### New Development of the Elderly Digital Divide in the Post-Epidemic Era

#### Hao Sun

Anhui University of Finance and Economics, Bengbu, 233030, China.

#### **Abstract**

New crown normalized epidemic prevention and control has come to an end, social pace has been towards the outbreak era, review the outbreak, due to the need for epidemic prevention and control measures, many old people are willing to learn mobile phone code, online booking nucleic acid detection, but the current government, society, and even the elderly relatives of the elderly new demand lack of attention, make the elderly digital divide has a new development trend. In the context of the epidemic era, this paper discusses the new development of the digital divide among the elderly with the combination of observation method and questionnaire. As the needs of this group continue to expand, reasonable attention has taken various measures to address the group, and finally concluded that the digital divide among older people is narrowing.

#### **Keywords**

Post-epidemic era; Digital divide; Older people.

#### 1. Research background

With the end of regular epidemic prevention and control, Chinese society has turned into a post-epidemic era. Looking back at the early stage of the epidemic, the digital divide of the elderly is shown as follows: on the one hand, the epidemic pushed the pause button of social life and the acceleration button of social digitization. When digitalization and online survival becomes the norm of people's lives, the differences between different groups in terms of the Internet are amplified, and the differences between these social classes are particularly prominent, especially in the elderly population. With the aging of Chinese society, the post-epidemic era, regional social development and social class differentiation, and profound social problems interwoven, the digital divide has taken on new development and manifestations in the post-pandemic era.

With the advent of the digital era, digital businesses is increasingly popular, e-commerce and e-government are becoming more and more perfect, and part of offline education, tourism, shopping and other businesses can be completed online. This leads to many elderly people experience life in the digital society at the same time, there are difficulties in the use of digital information, resulting in the formation of information isolation network of the elderly society, the elderly can not successfully enter the digital society, which forms a sense of panic and powerlessness, digital technology, digital production, lifestyle, virtual communication, new forms of consumption and other new forms. So many elderly people do not know how to cross the digital divide.

In digital survival[2]Nicholas Negroponte argues that the real divide will be between generations. In his book The Generation Gap, Mead argues that the generation gap, as a social phenomenon, is ubiquitous in intergenerational relations, suggesting that the problem of generation gap is pervasive. At the advent of the new media era, with the Internet communication as the background, the existing generation gap is gradually deepened by the digital divide due to the inequality between the two generations.

The Digital Divide study was first published in 1999 by the National Telecommunication Commission and the Information Administration of the United States. It was titled Falling Behind on the Internet: Defining the Digital divide, a new development of knowledge gap theory in the Internet era is the digital divide. Now the digital divide has a new development trend in the elderly population under the background of the post-epidemic situation, which is reflected in the large enterprises for the elderly to launch large-character software, aiming at facilitating the use of mobile phones by the elderly. At the same time, there are many elderly people willing to make changes. Including letting their loved ones try to teach them how to use smart phones. This article aims to explore the trend of the digital divide among the elderly in the context of the pandemic and how to further narrow the digital divide in the future.

#### 2. Current situation of digital divide for the elderly

According to the 51st Statistical Report on China's Internet Development[3], by December 2022, the number of Internet users in China had reached 1.067 billion, an increase of 3.4% year-onyear, and the Internet penetration rate reached 75.6%. There were 759 million netizens in urban areas and 308 million in rural areas, with the proportion of netizens aged 50 or above rising to 30.8 percent. However there are still hundred of millions of elderly people in China who has not yet taken up the express train of digitization. Internet users from different regions and of different ages form the vast user base, and different forms of digital consumption, such as traffic and capital, continue to unleash vitality, promoting the healthy development of the digital economy. The phenomenon of the digital divide among the elderly is especially obvious in the post-COVID-19 era. Liang Chunxiao and Ge Jingjing wrote in an article entitled Promoting the Aging Transition through Digitalization[4]. Compared with digitalization in other countries, China is still in the initial stage of development and faces many difficulties, such as insufficient investment, especially the lack of traditional investment, and most elderly care institutions are financially strapped or even reluctant, said the article. The lack of systematic research on the needs of the elderly has resulted in the lack of development level of platforms, systems, services and products, and the lack of sound platforms and other social service systems. In the large platform industry, large enterprises lack a wide range of access or services, resulting in the situation of pension institutions fighting alone and making repeated investments, which further increases the service cost and leads to the shortage of pension professionals. As a result, the overall information literacy of the pension industry is lacking, which greatly restricts the digitization process of the pension field.

