ASPECTS OF INTERNET USE AMONG OLDER PEOPLE: SOCIOLOGICAL RESEARCH

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ABSTRACT

Information and communication technologies have become an integral factor in the daily lives of people over the last decade. Although their usage allows significant advantages, there are still a lot of people in the world who do not use such technologies. In industrialized countries, the reason for this is not in economic factors, but age seems to be a significant determinant of the digital divide. Recently, however, the number of older adults taking advantages of the Internet has been growing. Numerous authors state that a key aspect of successful aging is to remain actively involved in life in old age. In this regard, it is pointed out that online communication and new media present many new opportunities and challenges for the social inclusion of older people. The aim of this paper is to examine the attitudes and opinions of older people towards the use of the Internet and the reasons for its use. The research was conducted using the 2019 survey method on a sample of 240 people over the age of 65 residing in the Šibenik-Knin County in the Republic of Croatia. The results of the survey show that, although more than half of the respondents have an Internet connection, only a fifth own a computer or a laptop. One third of the respondents uses the Internet every day, and most of them did not attend a course to help them use it.

They point out that they easily mastered the rules of the network, in which their family members gave them a support and help. Respondents most often search the Internet for the purpose of informing, especially about daily events, then for the entertainment, cultural education and communication with others. More than half of them have a profile on social networks, mostly on Facebook. Despite all this, they do not emphasize the great impact of the Internet on their lives, and believe that the Internet often takes up a lot of free time. Also, more than half of the surveyed population does not use the Internet because they are not interested in it, do not have the financial means to buy a computer. The reason is that they are suspicion of endangering their own security and privacy. However, those not using the Internet state that their accessing to information is not limited because of that. They also point out that the only motivation for starting using the Internet would be the necessity of communicating with their families.

Keywords: Internet use, older people, sociological research, social inclusion

INTRODUCTION: ACTIVE AGEING

In recent years, the population has continued to age. The average age of the total population of the Republic of Croatia was 43,4 years (men 41,5; women 45,0), which ranks it among the oldest nations in Europe [1]. Due to the increase in the elderly population, in Europe and Croatia (currently people over 60 make up 20% of the population), an increasing number of authors are dealing with this area for social, economic, medical and many other reasons [3]. Although the process of increasing the share of older people

brings significant socio-economic implications, aging is also approached as a predictor of reduced quality of life. Medicine, technology and better health care have enabled the extension of life expectancy and the continuation of such a trend. However, there are more and more elderly people who need help to meet their primary needs, all with the aim of actively contributing to their own well-being, their own family or the wider local community. Therefore, the question is often asked how and in what way to improve their life position and help them stay active and independent for as long as possible [4].

EU countries, and thus Croatia, have been trying over the last few decades to respond in an appropriate way to unfavorable demographic trends that result in aging and increasingly unfavorable ratios between the working and inactive population. At the same time, they show a trend of systematic approach to defining the policy of care for the elderly, and numerous documents and expert platforms aimed at improving the position of older individuals in society have been developed and adopted. These trends promote active and healthy aging as a key to ensure the equal role for them in society. In other words, the older man has so far been approached as a recipient of services who should be provided with a more or less dignified rest of his life. Such trends are preventively oriented and tend to encourage the self-activity of older people. At the same time, meeting the new demands of older people is possible only if they are more socially active and involved in making important decisions for them at the local community level. Therefore, both state institutions and programs are focused on such oriented policies [4].

Successful aging is associated with high levels of physical and cognitive health as well as with social engagement. However, such formulas fail to justify effective adjustments to the inevitable limitations and losses that people face as they age. Numerous authors state that a key aspect of successful aging is to remain actively involved in life in old age. Therefore, leisure activities often allow older people to remain physically, socially and mentally active, and to allow them to express remaining strengths and enduring interests even when faced with certain functional limitations [5]. Therefore, active aging is a newer concept that means helping people to continue to manage their lives for as long as possible while contributing to both the economy and society [6].

