

## CHALLENGES OF ONLINE HEALTH-RELATED INFORMATION FOR ROMANIAN SENIORS

DOI: <http://doi.org/10.26758/10.1.2>

Valentina MARINESCU

Faculty of Sociology and Social Work, University of Bucharest, Romania

Address correspondence to: Valentina Marinescu, Faculty of Sociology and Social Work, University of Bucharest, 9, Schitu Magureanu Bd., Bucharest, 010181, Romania, Ph.: +40-720-024-813; E-mail: vmarinescu9@yahoo.com

### Abstract

**Objectives.** Research shows that older adults respond differently to mediated communication than younger adults. These age differences result from both generational differences and life-span development. Seniors face new challenges in the case of the present displacement in the study and practice of medical communication. The present study draws on the hypotheses related to health-related Internet use by seniors and try to validate them in a specific context - the Romanian society. The hypotheses of our study are: H1. Seniors use the Internet as a starting point for general information related to health but when it came to make informed decisions about health care they adhere to physician-centered care model (Campbell and Nolfi, 2005). H2: The more a senior as a patient learns from the Internet about her/his illness, the more likely she/he is to ask questions derived from Internet consumption to his/her physician (Frederikson and Bull, 1995).

**Material and methods.** The study used the interview as the main method of research. A sample of seniors was included in the analysis. The sample was made of fifteen persons aged +65 years old who used the Internet not only to obtain daily information and to socialise with their friends but also to search for health-related information.

**Results.** Only the first research hypothesis (H1) was validated by the data. The results showed that Romanian seniors still do not consider online health information to be as reliable as inter-personal communication with their General Practitioners (GPs). At the same time, Romanian older adults are overloaded with the sheer amount of information available on the net and tend to "simplify" it by checking that information with medical staff (e.g. GPs, nurses).

**Conclusions.** As our set of interviews showed, Romanian seniors we included in the sample have a lower desire to control their own health care by themselves and remain deeply dependent on the interpersonal medical communication with GPs, family, pharmacists and friends. A *post-festum* hypothesis is generated by the project: The e-health related consumptions for Romanian seniors could be conditioned by the level and degree of their active search of health-related information.

**Keywords:** seniors, online communication, interpersonal communication, health-related information.

### Introduction

At present, the general image of the Romanian older adults is extremely fragmented and incomplete. The existing researches in Romania on seniors are mainly descriptive and made at a punctual level, being focused on specific factors affecting their lives (poverty or illness) (Bodogai and Cutler, 2014). The Romanian researchers (Bodogai and Cutler, 2014; Dascălu, Rodideal and Popa, 2018) outlined the fact that there is no data-basis about Romanian older adults available to

the general public and the scarcity of the existing data made difficult even the secondary analyses on the basis of other researches.

As regards the seniors' quality of life, the existing data showed that Romanians over 65 years old are generally living in poverty (73% say they do not have enough resources from one month to the other), and the three main factors influencing their quality of life are: health, family relationships and financial situation (Garoschy and Mihart, 2010; Consiliul Național al Persoanelor Vârștnice, 2014). In 2013, the Romanian Commercial Bank's study (Banca Comercială Română, 2013) pointed out the fact that Romania increase in aging population connected with the decreasing number of active population (due to external migration and low fertility ration) will have a negative effect on economic situation at the level of economic and social development in the next decades (Banca Comercială Română, 2013).

At the level of seniors' personal health, as the National Institute for Statistics (2014) had pointed out, from the total number of persons suffering from a chronic illness or disability, 38.1% of the persons aged 65-75 years and 66.7% of the persons over the age of 75 years old assessed that their health-state health is in a bad and very bad condition (Institutul Național de Statistică, 2014). In addition, 19.1% of seniors aged 65-74 years and 35.8% of those aged over 75 years had declared that their health had put a great degree a limit on their daily activities (Institutul National de Statistică, 2014).

Meanwhile, the rate of adoption of new communication technologies by Romanian seniors remained very low. In 2017, only 68.6% Romanians' have Internet access at home, 64.3% within urban areas (Institutul Național de Statistică, 2017). According to the same set of data, there are some good predictive factors in Romania (same as worldwide) that influence digital devices possession and Internet access and the most important are the occupational status and the householders' income (90.9 % of employees have access, compared with 42.2% pensioners) (Institutul National de Statistică, 2017). The occupational status and the income of the householder influenced the ownership of the household computer equipment. Old people who live with younger relatives are most likely to use Internet than those who live alone and the use of the ICT decrease as the people get older (Institutul National de Statistică, 2017).

