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Lifelong Learning and Older People in the Context of ICT

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Abstract

Global aging of the population occupies the attention of numerous professions, as it is the key reason for the increased share of old people. Demographic data also indicate a trend of further growth. Existing and upcoming generations of elders are influenced by numerous changes that have immediate involvement in the way and the quality of their life. These changes, associated with biological and psychological factors, occur in the context of the existing and changing attitude of society towards age and aging. Since many changes are not directly influenced by societal will, they cannot be resisted or stopped. However, society can adapt to them and take its stand towards these changes.

Upcoming elders are expected to change the perspective of a traditionally vulnerable and dependent group by using all scientific, professional and technological advances, into the perspective of active societal participants who change and enrich the society they live in. The potential for adaptation and active and successful aging rests on lifelong learning opportunities. Modern technologies, especially the use of ICT, combined with the needs and motivation of the elderly, allow for adjusting the form, way, and time and place of learning. Lifelong learning is correlated with the assessment of the subjective well-being of the elderly and with the general quality of life and aging.

Key words*: active aging, lifelong learning, ICT, quality of life.*

Introduction

Today, elderly people live differently and longer than previous generations. Their way of life is influenced by technological advances and the rapid multiplication and spread of knowledge, but also by the changed traditions they have adopted throughout their lives. Contemporary changes are manifested in the lifestyle of all generations through reality understanding and acceptance of new or changed social and individual values

(Findak, 2016). Prskalo (2018) points out that individuals and smaller groups cannot resist these changes but rather accept them as prerequisites in modern education, whereby knowledge is becoming globally available thanks to information and communication technology (ICT). We are currently in a time marked by an increase in the population aged 65 and over, and such a trend continues to increase further. Attitudes towards aging and old age are gradually changing from the perception of the elderly as dependent on younger generations and helpless, due to impaired or lost functional abilities, to the perception of the elderly as active members contributing the society they live in. Currently, the baby boom generation (born after World War II until the 1960s), which has a higher formal level of education and longer working life than their predecessors (Mather et al., 2015), is entering old age. According to demographic indicators, this generation continues the trend of longer life expectancy, good physical and mental health, and active participation in community life. After retirement, which for most is after the age of 65, this generation can expect decades of life. Hence, it would be unusual to expect them to take on the role of passive and dependent citizens. More so because they are a significant population that is constantly growing, and their way of life requires support for active and successful aging. Old age has ceased to be a state of dependence on others and has become a time of additional opportunities (Zaidi & Howse, 2017). It is a time in which retirees realize their plans and activities for which they did not have time or opportunities before. Successful active aging means taking advantage of opportunities for maintaining physical, social, and mental health in order to actively participate in community life and live independently without age discrimination (Sniadek & Zajadacz, 2010). Šobot (2015) considers necessary to perceive active aging as a lifestyle and as a social norm. Zaidi and Unt (2019) described 4 domains (employment; participation in society; independent, healthy and safe living; potential for active aging) and 22 indicators of active aging. Among others, lifelong learning is in the domain of independent, healthy, and safe living, while educational achievements, the use of ICT, and the preservation of mental health are in the domain of the potential for active aging. Pastuović (1999) states that the purpose of upbringing and education is to promote the quality of life, i.e. the concept that is operationalized by meeting the needs and satisfaction of life. With the analysis of life satisfaction factors, Kutubaeva (2019) finds that the influence of chronological age varies in relation to gender and regional affiliation. The most significant and stable contribution to life satisfaction is self-assessment of the health status of the elderly. The structure of needs and the way these needs are met are not only dependent on changes in the living conditions and vary between social groups, but they also affect the change in learning goals (Pastuović, 1999). Accordingly, the purpose of this paper is to analyse lifelong learning and learning of the elderly in the context of modern technologies, as the need for lifelong learning or acquiring knowledge stems from the fact that knowledge, values, and attitudes become obsolete in relation to technological progress and social change (Pastuović, 1999). Research has confirmed the positive

association of lifelong learning with the level of psychological, social, and general well-being of older people (Escolar Chua & Guzman, 2014; Goriup & Lahe, 2018).

Aging and lifelong learning

Lifelong learning, as the term itself denotes, is continuous learning throughout life, and it refers to all activities whose purpose is to improve knowledge, skills and competencies concerning personal, civic, social and work perspectives. In addition to educational institutions, it is carried out by participating in sports and cultural activities, hobbies and recreation, and volunteering (Weinstein, 2004). Escolar Chua and Guzman (2014) consider lifelong learning of the elderly as active participation in physical activities and recreation, cognitive learning, and social participation. A fundamental feature of lifelong formally or informally organized learning is purposefulness (Eurostat, 2012). Purposeful and intentional learning is a deliberate search for knowledge, skills, competencies and attitudes of enduring values (Eurostat, 2012, p. 220). The assessed purposefulness of the content of the elderly's learning is related to their motivation to learn (Keceki & Bulduk, 2012). Yunianta et al. (2012) singled out five characteristics or components of meaningful learning – activity, constructiveness, intentionality, uniqueness, and cooperation. Such learning is conscious and directed towards the acquisition of specific knowledge or skills in a natural context. In addition, when it comes to teaching the elderly and involving them in further education in the context of lifelong learning, it is important to create opportunities. Nevertheless, without personal motivation and intention, these opportunities alone cannot lead to meeting the needs of the elderly.

Maolud and Lu (2020) emphasize that four criteria need to be met to teach the elderly: (i) approachable, empathetic and inclusive instructors; (ii) interactive and diverse teaching methods of real-life content; (iii) flexible curricula and learning content appropriate to abilities and interests; (iv) an inclusive and friendly environment conducive to a wider mass of stakeholders. The potential to preserve the overall functioning of the elderly in the mental, physical and social fields is partly conditioned by continuous learning (Purdie & Boulton-Lewis, 2004). In addition to preserving cognitive functions, the elderly purposefully fill their free time with learning. Goriup and Lahe (2018) argue that learning not only upgrades existing knowledge or acquires new but also enriches the personal life experience of the elderly, develops civic competencies, and acquires a better understanding of changed social and family functioning. Moreover, the elderly can communicate in native and foreign languages, use media, meet new cultures, recognize their own needs and the way of fulfilling them, learn about entrepreneurship and express themselves creatively. By learning, the elderly prepare and adapt more easily for the coexistence with the younger generations and give meaning to their lives (Goriup & Lahe, 2018).

In a research by Casia Gomes et al. (2015) on a sample of older women (69-79 years), a significant correlation was found between the level of education (8 and more years)

and their ability to perform multiple tasks faster. Mather et al. (2015) point out that one quarter of the population over 65 in 2014 was highly educated (BA/BS), majority of which were men, which is a direct consequence of educational policies in the 70s of the last century. As higher levels of education are associated with better financial status and income as well as better health, life expectancy, and broader social network, so the lower levels of women's education are associated with poverty and higher risk of stress and depression (Mather et al., 2015).

No matter how much it was influenced by previous experiences, gender and social differences, the attitude towards learning is in the end an individual characteristic related to what the elderly want to learn and what will benefit them. At that age, their learning is most often based on a behavioural approach and oriented towards how something is done (Keceki & Bulduk, 2012). In general, it can be said that the interest of the elderly in learning is growing globally, and they show greater interest in hobby activities and skills courses (Leung et al., 2006) as well as in learning to advance or change careers (Lakin et al., 2007). For most older people, the most important motivating factor for learning is cognitive interest (Kim & Merriam, 2004), followed by attitude towards learning (Tam & Chui, 2015), the experience of personal satisfaction and expansion of social contacts (Kim & Merriam, 2004; Leung et al., 2006; Tam & Chui, 2015), previous experiences, successes and achievements (Keceki & Bulduk, 2012). Tam and Chui (2015) analysed the interest in learning in the population aged 55 and over and found that the three most common priorities include health (69.6% - nutrition, sports, fitness), leisure (53% - cooking, travel, gardening) and art (51.4% - music, dance, painting, handicrafts). Pastuović (1999) states that adult education and learning is aimed at improving existing knowledge and skills that are accompanied by changes in value orientations, attitudes and habits.

