

Investigation and Analysis of the "Digital Divide" among the Elderly in the Post-Epidemic Era

-- Take Shijiazhuang City, Hebei Province

Qing Yu¹, Yuhan Wang², Yaoying Wang³

¹Fin technology from Hebei University of Economics and Trade, Hebei, China

²International Economics and Trade, Hebei University of Economics and Trade, Hebei, China

³Administration, Hebei University of Economics and Trade, Hebei, China

Abstract

In the era of the rapid development of the Internet, information technology and digital economy, media technology is everywhere. This epidemic has sounded the alarm for us that the elderly groups are really unable to adapt to the information society because of their media knowledge and scientific and technological awareness, so they cannot enjoy the convenience brought by intelligence in their daily life. In the context of the post-epidemic, the difficulties encountered by the elderly group have attracted high attention from the media, society and government departments. This paper investigates the phenomenon of "digital divide" among the elderly groups in Shijiazhuang city, Hebei Province, analyzes the influencing factors, and puts forward strategic research from the government, social association, enterprises, individuals and other aspects to help the elderly to cross the digital divide.

Keywords

Post-Epidemic Era; Digital Divide; Survey and Analysis; Strategy Research; Shijiazhuang; Hebei Province.

1. First, The Question is Raised

According to the 49th Statistical Report on the Development of Internet in China released by the China Internet Network Information Center, as of February 2022, the number of Internet users reached 1.025 billion, and the Internet penetration rate reached 75 percent, but Internet users aged 60 and over accounted for only 12.2 percent. According to the data, while the new technology develops rapidly, there are still hundreds of millions of elderly people who have yet to enjoy the dividends of digital technology.

Before the outbreak, the digital applications, such as mobile payment, online shopping, online car hailing, have overwhelmed the elderly; after the outbreak, "the elderly no health code by subway blocked", "the elderly will not APP booking registration", "the elderly in cash was rejected" was repeatedly reported, caused the high attention of the media and government departments. On November 24, 2020, the issued by the State Council General Office about to solve the elderly using intelligent technology difficult implementation plan notice released publicly, require all regions, departments combined with the actual earnestly implement, adhere to the traditional service mode and intelligent service innovation, to solve the elderly outstanding difficulties in the use of intelligent technology, to provide the elderly with more comprehensive, more intimate, more direct facilitation services.

2. Second, the Status Quo of the Digital Divide of the Silver Hair People in Hebei Province

With the construction of digital and information society in China, the problem of "digital divide" is becoming increasingly prominent among the elderly groups in China. According to the statistics of the 2021 Hebei Province Internet Development Report, the population aged 60 and above accounts for 0.6%, which is a very low proportion. That is to say, a considerable number of the elderly people in Hebei province are still facing an insurmountable "digital divide" and do not enjoy the dividends brought by the digital age. From a shallow level, many of the situations of "digital divide" for the elderly group in our province are due to the limitation of their own conditions; however, they are also reflecting the distribution and inequality of information resources in our province, increasing the extent of the "digital divide" dilemma of the elderly group in Hebei Province. Our province has also set up a special related green health channel for the elderly. However, under the current torrent of social informatization, the elderly groups are still facing an insurmountable "digital divide", being submerged in the torrent of science and technology. Therefore, in the current "14th Five-Year Plan" construction and development period, it is of great significance to reasonably guide the elderly group to cross the "digital divide", solve the "digital problem", develop into the shared information age, and safeguard the legitimate rights and interests of the elderly in the information age.