Giving the low level of connection at the new communication means – especially, the Internet – the interest in analysing the relation between Romanian seniors and technology was rather small. Few data which exist showed (Ivan et al., 2017) that Romanian older adult population was not a homogeneous group in relation to the internet. Much more, computer anxiety had not always a linear negative effect on performance and certain level of anxiety could be functional in process of technology appropriation. The fact that it is a social need to better understand the everyday practice of Romanian seniors related to the Internet was recognised. Unfortunately, the attempts to understand more the role, meanings and utilities of different computer activities at the level of population aged over 65 years are extremely rare and inconsistent (Ivan et al., 2017).

The researches made about the Romanian seniors' image in (central and local) mass media had revealed that they were a social group with small media coverage (Ministerul Muncii, Familiei și Protecției Sociale, 2009). Much more, Romanians over 65 years have a negative public image and a low media reputation (Ministerul Muncii, Familiei și Protecției Sociale, 2009). It is important to note that the cases in which the media covered an exclusive component of the image of older adults were those articles in which they were considered as a "burden" for the active people and where their standard of living was compared with that of the rest of the population (Ministerul Muncii, Familiei și Protecției Sociale, 2009). At the level of local media the coverage of Romanian seniors was limited only to the case of social risk situations (whether they are sick, retired or poor). Much more, if the Romanians seniors are presented in the press this had been made almost exclusively at the local level: 90% of the articles covering this social category were printed in local media and only 10% in Romanian central media (Ministerul Muncii, Familiei și Protecției Sociale, 2009).

At the opposite end of the communication process, when the image of seniors was assessed at the level of the population, one can notice that the existing studies (Consiliul National al Persoanelor Vârstnice, 2016) stressed the fact that limited access to medical facilities or medical treatment (21%), social and psychological vulnerabilities (31%), social isolation and loneliness (31%), the discrimination on the basis of age (39%) and the low level knowledge of their own rights (65%) were the main elements associated with people aged over 65 years in Romania (Consiliul National al Persoanelor Vârstnice, 2016). When they assessed in general the older adults the Romanians also associated them with the pension (62.9%), the incapacity to move (54.8%), the life-experience (51, 6%), illness and disease (50%), loneliness (33.8%), addiction (29%), poverty (29%) and "being a burden for the others" (19.3%) (Consiliul National al Persoanelor Vârstnice, 2016).

Due to the fact that, compared to other age groups of population, seniors tend to be complex patients, the relation they have with Internet was assessed as beneficial when seeking health information online is at stake (Chaudhuri et al., 2013). At the same time, the existing literature pointed out the aims for which seniors used the Internet for health-related information. In their study, Macias and McMillan (2008) stressed the following reasons for which older adults use the Internet: to send mails to friends and family (e.g. "to socialise"), to read, to prepare for the visit to the doctor or to fill in the gaps left by doctors. In a different analysis, Sommerhalder et al. (2009) assessed that the proliferation of online health information available for the patients is controversial due to the fact that patients are overloaded with the sheer amount of information available on the net. But, as Wicks (2004) noticed, despite the fact the more and more medical and health-related information is available online seniors tend to look primarily to interpersonal sources (General Practitioners, family, pharmacists and friends) for answers related to their health.

The present study attempted to fill a gap in the existing literature in Romania by attempting to understand what is happening at the intersection of three elements: Romanian seniors, Internet use and health. From here, as the main objective of the research, there was the following:

RO1: To understand the ways in which Romanian seniors use the Internet for health-related issues.

## Material and methods

The main method of research used in the present article is the semi-structured interview. The guide of interview included thirty-one questions on the topics of health-related Internet uses.

The set of data included in the analysis were collected in face-to-face interactions between January 2017 and June 2018 in Bucharest (Romania). The sample of seniors was made of fifteen persons (ten women and five men), aged over 65 years old, who used the Internet not only to obtain daily information and to socialise with their friends but also to search for health-related information.

