The Digital Age: the Problems and Dilemmas Faced by the Elderly

Zixiang Zou, Yan Liu
Jiangxi University of Traditional Chinese Medicine, Nanchang 330004, China.

Abstract: In modern society, with the continuous progress of information technology, our way of life has undergone tremendous changes. As my country's population aging continues to intensify, according to the "National Strategy for Coping with Population Aging", my country's elderly population will increase to 423 million in 2036, and the aging level will reach 29.1%. On the other hand, according to statistics, China has about 2.74 100 million elderly mobile phone users, of which about 134 million use smartphones to surf the Internet. This means that nearly 140 million seniors use a feature phone or smartphone but do not go online. Therefore, whether the elderly can adapt well to this drastic lifestyle change will deserve our attention.
Keywords: Informatization; Digitalization; Population Aging; Elderly; Psychology

1. Introduction

Population ageing is a global trend in the 21st century. In this torrent of digital life, although the elderly are not the main force in development, they are certainly involved. As China's population ages, China's "digital divide" is getting worse. However, to solve this problem, we must first understand the laws of mental development of the elderly, and then adjust relevant digital products according to the laws of mental development of the elderly to help the elderly adapt better and faster.

2. Basic characteristics of old age

2.1 Cognitive aspects

Memory has both a decline and an advantage: it is not a full decline. This is related to the nature and content of the memory, which shows the selectivity in the process of memory aging.

Recognition performance is better than recall performance.

b) The age difference of implicit memory is smaller than that of explicit memory.

c) Thinking: Concept learning, problem-solving effectiveness decreases.

Intelligence has decreased, but not all of it: In addition to memory impairment, stubborn thinking, and difficulty concentrating, the more important one is Alzheimer's. Not all intelligence decreases, and it does not mean that the factors that make up intelligence are at the same speed. Diminish.

2.2 Emotional aspects

1. It is easier to produce negative emotions;2. The emotional experience is deep and lasting; 3. The emotional expression is more subtle;4. Various "losses" are the most important stimulating events in the emotional experience.

2.3 Personality and society

The personality of old age tends to have the following ten major changes or characteristics: self-centeredness; introversion; conservative; easy to be wildly suspicion; strong jealousy; rigid in doing things; poor flexibility; decreased adaptability; impatience; love to complain; good management Nosy; dependency

Although there have been some changes in personality, the basic aspects of personality are constant and stable, and stability is more than change.

Interpersonal relationships have also changed, which are mainly manifested in three changes: work unit-centered to family-centered, work-driven to hedonic, and variable objects are changed to stable objects[1].

Social support for the elderly:1. The social support the elderly receive is significantly positively correlated with their happiness and quality of life; 2. The impact of social support on the elderly depends on the dimensions and sources of social support; 3. The system of social support for the elderly is not yet balanced; 4. The filial piety of children to the elderly is an

important aspect of social support for the elderly.

3. Theoretical basis

3.1 Theories emphasizing the interaction between individuals and society: mainly include alienation theory and adaptation theory

The theory of alienation believes that the separation of the elderly from society is the main cause of individual aging. With the increase of age, the social activities of the elderly decrease, their interpersonal communication gradually decreases, and the connection with the surrounding environment gradually weakens. This change in the relationship between the individual and the external environment is the alienation between the individual and the environment caused by internal changes.

According to the theory of adaptation, the main change in old age is the change in interpersonal relationships. Increased interpersonal communication will reduce the anxiety of the elderly, and it can also increase personal confidence and self-esteem from the feedback of friends. As a means of adaptation, the elderly must put an end to self-enclosed lifestyles.