Given the trend of increasing life expectancy, a significant increase in the number of people over the age of 65 is expected, with a simultaneous decrease in the working population. Forecasts for the EU are a reduction in the working population by 9.6% in the coming period until 2070 (European Commission, 2018). This will require further extension of working years and directing additional investments in the education system for the sustainability of the system (European Commission, 2018). Employment inequality with regard to education is significant and it increases with aging. These differences are particularly pronounced between the highly educated and those with a lower level of education since the highly educated have more opportunities to work longer (Zaid & Unt, 2019). In relation to the older population of potentially retired workers who may be additionally included in the labour market, Lam and Chung (2009) emphasize the need for their retraining or training for new work skills. Employment of the elderly is one of the indicators of active aging, and the continued work of the elderly who have acquired the conditions for retirement is positively correlated with the state's gross income (Zaid & Unt, 2019). The latest Eurostat data for Croatia indicate a share of 3% of adults (25 to 64 years) who participated in either formal or non-

formal education, and at the European Union level, it was 11% with a higher share in developed European countries (Eurostat, 2019). This data shows that at the level of the EU, for the period up to 2020, the planned target of 15% of adults involved in lifelong learning has not been achieved. The reason for the small share of the elderly in formal and non-formal education and learning is based on the social perception of age as a problem and burden (Goriup & Lahe, 2018). Therefore, access to information on available opportunities for the elderly is the first step towards activities that will meet their learning needs. Society in general must be aware of the challenges and opportunities associated with the aging population related to finding ways to develop the elderly's full potential, and raising prosperity and strengthening the benefits of the society. Encouraging active aging through social investment preserves the knowledge and valuable life experiences of the elderly, maintains their potential and strengthens social structures as it is more economically advantageous than keeping them on the margins and dependent on family and society (Goriup & Lahe, 2018; Zaid & Unt, 2019).

Despite all the benefits that learning brings to the elderly population, and thus to society in general, the existing educational practice does not follow these insights. Namely, in the Republic of Croatia there is only one university for the third age, which operated within the Open Public University of Zagreb. Lifelong learning of the elderly seems to rest on these very institutions. According to the Croatian Community website, 36 open public universities in the Republic of Croatia, of which 41% offer IT and 50% offer foreign language courses, only two institutions have targeted IT literacy and foreign language learning programs for retirees. Every other institution has training programs for the acquisition of vocational qualifications and adult secondary education. Thirty-six percent of public colleges have planned activities for learning creative techniques and handicrafts valuable for free time. Two institutions have health-oriented activities. This does not mean that targeted learning of the elderly has not been paid attention to. There are support groups, targeted education of the elderly on specific health topics provided by the primary health care service, the activities of pensioners' associations, associations that bring together members for specific subjects (diabetes, breast cancer, etc.), work occupation activities in the homes for the elderly and infirm persons. All of them encourage the old, to varying degrees, to learn new things or maintain their acquired knowledge and skills. Based on the analysis of the users of the university program for the third age, Čurin (2018) points out the curricula and the social component as important factors in the selection of the program. Although the programs are not explicitly mentioned for the elderly, all those conducted by open public universities and other institutions are also available to them.

The cognitive, emotional, and behavioural dimensions of attitudes influence behaviours toward the learning activities and contents of older people, their responsibilities toward health, leisure, coping with stress, interpersonal relationships, etc. (Tsai et al., 2014). In terms of successful and active aging, this refers to learning and practicing physical activity, maintaining health, engaging in creative work, practicing cognitive abilities, and

participating in social life (Sniadek & Zajadacz, 2010), which is in line with the expressed interest of the elderly for learning (Tam & Chui, 2015). The focus on healthy aging itself goes beyond individual-focused support, which still exists as it leads to productive aging and the general well-being of society (Zaidi & Howse, 2017). Older people who are active in various areas of life through their actions and engagement contribute to further development and progress by teaching younger people, sharing their experiences, participating in advisory bodies, and working. Social inclusion and participation in productive activities are expected of all citizens regardless of their age (Zaidi & Howse, 2017). This leads to acceptance of the elderly and their potential beyond the deficits and limitations associated with aging. Active aging, therefore, implies opportunities for longer work, participation in important decisions, reduction of poverty and economic dependence, lifelong learning, and maintaining health (Zaidi & Howse, 2017). An important area of learning for the elderly is digital skills and the use of information and communication technologies that affect and improve their quality of life.

The obstacles of lifelong learning and the use of ICT

Šverko et al. (2007) connect human behaviour with the obtained roles through life and the norms of society. When observing older people through their chronological age and classifying them as retired or old and infirm, their role is interpreted through the compliance of behaviour, rights and obligations with expectations and norms of the society (Šverko et al., 2007).

The pursuit of knowledge is an intrinsic interest or motive that encourages research and learning (Ruiz-Fuster, 2019), and therefore lifelong learning and learning of the elderly should be viewed in terms of the individual lifestyle and culture in which they live. Learning in older age is influenced by individual characteristics and changes in functioning that occur with aging. These changes are manifested by structural, physiological changes, loss of functional abilities of organs and senses, and weakening of cognitive abilities. In addition to these biological ones, learning in old age is influenced by the level of motivation to learn and the availability of learning opportunities. The availability of opportunities is related to society's attitude towards the elderly and in this regard with the intolerance of old-age learning and education in general, low social value of old-age learning, societal poverty, insufficient media attention, low level of education and awareness of the need for lifelong learning, lack of trained professionals, and a non-stimulating learning environment (Goriup & Lahe, 2018). Previous research has confirmed the disparity in adult lifelong learning based on regional affiliation, and the same trend is projected on older adults who are more often involved in intentional learning in developed countries and urban areas.

The learning outcomes of the older population are measured through the knowledge, skills, and values they will develop. Pastuović (1999) talks about the immediate results of the educational process, which represent changes in the cognitive, psychomotor and motivational areas of a person who is learning. Accordingly, learning outcomes

are skills and behaviours aimed at meeting different human needs (Pastuović, 1999). One of these needs is the transmission of life experience and knowledge to younger generations in interaction with learning something new (Ramovš, 2003). If the old people do not see the benefit of the knowledge and newly acquired skills or that their effort is much higher than the profit, they will most likely stop investing their time in further learning.

According to the index of active aging and meeting the indicators, it was determined that Central and Eastern European countries have the lowest results, unlike the Scandinavian countries and the United Kingdom, which have the highest (Zaidi & Unt, 2019). In relation to the education indicator, differences were found in favour of male residents, and this inequality is more pronounced in countries with general economic deprivation. Ignorance of the possibilities of ICT related to learning is an obstacle to successful aging. Exploring the needs of older people, Purdie and Boulton-Lewis (2004) found that learning about technologies is considered the least important. Depp et al. (2010) point to three possible attitudes of the elderly toward technology: a pronounced need for technology; interest in technology; intention to invest in technology. According to them, old people think about technologies from the perspective of needs and benefits, and the time they have to spend to use them. When it comes to modern technologies, especially ICT and their use for social purposes, the elderly resist them because they perceive the Internet and social networks as a dangerous place for inappropriate behaviour, which creates an obstacle to their more frequent use (Lehtinen et al., 2009). This resistance is most pronounced in the generation of baby boomers and older. They believe that social networks are used by young people who want publicity and superficial friendships. Older people's resistance to the use of ICT also stems from their unfavourable attitude towards learning something new (Lam & Chung, 2009). Schreurs et al. (2017) point to positive shifts in the communication of old people with family and friends using ICT and the Internet (mail, Skype) and the exchange of photographs, but note that the low digital literacy of old is a barrier to new learning linked with self-confidence. Negatively oriented attitudes towards ICT in most elders stem from ignorance and lack of experience with their use (Broady et al., 2010). Therefore, Schreurs et al. (2017) distinguish between two groups of ICT users, one who uses, knows and wants to learn more and expand knowledge, and the other who uses and believes that what they know is enough for their needs.

Given the fact that adult education institutions, among which are open public universities, charge for participation in the programs, it is unlikely that they will be available to the elderly with low incomes and limited transport possibilities. Therefore, learning in old age is hampered by the low economic opportunities of most older people, lower accessibility, unfavourable attitude towards learning and motivation to learn. Schreurs et al. (2017) see the potential of overcoming barriers of elderly learning in the younger generations and family members, while Berčan and Ovsenik (2019) emphasize intergenerational learning as a prerequisite for quality of life and aging.