**Table 1. The structure of the sample of respondents**

Name/Initials of the name used in the analysis	Gender	Age
L.D.	F	68 years
A.G.	M	89 years
I.D.	M	72 years
M.G.	F	71 years
I.S.	F	66 years
D.P.	F	75 years
L.S.	F	65 years
P.F.	M	64 years

Name/Initials of the name used in the analysis	Gender	Age
R.P.	F	70 years
T.B.	M	66 years
D.G.	F	64 years
I.V.	M	64 years
G.I.	F	66 years
B.O	F	70 years
E.V.	F	67 years

The hypotheses of this study were the followings:

H1. Seniors use the Internet as a starting point for general information related to health, but when it came to make informed decisions about health care they adhere to physician-centered care model (Campbell and Nolfi, 2005).

H2: The more a senior as a patient learns from the Internet about her/his illness, the more likely she/he is to ask questions derived from Internet consumption to his/her physician (Frederikson and Bull, 1995).

**Results**

When they had been asked about the definition of the term "information" Romanian seniors had associated it with "knowing what is happening in the entire country" (MG) or "knowing what is happening in the entire world" (IS).

Among the mass media used by them, television came on the first place:

*A.G.: First of all, I see and watch everything at the TV.*

On the second place among information sources Romanian, older adults have placed the radio:

*I.D.: I listen to it even when I went in my garden.*

*D.P.: News is really good at radio, it gives information. Radio also gives the programs that I am interested in, pleasant music, small competitions, only interesting things or the "Villages' Antena". In short, it is so varied...*

The newspapers and magazines came only on the third place among information sources for Romanian seniors.

Referring to the "traditional" media, our respondents noticed that they did not use all of them, mainly due to the high prices associate with printed press:

*I.D.: I have ceased to buy newspapers many years ago, because what the information is the same as that offered by the TV stations. So, when I have to give up of something I give up the newspapers because they are really expensive for me.*

The selection of the printed press' titles by our respondents was based on their utility in their daily lives:

*G.I.: I'm not buying newspapers until Friday. On that day I buy "Libertatea" because it has a TV program for all next week and on Thursday or Friday I buy "Formula AS" where I can find 30 pages of preventive medicine.*

The Romanian seniors did not trust very much Romanian mass media, and they tended to be prudent in their assessments:

*P.F.: I trust some of them but the great majority... well... they publish information and articles which made me angry. Of course, I read them, get angry and drop them. After a while, I came back, read them again and balance the information with what I found on TV or at the radio.*

*I.D.: I select them and if they fit with the ideas and opinions I already have, I remember them, if not, I move on, change the TV channel of radio program or even give up the newspaper.*

Many times mass media was used for secondary purposes, as background information on

which the daily activities could be performed:

*P.F.: I'm opening the TV if I have other things to do in my house.*

*D.P.: I'm opening the TV at 12.00-13.00 when I came home with my grandchildren and stay with it open until the evening.*

The information from the media also has the role of bringing together people:

*L.S.: I talk to my neighbors about what we hear on TV, we go out to the street, we meet, and we discuss "Look what they say..."*

*T.B.: I have two or three former work-colleagues with whom I meet when I hear a breaking-news report at TV. They call me or I call them and either we meet in person or we talk on the phone... until the next day we realize that there was nothing extraordinary with this news. It was simple information placed with buzz on a newspaper to sell it or to stay tuned on a TV or radio channel. By talking about this or this topic we only took the opportunity to meet and not to quarrel.*

As regards the internet, our interviews showed that Romanian seniors had linked the beginning of its use to personal moments: the day when they received the computer or a tablet, the day in which their son or grand-daughter had showed for the first time how to use the internet:

*E.V.: When my daughter came for the first time back from Italy, she bought me a computer. It was something very new for me. Although she showed me how to use it I did that only three years after. For me it was a device too new, I was afraid to do not break it.*

When asked what they assess to be the advantages of using the Internet, Romanian seniors mentioned the possibility to get in touch with their relatives, especially with their children living abroad, or to reconnect with friends or former work-colleagues:

*E.V.: I'm in touch with my daughter in Italy and my nephew. Or I read something on the internet.*

*P.F.: Yes, I use to see what are doing my friends and, well, my relatives. I use it for emails and, of course, to watch movies, to listen to the music.*

Our data showed that treatment of disease and illness' symptoms were the main topics for which Romanian seniors had declared that they search for online information. The interest in other health-related information found on the Internet was low and limited to medical system (e.g. to find information about hospitals or doctors in general).

