends and relatives for elderly individuals. These technologies also offer various opportunities to facilitate the daily lives of individuals with physical and mental age-related losses. For example, in the study conducted by Becerikli (2013), it is seen that the elderly frequently uses digital technologies for banking services. In this research study, the participants (EY, 2023; TIHEK, 2022) stated that they benefit from many functions such as shopping, health monitoring and banking as well as entertainment and communication. There are many motivations for people to use the internet such as entertainment, following news, being aware of the environment, messaging, sharing, obtaining information, shopping, and tracking finances with digital banking, but the most prominent motivations for use are research on their own or their environment's health, communicating with loved ones or viewing their posts, and reading news, that is, obtaining information. Here are some examples:

*"I use YouTube and search engine the most. I broke my arm last year, I looked at treatment methods and exercises for it to heal immediately. I also follow the TV series I missed on YouTube and sometimes I look for recipes."*

*"I used it for shopping during the pandemic. I follow the agenda, sometimes I look at new books. I use it for payments. I also use it for communication with my children and family."*

### *Reasons for Elderly People' Use of Social Media*

Individuals over the age of 65, who stayed away from their children, grandchildren and social circle, especially during the pandemic, have started to use social media for communication, being aware of the life of their surroundings, having fun and spending time. Hence, the tendency to make video calls, to

communicate with family/friend/relative groups on a daily basis via WhatsApp, and to build and maintain their sociality through social media at the end of the day has become dominant. Below are the social media usage habits and motivations of some of the participants (TIHEK, 2022). Here are some examples:

*"We have Robert 67 Alumni pages on Instagram, Facebook and WhatsApp, where we see each other's good and bad days, organize get-togethers and keep in touch."*

*"I have video calls with my grandchildren and my daughter on WhatsApp. I also look at their photos on Instagram. If I like a photo, I always leave a comment under it."*

#### *Applications Used by Elderly People*

Looking at the social media they use, it was observed that all of them use WhatsApp actively and frequently every day, as well as Facebook and Instagram, while there is no participant with a Twitter account. In addition, the use of Google Search Engine and YouTube is also active at the point of research and obtaining information.

#### *Elderly People' Insights on Internet and Social Media*

Although the elderly had different opinions on this issue, the majority of them stated that social media and the internet were very useful in actions such as payment, shopping, obtaining information, communication and socializing, especially during the pandemic period. In fact, most participants (TIHEK, 2022) gave information about the important place of the internet and social media in their lives with descriptions such as "it is a great thing, a wonderful thing". At the same time, it was also found that the internet and social media sometimes frightened them and they were afraid of its size. One of the things that affect digital inequality is people's perspective on technology. Reasons such as lack of interest in new technologies and fear of computers may prevent motivational access (van Dijk and Hacker, 2003).

#### *The Difficulties Elderly People Face in the Use of Internet/Social Media and Methods of Solving Them*

The ageing of the population brings with it an increase in chronic diseases. Long-term and regular follow-up of elderly individuals is important in the management of chronic diseases. This long-term care need is associated with health expenditures and requires a change in health service provision (EY, 2023). At the same time, combating chronic diseases that develop with the help of digital health applications; morbidity (disease) and mortality (death) rates are reduced, and by ensuring that the treatment and follow-up of chronic diseases are managed with lower costs; it also makes a significant contribution to the economy is expected (Ministry of Health, 2018). Hence the technology literacy rate of elderly people in a population is very important.

As mentioned above, some of the elderly prefer to use only the areas and applications they know because they are afraid of making a wrong transaction, being defrauded, or making a wrong post on the internet. In addition, physical problems such as slow hand-eye coordination, inability to see or difficulty in seeing small areas on the screen due to the enlargement of the number in the eye are also something that may cause them to have difficulty in some applications/operations and to hesitate and give up. We can observe the skill barrier, one of the four barriers listed by Van Dijk, in these findings. In addition to skill, the fact that people associate a digital process with fear also brings up the motivation barrier. Here are some examples:

*I do all my work by myself, but I cannot shop on the phone, the screen is too small and my eyesight is deteriorating, so I usually do these transactions on the computer."*

*"Digital banking has been a great convenience, but the incidents of fraud scare me, so I only use it when my daughters come. I would like to use it myself if a more secure area was offered or if I learnt it."*

*Sometimes, because of our age, we cannot solve some things and we make mistakes. Some features can be very gradual and confusing. When this happens, I ask for help from my neighbour's daughter. I have difficulty entering some sites. I can't get the result I want and I give up. The sites want to move me to different places through advertisements and advertisements and then I can't go back to the site. I also forget my passwords, so I have to reset them.*

## **Discussion**

It has been observed that while people generally find social media and the internet positive and useful, they are also very afraid of performing a wrong action, so they sometimes get help and sometimes give up using the relevant application. In terms of digital inequality, although people are in advantageous positions at the point of access, there are some physical barriers to use, lack of motivation and skill problems arising from the fear of doing something wrong while using the application. Although people have devices and the internet, they do not have the knowledge, skills and motivation to use the internet to meet all their needs. As a result, considering the effects of the pandemic, people over the age of 65 in Turkey have started to use social media and the internet more frequently and with more diverse motivations.

## **Conclusions**

The pandemic, which has affected the whole world, has presented an extra restrictive and limiting lifestyle, especially for people of certain ages. Individuals over 65 years of age in Turkey have been able to go out on the streets in limited hours and days for months with the pandemic, have not used public transport for a

long time, in short, have been isolated from their social life. At this point, many functions brought by the internet and social media have become more involved in the lives of elderly individuals, and their technological devices have become a kind of friend that makes it easier for them to spend the day and meet their needs. The selected sample, being referred in reports, used the internet and social media in the light of motivations such as entertainment, spending time, communication, receiving news, obtaining information, sharing and socializing. The most frequently used applications are WhatsApp, where they communicate, video chat and correspond with their family and loved ones, Google, where they find answers to their questions, and Facebook and Instagram, where they meet their need for socializing and sharing.

With the increase in the average age and health systems offering people a longer life expectancy, the population over the age of 65 is expected to increase rapidly in the world and in Turkey, which leads us to conclude that applications and social media areas that exist on the internet should be made user-friendly for people. In the coming years, over the age 65 group will become both a good internet user and a good consumer group for those who produce technology. In recent years, important calls for actions have been made to promote the enjoyment of the rights of all human beings for elderly people (UN High Commissioner for Human Rights, 2021).

### **Acknowledgments**

This work has been supported by the Scientific Research Projects Commission of Galatasaray University under grant number SBA-2023-1174.

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