ICT's contribution to lifelong learning and well-being

Lifelong learning advocates the possession of basic skills, including digital literacy to create quality opportunities for new and flexible forms of equally accessible learning across generations (Eurostat, 2012). The context of lifelong learning has been enriched by information communication technology and distance learning mediated through it, which is increasingly replacing or complementing traditional classroom learning. It is known that educational institutions are already changing the way they work and implement e-learning (Laeeq & Shaikh, 2016), meaning that learning of the elderly can be organised as needed, by using available technological solutions for distance learning. Furlong (1994, acc. to White & Weatherall, 2000) singles out five positive results of the use of ICT: they represent a new model of social and academic communities, enable lifelong learning, provide access to information, enable electronic services, and intergenerational connectivity. Mohammad (2012) explains that it is difficult for technology-mediated e-learning to compensate for direct social contact, which further emphasizes the responsibility of teachers in how they use it and how it affects learning. In the current epidemiological crisis, we are witnessing information and communication technology being used by numerous educational institutions and state institutions to inform the public and disseminate the information necessary for responsible health behaviour. In this instance, we are talking about the general population with a large proportion of the elderly that has experienced and is still experiencing an expansion of knowledge and is facing lifestyle changes associated with advances in technology and digitization. Concerning the way of learning, older generations still prefer learning in groups (72%), followed by learning in a classic classroom with a teacher (49%) and reading newspapers, magazines and books (43.2%). Online learning is preferred by only 15.2% (Tam & Chui, 2015).

In general, older population is using technology in everyday life activities for maintaining personal health and safety, transportation, communication, physical activities and to fill free time (Dumbrell & Steel, 2013; Peek et al., 2015). Depp et al. (2010) found on an appropriate sample of the elderly that 44% use ICT on daily basis and 41% of people over 70 uses technology for entertainment. According to the results of Roupa et al. (2010), older women use more often and more modern technological devices in everyday life, compared to men, except for mobile phones and television, which they use less. Zaid and Unt (2019) confirm that men are generally ahead of women in the use of ICT.

In total, about 10% of people over the age of 65 work on a computer, and 7% of them are highly educated (Šobot, 2015). In their research with a sample of older adults who use technology and social media, Teng and Joo (2017) found a positive impact on reduced feelings of loneliness and social exclusion because the elderly use them for fun, communication and friendships. Using technology for leisure activities contributes to the quality of life. Playing computer games in pairs or against someone contributes to greater engagement and social inclusion, maintains attention and memory, while

interactive games also encourage motor activity and mobility (Cota & Ishitani, 2015; Andrews, 2019). In addition to the social component, Maher et al. (2015) state that the elderly population often uses assistive devices and technology to help them move and maintain independence, but they are more used by people with higher education and income. There are also differences in the use of ICT within the group of highly educated people, with older people using fewer available applications and possibilities. Bechina Arntzen (2011) points to the possibility of using ICT-mediated games for the learning and rehabilitation of older people through their participation in cognitive and physical tasks.

Lam and Chung (2009) wrote about the untapped potential of learning mediation technology, noting that users' motivation is lacking for their educational use. Lehtinen et al. (2009) pointed out that the elderly do not perceive all the possibilities provided by ICT and question its benefits and usability the most while Roupa et al. (2010) highlighted insufficient incomes and economic opportunities, low education and lack of digital skills, place of residence, health difficulties, and software solutions that are not appropriate for the elderly. Technical characteristics of, for instance, mobile technology in terms of dimensions, screen size and touch response may conflict with sensory, motor and cognitive functionalities of the elderly (lam & Chung, 2009), therefore making desktops and laptops more suitable.

Distance learning is also possible through available national and local television programs for the elderly dedicated to topics such as health and rights. This is confirmed by Ramovš (2003) who states that a person in the third age learns the most by reading, listening to radio and television programs, and by talking to other people. The number and type of programs available to the elderly depends on attitudes towards aging and old age. Older people can use public media to obtain and process the necessary information (Dumbrell & Steel, 2013). Šobot (2015) found that slightly less than two-thirds of people over the age of 65 in retirement have a lot of free time in which they rest and idle. Television viewing is the most common activity, and out of 16% of those who read, 5% read magazines. The prevalence of reading in the population of highly educated elderly people is twice as high, and women read more often. This leads us to the conclusion that engaging in intellectual activities or lifelong learning of the highly educated as a lifestyle continues even after working life, in retirement.

The influence of the media on the elderly also has negative effects related to the neglect of physical contact and daily activities in favour of the media (Teng & Joo, 2017). Research has shown that older people spend 80% of their days in a sedentary mode, watching television, reading or working on computers, which negatively affects their physical health (Rezende et al., 2014). In a research on a sample of Polish residents over the age of 60, Snjadek and Zajdacz (2010) found that less than 10% of them engage in sports activities on weekdays, about 40% go for walks, and 72% never or rarely use the computer. They mostly stay at home watching television (70%), reading newspapers (60%) and books (40%), while 80% of those over 60 do not visit theatres, museums

or art galleries. Women, singles, and people of lower socio-economic status watch more television (Andrews, 2019). Based on the data from a longitudinal aging study, Andrews (2019) indicates that watching television for more than 3.5 hours harms verbal memory abilities. This supports the conclusion of a group of authors (Depp et al., 2010) about the negative association between television viewing and reduced life satisfaction, and this negative relationship intensifies with age at the expense of subjective well-being. Depp et al. (2010) found the time spent watching television increases with the increase in chronological age, which is associated with feelings of sadness and less satisfaction.

Roupa et al. (2010) confirm the connection between the quality of life of the elderly and the use of technology. They find the biggest obstacle is the insufficient knowledge on the use and available possibilities. However, knowledge and use of ICT technology cannot in itself be a guarantee of success in the learning of the elderly because it is depended on the motivation to learn. Accordingly, their purposeful usage proportionally increases with the level of motivation to learn (Yang, 2012).

The primary area of education and learning of the elderly should be related to health and the adoption of healthy behaviour since the elderly are known to be at an increased risk of disease, abuse and neglect, as well as at the increased risk of difficulties in maintaining life roles such as citizenship, recreation and leisure (Super & Šverko, 1995, acc. to Pastuović 1999; Goriup & Lahe, 2018). Given that human life expectancy is due to improve and, with that, the emergence of age-related diseases increase, the mediation of technology in the transmission of health information has significant potential. In addition to the existence of technology as one of the possibilities of transmitting information, it is important to consider the information and health literacy of the elderly. Many important information about diseases and their characteristics are available on the websites of health institutions and in general on the Internet, which allows the acquisition of specific knowledge (Dumbrell & Steel, 2013).

The emphasis in old age is somehow on maintaining a health-related quality of life. Therefore, for example, health education should be focused on the promotion of all aspects of health and the learning of the elderly on the acquisition of knowledge and skills that enable them to actively participate in creating opportunities for their realization. By raising knowledge about various aspects of health and well-being, older people become more willing to choose ways and make decisions about preventive behaviour that ensures their active aging and increases life satisfaction (Kececi & Bulduk, 2012). In this regard, it is important to promote the health literacy of the elderly, which involves the use of acquired skills to find, receive, and interpret and apply health-related information (Sorensen et al., 2012). Literacy is one of the several factors associated with the risk of developing anxiety and depression in elderly population (Sau & Bhakta, 2017). The elderly still consider their doctors, nurses, family members, friends and prominent members of their generation to be reliable sources of information (Sniadek & Zajadacz, 2010). Hoa et al. (2020) point to greater health literacy of older people

in the work environment, as they can verbally convey information, and of those who live with younger generations, as they have a developed social network and use print and audio-visual media.

White and Weatherall (2020) predict that the number of elderly ICT users will increase by 15% annually. Analysing the existing works on the use of ICT in the elderly population, Schreurs et al. (2017) indicated an increase; however, in terms of exploiting all opportunities, their use continuously lags behind the use by younger generations. Schreurs et al. (2017) also indicated the benefits of using the ICT and online environment manifested in the areas of communication, expanding lifelong learning opportunities, access to health information and services, interest and entertainment, improving the quality of life, and in daily activities.