3. The Factor Analysis of the "Digital Divide" among the Elderly

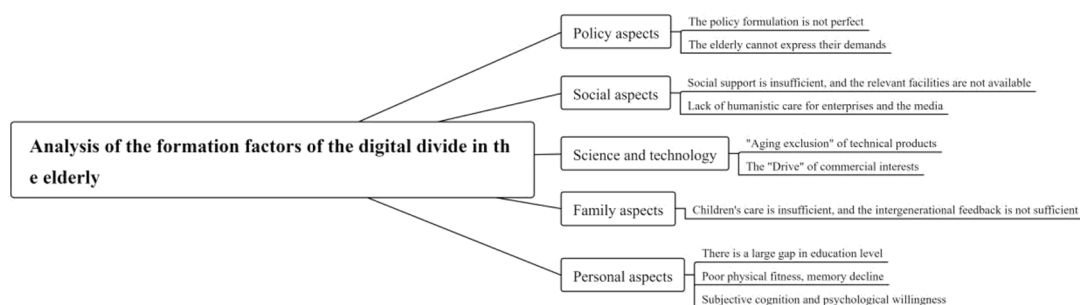


Fig 1. Analysis of the formation factors of the digital divide in the elderly

3.1. Policy Aspects

At present, specific social phenomena, such as "the elderly can not take a bus without a health code" and "they have to go through a series of online operation procedures", are all caused by the lack of refined and targeted epidemic prevention and control policies. On the one hand, novel coronavirus is highly contagious, involves a wide area, the policy makers and the public, especially the elderly, in the process of rapid epidemic prevention policy, the characteristics of all audiences, especially the elderly group cannot use smart devices; on the other hand, the elderly who can not access the Internet cannot express their own interests for this situation, it is difficult to put forward their own opinions and suggestions to the relevant departments.

3.2. Social Aspects

3.2.1. Lack of Social Support

For the elderly group, the popularization of Internet technology is relatively backward, which is also an important factor causing the "digital divide" of the elderly group. In the process of popularizing modern network technology, the courses related to modern technology skills training for the elderly are missing. Although some universities and communities will offer computers, networks and smart devices, and volunteers will help and guide the elderly in using smart phones, the coverage is small.

3.2.2. Lack of Humanistic Care

The lack of humanistic care in contemporary society constantly intensifies the digital divide and social inequality between the younger generation and the older generation. In addition, the current enterprises, the media and the public generally lack of humanistic care for the elderly group, and the elderly are full of age exclusion and stereotypes. In terms of enterprises, the technology update is more based on the main market consumer groups- -young people, while the mass media, especially the digital new media, are full of negative bias on the elderly group. On the one hand, in order to show the kindness of protecting the elderly, repeatedly emphasizing the "common characteristics" of the elderly's weakness and loneliness can inhibit the subjective initiative and learning awareness of the elderly group on the Internet, and reduce the confidence of the elderly in learning,

3.3. Science and Technology

3.3.1. "Aging Exclusion" of Technical Products

Most of the Internet products in the design of users are young and middle-aged groups, in the attitude of the elderly group to take neglect and unfriendly attitude, so most of the current technology products "aging" serious, which greatly hindered the network needs of the elderly, lead to the enthusiasm of the elderly active use of the Internet. At the same time, in the typesetting form and content distribution mode of the website and APP, there is also a lack of optimization for the habits of the elderly. For example, the APP has rich functions, but the operation process is too complex, the mobile website handwriting is too small for the elderly to adapt to, and so on.

3.3.2. The "Drive" of Commercial Interests

In terms of smartphones, the equipment updated fixed number of year, almost half a year a new smartphone, modern people also indulge in the wave of skills innovation, mobile phone application reference to the needs of young people, hobbies and use habits, and the elderly group cannot bring enough economic benefits for science and technology industry, is not the scope of its focus. To some extent, it is also an important reason for the "digital divide" among the elderly.

3.4. Family Aspects

The research shows that the intergenerational family feedback and the mutual assistance of relatives and friends play a key role in improving the digital quality level of the elderly. In the network age, in the face of new things, the elderly to children for help, and children often lack enough time and patience to help and guide the old man learning, at the same time, the elderly group around most relatives and friends with the same situation, so relatives and friends also exist certain difficulties, which makes the elderly learning and use the Internet difficulties, thus weaken the number of the elderly. In this questionnaire, most of the elderly people live together with their wives, but less people live together with their children, which reflects the lack of family feedback, and deepens the "digital divide" dilemma of the elderly group to a certain extent.