*R.P.: Generally, I want to see what other people say about treatments or their illnesses, whether they are doctors who discuss about certain diseases, or if a new drug is now available on the market.*

*D.G.: I told you that I adhere at the naturalist [e.g. alternative] medicine and I take some medicines, such are those for the heart, for the liver. Since I'm insulin-dependent, I'm more sensitive at the changes in medication and after I've documented on the Internet and... I can tell you that for three years, I'm doing very well and I'm in a very healthy condition taking those naturalist medicines.*

*M.G.: First of all, if I don't know a certain physician in a certain field, I'm starting to look online after him or her. I'm starting to look for best doctors in a certain medical field in Romania. I read about them, I'm looking for more sources. I want to see what would be the best way to approach him or her. Of course, I'm looking for the clinic or the hospital where he or she is working. I'm looking at their work-program and try to contact them.*

When they describe the relation with their doctors, Romanian seniors stressed the trust they placed in the medical staff and the high status the doctors have in their eyes. From here, as the majority had declared, they avoid any discussion starting from the information related to health which could be found online. The main reason for this reluctance, and even avoidance, was their personal assessment that such subjects cannot be discussed in a doctor-patient meeting:

*I.S.: He [e.g. the GP] told me what I had to take, that is, the reason for which he gave me the recipe. He is a doctor so I can't take what medicine I want. It's a very good thing this one because, you know, we, the elders, have to take that way, that's the way in which we have been learned and that's right, he's right.*

*L.D.: I cannot discuss with him what I found on the internet. Even if I had tried to do that, he had told me that I didn't know a lot and he was right, after all, he is the specialist.*

It was obvious, from here, that, in the case of the hierarchy made between online and offline health-related information, the former took precedence. In other words, for Romanian seniors always the medical advice comes first and the information from other sources is secondary as relevance. As the respondents have declared, the most trustful advices they received related to health and illness, came from the medical staff.

*I.V.: It has happened to tell him about some information of this kind [e.g. found on the Internet]. For example, I saw an advertisement that is easy found now on the Internet, with drugs for weight loss. I told her about that, but she recommended me to do more sports and live healthy and not to swallow some drugs I know nothing and which are only found on the internet. And she was right.*

*G.I.: I have asked some doctors about some things about which I have read on the internet. Sometimes they approve and said that it could be something interesting but in general they said that is something stupid and had not to be taken into account. Well, after all, I think they know better.*

When Romanian seniors acknowledged that they followed advices related to health found online they stressed that those were only alternative treatments, natural medicines and not allopathic drugs:

*M.G.: Yes, I found something on the website of "Forever" company and I used it. But I do not take into account everything I found on the Internet. If I heard about something interesting and I am somehow convinced, I go and take the information needed, in which I am interested, I didn't intend to do things in other way, ... , I do not know how to say. I try to be in line.*

The use of Internet in doctor-patient communication is not common among Romanian seniors. In fact, when they did not go in person for the visit to their GP or the doctor, they use phone-calls only for appointments (and not for prescriptions or medical advices):

*P.F.: Only once or maybe two times I called her to schedule me. In general I'm going straight to the cabinet.*

*I.S.: We called the doctor and then he made an appointment for us, not online, he schedules us and we go directly to him when he said that we can do that.*

The general use of the feed-back was, as such, low in the online environment. In the case of our respondents only two persons had acknowledged that they have rated the medical services on the online website of the clinics:

*D.P.: I once rated the doctor from the private hospital "Regina Maria" where I was for an abdominal ultrasound investigation.*

## **Discussions**

At present, the situation of older adults' general education is worldwide of great interest for the researchers in education sciences. The first "University of the Third Age" has been set up in Toulouse, in 1972 by Pierre Vellas (Neculau, 2004). In 1975, New Hampshire University had the initiative to run an experiment in which, during the summer vacation, the students' hostels were organised as seniors' hotels. Older adults were involved in various activities, such as "educational programs, and physical, intellectual and leisure-related", the entire program taking, in fact, the shape of a true summer school (Neculau, 2004).