Penglan in Health code and Digital Survival of the Elderly[5] notes that health codes, which means passes, plagued large numbers of older people during the pandemic. A variety of factors, such as lack of smartphones, mobile payments, and the ability to operate, may prevent them from travelling and limit their mobility, and this is especially true in the post-pandemic era. The problems brought by these situations not only bother the elderly, but also serve as a metaphor: the health and freedom of today's people are not only reflected in the real state, but also reflected in the state of the digital space. In the digital space, healthy survival, the elderly initiative travel is very little, often hindered by various factors. Specific performance in the following aspects:

#### 2.1. Elderly people's willingness to use smart phones declines

The older generation never touched the mobile phone when they were young, and when the mobile phone became popular, they shrugged off this new thing because of their age, resulting in their skills and interests in using the smart phone gradually disappearing, even if they learned the basic operation of the mobile phone, but only limited to making phone calls, receiving text messages, etc. Unable to make further use of mobile phone to surf the Internet, use online payment, scan code and other functions. Although the number of the elderly is

increasing with the development of society, they are less willing to accept new knowledge due to their age, and they also believe that they have been well off due to relatively satisfied psychological expectations, thus causing a digital divide between the elderly and society.

#### 2.2. 2. Digital survival brings greater challenges to the elderly group

With the development and maturity of the Internet society, the digital divide between generations is gradually evolving into a digital inter-generational conflict. With the development of digital technology, the digital divide is aggravating the conflict between parents and children, but digital learning also brings unique value to the elderly group. Studies have shown that digital technology has psychological value in promoting active aging, including maintaining social contact, obtaining information, reducing anxiety, enhancing information participation, enhancing self-esteem, slowing cognitive decline, etc., which can bring positive mental state and social participation experience to the elderly group. Restricted by the ability of the elderly and the information infrastructure and other factors, they reject digital products. which leads to their social isolation. Although older people agree that technology provides security for their lives and gives them autonomy, their acceptance of this technology is generally not high. In the post-COVID-19 era, with the rapid development of the Internet, the quality of life and happiness index of the elderly can be fully guaranteed, which requires the joint efforts of all aspects of society to enhance the digital survival ability of the elderly, and accelerate the integration of the elderly with digital living space, Internet + and other social environments.

#### 2.3. The digital divide between urban and rural elderly groups has widened

The digital divide between the elderly cannot be generalized. There are different digital divides between urban and rural areas. The seventh census report shows that by 2020, China's urban population will exceed 900 million and its rural population will exceed 500 million. The gap between urban and rural development indirectly affects the thinking of the elderly, most of the elderly in the cities get many new things through various channels, they show a clear willingness to accept, while in the countryside, the current urban and rural structure of China is gradually improving, but the aging population is equally serious, the elderly group is constantly expanding, so the digital divide between the elderly must be addressed. The aging population will become the foundation for a country's long-term development which brings challenges and opportunities for economic and social development. In the post-COVID-19 era, the speed of Internet development has accelerated our dependence on digital survival. It is precisely because of this that digital survival of the elderly requires us to pay special attention to their basic living conditions and further meet their spiritual and cultural needs. This requires the joint efforts of the government, society, Internet platforms and family members to enable the elderly to visit and penetrate into the digital Internet space.