The elderly, however, cannot be treated as a homogeneous group. It is possible to recognize differences between them regarding the needs, abilities and preferences. During the period of old age that lasts longer and longer, individuals face new challenges, gain new worldviews and new perspectives. In this way, they create life in old age according to their decisions. Such decisions, as well as health care, include conscious efforts to preserve freedom and freedom of choice, interpersonal relationships, care for learning and creativity, awareness of the value and meaning of one's life. In other words, in this way it is possible to achieve quality aging [7].

One of the ways that older people can achieve the above stated is through leisure time as an integral part of human life. The understanding of it and the way it is conducted changes during a person's life.

Therefore, the period of aging or retirement brings new views on and opportunities to spend leisure time, with the aim of meeting individual needs. According to research by Ovsenik and Vidic in Slovenia, older people have enough, and in their opinion, even too much free time. They understand free time as time for themselves, for entertainment, i.e., for relaxation, and they are not quite sure about the differences between obligations and carefree. For example, the respondents mention cooking, washing, tidying up as leisure activities, which would be obligations in other periods of life. Research also shows that older people do not state significant desires for greater offer or choice of activities. They spend their free time mainly by doing the activities for which they did not have time before [7].

The term leisure refers to the time when obligatory activities and work are not performed, to free and unobligated time, time when you do what you like. It brings a lot of benefits which are usually shared with other people such as "improvements in personal relationships, in family functioning, and in terms of creation of social capital networks". There are no differences in type of activites performed in leisure time regarding the age. But there are differences in the degree of participation as well as in the amount of free time. Leisure activities can be grouped in five categories: multimedia entertainment at home (TV or radio at home), other leisure activities (Internet and phone use, different hobbies etc.), visiting or entertaining friends, participating in and attending social events (such as cinema, museums, concerts etc.), and sports (actively participating in regular physical individual or organised activities) [8].

THE USE OF COMPUTER TECHNOLOGY AND THE INTERNET AMONG THE ELDERLY

Fifteen years ago, Blit-Cohen and Litwin pointed out that few studies had been conducted on the participation of the elderly in the virtual world of computer-mediated communication. Such a trend is still present today [9]. White and Weatherall state that in 1996. Butler presented computer technology as an integral part of work, industry, transportation, health and entertainment, and many other aspects of everyday life. The media, industry and governments have mostly hailed these events as positive and existing. However, these optimistic reports failed to take into account populations with limited access to information technology. Older adults are just that group. For many older people, employment opportunities and costs may be limited, and the chances of learning about information technology may be less available than for the rest of the population [10].

Furlong highlighted in 1998, refering to the opinions of Blit-Cohen and Litwin, the benefits of computer technology for the elderly. It can provide the elderly with various useful information on a variety of topics (such as information on retirement homes, questions and answers on financial issues, health rights and legislation, etc.). Moreover, participation in the virtual community is likely to reduce the level of isolation, especially for older people with limited mobility. Active participation in the virtual world provides an opportunity for older people to find other people with similar problems or issues and to share not only information but also age-relevant social and emotional issues. Participation in the virtual world, according to Furlong, is likely to strengthen and support older people's self-confidence [9].

Research by Celer and Jánská has shown that there are more and more older people changing their attitudes towards the Internet and it is becoming part of their lives. Seniors are becoming aware of the benefits of the Internet and they usually use it at home and mostly in order to communicate or read online news [11]. The concept of successful aging implies the preservation but also the continuous development of potential, abilities and new skills. In that sense, the use of computer communication, ie. accordingly developed digital literacy can be an important aspect of successful aging [12].

Boz and Karatas also emphasize the importance of technology in terms of reducing marginalization, loneliness, and intergenerational differences. The authors point out that older people should have access to information and communication technologies (ICT) and benefit from them. Growing share of ICT in everyday life, as well as understanding and examining the role of the Internet become crucial for the quality of life of the elderly population. However, most of the existing research focuses on younger people who are considered to be more active Internet users. In recent years, the number of studies on older Internet users has been gradually increasing [13]. Summarizing the conclusions of various studies, Erickson and Johnson point out the predictors of Internet usage in later life. These are higher education and higher incomes, positive attitudes towards computers and the Internet, high computer self-efficacy and low computer anxiety, good physical health and cognitive functioning. Thus, for example, the results of their study showed that older users use the Internet for purposes of communication and information, but not for entertainment and this is significantly correlated with self-efficacy. The more-frequenty the older people use the Internet, the higher levels of self-efficacy they show [14].