At the same time, one could notice the existence of specific projects centered on teaching the seniors the new skills needed in order to face the rapid changes brought by the technological progress. For example, the "ACT (Ageing + Communication + Technologies) Project" is a multi-methodological study centered on individuals and communities of the seniors in Canada (ACT, 2019). Experts working on this project are researchers, students and members of partner institutions that aim to integrate seniors in the digital and network-centered societies, and they suggest strategies for change and practical advices for the beneficial use of new media by the Canadian

seniors (ACT, 2019). Within the same segment of programs centered on the new social approach to seniors, one could notice the activities of "SeniorNet", a Nonprofit Organization which was established in 1986 in United States (SeniorNet, 2019). In time, the main aim of this organization has expanded from the initial ones related to understanding the importance of traditional media (TV, radio, print media) for the seniors well-being to more specific ones, such as is the case of understanding the digital skills specific to older adults and increasing seniors' abilities in the fields of computer and Internet uses by encouraging them to have virtual friends, to enter various contacts and to share their lives experiences with others (SeniorNet, 2019). Another program worth-mentioning was "Silver Program" from UK which was focused on matching pairs of youth and seniors in order to help older adults to use (new and old) media information (Hobbs, 2010). The project aimed not only to teach seniors how to use the computer and the Internet as a new form of the media, but also to facilitate inter-generational (the youth vs. the older adults) discussions about classical media information (Hobbs, 2010).

In the case of the Internet use by the older adults, one could notice that this has developed as a research topic only in the last two decades (Chen and Persson, 2002; Czaja and Lee, 2007) and there are many aspects which are not yet in-depth analysed.

According to the registered data, the first research hypothesis was confirmed. The relation between Romanian seniors and the use of Internet for health-related information was secondary as importance, as compared with direct communication with medical staff.

In the meantime, our data did not lead to the confirmation of the second research hypothesis. The seniors did not discuss with their doctors the health-related information found on the internet.

## Conclusions

The present study aimed to fill a gap in the existing literature in Romania. As our data showed Romanian seniors use the Internet as a starting point for general information related to health, but when it came to make informed decisions about health care they adhere to physician-centered care. Even if the seniors search the online sources for general information related to health, they always take their final decisions according to their doctors' advices. As such, Romanian seniors adhered to physician-centered care model and acted according to Caress' thesis (1997) who stipulated that, in general, seniors' locus of control is external. The fact that this locus of control was external was obvious in our case: Romanian seniors assumed that some aspects of their lives (e.g. health) were controlled by powerful others (e.g. doctors). From here, they agreed that doctor's advice was more reliable than online health-related information. The same set of data confirms Breemhaar, Visser and Kleijnen (1990) thesis which assessed that when their treatment was decided, the older patients are more likely to let their physicians to make the final decisions.

On the other hand, our data analysis did not allow us to assess in what degree the health-related information found on the internet were used by Romanian seniors in their communication with the doctors. Quite opposite to Mullen, Mains and Velez's thesis (1992), in the case of Romanian seniors there is no direct relation between health-related online information and the degree of information requests from a patient. In fact, in Romania, the more a senior patient learns about her or his illness, the less willing she or he is to ask questions to his or her physician.

We can, as such, assess that a *post-festum* hypothesis which is generated by the project could be the following:

H3: The e-health related consumptions for Romanian seniors could be conditioned by the level and degree of their active search of health-related information.

Starting from this *post-festum* hypothesis, one can assume that a future direction of research could be the testing of it not only in Romania, but also in other Eastern European countries.

## Acknowledgements

A summary of this paper was presented at International Conference: Individual, family, society - contemporary challenges, 3rd edition, 9 to 10 October 2019, Bucharest, Romania, and published in the journal *Studii și Cercetări de Antropologie*, No. 6/2019.

**Conflict of interests.** The author of this article does not have any conflict of interest.

**Financing and ethical aspects.** The project was not financed from external sources and the author did not obtain an ethical agreement of her institutions. For each person included in the sample and who was interviewed, the informed consent was obtained prior to the interview.