#### 2.4. Digital products lack suitable transformation for aging

Digital products lack the friendly transformation of the elderly, the rapid development of digital, so that some institutions and enterprises in the design intention and products and services to pay more attention to the young and middle-aged group, in order to seek market benefits, but in the product research and development less consideration of the elderly users' habits, blind pursuit of new changes, did not take into account the needs of the elderly users. Digital intelligent products are obviously lack of aging transformation. When the elderly encounter digital difficulties, they are resistant to learning new features and reluctant to learn. Digital feedback is difficult to achieve significant results through one or two training or teaching. It is a gradual process that requires some people to have enough patience and time to teach them. Therefore, long-term stable digital feedback is not easy to achieve

Intergenerational digital feedback is a major channel to provide digital support to the elderly, which has a positive effect on the senses. Knowledge usefulness and perceived ease of use has indirect effects on digital learning of the elderly. In addition to the needs of daily life, the psychological needs of the elderly also affect their cognition of digital products. The greater the need of belonging, the greater the value of the elderly, the stronger the perception of the usefulness and ease of use of digital products, the stronger the intention of use. These factors have a guiding and reference role in promoting the digital learning of the elderly in society.

### 3. Factors influencing the digital divide of the aged in the post-epidemic era

In today's rapidly developing society, especially in the post-COVID-19 era, there is a trend to further exacerbate the digital divide for the elderly, mainly in the following aspects:

## 3.1. Relevant measures in the post-COVID-19 era do not take into account the needs of the elderly, resulting in a digital divide in the post-COVID-19 era

In the post-COVID-19 era, the whole society is in urgent need of contactless interaction. Therefore, digital life will be an obvious development trend in the future social development. At present, the whole society has completed the initial digital transformation. To the hospital online registration, catering online queue, online shopping, online teaching, etc. Represented by digital operation, has become the main media of People's Daily interaction. Since the outbreak of COVID-19, news reports such as elderly people do not use mobile phone registration for medical treatment and elderly people are not allow to take the subway without a health code have repeatedly appeared. Therefore, affected by various factors, some elderly people who do not know how to access the Internet have become digital refugees excluded from the digital space of the Internet, thus forming the phenomenon of digital divide in the post-COVID-19 era.

# 3.2. Education level is an important factor in the formation of the digital divide among the elderly

The elderly lack of digital thinking and literacy ability, and the digital divide requires the establishment of a certain digital thinking ability and digital literacy ability. The elderly are relatively weak in digital thinking, digital literacy network, digital public services, and commercial services. Because most of the elderly do not have good digital thinking and literacy skills, they are often vulnerable. In addition, the non-scale allocation of urban and rural digital empowerment intensifies the digital divide among the elderly in rural areas. Smart phones mainly use text language, accompanied by pictures, videos, etc. Literacy are the most important basis for good use of smart phones, if the reading and writing ability is not strong, it is difficult to use freely. The more educated the elderly are, the more receptive they are to the use of smart phones. Because literacy, reading, reading skills and knowledge level is high, they are more likely to learn to operate the complex functions of smart phones. However, there are only a few old people with cultural literacy in the society, and the majority of elderly people lack the media literacy ability. In the post-epidemic era, the gap in literacy rate is more significant. People with higher education can communicate with their loved ones through video recording. However, in some areas, such as in rural areas, many elderly people can only sit at home alone.

#### 3.3. Family and intergenerational feeding exacerbates the dilemma

For most of the post-80s and post-90s young people, the Internet has been with them almost since the day they were born. At the beginning of their study, knowledge training is relatively high. Most of them are skilled in using computers since childhood, and they believe from the bottom of their hearts that Internet belongs to young people. This misconception greatly

weakens the elderly's use of digital products. Society should not give up on the retired elderly. In the digital world, the needs of the elderly should also be taken into account. At present, almost no young people volunteer to help the elderly use digital equipment, even the elderly will take the initiative to ask, most young people in solving this problem is also very impatient, in fact, whether in terms of economy and time, family youth should help the elderly to deal with digital problems, the elderly when they are young to make contributions to society, should be reciprocated, this kind of affection level, its effect should be more than any kind of social service, is more effective, more successful.