4. The problems of contemporary elderlyin digital life

4.1 Lack of digital skills and decline of physical and mental function

Internet-based digital skills are crucial for the elderly to participate in online activities. Compared with adults, due to the limited energy of the elderly, their learning desire is small, their proficiency is low, and the use of information and communication technology is more difficult. Even in developed regions of China, the demand of the elderly for digital technology is not strong, because their early experience and habits are difficult to change. Although most of the elderly believe that technology has a positive impact on society, nearly 3 / 4 of the elderly lack confidence in the ability to use equipment to complete online tasks. Studies have shown that older persons ' lack of interest in online activities is often due to insufficient digital skills, not to costs and lack of opportunities to participate. Khoo et al found that the older people have a higher sense of identity to the Internet and smart phones, the more functions they master, the stronger their mobility. Therefore, it is very important to help the elderly learn the operation and digital skills of intelligent equipment.In the process of helping the elderly learn the operation of smart devices, the difficulty level of the operation itself and the attitude of the assistant are two important dimensions[7].

On the other hand, the touch-sensitive interface design of smart devices is visually oriented and lacks physical feedback. This makes the elderly often make mistakes in use, which ultimately brings frustration to the elderly users.

Taking tactile direct manipulation in tangible manipulation as an example, we focus on whether users can touch, perceive and manipulate elements in the user interface. Obviously, the current touch screen cannot provide better physical feedback and touch than buttons. In the physiology of the elderly, one is the decline of touch and the other is the decline of hand sensitivity.[6] In psychology, the elderly are more inclined to the traditional physical technology.

5. Social support ofthe elderly

5.1 Level of online social participation of older persons

The number of elderly Internet users in China is growing. From 2013 to 2017, the number of Internet users over the age of 60 in China increased from 11.72 million to 40.14 million, and the Internet usage rate among the elderly increased from 5.8% to 16.6%. But older adults still lag behind compared with other age groups; overall, older adults have relatively low levels of online engagement and are more willing to engage in society at lower demand levels. In the future, it is necessary to consider promoting high-level online social participation activities of the elderly, so that the elderly can realize their self-worth [8].

5.2 Impact of online social participation on older persons

a) Maintain intimacy.

b) Promoting healthy behaviour of older persons.

c) Help alleviate the loneliness of the elderly.

d) Facilitation of social adaptation and maintenance of social connectivity.

Social networking sites can maintain and expand individual social connections. Help compensate for their lack of social interaction and provide the necessary emotional and informational social support[3]. At the same time, social communication has certain entertainment and information functions, which can enrich individual leisure life, which has important value and significance to reduce the risk of depression, improve their social adaptation and mental health.

Information and communication technology is mainly used by the elderly to reconnect or improve their contact with the

outside world, including communication with family and friends, and to find health-related information that helps them enjoy a higher quality of life.

6. Conclusion

To sum up the problems discussed in this paper, in order to help the elderly solve the difficulties they face, we must start from the laws of physical and mental development of the elderly. Firstly, compared with the touch-based user interface that young people like, the elderly are more suitable for the user interface based on physical keys. For young people and the elderly, the same product can have different entrances; permissions and interfaces. Secondly, the elderly emotional vulnerability, learning new things more difficult. Therefore, we need to be more patient and tolerant of the elderly, to make the elderly believe that they can adapt to the new way of life. Moreover, we should make good use of information and communication technology to help the elderly maintain and expand individual social connections and compensate for their lack of social interaction. Promote high-level online social participation of the elderly, so that the elderly can achieve self-worth while enriching their leisure life, reduce their risk of depression, improve their social adaptation and mental health.Attention to the integration of older persons into the new technological environment is not a temporary task but a long-term task. To ensure the maximum welfare of everyone in technological and social progress.

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[9] Zou ZX, Graduate School.Jiangxi University of Traditional Chinese Medicine,Graduate School of Jiangxi University of Traditional Chinese Medicine,Nanchang, China.

[10] Liu Y, Faculty of Humanities Musicology Teaching and Research Section. Jiangxi University of Traditional Chinese Medicine,Department of Musicology, School of Humanities, Jiangxi University of Traditional Chinese Medicine,Nanchang, China.