## References

1. Bodogai, S.I. and Cutler, S.J., 2013. Aging in Romania: Research and public policy. *The Gerontologist*, [e-journal] 54(2), pp. 147-152. <https://doi.org/10.1093/geront/gnt080>.
2. Breemhaar, B., Visser, A.P. and Kleijnen, J.G.V.M., 1990. Perceptions and behaviour among elderly hospital patients: description and explanation of age differences in satisfaction, knowledge, emotions and behaviour. *Social science & medicine*, [e-journal] 31(12), pp. 1377-1385. [https://doi.org/10.1016/0277-9536\(90\)90076-5](https://doi.org/10.1016/0277-9536(90)90076-5).
3. Campbell, R.J. and Nolfi, D.A., 2005. Teaching elderly adults to use the Internet to access health care information: before-after study. *Journal of medical Internet research*, [e-journal] 7(2). <https://doi.org/10.2196/jmir.7.2.e19>.
4. Caress, A.L., 1997. Patient roles in decision-making. *Nursing Times*, 93(31), pp. 45-48.
5. Chaudhuri, M.S., Le, M.T., White, M.C., Thompson, H. and Demiris, G., 2013. Examining health information-seeking behaviors of older adults. *Computers, Informatics, Nursing: CIN*. 31(11), [e-journal] pp. 547-553. <https://doi.org/10.1097/01.NCN.0000432131.92020.42>.
6. Chen, Y. and Persson, A., 2002. Internet use among young and older adults: Relation to psychological well-being. *Educational Gerontology*, 28, [e-journal] pp. 731-744. <https://doi.org/10.1080/03601270290099921>.
7. Czaja, S.J. and Lee, C.C., 2007. The Impact of Aging on Access to Technology. *Universal Access in the Information Age*, [e-journal] 5(4), pp. 341-349. <https://doi.org/10.1007/s10209-006-0060-x>.
8. Dascălu, M., Rodideal, A. and Popa, L., 2018. In Romania, Elderly People Who Most Need ICT Are Those Who Are Less Probable to Use It. *Social Work Review/Revista de Asistența Socială*, 17(2).
9. Frederikson, L.G., and Bull P.E., 1995. Evaluation of a patient education leaflet designed to improve communication in medical consultations. *Patient education and counseling*, [e-journal] 25(1), pp. 51-57. [https://doi.org/10.1016/0738-3991\(94\)00696-J](https://doi.org/10.1016/0738-3991(94)00696-J).
10. Garoschy, D. and Mihart, E.O., 2010. *Saracia și standardul decent de viață al persoanelor varstnice din România*. [The older adults' poverty and decent standard of living in Romania]. [online]. Available at: <[www.cnpv.ro/pdf/analize2010\\_2011/studiu-saracie-2010.pdf](http://www.cnpv.ro/pdf/analize2010_2011/studiu-saracie-2010.pdf)> [Accessed 12 July 2019].
11. Hobbs, R., 2010. *Digital and Media Literacy: A Plan of Action. A White Paper on the Digital and Media Literacy Recommendations of the Knight Commission on the Information Needs of Communities in a Democracy*. Aspen Institute. 1 Dupont Circle NW Suite 700, Washington, DC 20036.
12. Ivan, L., Buzoianu, C., Tudorie, G., Bîra, M., Săvulescu, R., Dumitriu, D., Duduciuc D., A., Schiau, I. and Cârlan, A., 2017. *AGE – TECH: Relationship between technology and age:*