#### 3.4. Lack of willingness to integrate figures

There are three reasons for this: first, the elderly lack confidence and self-efficacy in using media technology on the whole; Second, the lack of network security, technology panic phenomenon is obvious; Secondly, the imbalance of media cognition and the existence of wrong cognition, the reasons above isolate the elderly from new media. Social learning theory was proposed by American psychologist Albert Bandura in 1977. It proposes that cognition, behavior and environmental factors, as well as their interactions, all has important effects on people's behavior. The self-efficacy theory occupies an important position in the social learning theory. It is the self-judgment and subjective prediction made by individuals about whether they can complete an activity within a certain range. The efforts of individuals are closely related to their expectations of self-efficacy.

Different from the young generation born in the period of rapid development of new media, the silver group was born in the era of traditional media. They are used to reading books, newspapers, listening to radio, watching TV and so on. While the younger generation can skillfully operate and use new media and be familiar with various advertising programs of mobile applications, the silver generation is still in the initial stage of learning to use new media, and they are full of strangeness to new media technology. The elderly group's impaired eyesight, sluggish movement and slow thinking result in a lack of energy when using new media. In addition, in the era of new media, media platforms blindly chase economic interests, ignore humanistic care, insert a large number of small advertisements into the platform to click on the logo, and the application page is designed to be relatively complex and small in scale. All these make the elderly feel powerless when using new media, which greatly reduces their confidence in the application of new media technology and their low sense of self-efficacy, resulting in a lack of willingness to digital integration.

At the beginning of this century, when the Internet was just booming, it caused a series of social contradictions. In the era of the lack of supervision of the platform, teenagers addicted to online games has become a common phenomenon. The elderly group will blame their grandchildren's poor academic performance on the Internet, thus generalizing, demonizing the Internet and ignoring the benefits of the Internet for life. The evaluation and perception of the Internet of the elderly group is mainly negative. Many contemporary young people are obsessed with online games, and their disregard for study and labor and other social phenomena drives them to refuse to accept new media. In recent years, online fraud has emerged in an endless stream, and the elderly have become one of the targets of online scammers. Some criminals on the Internet to obtain small gifts, cash back money, health care products sales and other inducements to the elderly to fill in the key identity information of individuals, defrauding them to use wechat pay, leading to the disclosure of bank card passwords and other serious consequences. Therefore, it is necessary to enhance the psychological resilience and self-efficacy of the elderly in the application of technology, and families, communities and governments should support the elderly to get rid of panic from the aspect of psychological construction.

# 4. Efforts made by all sectors of society to bridge the digital divide among the elderly

Recently, Zhejiang Science and Technology Association led the Yinling across the Digital Divide science popularization special action, in 2021, Zhejiang Provincial Party Committee Senior Cadre Bureau, provincial Education Department, provincial health Department, provincial civilization Office and other departments, launched a special action plan, province, city, county level linkage, plan to provide more than 2 million times of smart phone science training for the elderly in the province within three years. Huang Chenxi in his paper The Status quo, Challenges and Countermeasures of the Digital Divide for the elderly[6]. Due to a lack of digital skills, the proportion of the elderly in search engines, app installation and wechat usage is significantly lower than that of the young, he said. Among them, the proportion of the elderly using search engines is 4.4 percent, less than one sixth of non-elderly Internet users, the number of mobile apps used by each elderly is 37, accounting for only 44 percent of young Internet users aged 20 to 29, and the proportion of the elderly using wechat is 26.2 percent, less than one third of non-elderly users. At present, in order to facilitate the use of smart phones by the elderly and narrow the digital divide among the elderly, various approaches have been adopted, including the following aspects.

#### 4.1. State support and government guarantee implementation

The Ministry of Industry and Information Technology, when answering a reporter's question on how to narrow the digital divide for the elderly at a regular State Council policy briefing held by The State Council Information Office, proposed that the measures would be implemented in the following aspects:

First, we will vigorously promote the construction of information and communication infrastructure. China has built the world's largest 5g network, which enables all citizens, including the elderly, to access the Internet anytime and anywhere, greatly facilitating people's lives.

