

THEORETICAL ASPECTS OF DIGITAL LITERACY AMONG OLDER ADULTS

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Abstract

The article examines the aspects of digital literacy among older adults - its significance, features of formation, barriers, and ways of support. It analyzes current research indicating the positive impact of digital competence on the quality of life, health, and social inclusion of older people. Special attention is given to examples of successful educational programs and recommendations for their adaptation to senior age groups.

Keywords: digital literacy; digital inequality; active aging; social inclusion; digital skills; curricula; digital transformation; barriers to digital literacy; motivation to learn; education for older people; cybersecurity; internet access; digital technologies; social isolation; quality of life; psychological barriers; family and volunteer support; digital competence assessment.

Introduction

According to the Pension Fund of Ukraine, as of July 1, 2025, there were approximately 10.3 million registered pensioners in Ukraine, about 2.8 million of whom were over 65. Moreover, it is estimated that the proportion of people aged 65 and over in Ukraine's total population reached about 22% in 2024. These figures illustrate the scale of population aging in Ukraine - the significant number of elderly people poses challenges in the field of digital literacy, as this age group becomes the main target for digital skills development programs.

In modern society, which is increasingly oriented toward digital technologies, the issue of developing digital literacy among older adults gains particular importance.

Digital literacy - the ability to effectively and safely use information and communication technologies - becomes not only useful but necessary to ensure social inclusion, access to services, communication with family, and maintaining an active lifestyle. Research shows that a higher level of digital literacy among older adults is associated with better health, a lower risk of isolation, and an overall higher quality of life.

One of the key problems is that the standards of digital competence and teaching methodologies developed for younger and middle-aged groups often fail to adequately address the needs of older adults. A number of studies analyzing digital literacy assessment tools for older people have found that most of them cover only one or two aspects of competence (such as information/data and communication), while other important components - such as digital content creation or cybersecurity - remain underrepresented. This highlights the need for specialized approaches to teaching and assessing digital literacy for the senior population.

Barriers to developing digital literacy among older people are diverse. They include a lack of experience with technology, physical limitations (vision, motor skills, hearing), cognitive changes, social and cultural attitudes toward old age as a period of technological disengagement, as well as economic and infrastructural obstacles (lack of access to devices or fast internet). A significant psychological barrier also exists - fear of the new, lack of confidence, and anxiety about making mistakes or "using the device incorrectly." Motivation plays a key role here - specifically, understanding the benefits of digital skills and having support from family, peers, or volunteers. Effective educational programs for older adults show a strong impact: they improve not only knowledge and confidence in using digital tools but also stimulate social activity, reduce feelings of isolation, and facilitate the use of online services (healthcare, banking, social services). For example, in one study, a digital literacy program for low-income older adults resulted in positive changes in their self-assessment of digital skills.

Another study identified six strategies that support successful learning: collaborative learning, informal settings, the use of visual aids, a focus on practical and daily applications, allowing sufficient time, and systematic evaluation. Therefore, program development should consider the age-related, physical, and sociocultural characteristics of the audience.

It is also important to highlight the positive impact of digital literacy on the health and quality of life of older adults. Research on a Chinese sample showed that digital literacy improves health through the mechanism of social support: people with higher digital competence have wider social networks, communicate more easily, and thus experience better psychological and physical well-being. Moreover, another study found that active internet and technology use among people aged 50+ is associated with reduced depressive symptoms and higher life satisfaction. This allows us to view digital literacy not only as a skill but as a factor that promotes “active aging” and social integration.

In light of the above, several practical recommendations can be made for program developers and social initiatives:

1. Conduct preliminary assessments of skills, interests, and needs of specific groups of older adults - since a “one-size-fits-all” approach is ineffective.
2. Structure training in modular form, with small steps, lots of practice, repetition, and adaptation of topics to everyday life (communication, health, finances, entertainment).
3. Create a friendly, supportive environment - with mentors or volunteers who understand age-related needs; group sessions can foster social interaction.
4. Use devices and interfaces designed with age in mind: larger fonts, simplified interfaces, audio options, ergonomic headphones, mice, and keyboards that require less fine motor control.
5. Emphasize safety: teach how to recognize scams, choose strong passwords, use backup options, and understand privacy - this is crucial since older adults are more often targeted by cybercriminals.
6. Ensure access to necessary devices and the internet - without this, training will be limited or ineffective. Infrastructural barriers remain significant.

Despite positive trends, challenges remain. Not all programs achieve changes in actual skill levels - some studies note that improved knowledge or confidence does not always translate into real behavioral change or increased technology use. There is also a risk that people with lower education levels or no prior experience with technology may remain on the margins of digital transformation - the effects are uneven and depend on age, education, and place of residence (urban/rural). Therefore, policies and programs should aim to reduce digital inequality, not merely raise the average level.

Conclusions

In conclusion, developing digital literacy among older adults is more than just acquiring a skill - it is a pathway to a more active, socially included, safer, and healthier lifestyle in the digital age. The key factors of success include consideration of age-specific characteristics, individualized approaches, accessibility, and a motivating environment. Programs that meet these criteria can become effective tools for supporting the older generation in the era of digital transformation.

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