- understanding computer anxiety on old people.* [online] Available at: <centrucomunicare.ro/agetech/home.html> [Accessed 15 July 2019].
13. Macias, W. and McMillan, S., 2008. The return of the house call: The role of Internet-based interactivity in bringing health information home to older adults. *Health communication*, [e-journal] 23(1), pp. 34-44. <https://doi.org/10.1080/10410230701805174>.
  14. Mullen, P.D., Mains, D.A. and Velez, R., 1992. A meta-analysis of controlled trials of cardiac patient education. *Patient education and counseling*, [e-journal] 19(2), pp. 143-162. [https://doi.org/10.1016/0738-3991\(92\)90194-N](https://doi.org/10.1016/0738-3991(92)90194-N).
  15. Neculau, A., 2004. *Educatia adultilor*, Iasi: Polirom.
  16. Sommerhalder, K., Abraham, A., Zufferey, M.C., Barth, J. and Abel, T., 2009. Internet information and medical consultations: experiences from patients' and physicians' perspectives. *Patient education and counseling*, [e-journal] 77(2), pp. 266-271. <https://doi.org/10.1016/j.pec.2009.03.028>.
  17. Wicks, D.A., 2004. Older adults and their information seeking. *Behavioral & Social Sciences Librarian*, [e-journal] 22(2), pp. 1-26. [https://doi.org/10.1300/J103v22n02\\_01](https://doi.org/10.1300/J103v22n02_01).
  18. \*\*\*ACT Project 2019. *About ACT*. [online] Available at: <<https://actproject.ca/>> [Accessed 20 June 2019]
  19. \*\*\*Banca Comercială Română. 2013. *Raport BCR Cercetare - Procesul de îmbătrânire în România – Implicații economice*. [Research Report BCR – The aging process in Romania – The economical consequences] [online]. Available at: <<https://www.ziuaconstanta.ro/informatii/banci-comunicate/raport-bcr-cercetare-procesul-de-imbattranire-a-populatiei-in-romania-implicatiile-economice-451911.html>> [Accessed 10 July 2019].
  20. \*\*\*Consiliul Național al Persoanelor Vârstnice. 2014. *Calitatea vietii persoanelor varstnice din Romania*. [The quality of life of the elderly in Romania]. [online]. Available at: <[www.cnpv.ro/pdf/analize2014/studiu\\_calitatea\\_vietii\\_2014.pdf](http://www.cnpv.ro/pdf/analize2014/studiu_calitatea_vietii_2014.pdf)> [Accessed 10 July 2019].
  21. \*\*\*Consiliul National al Persoanelor Vârstnice. 2016. *Percepția persoanelor tinere și adulte despre bătrânețe și persoanele vârstnice-Martie 2017*. [The youth and mature population's perception about aging and older adults]. [online] Available at: <<http://www.cnpv.ro/pdf/analize2017/Percep%C8%9Bia-b%C4%83tr%C3%A2ne%C8%9Bii-%C8%99i-a-persoanelor-v%C3%A2rstnice-de-c%C4%83tre-persoanele-tinere-%C8%99i-adulte-MP.pdf>> [Accessed 10 July 2019].
  22. \*\*\*Institutul Național de Statistică. 2014. *Condițiile de viață ale populației din România în 2013*. [The living condition of the population in Romania in 2013] [online]. Available at: <http://hymerion.ro/wp-content/uploads/2014/09/Conditiiile-de-viata-ale-populatiei-din-Romania-in-anul-2013.pdf> [Accessed 26 June 2019].
  23. \*\*\*Institutul National de Statistică. 2017. *Accesul populației la tehnologia informațiilor și comunicațiilor – 2017*. [The population's access at the technologies of information and communication]. [online]. Available at: <<http://www.insse.ro/cms/ro/content/accesul-popula%C5%A3iei-la-tehnologia-informa%C5%A3iei-%C5%9Fi-comunica%C5%A3iilor-rom%C3%A2nia-2017>> [Accessed 12 July 2019].
  24. \*\*\*Institutul National de Statistică. 2017. *Proiectarea populației României în profil teritorial la orizontul anului 2016*. [The projection of Romanian population at the territorial level for the 2016 horizon]. Available at: <[http://www.insse.ro/cms/sites/default/files/field/publicatii/proiectarea\\_populatiei\\_romaniei\\_in\\_profil\\_teritorial\\_la\\_orizontul\\_2016.pdf](http://www.insse.ro/cms/sites/default/files/field/publicatii/proiectarea_populatiei_romaniei_in_profil_teritorial_la_orizontul_2016.pdf)> [Accessed 20 June 2019].
  25. \*\*\*Institutul National de Statistică. 2017. *Romania in Figures – 2016*. [online] Available at: <<http://www.insse.ro/cms/ro/content/rom%C3%A2nia-%C3%AEn-cifre-breviar-statistic-0>> [Accessed 5 July 2019].

26. \*\*\*Ministerul Muncii, Familiei și Protecției Sociale. 2009. *Reflectarea incluziunii sociale in mass media din Romania*. [The social inclusion as it is reflected in Romanian mass media]. [online]. Available at: <<http://www.mmuncii.ro/pub/imagemanager/images/file/Domenii/Incluziune%20si%20asistenta%20sociala/PHARE2006-Constientizare-incluziune/220110CNCIS-Reflectarea%20incluziunii%20sociale%20in%20mass-media%20din%20Romania.pdf>> [Accessed 20 July 2019].
27. \*\*\*SeniorNet 2019. *SeniorNet – The Organization*. [online]. Available at: <[https://www.seniornet.org/index.php?option=com\\_content&task=view&id=42&Itemid=204](https://www.seniornet.org/index.php?option=com_content&task=view&id=42&Itemid=204)> [Accessed 20 June 2019].