Second, we will actively promote the construction of barrier-free information. China has revised the information accessibility of 32,000 government websites and instructed the release of some information accessibility standards. In September 2021, the Ministry of Industry and Information Technology and the Disabled Persons' Federation released a guideline to promote Information Accessibility, which focuses on removing information barriers for the elderly and disabled in terms of information consumption costs, terminal equipment, services and applications.

Third, the ministry will work with relevant departments to develop a catalogue of smart health care products and services for the elderly, including more than 100 care products and services, to effectively improve the supply of smart health care products and services for the elderly.

### 4.2. The rise of universities for the elderly provides a learning platform for them

According to the Report on Education for the Elderly in China[7] (2019-2020) released on October 19, 2021, more than 10 million students are enrolled in universities for the elderly in China. One reason why universities for senior citizens have gained widespread popularity and attention is their cheap tuition fees. With each course costing about 150-300 yuan per semester, senior citizens can easily afford it. On the other hand, it is difficult for senior universities to operate solely on tuition fees, so government and corporate funding is essential. Universities for senior citizens offer a range of courses, including a special course on smartphones for senior citizens. Yang Xiaoqin teaches senior citizens how to live stream in a class on Dec 27. In the classroom, more than 20 senior citizens skillfully operated the mobile phone interface under

her guidance, although they are old, they are more eager to learn than our young people. Yang Xiaoqin said that after a semester of study, these uncles and aunts can skillfully use the most basic functions such as cameras, snatching red envelopes, ordering takeout food and online shopping.

### 4.3. The major software launched for the elderly group of large-character version

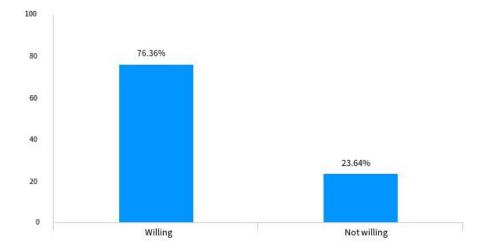
To make it easier for the elderly to use smartphones, several software development departments have launched large-font versions for the elderly, and Baidu, Meituan, UC browser and others have also launched versions suitable for the elderly. At the same time, to reduce the elderly's travel difficulties during the epidemic, it is convenient to access health codes, such as ID numbers. As early as March this year, some places took into account the fact that people who do not know how to use a mobile phone or do not own a smartphone applied for a health code, and opened community and village committee stamps for these people, which can act as an effective health certificate. Now the others check function has been added to the health code. In theory, besides family members, staff in public places can also help with the check on behalf of the elderly to solve the pain points of travel. From a practical point of view, elderly people also account for a considerable number of passenger traffic in public places. The travel time of the elderly is relatively fixed, with strong regularity. Public places can search for the access ways of elderly people according to the previous flow data, so as to provide targeted services for the elderly and improve service efficiency during the period of relatively dense flow of people.

#### 5. The intention and difficulties of the family to feed the elderly

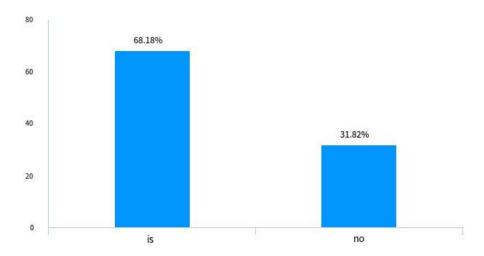
The improvement of China's international status and growing strength requires every Chinese people to keep up with the pace of China's progress. Under the double pressure of COVID-19 and aging, the elderly population has shown a willingness to change, which is closely related to the relatives of the elderly. Therefore, a questionnaire survey will be designed for the relatives of the elderly to explore and analyze. The intention of relatives willing to help narrow the digital divide of the elderly and the obstacles and solutions in which aspects, this questionnaire is filled out by relatives of the elderly in person, the data is real and effective, and the survey results are limited to this analysis, the results and analysis are as follows:

The willingness of relatives to teach the elderly to use smart phones

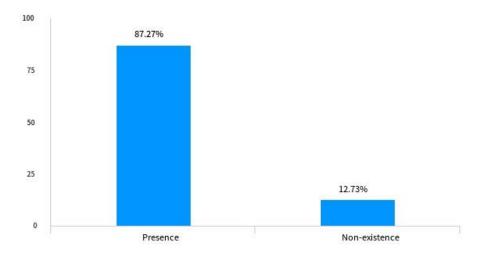
Question 1: Are you willing to help the elderly learn how to use smart phones?



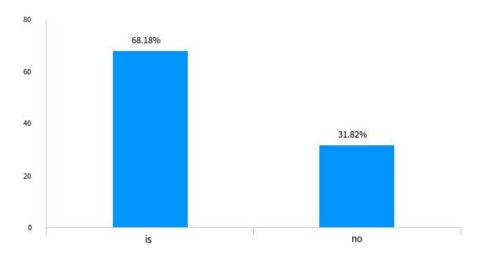
Question 2: Do you think there are obstacles for the elderly to use smart phones in the context of the epidemic? [multiple choice]



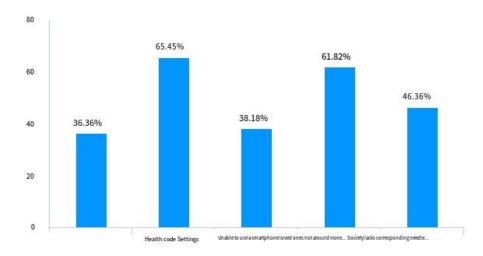
Question 3 Is there a digital divide between the elderly and the young [multiple choice]



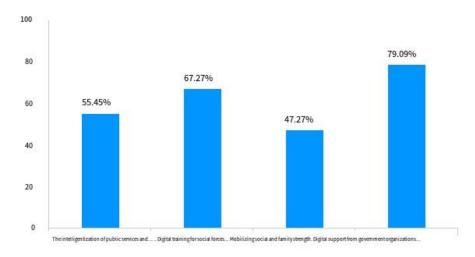
Question 4 Whether the elderly people around you are willing to learn how to use smart phones [multiple choice]



Question 5. Under the normal epidemic prevention and control, what are the factors that will hinder the elderly from traveling? [Multiple choice]



Question 6. What aspects do you think society should take to narrow the digital divide among the elderly? [Multiple choice]



In the use of relevant software to assist the design of the questionnaire, an online questionnaire survey was issued to the group of elderly families, and 115 valid data were collected[8]. According to the survey results, the following can be analyzed: The willingness of the elderly's relatives to help them learn new things is on the rise, and they think this is particularly important, mainly reflected in the use of mobile phones, relatives said that there is indeed obstacles for the elderly to use mobile phones, and according to the communication with their own family of elderly people believe that today's elderly are willing to take the initiative to use smart phones. Especially under the influence of the epidemic, the relevant help work should be taken from the humanization of the health code setting, the mobilization of family strength, government help and other aspects to help the elderly narrow the digital divide. One of the most important theories of geriatric psychology is social emotional choice theory, which believes that the young and the old have different life goals, the young's goal is the future, namely learning new knowledge, making new friends, while the old's goal is instant gratification, namely living in the present, this difference in goals leads to different needs of the young and the old, but with the update of the old people's concept, more and more old people are willing to learn new things.

### 6. Future trends and suggestions of digital divide in the post-pandemic era

Although the low-level areas of the Internet in China are not as good as in the early stage, due to the favorable conditions of later development, the Internet diffusion speed is accelerated. Today, in the post-epidemic era, all aspects of society have seen the digital divide among the elderly, and gradually pay attention to narrowing this gap, in order to facilitate the needs of the elderly in all aspects of life.