Conclusion

Personal interests and motivation condition learning in the elderly age. Having access to a multimedia environment allows the elderly to reach information of interest and obtain desired knowledge in a faster and simpler way. In order to enable lifelong learning within the elderly population, it is not only crucial to understand their way of learning but also the technology by which the dissemination of knowledge can be realized. Given that the elderly spend most of the day sitting and watching television programs, they are at an increased risk of developing chronic diseases. Information and communication technology should ensure easier and enriched life for this age group. However, its use is in direct violation of the recommendations for physical activity and avoiding a sedentary lifestyle. Hence, it is paradoxical to encourage older generations to use digital technology for learning as the sedentary lifestyle is encouraged in such a manner. Because there is a positive relationship between inclusion and life satisfaction, older people are advised to maintain the lifestyle they had before for as long as possible and find new roles similar to those they lost. The purpose of active and successful aging is not the assimilation of the elderly into a collective understanding of their needs and interests, but it is based on the model of law according to which individual differences are respected and their personal choices accepted within the created opportunities. Lifelong learning enables the elderly to acquire knowledge and find information that strengthen their competencies in decision-making, representing their own needs and interests. The use of technologies, ICT in particular, can help them to achieve this. Differences in the daily use of ICT and the attitudes towards its usage in learning are visible between economically and socially developed regions and those in development, as well as depending on the level of formal education. In order to increase the use of ICT in the elderly population, it is first necessary to work on the development of their digital skills and acquainting them with all the possibilities available when using ICT. However, when promoting lifelong learning, the social component, direct contact and the subjective experience of learning should be taken into account in the context of culture and preferences. Older people have been shown

to value and respect the opinions of their peers and family members so they should be considered in the mediation of using the ICT for learning and everyday use to the extent and in the way best suited to the lifestyle, abilities and needs of the elderly.

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Cjeloživotno učenje i osobe starije životne dobi u kontekstu IKT-a

Sažetak

Starenje populacije na globalnoj razini zaokuplja pažnju brojnih profesija, a ključni je razlog povećanje udjela starih osoba. Demografski podatci ukazuju na trend daljnjega rasta. Postojeće i nadolazeće generacije starih pod utjecajem su brojnih promjena koje imaju neposredni utjecaj na način i kvalitetu njihova života. Ove su promjene povezane s biološkim i psihološkim čimbenicima događaju u kontekstu postojećega i promjenjivoga odnosa društva prema starosti i starenju. Mnogim se promjenama ljudi ne mogu oduprijeti ili ih zaustaviti jer nisu pod utjecajem njihove volje, ali im se mogu prilagoditi i prema tim promjenama zauzeti stajalište. Od nadolazećih starih očekuje se da perspektivu tradicionalno ranjive i ovisne skupine, koristeći sva znanstvena, stručna i tehnološka dostignuća, promijene u perspektivu aktivnih sudionika koji društvo u kojemu žive mijenjaju i obogaćuju. Potencijal za prilagodbu, aktivno i uspješno starenje počiva na mogućnostima cjeloživotnoga učenja. Suvremenim su tehnologijama, a posebno upotrebom IKT-a, u kombinaciji s potrebama i motivacijom starih moguće prilagodbe u odnosu na oblik, način, vrijeme i mjesto učenja. Cjeloživotno se učenje dovodi u korelacije s procjenom subjektivne dobrobiti starih i općenito s kvalitetom života i starenja.

Ključne riječi: *aktivno starenje; cjeloživotno učenje; IKT, kvaliteta života*

Uvod

Osobe starije životne dobi danas žive drugačije i duže nego što su to živjele prethodne generacije. Njihov je način života pod utjecajem tehnološkoga napretka te brzoga multipliciranja i širenja znanja, ali i izmijenjenih tradicija koje su tijekom života usvajali. Suvremene promjene manifestiraju se u životnom stilu svih generacija, razumijevanju stvarnosti te prihvaćanja novih ili izmijenjenih društvenih i individualnih vrijednosti (Findak, 2016). Prskalo (2018) ističe da se tim promjenama pojedinci i manje skupine ne mogu oduprijeti, već ih moraju prihvatiti kao preduvjete u suvremenom obrazovanju pri čemu znanja zahvaljujući infomacijsko-komunikacijskoj tehnologiji postaju globalno dostupna. Trenutačno se nalazimo u vremenu koje je obilježeno porastom stanovništva starog 65 i više godina, a trend rasta udjela u općoj populaciji će se nastaviti. Stavovi prema starenju i starosti postupno se mijenjaju od

percepcije starih kao ovisnih o mlađim generacijama i nemoćnih zbog oslabljenih ili izgubljenih funkcionalnih sposobnosti prema doživljavanju starih kao aktivnih članova koji doprinose društvu u kojem žive. U staru ili treću životnu dob ulazi *baby boom* generacija (rođeni nakon II. svjetskog rata do 1960-ih) koja ima višu formalnu razinu obrazovanja i dulji radni vijek od prethodnika (Mather, Jacobsen i Pollard, 2015), koja prema demografskim pokazateljima nastavlja trend duljega životnog vijeka, dobroga tjelesnog i mentalnog zdravlja te aktivnoga sudjelovanja u životu zajednice. Oni nakon umirovljenja, koje je za većinu nakon navršenih 65 godina života, mogu očekivati nekoliko desetljeća života i bilo bi neobično očekivati da preuzmu ulogu pasivnih i ovisnih građana. Tim više što se radi o značajnoj populaciji koja kontinuirano raste, a način njihova života zahtijeva potporu aktivnom i uspješnom starenju. Starost je prestala biti stanje ovisnosti o drugima i postala je vrijeme dodatnih mogućnosti i prilika (Zaidi i Howse, 2017). To je vrijeme u kojem umirovljenici ostvaruju svoje planove i aktivnosti za koje ranije nisu imali vremena ili mogućnosti. Uspješno aktivno starenje podrazumijeva iskorištavanje mogućnosti kojima se održava tjelesno, socijalno i mentalno zdravlje za aktivno sudjelovanje u životu zajednice i neovisno življenje bez diskriminacije prema dobi (Sniadek i Zajadacz, 2010). Šobot (2015) aktivno starenje smatra potrebnim sagledati kao stil života i kao društvenu normu. Zaidi i Unt (2019) opisali su 4 područja (zaposlenost, sudjelovanje u društvu, neovisno, zdravo i sigurno življenje i potencijal za aktivno starenje) i 22 indikatora aktivnoga starenja. Između ostalih, u području neovisnoga, zdravoga i sigurnoga življenja je cjeloživotno učenje, a u području potencijala za aktivno starenje su obrazovna postignuća, upotreba IKT-a i očuvanje mentalnoga zdravlja. Pastuović (1999) navodi da je svrha odgoja i obrazovanja promicanje kvalitete života, odnosno koncepta koji se operacionalizira zadovoljenjem potreba i zadovoljstvom života. Kutubaeva (2019) analizom faktora životnoga zadovoljstva utvrđuje da utjecaj kronološke dobi varira u odnosu na spol i regionalnu pripadnost, a najznačajniji i stabilni doprinos životnom zadovoljstvu ima samoprocjena zdravstvenoga stanja starih. Struktura potreba i način njihovog zadovoljenja različiti su u društvenim skupinama te zavise o promjenama životnih uvjeta pojedinaca i tih skupina, a u skladu s time mijenjaju se i ciljevi učenja (Pastuović, 1999). Sukladno tome, svrha je ovoga rada analizirati cjeloživotno učenje i učenje starih u kontekstu suvremenih tehnologija jer potreba cjeloživotnoga učenja ili stjecanja znanja proizlazi iz činjenice da znanja, vrijednosti i stavovi zastarijevaju u odnosu na tehnološki napredak i društvene promjene (Pastuović, 1999), a brojnim je istraživanjima potvrđena pozitivna povezanost cjeloživotnoga učenja s razinom psihološke, socijalne i opće dobrobiti starijih osoba (Escolar Chua i Guzman, 2014; Goriup i Lahe, 2018).