In the study conducted by Gatto and Tak in America, dealing with the benefits and barries of Internet use among older people, the respondents point connectedness, satisfaction, utility, and positive learning experience as positive aspects of the Internet. On the other hand, frustration, limitations, mistrust, and lots of time need, are indicated as negative aspects of Internet use. Internet and computer usege are important in their lives. The older adults surveyed in this study are the younger old, affluent, with more years of education then many elders and most of them are married. They are motivated to learn computer skills by other members of their family and by their own interests. As Gatto and Tak state, the profile of their respondents is consistent with other published data indicating that older generations start to use computer and the Internet when encouraged by family members and stay connected because of possible access to family and friends. Once motivated to learn about the Internet and to use it, many of these older people take formal computer classes or the help of family and friends. These classes brought for most of them "the sense of accomplishment and increased self-confidence and self-esteem" [15].

When older people manage to bridge the digital divide, it seems that using of the Internet will become a common part of their lives. It allows older people to stay in touch with others and communicate with their social connections. For example, email seems to be more effective than face-to-face or telephone communication because it facilitates regular contact with family and friend networks. The use of social networking sites as one of the Internet applications has grown among the elderly in recent years, and around

one-third of older Internet users are active on such sites. Whether the use of the Internet increases or decreases social isolation is not clear. Cotten, Anderson, and McCullough state that various researchers have found that Internet usage is connected with a decrease in social isolation and loneliness or that it is associated with an increase of social cohesion. Some research has also shown that using the Internet enriches the lives of isolated older adults and reduces the experienced life stress. It also has shown positive associations between the Internet usage and the perception of self-efficacy. While there is much evidence to suggest that using of the Internet may be beneficial for older population in overcoming social isolation or loneliness, more research is still needed. Researchers need to go further, from researching simple aspects of Internet use to more complex research of the type, quantity, timing, and function of use that can affect outcomes in a variety of ways [16].

Although an increasing number of older people are enjoying the benefits of ICT, for most of them, web information is not available because they lack access to a computer. This problem is often named a digital divide, and stems from various technical and cultural barriers, such as computer costs, lack of computer skills, fear of modern technology (technophobia), lack of available training and technical support, lack of perceived needs and difficulties with lowercase reading on web pages. The digital divide is central theme in many studies exploring limitations and barriers to participation, programmes of intervention, and their impact on participant well-being. Also, even those who use online resources face difficulties in finding reliable and authoritative information and websites that are more pro-elderly [17].

There is little research in Croatia on digital inequality, computer literacy, Internet use among the elderly, as well as on the advantages and disadvantages of use [18], [12], [3], [19], [20], [21]. The results of a survey conducted by Telebuh, Bertić, Znika and Poljak in several counties in Croatia show poor use of the Internet and social networks among respondents who are elderly. The authors state that the reason may lay in the little knowledge of modern technology, in the poor economic status of the elderly in Croatia, in the inaccessibility or in the lack of educational programs for the elderly. They are thinking that society as a whole should create and encourage the creation, improvement and use of education programs for older population. This would give them a relevant opportunity to participate more actively in social activities, but also to gain a sense of the importance of their own role in society [3].

Nekić, Tucak Junaković and Ambrosi-Randić obtained a more favorable picture of Internet use among the elderly in their research. They conducted a survey at the level of the whole of Croatia, but on a smaller sample (N=295) of elderly people and came to the result that 40% of them use the Internet at least once a week. They also compared this data with Eurostat surveys, which show that Croatia is at the bottom in terms of the number of "silver surfers". Only 15% of the old population use the Internet, which is 25% less than the results they obtained in this study. The reasons for this are found in the method of sampling, where the characteristics of the place of residence, the achieved level of mental and physical health and the level of education were considered differently. The results of this research also showed that more frequent use of the Internet is more common among older population with a higher level of education and their lower chronological and subjective age, as well as with better mental and physical health [12].