#### 6.1. Future trends of digital divide

Peng Bo, Dean of the Internet Research Institute of Peking University, and Yan Feng, a scholar, Discuss the New Opportunities and New Ways to Bridge the Digital Divide in China[9]. The article uses new opportunities and new methods to eliminate the digital divide in China. The Internet has entered the second half of the information technology era in China. The epidemic era has seen new developments for the digital divide for the elderly.

(1)From the perspective of the access gap, the urban-rural gap of Internet access is gradually being diluted. According to CNNIC's 48th Statistical Report on China's Internet Development, China's Internet population reached 1.011 billion in 2021, an increase of 21.75 million over December 2020, and the Internet penetration rate reached 71.6 percent. With 1 billion users connected to the Internet, China has become the world's largest and most active digital society. In addition, China's rural Internet population was 297 million, and the rural Internet penetration rate was 59.2 percent, 3.3 percentage points higher than in December 2020. The Internet penetration rate in urban and rural areas further dropped to 19.1 percentage points. Rural communication infrastructure has gradually improved, reducing the cost of using the Internet in rural areas.

(2)Senior citizens' family roles are mainly to manage household chores and take care of minor grandchildren. Senior citizens' digital lives have been greatly improved by playing family roles, such as picking up and dropping off grandchildren, and using the Internet to pay for daily necessities, and some seniors have learned to scan QR codes, shop online and pay online. At the same time, the Internet is becoming increasingly important in the family life of senior citizens. Nearly 60 percent of senior respondents said they do not live with their children. The Internet can complement senior citizens' experience of family roles by providing them with the closest family members to communicate and build a virtual sense of intimacy.

(3)Learning how to access the Internet using a smartphone is not as difficult as seniors learning how to operate digitally, as long as they stay in the mindset of learning.96.1 percent of seniors surveyed believe it is never too late to learn how to use the Internet, and only a small percentage are not confident in learning how to use the Internet. For example, 14.7 percent of respondents said they need to receive higher education in order to play well with smartphones. The advent of COVID-19 has largely changed the Internet habits of the elderly, making them more deeply and widely involved in the Internet world.95.1% of the elderly believed it was necessary to learn online operations after the outbreak of the novel coronavirus, and 82.76% of the surveyed elderly learned many new online operations during the outbreak. Despite the contrary trend of the epidemic, the elderly have improved their adaptability to digital life, but still face some prominent pain points that are difficult to solve.

#### 6.2. Suggestions

(1)In the post-COVID-19 era, first of all, it should be clear that: The elderly and the young are the same stage that everyone must have, and the main platform for a person to exert their social value and contribute their abilities. All age groups have the right to share the fruits of scientific and technological development, both developed and developing countries, and they should try

to eliminate the widespread prejudice and discrimination against the elderly. It has instilled a greater awareness of digital equity and inclusion in society, and created a social environment conducive to older people overcoming the digital divide. Second, the government should vigorously promote and build a lifelong learning society, so that the elderly have the convenience and opportunity to further study. The Fifth Plenary Session of the 19th Central Committee of the Communist Party of China elevated aging to the level of a national strategy, and the World Health Organization defines aging as the process of improving the quality of life of the elderly and fully pursuing opportunities for health, participation and security. The digital era advocates the awareness of lifelong learning, make full use of the Internet's convenient and quick characteristics, there is no doubt that this is one of the most important ways for the elderly to participate in social life. With the support of universities for the elderly, the government can offer courses that can stimulate the interest of the elderly and online courses that can meet their learning needs, so as to do well in public welfare training. Through communities and nursing homes, the elderly can be taught how to use computers and smart phones hand by hand to help them master basic operation techniques.

(2)More convenient schools for the elderly should be set up to improve their independent learning ability. Relevant departments should make comprehensive arrangements, clarify training objectives, provide human, financial and material training resources, actively strengthen cooperation with communities and enterprises, take the digital needs of the elderly as the leading, combined with the current situation of the elderly in various regions, formulate scientific and reasonable teaching content, assist the elderly with low education level to improve their cultural literacy, understand digital products and learn to use digital equipment. (3) Give full play to the role of self-communication in the social circle of the elderly, and create a good atmosphere for taking the initiative to connect with digital life. At present, in the towns and cities, due to square dance, chess and cards and martial arts, calligraphy and other kinds of enthusiasts, formed a large number of associations, the elderly community there are several natural social circles of the elderly, these interactions promote the exchange between different cultures, in these social circles, the elderly should be encouraged to take the initiative to learn to use digital equipment, through each other's experience exchange, trigger cultural resonance, and improve their media literacy to a certain extent.