Starenje i cjeloživotno učenje

Cjeloživotno je učenje, kako i sam pojam govori, učenje kroz cijeli život, a odnosi se na sve aktivnosti kojima je svrha unapređivanje znanja, vještina i kompetencija u relaciji osobne, građanske, socijalne i radne perspektive. Ono se osim u obrazovnim

ustanovama provodi sudjelovanjem u sportskim i kulturnim aktivnostima, hobijima i rekreaciji te volontiranju (Weinstein, 2004). Escolar Chua i Guzman (2014) cjeloživotnim učenjem starih podrazumijevaju aktivno sudjelovanje u tjelesnim aktivnostima i rekreaciju, kognitivno učenje i socijalno sudjelovanje. Temeljno obilježje cjeloživotnoga formalno ili neformalno organiziranoga učenja je svrhovitost (Eurostat, 2012). Svrhovito intencijsko učenje je namjerno traganje za znanjem, vještinama, kompetencijama i stavovima trajnih vrijednosti (Eurostat, 2012, str. 220), a procijenjena svrhovitost sadržaja učenja starih povezana je s njihovom motivacijom za učenje (Keceki i Bulduk, 2012). Yunianta, Yusof, Othman i Octaviani (2012) izdvojili su pet karakteristika ili sastavnica smislenoga učenja, a one su aktivnost, konstruktivnost, intencionalnost, jedinstvenost i kooperativnost. Takvo učenje je svjesno i usmjereno prema stjecanju specifičnoga znanja ili vještine u prirodnom kontekstu. Osim toga, kad je u pitanju učenje starih i njihovo uključivanje u dodatno obrazovanje u kontekstu cjeloživotnoga učenja, važno je stvoriti prilike i mogućnosti, ali one samostalno bez osobne motivacije i namjere ne mogu dovesti do zadovoljenja potreba starih.

Maolud i Lu (2020) podsjećaju da za učenje starih trebaju biti zadovoljena četiri kriterija: (I) pristupačni, empatični i uključujući poučavatelji, (II) interaktivne i raznolike metode poučavanja sadržaja primjenjivoga u stvarnom životu, (III) fleksibilni kurikuli i sadržaji učenja primjereni sposobnostima i interesima, (IV) inkluzivno i prijateljsko okruženje pogodno široj masi zainteresiranih. Potencijal očuvanja sveukupnoga funkcioniranja starih na mentalnom, tjelesnom i socijalnom području djelomično je uvjetovan stalnim učenjem (Purdie i Boulton-Lewis, 2004). Osim očuvanja kognitivnih funkcija, stari učenjem svrhovito ispunjavaju slobodno vrijeme. Goriup i Lahe (2018) argumentiraju da se učenjem nadograđuju postojeća znanja ili stječu nova te obogaćuje osobno životno iskustvo starih, razvijaju građanske kompetencije, stječe se bolje razumijevanje promijenjenoga društvenog i obiteljskoga funkcioniranja, stari mogu komunicirati na materinskom i stranom jeziku, upotrebljavati medije, upoznati nove kulture, prepoznati vlastite potrebe i kako ih ostvariti, uče o poduzetništvu te se kreativno izražavaju. Učenjem stari se pripremaju i lakše prilagođavaju za suživot s mlađim generacijama te daju svojem životu smisao (Goriup i Lahe, 2018).

Casia Gomes i sur. (2015) na uzorku žena starije kronološke dobi (69-79 godina) utvrdili su značajnu povezanost razine obrazovanja (8 i više godina) s njihovom sposobnošću bržega obavljanja višestrukih zadataka. Mather i sur. (2015) ističu da je u populaciji osoba starijih od 65 godina u 2014. godini bila četvrtina visoko obrazovanih (bacc.), a od toga više muškaraca što je izravna posljedica obrazovnih politika 70-ih godina prošloga stoljeća. S obzirom na to da je viša razina obrazovanja povezana s boljim materijalnim statusom i financijskim primanjima te boljim zdravstvenim stanjem, duljinom života i širom socijalnom mrežom, niža razina obrazovanja žena povezana je sa siromaštvom i većim rizikom za doživljaj stresa i depresije (Mather i sur., 2015).

Odnos prema učenju koliko god bio pod utjecajem prethodnih iskustava, spolnih i društvenih razlika na kraju je ipak individualno obilježje vezano uz što stari žele učiti i

čemu će im to koristiti. Njihovo je učenje najčešće u toj dobi temeljeno na bihevioralnom pristupu i orijentirano prema tome kako se nešto radi (Keceki i Bulduk, 2012). Općenito se može reći da je interes starih za učenje na globalnoj razini u porastu, a veći interes iskazuju prema hobi-aktivnostima i tečajevima vještina (Leung, Chi i Lui, 2006) te učenju za napredovanje ili promjenu karijere (Lakin, Mullane i Robinson, 2007). Za većinu starih najvažniji motivacijski faktor za učenje je kognitivni interes (Kim i Merriam, 2004), odnos prema učenju (Tam i Chui, 2015), zatim doživljaj osobnoga zadovoljstva i širenje socijalnih kontakata (Kim i Merriam, 2004; Leung i sur., 2006; Tam i Chui, 2015) te prijašnja iskustva, uspjeh i postignuća (Keceki i Bulduk, 2012). Tam i Chui (2015) su na populaciji starih u dobi 55 i više godina analizirali interes za učenje i utvrdili da tri najčešća po prioritetu uključuju zdravlje (69,6 %-prehrana, sport, fitnes), slobodno vrijeme (53 %-kuhanje, putovanja, vrtlarenje) i umjetnost (51,4 %-glazba, ples, slikanje, ručni rad). Pastuović (1999) navodi da je obrazovanje i učenje odraslih usmjereno prema usavršavanju postojećih znanja i vještina koje su praćene promjenama vrijednosnih orijentacija, stavova i navika.

S obzirom na trend produljenja životnoga vijeka očekuje se značajno povećanje broja osoba starijih od 65 godina uz istovremeno smanjenje radno aktivne populacije. Predviđanja za EU su smanjenje radno aktivnoga stanovništva za 9,6 % u narednom periodu do 2070. godine (European Commission, 2018). To će radi održivosti sustava zahtijevati dodatno produljenje radno aktivnih godina i usmjeravanje dodatnih ulaganja u sustav obrazovanja (European Commission, 2018). Nejednakost u zapošljavanju s obzirom na obrazovanje je značajna, a povećava se starenjem. Te su razlike posebno istaknute između visokoobrazovanih i onih s manjom razinom obrazovanja jer visokoobrazovani imaju više mogućnosti dulje raditi (Zaid i Unt, 2019). Lam i Chung (2009) u odnosu na stariju populaciju potencijalnih radnika koji su u mirovini, a mogu dodatno biti uključeni u tržište rada, ističu potrebu njihova prekvalificiranja ili osposobljavanja za nove radne vještine. Zaposlenost starih jedan je od indikatora aktivnoga starenja, a nastavak rada starih koji su stekli uvjete za mirovinu pozitivno korelira s državnim brutodohotkom (Zaidi i Unt, 2019). Posljednji podatci Eurostata za Hrvatsku ukazuju na udjel od 3 % odraslih (25 do 64 godine) koji su sudjelovali bilo u formalnom ili neformalnom obrazovanju, a na razini Europske unije bilo je 11 % s većim udjelom u razvijenim europskim zemljama (Eurostat, 2019). Taj podatak pokazuje da na razini Europske unije za razdoblje do 2020. godine nije ostvaren planirani cilj od 15 % odraslih uključenih u cjeloživotno učenje. Razlog maloga udjela starih u formalnom i neformalnom obrazovanju i učenju počiva na društvenoj percepciji starosti kao problema i opterećenja (Goriup i Lahe, 2018). Zato je pristup informacijama o raspoloživim mogućnostima starih prvi korak prema aktivnostima kojima će zadovoljiti njihove potrebe za učenjem. Društvo općenito mora biti svjesno izazova i mogućnosti povezanih sa starenjem stanovništva, a oni se odnose na iznalaženje načina razvoja njihovih punih potencijala, podizanja blagostanja, jačanje koristi društva u kojem žive. Poticanjem aktivnoga starenja kroz društveno ulaganje čuvaju se znanje i vrijedna

životna iskustva starih, održava se njihov potencijal i jačaju društvene strukture jer je to ekonomski povoljnije od njihova držanja na marginama i ovisnima o obitelji i društvu (Goriup i Lahe, 2018; Zaid i Unt, 2019).