METHODOLOGY

RESEARCH OBJECTIVES

Information and communication technologies have become an integral factor in the daily lives of people over the last decade. Although their usage allows significant advantages, there are still a lot of older people in the world who do not use such technologies, especially in Croatia. As previously stated, numerous authors point that a key aspect of successful aging is to remain actively involved in life in old age. It is pointed out that online communication and new media present many new opportunities for the social inclusion of older population. The research subject is the use of the Internet among the elderly. Accordingly, the following research objectives are defined: 1. to examine the frequency of Internet use among the elderly, 2. to determine the significance of the Internet for the user in everyday life, 3. to examine which content older people search, 4. to determine the reasons for use or not use of the Internet, 5. examine opinions on the advantages and disadvantages of using the Internet.

RESEARCH HYPOTHESES

In accordance with the set goals, the following research hypotheses were set:

H1. Older people with higher education use the Internet more often.

H2. Older people with higher material incomes use the Internet more often.

H3. Older people who are married are more likely to use the Internet.

METHOD AND SAMPLE

The research method applied in this research was a survey, while the measuring instrument was a questionnaire consisting of three parts. The first part is common for all respondents. The second part of the survey questionnaire is intended for older participants who use the Internet, while the third part of the questionnaire is intended for those older people who do not use the Internet. The field phase of the research was conducted in August 2019 in the Šibenik-Knin County in Croatia. The population was selected by the use of convenience sampling and included people over 65 years old. According to the official website of the Central Bureau of Statistics, and according to the 2011 census [22], in Šibenik-Knin County the number of persons older than 65 is 23,877, while the sample of this survey included 240 persons, with 104 men (43,3 %) and 136 women (56,7%). It included 1% of the relevant population.

Regarding education, the majority (50,4%) of respondents completed high school, primary school (22,1%), and college or university (20,8%). The sample includes 55,8% of respondents who are married, 31,3% are widowed, while 14,2% are in a relationship and 8,8% are single. Most respondents live in their own home (44,6%) or in their own apartment (30,4%). Tenancy (8,3%), retirement home (9,2%) and stay with a child (7,2%) are less represented. Respondents mostly (59,2%) have a monthly amount income of 300-530 euros.

RESULTS

The survey shows that the majority (92,5%) of respondents have a mobile phone, more than half (54,2%) have an Internet connection and a quarter (25,0%) own a laptop or computer (23,8%). Despite this, half (50,0%) of respondents never use the Internet, slightly less than a third (30,4%) use it daily, 13,3% use it sometimes, and 6,3% of respondents rarely use the Internet. Similarly, the research of Nekić et al. (2016) at the national level, show that 59,7% of the respondents did not use the Internet at all, while 40,3% of participants used the Internet in the range of several times a year (1,7%) to several times a day (20,7%). In the subgroup consisting of Internet users, 96,6% most often access the Internet from mobile phones and laptops, and only a few of them from tablets or desktops (3,4%) [12].

The data obtained also show that the vast majority of respondents (87,9%) did not attend a course on Internet use. While 42,5% of respondents think that they have easily mastered the use of the Internet, a third of respondents (33,3%) find these skills difficult or very difficult. Although a fifth of the respondents (21,7%) learned to use the Internet independently, the respondents received the most help or instruction for using the Internet from their family members (42,5%), and the least from their spouses (1,7%). Some other research has shown a stronger personal motivation and a greater incentive for partners to use the Internet. Thus, for example, the results of research by Gatto and Tak in America show that almost 90% of older people is motivated to use the Internet by their own interests or curiosity.

Almost 45% are motivated by their children, 28% by their friends, 14% by their grandchildren and and almost 21% by their partner [15].

Respondents state information and content search, as well as communication, as the reasons for the most frequent use of the Internet. The largest number of respondents (83,3%) search the Internet for information. Approximately one third (39,2%) of respondents use the Internet for entertainment, then communication with others (36,7%) and for cultural education (30,0%). On the other hand, a small number of respondents (12,5%) search the Internet for content about celebrities and use the Internet for self-promotion (5,0%). The analysis of the frequency of their activities on the Internet shows that the majority (61,7%) of respondents search the content on the Internet every day and inform themselves about daily events (58,3%). Furthermore, they communicate with friends and relatives daily (27,5%) and 1-2 times a week (35,8%) by using the Internet. However, respondents rarely buy (10%) or pay bills (12,5%) online. In comparison to the total number of Internet users, 61,7% have a Facebook profile and 15% an Instagram profile. Similarly, research by Nekić et al. showed that Internet users most often accessed the Internet

because of reading news and other interesting things on portals, then because of conversations with relatives and friends, use of social networks such as Facebook (21,8%), playing video games (2,5%) or due to work (1,7%) [12].