3.5. Personal Aspects

3.5.1. There is a Large Gap in Education Level

The learning and understanding of things caused by the difference in education level is one of the important factors affecting the elderly group's access to digital information. Compared with the elderly with high education level and lower education level, the gap between the understanding degree of smart devices and Internet information and the advantages of absorbing new knowledge is large, not to mention those who have not received education.

3.5.2. Poor Physical Fitness, Memory Decline

Secondly, the decline of physical fitness and its memory decline is an important reason for the formation of the "digital gap" in the elderly. As the age of the elderly increases, the physical quality decreases, and all the various functions of the human body will gradually weaken and degenerate.

3.5.3. Subjective Cognition and Psychological Willingness

The cognitive level and acceptance level of new things decrease, they lack the ability to learn from new things, and do not have the ability to use and understand the network information and new software. At the same time, many elderly people have negative and resistant emotions to the Internet, which is that the elderly cannot effectively understand and analyze the amount of information on the Internet. Most elderly people are difficult to accurately distinguish the authenticity of information, let alone grasp the information useful to themselves.

3.5.4. Research on digital Divide Strategy for the Elderly Group

With the deepening of the aging society, according to statistics, the proportion of the elderly population aged 60 and above in China ranges from to to, and the number of elderly people increases year by year and grows rapidly. Therefore, the whole society should be gathered to help the elderly successfully overcome the "digital divide" dilemma. Specifically promoted from the following aspects:

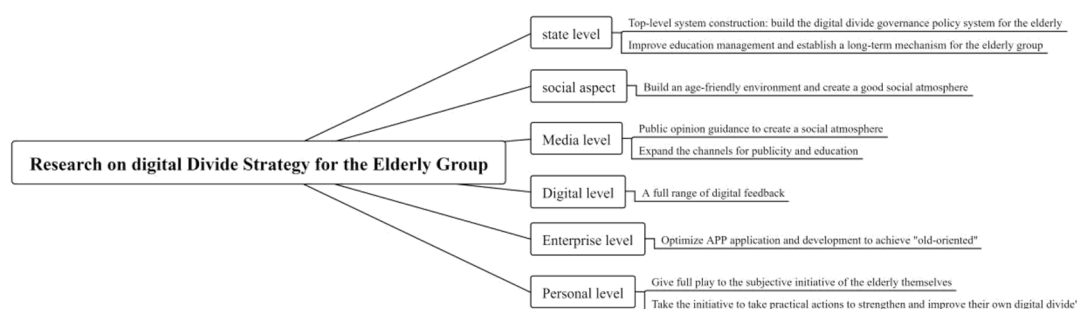


Fig 2. Research on digital Divide Strategy for the Elderly Group

4. State Level

4.1. Top-level System Construction: Build the Digital Divide Governance Policy System for the Elderly

In the process of strengthening the construction of the top system, actively implement issued by the State Council General Office about to solve the elderly using intelligent technology difficult implementation plan notice, continuous innovation aging digital divide concept, clarify the responsibilities and rights of multiple subject boundary, improve the relevant laws and regulations and regulatory system and to provide specific policy support and institutional guarantee in Hebei province.

Under the guidance of national policies, the government takes the lead in conducting various educational activities to improve the intelligent technology application ability of the elderly, which requires the participation and cooperation of many departments and institutions. In order to make various educational activities carry out efficiently, governments at all levels and education departments need to establish a scientific and effective operation mechanism according to relevant national policies, and actively mobilize all units to participate in education to help the elderly cross the "digital divide" activities.

4.2. Improve Education Management and Establish a Long-Term Mechanism for the Elderly Group

Under the guidance of national policies, the government takes the lead in conducting various educational activities to improve the intelligent technology application ability of the elderly, which requires the participation and cooperation of many departments and institutions. According to the actual situation of Hebei Province and according to the actual situation of the "digital divide", the educational objectives should be set up accordingly, and the corresponding educational activities should be reasonably planned. Especially in the rural backward areas of Shijiazhuang city, we should increase the investment of capital, equipment and personnel.