Unatoč svim prednostima koje učenje donosi populaciji starih, a time i društvu općenito, ne možemo reći da postojeća obrazovna praksa prati te spoznaje. Naime, u Republici Hrvatskoj postoji samo jedno sveučilište za treću životnu dob, a koje djeluje unutar Pučkoga otvorenog učilišta Zagreb. Čini se da cjeloživotno učenje starih počiva upravo na tim ustanovama. Analizom mrežne stranice Hrvatske zajednice 36 pučkih otvorenih učilišta u Republici Hrvatskoj, od 41 % njih koje nude tečajeve iz informatike i 50 % koje pružaju mogućnost učenja stranih jezika samo dvije institucije imaju ciljane programe informatičkoga opismenjavanja i učenja stranih jezika za umirovljenike. Svaka druga ustanova ima programe osposobljavanja za stjecanje strukovnih kvalifikacija i srednjoškolskoga obrazovanja odraslih. Planirane aktivnosti za učenje kreativnih tehnika i ručnoga rada za slobodno vrijeme ima 36 % pučkih učilišta. Usmjerene aktivnosti na zdravlje imaju dvije ustanove. To ne znači da se ciljanom učenju starih ne pridaje pozornost jer je poznato postojanje grupa potpore, usmjerene edukacije starih o specifičnim zdravstvenim temama koje provodi patronažna služba primarne zdravstvene zaštite, djelovanje udruga umirovljenika, udruga koje okupljaju članove zbog specifičnoga predmeta interesa (diabetes, rak dojke i dr.), radno-okupacijske aktivnosti u domovima za stare i nemoćne. Svi oni u različitom opsegu potiču stare na učenje novoga ili održavanje njihovih stečenih znanja i vještina. Čurin (2018) na temelju analize korisnika programa učilišta za treću životnu dob ističe sadržaje i socijalnu komponentu kao važne čimbenike u odabiru programa. Unatoč tome što nisu izrijekom navedeni programi namijenjeni osobama starije životne dobi, svi oni koje provode pučka otvorena učilišta i druge ustanove dostupni su i njima.

Kognitivna, emocionalna i ponašajna dimenzija stavova svojim utjecajem određuju ponašanja prema aktivnostima i sadržajima učenja starih, njihovoj odgovornosti prema zdravlju, slobodnom vremenu, suočavanju sa stresom, interpersonalnim odnosima itd. (Tsai, Huang i Wu, 2014). To se u pogledu uspješnoga i aktivnoga starenja odnosi na učenje i prakticiranje tjelesne aktivnosti, očuvanje zdravlja, bavljenje kreativnim radom, vježbanje kognitivnih sposobnosti i sudjelovanje u društvenom životu (Sniadek i Zajadacz, 2010), a što je i u skladu s izraženim interesom starih za učenje (Tam i Chui, 2015). Sama usmjerenost na zdravo starenje nadilazi individualno usmjerenu podršku, koja i dalje postoji, jer vodi prema produktivnom starenju i općoj dobrobiti društva (Zaidi i Howse, 2017). Stari ljudi koji su aktivni na različitim područjima života svojim djelovanjem i angažmanom doprinose daljnjem razvoju i napredovanju tako da poučavaju mlađe, dijele svoja iskustva, sudjeluju u savjetodavnim tijelima, rade. Socijalnu uključenost i sudjelovanje u produktivnim aktivnostima očekuje se od svih građana neovisno o njihovoj dobi (Zaidi i Howse, 2017). To nas dovodi do prihvaćanja starih i njihovih potencijala izvan deficita i ograničenja povezanih sa starenjem. Aktivno starenje stoga podrazumijeva mogućnosti duljega rada, sudjelovanje

u važnim odlukama, smanjenje siromaštva i ekonomske ovisnosti, održavanje zdravlja i cjeloživotno učenje (Zaidi i Howse, 2017). Važnim područjem učenja starih su digitalne vještine i upotreba infomacijsko-komunikacijskih tehnologija koje utječu i poboljšavaju kvalitetu života starih.

Prepreke cjeloživotnoga učenja i upotrebe IKT-a

Šverko, Babarović i Šverko (2007) ponašanje čovjeka povezuju s njegovim ulogama koje ima kroz životna razdoblja i normama društva. Ako osobe starije životne dobi promatramo kroz njihovu kronološku dob i svrstavamo ih u *umirovljenik*e ili *stare i nemoćne*, njihovu ćemo ulogu tumačiti kroz usklađenost ponašanja, prava i obaveza s očekivanjima i normama okoline (Šverko i sur., 2007).

Težnja za znanjem je unutarnji interes ili motiv koji potiče na istraživanje i učenje (Ruiz-Fuster, 2019) pa se stoga cjeloživotno učenje i učenje starih treba promatrati s aspekta individualnoga stila života i kulture u kojoj žive. Učenje starih ljudi pod utjecajem je individualnih obilježja i promjena u funkcioniranju koje se pojavljuju starenjem. Te promjene manifestiraju se strukturalnim, fiziološkim promjenama, gubitkom funkcionalnih sposobnosti organa i osjetila te slabljenjem kognitivnih sposobnosti. Osim ovih bioloških, na učenje starih utječe razina motivacije za učenjem i dostupnost prilika za učenje. Dostupnost prilika povezana je s odnosom društva prema starima i s tim u vezi netolerancija prema učenju starih i obrazovanju općenito, niska društvena vrijednost učenja u staroj dobi, siromaštvo društva, nedovoljna medijska pozornost, niska razina obrazovanja i osviještenost o potrebi cjeloživotnoga učenja, nepoznavanje prava, nedostatak osposobljenih profesionalaca i nepoticajno okruženje za učenje (Goriup i Lahe, 2018). Dosadašnja su istraživanja potvrdila nesrazmjer u cjeloživotnom učenju odraslih prema regionalnoj pripadnosti, a jednaki se trend projicira i na stare koji se učestalije uključuju u namjerno učenje u razvijenim državama svijeta i gradskim sredinama.

Ishodi učenja starije populacije mjere se kroz znanja, vještine i vrijednosti koje će razviti. Pastuović (1999) govori o neposrednim rezultatima odgojnoga i obrazovnoga procesa koji predstavljaju promjene u spoznajnom, psihomotornom i motivacijskom području osobe koja uči i biva učenjem osposobljena za nešto. Sukladno tome ishodi učenja su osposobljenosti i ponašanja kojima je svrha zadovoljenje različitih ljudskih potreba (Pastuović, 1999). Jedna od tih potreba je predaja životnih iskustava i spoznaja mlađim generacijama u interakciji s učenjem novoga (Ramovš, 2003). Ako stari u znanjima i novostečenim vještinama ne vide korist ili je omjer uloženoga znatno veći od dobiti, vrlo vjerojatno im neće pridati važnost ni svoje vrijeme.

Prema indeksu aktivnoga starenja i udovoljavanju indikatorima utvrđeno je da srednjeeuropske i istočnoeuropske države imaju najslabije rezultate za razliku od skandinavskih zemalja i Ujedinjenog Kraljevstva koji imaju najviše (Zaidi i Unt, 2019). U odnosu na indikator obrazovanja razlike su utvrđene u korist muške populacije, a ta je nejednakost izraženija u državama s općom ekonomskom deprivacijom. Nepoznavanje

mogućnosti IKT-a u dijelu koji se odnosi na učenje predstavlja prepreku uspješnom starenju. Istražujući potrebe starih ljudi, Purdie i Boulton-Lewis (2004) utvrdili su da učenje o tehnologijama smatraju najmanje važnim. Depp, Schkade, Thompson i Jeste (2010) ukazuju na tri moguća odnosa starih prema tehnologiji: izražena potreba za tehnologijom, interes prema tehnologijama, namjera ulaganja u tehnologiju. Prema njima stari o tehnologijama razmišljaju iz perspektive potreba i koristi te vremena koje moraju utrošiti da bi ih koristili. Kad su u pitanju suvremene tehnologije, a posebno IKT i njihovo korištenje u socijalne svrhe, stari prema njima pružaju otpor jer internet i društvene mreže doživljavaju opasnim mjestom neprimjerenoga ponašanja što stvara prepreku njihovom učestalijem korištenju (Lehtinen, Nasanen i Sarvas, 2009). Ovaj otpor najizraženiji je u generaciji *baby-boomera* i starijih. Smatraju da društvene mreže koriste mladi željni publiciteta i površnih prijateljstava. Otpor starih prema korištenju IKT proizlazi i iz njihova nepovoljnoga odnosa prema učenju nečega novoga (Lam i Chung, 2009). Schreurs, Quan-Haase i Martin (2017) ukazuju na pozitivne pomake u komuniciranju starih s obitelji i prijatelja upotrebom IKT-a i interneta (mail, skype) te razmjenu fotografija, ali konstatiraju da je osobno procijenjena niska digitalna pismenost starih prepreka novom učenju zbog povezanosti sa samopouzdanjem. Negativno orijentirani stavovi u odnosu na IKT u većine starih proizlaze iz neznanja i manjka iskustva s njihovom upotrebom (Broady, Chan i Caputi, 2010). Zato Schreurs i sur. (2017) razlikuju dvije skupine IKT korisnika, jedni koji koriste i znaju te žele naučiti više i proširiti znanja te drugi koji koriste i misle da je za njihove potrebe dovoljno ono što znaju.