Table 1. Frequency of online activities

Online activities	Every day		1-2 times a week		1-2 times a month		1-2 times a year		Never	
	f	%	f	%	f	%	f	%	f	%
I search for content	74	61,7	27	22,5	14	11,7	2	1,7	3	2,5
I inform myself about daily events	70	58,3	32	26,7	9	7,5	2	1,7	7	5,8
I communicate by email	14	11,7	32	26,7	13	10,8	16	13,3	45	37,5
I communicate with relatives and friends	33	27,5	43	35,8	7	5,8	19	15,8	18	15,0
I buy online	12	10,0	12	10,0	7	5,8	8	6,7	81	67,5
I pay the bills online	15	12,5	11	9,2	14	11,7	2	1,7	78	65,0

Furthermore, we assumed the existence of differences in the frequency of Internet use with respect to gender, level of education, material income, and marital status. The set hypotheses were tested by the chi-square test. At the very beginning, it was shown that there was no statistically significant difference between men and women in the frequency of Internet use ($\chi2=5,333$; $df=2$; $p=0,069$). However, the analysis shows that there is a statistically significant difference in the frequency of Internet use among the elderly regarding educational level ($\chi2=53,401$; $df=10$; $p=0,000$). The respondents who have secondary and higher education use the Internet more frequent in comparison to the respondents who completed primary school. Therefore, hypothesis H1 is accepted. Also, the chi-square test shows that there is a statistically significant difference in the frequency of Internet use with respect to material income ($\chi2=28,7444$; $df=8$; $p=0,000$) and with respect to marital status ($\chi2=25,492$; $df=6$; $p=0,000$).

Namely, those respondents with higher monthly material income use the Internet more often than respondents who have lower material income. Also, respondents who are married are significantly more likely to use the Internet than respondents who are widowed, single, or in a relationship. Therefore, hypotheses H2 and H3 are accepted. Nekić *et al.*, also show in their research that more frequent use of the Internet is accompanied by a higher level of education. Their results indicate that 91% of Internet users are people who have completed high school and college/university. More educated older people use the Internet more. The authors think that the reasons can be found in the fact that probably more educated people should have learned to use ICT because of the nature of their jobs [12].

We also found it interesting to examine the attitudes of older respondents towards the use of the Internet. The data show that the majority of respondents think that the use of the Internet is more difficult for older people than for young people (82,1%) and that using the Internet is time consuming (76,3%).

They state that the support and help of relatives is important in order to engage in activities related to the use of the Internet (77,2%), since the Internet, in their opinion, is a necessary mean of communication in today's society (60,8%). However, slightly less than half (45,8%) of respondent's state that using the Internet endangers their own security and privacy. But, a significant percentage of them have a profile on Facebook and/or Instagram. Furthermore, regarding the benefits of the Internet use, half of the respondents (51,7%) believe that the Internet has not affected their lives or cannot assess the impacts of the Internet on their own lives (22,5). Only 11,7% of respondents think that the Internet provides faster access to information, and 5,0% of them think that performing certain activities via the Internet still saves time.

We were also interested in the possibility of improving their use of the Internet. Thus, we asked them what else they would like to learn regarding the Internet. According to the data, a little more than one third of the respondents who use the Internet assess their knowledge as sufficient. A few (11,7%) respondents would like to learn how to use Internet banking, i.e., pay bills online, and learn how to use social networks (8,3%) and make purchases online (8,3%).