4.3. Social Aspect

Building an age-friendly environment, creating a good social atmosphere, advocating the concept of age equality, and safeguarding the rights and freedom of the elderly are the inevitable requirements to help the elderly cross the "digital divide" dilemma. The government should advocate the concept of lifelong learning and contribution to the society, and create favorable conditions to guide the elderly to better share the development dividend of the digital society, and to better participate in and contribute to the society. Secondly, attention should be paid to the realization of the value of the elderly in the era of science and technology, guide the elderly to make effective use of new business forms such as economic platform, help them create the value of the elderly, and break through the difficulties and problems of the "digital divide".

4.4. Media Level

4.4.1. Public Opinion Guidance to Create a Social Atmosphere

The reports of the news media often affect the views and attitudes of the public. Therefore, the media should try to be objective, knowledgeable and play a positive role of public opinion guidance when reporting the elderly groups, and mostly speak out for the elderly groups and express their needs and wishes. For the news of "the elderly are cheated", give more care, less ridicule, create a social friendly care atmosphere of "the old and the old", and advocate the whole society to treat and help the elderly group patiently.

4.4.2. Expand the Channels for Publicity and Education

Use social media to fully open up propaganda positions and enhance propaganda efforts. For example, to show the real cases of Hebei News, People's Daily, TV, radio and other media, where intelligent technology changes life and provides convenience for life, to deepen the elder's understanding of the use of smart devices.

4.5. Digital Level

The activities to help the elderly cross the "digital divide" should go deep into their families and various parts of society to carry out all-round digital feedback for the elderly. Family feeding plays a dominant position in digital feeding. The families of the elderly group should clarify the importance and necessity of integrating the elderly into the intelligent life, and actively participate in the family digital feeding activities; secondly, the community should actively participate in helping the elderly to integrate into the scientific and technological social activities; and finally, the social population should participate in the digital feeding activities. Although digital feeding occurs between two generations, it absolutely does not mean that only relying on inter-generational relations to realize digital feedback, but needs the attention and participation of the whole society.

4.6. Enterprise Level

According to the General Office of the State Council issued "about the practical solve the elderly using the intelligent technology difficult implementation plan", the Ministry of Industry and Information Technology and issued the Internet application for aging and barrier-free transformation special action plan, put forward priority to promote 115 websites, 43 APP for aging reform, science and technology enterprises in Hebei province should actively implement the social responsibility, optimize the APP application and development, based on the elderly rigid demand, comprehensive research and design for aging application and content. In terms of form and function, it should be suitable for the specific physical characteristics of the elderly, and larger ICONS and font functions should be designed in the operation interface, so that the elderly can be easier to identify them and the operation is relatively simple. In terms of service maintenance, the daily updated barrier-free layout should be formulated and established, and the "care mode" and "elder mode" should be introduced for the convenience of the elderly to use. For example: Zhejiang "Zhejiang Office" medical care mode, Alipay elders mode, Didi elderly taxi and so on.

4.7. Personal Level

To eliminate the "digital divide" of the elderly, we must give full play to the main role of the elderly. Starting from the elderly themselves, change the original traditional concept, do a good job of actively integrating into the information society and intelligent life psychological construction, and actively adapt to the changes and development of the information age. On the one hand, the elderly should give full play to their own subjective initiative, create a positive inner environment for aging, strive to overcome their own anxiety about smart devices, actively accept new things from the mind, and give the intelligent society a full sense of trust and security. On the other hand, the elderly should take the initiative to take practical actions to improve their own "digital divide".

5. Summary and Outlook

Today, China is accelerating into a medium aging society, and is rapidly embracing the arrival of the intelligent digital era. Facing the accompanying "digital divide", building a smart society regardless of age is an proper part of building a great modern socialist country. Therefore, we should leave a fast-down option for the elderly in our fast-paced environment. In response to this, efforts should be gathered to help the elderly overcome the digital divide. It is expected that with the efforts of the government, society, communities, families and the elderly themselves, more elderly groups will integrate into the scientific and technological society, embrace an intelligent life, and enjoy a happy old age.

Acknowledgments

Funding: "S & T Program of Hebei (Project No.: 2021H011307)".

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