Uzevši u obzir činjenicu da ustanove za obrazovanje odraslih, a time i primjerice pučka otvorena učilišta, naplaćuju sudjelovanje u programima od samih polaznika malo je vjerojatno da će oni biti dostupni starima s niskim primanjima i ograničenim transportnim mogućnostima. Stoga je učenje u starijoj dobi otežano dokazano niskim ekonomskim prilikama većine starih, manjom dostupnošću, nepovoljnim odnosom prema učenju i motivacijom za učenje. Schreurs i sur. (2017) potencijal nadilaženja prepreka učenju starih proizašle iz okruženja vide u mlađim generacijama i članovima obitelji, a Berčan i Ovsenik (2019) upravo međugeneracijsko učenje ističu preduvjetom kvalitete života i starenja.

Doprinos IKT-a cjeloživotnom učenju i dobrobiti

Cjeloživotno učenje zagovara posjedovanje temeljnih vještina, a među njima i digitalnu pismenost s ciljem stvaranja kvalitetnih mogućnosti za nove i fleksibilne oblike jednako dostupnoga učenja ljudima svih generacija (Eurostat, 2012). Kontekst cjeloživotnoga učenja obogaćen je zbog informacijsko-komunikacijske tehnologije i njome posredovanoga e-učenja na daljinu koji sve više zamjenjuje ili nadopunjava tradicionalno učenje u učionici. Poznato je da obrazovne institucije već mijenjaju način rada i provode e-učenje (Laeeq i Shaikh, 2016) pa to znači da obrazovne institucije mogu prema potrebi organizirati i učenje starih koristeći dostupna tehnološka rješenja za

učenje na daljinu. Furlong (1994, prema White i Weatherall, 2000) izdvaja pet pozitivnih rezultata upotrebe IKT-a: predstavljaju novi model socijalnih i akademskih zajednica, omogućuju cjeloživotno učenje, osiguravaju pristup informacijama, omogućuju elektronske usluge i međugeneracijsku povezanost. Mohammad (2012) objašnjava da e-učenje posredovano tehnologijom teško nadoknađuje izravni socijalni kontakt, a što dodatno naglašava odgovornost učitelja na koji će je način koristiti i kako će utjecati na učenje. Svjedoci smo da informacijsko-komunikacijsku tehnologiju u postojećoj epidemiološkoj krizi koriste brojne obrazovne ustanove i državne institucije za obavještavanje javnosti i širenje informacija potrebnih za odgovorno zdravstveno ponašanje. Tu govorimo o općoj populaciji s velikim udjelom staroga stanovništva koja je doživjela i još uvijek doživljava ekspanziju znanja i suočava se s promjenama u načinu života povezanih s napretkom tehnologije i digitalizacije. U odnosu na način učenja stariji i stari još uvijek najviše preferiraju učenje u grupama (72 %), zatim učenje u klasičnim učionicama s učiteljem (49 %) te čitanjem novina, časopisa i knjiga (43,2 %). *Online* učenje preferira tek 15,2 % (Tam i Chui, 2015).

Općenito se stari tehnologijom služe u aktivnostima svakodnevnoga života, održavanju osobnoga zdravlja i sigurnosti, transportu, komunikaciji, fizičkim aktivnostima i za ispunjavanje slobodnoga vremena (Dumbrell i Steel, 2013; Peek, Luijkx, Rijnaard i sur., 2015). Depp i sur. (2010) na prigodnom uzorku starih utvrdili su da na dnevnoj razini IKT koristi 44 %, a tehnologiju za zabavu 41 % osoba starijih od 70 godina. Prema rezultatima Roupa i sur. (2010) žene starije životne dobi koriste češće i više suvremenih tehnoloških naprava u svakodnevnom životu u odnosu na muške, osim mobilnih telefona i televizije koje koriste manje. Zaid i Unt (2019) potvrđuju da prema upotrebi IKT-a muškarci uglavnom prednjače u odnosu na žene.

Sveukupno oko 10 % starijih od 65 godina radi na računalu, a od toga su 7 % visokoobrazovani (Šobot, 2015). Teng i Joo (2017) na uzorku starijih odraslih osoba koji koriste tehnologiju i društvene mreže ustvrdili su pozitivan utjecaj na smanjeni osjećaj usamljenosti i socijalne isključenosti jer ih stari koriste za zabavu, komunikaciju i prijateljstva. Korištenje tehnologije za aktivnosti u ispunjavanju slobodnoga vremena doprinosi kvaliteti života, zatim igranje računalnih igrica u paru ili protiv nekoga doprinosi većem angažmanu i socijalnoj uključenosti, održavanju pažnje i pamćenja, interaktivne igre potiču motoričku aktivnost i pokretljivost (Cota i Ishitani, 2015; Andrews, 2019). Osim socijalne komponente, Mather i sur. (2015) navode da starija populacija često koristi asistivne naprave i tehnologiju koji im pomažu u kretanju i zadržavanju samostalnosti, ali njih više koriste ljudi s višim obrazovanjem i primanjima. I unutar skupine visokoobrazovanih postoje razlike u upotrebi IKT pri čemu stariji koriste manje dostupne aplikacije i mogućnosti. Bechina Arntzen (2011) ukazuje na mogućnost upotrebe IKT posredovanih igara za učenje i rehabilitaciju starijih osoba kroz njihovo sudjelovanje u kognitivnim i fizičkim zadatcima.

O neiskorištenom potencijalu tehnologije za posredovanje u učenju pisali su Lam i Chung (2009) koji su konstatirali da za njihovo edukativno korištenje izostaje

osobna motivacija korisnika, Lehtinen i sur. (2009) ističu da stari ne percipiraju sve mogućnosti koje pruža IKT te najviše propituju njezinu korist i upotrebljivost te Roupa i sur. (2010) koji ističu nedostatna materijalna primanja i ekonomske prilike, nisko obrazovanje i nedostatak digitalnih vještina, mjesto stanovanja, zdravstvene teškoće i softwerska rješenja koja nisu prikladna starima. Tehničke karakteristike primjerice mobilne tehnologije u smislu dimenzija, veličine ekrana i reagiranja na dodir mogu biti u koliziji sa senzornim, motoričkim i kognitivnim funkcionalnostima starih (Lam i Chung, 2009) pa su iz tog razloga stolna i prijenosna računala pogodnija.

Učenje je moguće na daljinu i preko dostupnih nacionalnih i lokalnih televizijskih programa i namjenskih priloga. Tome doprinose tematski prilozi o zdravlju, pravima, osmišljene emisije za stariju populaciju te svi drugi dokumentarni i zabavni sadržaji koji na jednostavan i zanimljiv način donose pregled važnih činjenica. To potvrđuje Ramovš (2003) koji navodi da čovjek u trećoj životnoj dobi najviše uči čitanjem, slušanjem radijskih i gledanjem televizijskih programa te razgovorom s drugim ljudima. Koliko će i kakvih programa biti dostupno populaciji starijih osoba, ovisi o stavovima prema starenju i starosti. Javni mediji mogu koristiti starim ljudima za dobivanje i procesuiranje potrebnih informacija (Dumbrell i Steel, 2013). Šobot (2015) je utvrdila da nešto manje od dvije trećine osoba starijih od 65 godina u mirovini ima puno slobodnoga vremena u kojem se odmara i besposličari. Najviše je zastupljeno gledanje televizije, a od 16 % onih koji čitaju 5 % čita časopise. Dvostruko je veća zastupljenost čitanja u populaciji visokoobrazovanih starih ljudi i češće čitaju žene. To nas navodi na zaključak da se bavljenje intelektualnim aktivnostima odnosno cjeloživotno učenje visokoobrazovanih kao stil života nastavlja i nakon radnoga vijeka, u mirovini.