Since the survey also included those individuals who do not use the Internet, we considered it important to state that 60,8% of them stress that they have never had the opportunity to use it. Therefore, 81,7% of them point that the reason for not using the Internet is their lack of interest in this activity, i.e., that they did not feel the need to use it. Furthermore, half (50,8%) of respondents also point out that they do not have time to use the Internet, but a considerable number of respondents (45,0%) believe that the Internet would endanger their security and privacy. However, for approximately one third (31,7%) of respondents,

the reason for not using the Internet is purely financial. Studies conducted ten to fifteen years ago, such as Gatto and Tak study, usually stress fear of being a victim and less of time as barriers for using the Internet among older populations [12]. On the other hand, recently the authors, for example [19], point out the unfavorable financial situation of the old population as a significant reason for not using the Internet in Croatia.

We also examined what could motivate them to use the Internet. First of all, respondents would find motivation to use the Internet in the need to communicate with family members and relatives (77,5%).

Also, 21,7% of respondents would use the Internet for information needs, material benefits (17,5%) and the desire for entertainment (14,2%).

Table 2. Motivation of respondents to use the Internet in the future

Motivation	YES		NO	
	f	%	*f*	%
the need to communicate with relatives	93	77,5	27	22,5
material benefit	21	17,5	99	82,5
need for information	26	21,7	94	78,3
time saving (e-citizen system, Internet banking ...)	5	4,2	115	95,8
developing or improving their own skills	5	4,2	115	95,8
acquisition of practical knowledge	9	7,5	111	92,5
wish to have fun	17	14,2	103	85,8
none of the above	3	2,5	117	97,5

The respondents were also asked to review their non-using of the Internet (whether they feel any loss regarding that). Thus, almost half (49,2%) of them think that their access to information is limited.

Regarding the effects of the possible Internet use on their lives, around a third (35,8%) of respondents believe that if they would use it, it would not affect their lives. But, almost 57,5% of them can't estimate what impact the Internet would have on their lives if they would use it.

CONCLUSIONS

Since the population has been growing old and consequently the number of older users of the Internet is becoming higer, there are many aspects that should be improved. First, older people should have opportunity to access computer technology. Thus, computer training, development of various educational materials for Internet use, online social support, and different ways of computer-mediated communication are among the aspects where the interventions should be made [15]. These need to include the meassures and policies on all levels (from national to regional) as well as the various professionals who would implement these activies and work with older people. Thus, they should be aware of the characteristics of older computer users, knowing and perceiving the obstacles and beneficiaries of computer and Internet applications use in order to arrange and conduct education and improve active living as well as the quality of life of older population. Furthermore, even though Croatia and many other countries around the world have made efforts to build an information society, there is still a lot of to do. The availability of ICT is increasing, enabling the individual to use information effectively and to develop information and digital literacy through the use of the Internet and the benefits it brings. That is why it is important to provide the elderly with the necessary education to master information and information literacy in order to minimize their social exclusion and dependence on others. Such education will primarily dispel the fear of new technologies that elderly people usually have toward information technology, which is a big step towards mastering information and information literacy [19].

We consider all this important since the results of the conducted research indicate that a small number of surveyed elderly people use the Internet. Respondents mostly learn to use it by themselves, while some others receive support and help from their family members. However, this activity is problematic and complicated for some of them and state that it is much easier for young people than for themselves.

They also believe that time spent on the Internet takes up a lot of free time and that it can also violate privacy and endanger our own safety. Those respondents who use it, usually do that in order to inform themselves about daily events and are generally satisfied with these activities. It should be emphasized that, by testing the hypothezes, we found statistically significant differences in the frequency of Internet use regarding the education level, material income and marital status. We came to the conclusion that

respondents with higher education, higher material income and those who were married used more often the Internet in comparison with those who had lower education, lower material income and those who were widowed, single or in a relationship. On the other hand, those respondents who do not use the Internet stated the lack of time and interest, threats to privacy and security, and financial impossibility as reasons for not using it. Therefore, the older population is mostly motivated by the need to communicate with family members and relatives.

Finally, we consider as necessary to design different ways to include older people in the virtual such as different online courses for the Internet application use or support groups. These activities would strengthen self-confidence and overcome the digital divide. At the same time, they would provide them with various ways to spend time creatively and thoughtfully as well as to increase interactions and their active social life.

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