(4)Launch more smart terminal products suitable for aging. Aimed at bridging the digital divide among the elderly, the development of digital technologies aims to promote the lives of the elderly, rather than create obstacles. Let smart products serve the elderly, first is to simplify the operation steps of smart products, the government should encourage manufacturers in the process of manufacturing smart products for registration and login, payment and other links to reduce the threshold of use, the development of convenient for the elderly boot, installation application, facial recognition, easy to operate and other elderly mode features, and the cognitive needs of the elderly; Second, the aging and transformation of intelligent products, in order to let the elderly use mobile phones become convenient, convenient, safe, give full play to the advantages of smart products, the government should put the website, APP, suitable for old products, intelligent terminal transportation, daily medical treatment, daily consumption, sports, services, payment, security and other aging transformation procedures, digital barrier-free application into a daily update and maintenance, so that the elderly more convenient, rapid access to information and services.

#### 6.3. Concluding Remarks

In conclusion, helping the elderly better adapt to digital life is the main embodiment of active aging practice, and also an inevitable practical problem in the construction of digital rural projects. This paper investigates and analyzes the current situation of digital construction and mobile phone use among the elderly in the post-epidemic context, and discusses the reasons

leading to the digital divide in order to provide a practical path for narrowing the digital divide among the elderly. The elderly are restricted by physical functions, time and space gap, thinking mode, behavior habits, learning ability and other factors, and gradually become the forgotten group in the digital era. In the process of helping the elderly to enter the digital life, in addition to relying on their own subjective efforts to improve digital information literacy and skills, it is also necessary for the government, society, enterprises and families to help the rural elderly to overcome the four barriers of digital thinking gap, technology application gap, product supply gap and digital feedback gap.

#### 7. Conclusion

In the process of digital construction and development, the country should further improve the top-level design, the deep supply of smart products suitable for aging, strengthen the intergenerational feedback social responsibility, hold public welfare offline training and network education combined activities, help the elderly take the initiative to walk into the digital life, out of the digital poverty dilemma, beyond the digital divide, only in this way can we truly achieve the active aging of the population. However, we should not forget that at present, there are still a large number of elderly people who are separated by digital products or even adversely affected by the digital divide. It is imperative to crack the digital divide by establishing accurate and sound systems, constructing media and public opinion campaigns, and establishing public participation.

#### References

- [1] Sunhao:Anhui University of Finance and Economics Graduate Scientific Research Project Fund Project:ACYC2022206.(2022).
- [2] Nicholas Negroponte: Digital Survival (Hainan Publishing House, 1996), p. 78-79.
- [3] Information on:https://www.cnnic.net.cn/n4/2023/0302/c199-10756.html
- [4] Ge Jingjing and Liang Chunxiao:Promoting the Transformation of Aging Society by Digitization,China Information Society,03(2021),p.26-29.
- [5] Peng Lan:Health Code and the Digital Survival of the Elderly, Modern Audio-Visual, 06(2020), p.1-2.
- [6] Huang Chenxi:Current Situation Challenges and Countermeasures of Digital Divide for the Elderly, People's Forum, 29(2020), p.126-128.
- [7] Information on:https://www.chinanpo.org.cn/index/index/show/id/4979.html
- [8] Information on:https://www.wjx.cn/wjx/activitystat/verifyreportpassword.aspx?viewtype=1&activity=1514 27696&type=1
- [9] Peng Bo and Yan Feng: New Opportunities and Eew Ways to Eliminate the Digital Divide in China, Modern Communication, 02 (2020), p. 142-147.