Utjecaj medija na stare ima i negativne utjecaje, a oni se odnose na zanemarivanje fizičkih kontakata i podređivanje izvršavanja svakodnevnih aktivnosti medijima (Teng i Joo, 2017). Istraživanja su potvrdila da ljudi starije životne dobi provedu 80 % dana u sjedećem položaju gledajući televiziju, čitajući, radom na računalima koji ima negativne posljedice na tjelesno zdravlje ljudi (Rezende, Rey-Lopez, Matsudo i Carmo Luiz, 2014). Sniadek i Zajadacz (2010) na uzorku poljskih stanovnika starijih od 60 godina ustanovili su da se tijekom radnih dana u tjednu manje od 10 % njih bavi sportskim aktivnostima, a oko 40 % odlazi u šetnje, 72 % njih nikada ili rijetko koristi se računalom. Uglavnom borave u kući gledajući televiziju (70 %), čitaju novine (60 %) i knjige (40 %). Također su dobili podatke o 80 % starijih od 60 godina koji ne posjećuju kazališta, muzeje ni umjetničke galerije. Televiziju više gledaju žene, samci i ljudi nižega socioekonomskoga statusa (Andrews, 2019). Andrews (2019) na temelju podataka longitudinalne studije starenja ukazuje da gledanje televizije dulje od 3,5 sati ima negativni utjecaj na sposobnosti verbalnoga pamćenja. To potkrepljuje zaključak skupine autora (Depp i sur., 2010) o negativnoj povezanosti gledanja televizije i smanjenjem zadovoljstva životom, a taj se negativni odnos s godinama pojačava na štetu subjektivne dobrobiti. Depp i sur. (2010) utvrdili su da se porastom kronološke dobi povećava vrijeme gledanja televizije, a ono je povezano s osjećajem tuge i manjega zadovoljstva.

Roupa i sur. (2010) potvrđuju povezanost kvalitete života starih s upotrebom tehnologije, a najveću prepreku pronalaze u nedovoljnom poznavanju njihove upotrebe i mogućnostima koje im postaju dostupne. Međutim, poznavanje i korištenje IKT ne može samo po sebi biti jamstvo uspješnosti u učenju starih jer ono ovisi o motivaciji za učenjem. Sukladno tome, realizacija njihova korištenja i svrhovite upotrebe proporcionalno raste s razinom motivacije za učenjem (Yang, 2012).

Primarno područje edukacije i učenja starih treba se odnositi na zdravlje i usvajanje zdravoga ponašanja jer je poznato da su stari u povećanom riziku za nastanak bolesti, zlostavljanje i zanemarivanje, ali i teškoća održavanja životnih uloga poput uloge građanina, rekreativne uloge i korisnika slobodnoga vremena (Super i Šverko, 1995., prema Pastuović, 1999; Goriup i Lahe, 2018). S obzirom na očekivano produljenje života ljudi i nastanak bolesti povezanih sa starenjem, posredovanje tehnologije u prenošenju zdravstvenih informacija značajan je potencijal. Osim postojanja tehnologije kao jedne od mogućnosti prenošenja informacija, važno je razmotriti informatičku i zdravstvenu pismenost starih. Brojne važne informacije o bolestima i njihovim karakteristikama dostupne su na mrežnim stranicama zdravstvenih ustanova i općenito na internetu, a što omogućava stjecanje specifičnih znanja (Dumbrell i Steel, 2013).

U starijoj je životnoj dobi nekako naglasak na zadržavanje kvalitete života povezane sa zdravljem. Stoga se recimo zdravstveni odgoj treba usmjeriti promociji svih aspekata zdravlja, a učenje starih na stjecanje znanja i vještina koje im omogućuju aktivno sudjelovanje u stvaranju prilika za njihovo ostvarenje. Podizanjem znanja o različitim aspektima zdravlja i blagostanja stari postaju spremniji birati načine i donositi odluke o preventivnom ponašanju koje im osigurava aktivno starenje i povećava zadovoljstvo životom (Kececi i Bulduk, 2012). S tim je u vezi važno promicanje zdravstvene pismenosti starih, a koja podrazumijeva korištenje stečenih akademskih vještina za pronalaženje, primanje i interpretaciju te primjenu informacija povezanih sa zdravljem (Sorensen i sur., 2012). Pismenost je jedan od brojnih faktora koji se vežu za rizik nastanka anksioznosti i depresivnosti u populaciji starijih osoba (Sau i Bhakta, 2017). Stari još uvijek kao pouzdane izvore informacija smatraju njihove liječnike, medicinske sestre, članove obitelji, prijatelje i ugledne članove njihove generacije (Sniadek i Zajadacz, 2010). Hoa, Giang, Vu, Tuyen i Khue (2020) ukazuju na veću zdravstvenu pismenost starijih ljudi koji su u radnom okruženju jer imaju mogućnost usmenoga prenošenja informacija, koji žive s mlađim generacijama, imaju razvijenu socijalnu mrežu te se koriste tiskanim i audiovizualnim medijima.

White i Weatherall (2020) dali su projekciju da će se broj starih osoba korisnika IKT-a povećavati za 15 % na godišnjoj razini. Schreurs i sur. (2017) su analizirajući postojeće radove o korištenju IKT-a u populaciji starih ukazali na porast, ali njihovo korištenje u smislu iskorištavanja svih mogućnosti kontinuirano zaostaje za mlađim generacijama. Schreurs i sur. (2017) sumirajući istraživanja ukazuju na benefit korištenja IKT-a i *online* okruženja koji se očituje u području komunikacije, proširivanja mogućnosti cjeloživotnoga učenja, pristup zdravstvenim informacijama i uslugama, zadovoljenje interesa i zabavu, poboljšanju kvalitete života, svakodnevnim aktivnostima.

Zaključak

Učenje starih uvjetovano je osobnim interesima i motivacijom, a u multimedijalnom okruženju brže i jednostavnije mogu doći do željenih informacija i znanja. Kako bi se starima omogućilo cjeloživotno učenje, potrebno je poznavati njihov način učenja, ali i tehnologiju pomoću koje se diseminacija znanja može realizirati. S obzirom na to da stari većinu dana provedu sjedeći i gledajući televizijske programe u povećanom su riziku razvoja komplikacija i kroničnih bolesti. Informacijsko-komunikacijska tehnologija trebala bi život starima učiniti jednostavnijim i bogatijim, ali se njezina upotreba kosi s preporukama za bavljenje tjelesnim aktivnostima i izbjegavanje sjedećega načina života. Upravo iz toga proizlazi paradoks da poticanjem starih na učenje posredstvom digitalne tehnologije potičemo na sjedeći način života. Budući da postoji pozitivan odnos uključenosti i životnoga zadovoljstva, starim se ljudima preporuča što dulje održavanje stila života koji su imali prije i pronalaženje novih uloga koje su slične onima koje su izgubili. Svrha aktivnoga i uspješnoga starenja nije asimilacija starih u kolektivno poimanje njihovih potreba i interesa, već se temelji na modelu prava prema kojemu se unutar stvorenih prilika i mogućnosti uvažavaju različitosti pojedinaca i prihvaćaju njihovi osobni izbori. Cjeloživotno učenje omogućava im stjecanje znanja i pronalaženje informacija koje osnažuju njihove kompetencije u donošenju odluka, zastupanje vlastitih potreba i interesa. Korištenje tehnologija, a posebice IKT u tome im može pomoći. Razlike u svakodnevnoj upotrebi IKT-a, stavovima prema korištenju i upotrebi za posredovanje u učenju vidljive su među ekonomski i društveno razvijenim regijama i onih koje su u razvoju te u odnosu na stupanj formalnoga obrazovanja. Za učestaliju primjenu IKT-a u populaciji starih ponajprije treba djelovati na razvoj njihovih digitalnih vještina i upoznavanja s mogućnostima koje su im korištenjem dostupne. Međutim, u promicanju cjeloživotnoga učenja treba u kontekstu kulture i preferencija uvažavati socijalnu komponentu, neposredni kontakt i subjektivni doživljaj iskustva učenja. Pokazalo se da stari cijene i uvažavaju mišljenje vršnjaka i članova obitelji pa se stoga oni mogu iskoristiti za posredovanje u primjeni IKT-a za učenje i svakodnevno korištenje u onoj mjeri i na način koji najbolje odgovara stilu života, sposobnostima i potrebama starih.