

# Intergenerational Education As a Resource of Digital Socialization of Older People

Larisa Darinskaia  
*Department of Psychology*  
*St Petersburg State University*  
 St Petersburg, Russia

Natalia Moskvicheva  
*Department of Psychology*  
*St Petersburg State University*  
 St Petersburg, Russia

**Abstract**—One of the resources of digital socialization of older people is intergenerational education, but its organization often faces barriers of perception and misunderstanding of different generations. The pilot survey of older people and adolescents revealed their mutual expectations, assessment of their capabilities, typical problems and, in general, the positive attitude of young people towards the elders. To improve the readiness for effective communication, training programs have been developed for different age groups. The study was a part of the research project No. 18-013-00599, supported by the Russian Foundation for Basic Research.

**Keywords**—socialization, intergenerational education, digital technologies, communication, training

## I. INTRODUCTION

The issues of involvement of older people in the digital environment, caused by the desire of society to integrate them into community, has been actively discussed in recent years in many countries [1-3]. Meanwhile, older people are often associated with distancing from computers, smartphones and other digital innovations, as well as with weak learning ability. Moreover, such distancing entails a similar way of thinking in some older people who tend to perceive themselves as passive members of society and exclude themselves from active social life.

That is why it is quite appropriate to define the process of involving the elderly in the digital space through the concept of digital socialization. According to the definition of T. Westin, it is to learn the ways of living online, across the national borders, local cultures and societies, and has to be inclusive for equal participation. Conditions for this socialization process are different due to both local and individual limitations [4].

But to be more precise, we are talking about the need to find new channels for re-socialization of older people in a modern digital society [5]. And there are such channels, as evidenced by the experience of universities and schools for the elderly in different countries (“School of the Third Age”, “Pensioner Online”, etc.), training centers and social

---

**Corresponding Author:** Larisa Darinskaia, Department of Psychology, St Petersburg State University, St Petersburg, Russia.

**Fund Project:** The work was supported by the Russian Foundation for Basic Research, the research project No.18-013-00599.

projects.

However, older people are not always active in mastering digital technologies, which leads to the search for new ways to bridge the digital divide. One of such methods is intergenerational learning aimed at developing participants' communication [6-7]. The organization of such training determines the generalities of the elderly and young people aimed at bridging the intergenerational digital divide [8].

## II. LITERATURE REVIEW

An analysis of the literature has shown that adoption and acquisition of digital technologies by older people is largely due to the compatibility of innovations with their lifestyle, values and needs, simplicity and ease of use [9]. Also, the attitude of older people to digital technologies is closely related to previous personal circumstances (fear of technology, frustration, level of education, economic and social status, etc. [10].

Among the external barriers for engaging the elderly in the digital environment, researchers highlight the complexity and high cost of equipment, lack of support during the learning process, inappropriate didactic approaches to building skills related to the development of digital technologies, too high speed of instructions, complexity of the user interface forcing the elderly be aware of their own helplessness lack of support from their families [10-11]. Based on the results of diagnosing the difficulties of introducing the elderly to the digital environment, psychological and pedagogical programs of measures have been developed to overcome these difficulties [12].

Studies by Russian scientists have shown that a negative attitude towards old age in youth groups is based on the idea of this period as being unfavorable in socio-economic and socio-psychological terms. The prediction of external changes prevails among girls, and among young men the loss of social activity and status predominates. In this context, adaptive strategies are typical for elderly people, which are formed as a result of intergenerational interactions [13].

It should be noted that participation in the practice of intergenerational interaction can positively affect the dynamics of attitudes towards old age and increase the level

of readiness of young people to age-related changes. For example, in groups of volunteers, the characteristics associated with the assessment of old age as the highest stage of maturity dominate, the family plays a large role in preserving intergenerational ties and sharing experience in the information space [8].

In general, it can be concluded that the success of introducing intergenerational practices with the goal of digital socialization of older people and teaching them digital technology largely depends on overcoming a number of difficulties, primarily of communicative nature. On this basis, we set the research question: what are the possibilities of intergenerational interaction in digital socialization of older people?

The purpose of our study was to develop and test training programs for representatives of older and younger generations, focused on productive interaction in the process of acquisition of digital technologies by older people.

### III. METHODOLOGY

The main thing in working with older people in the context of our research is to discover the possibilities of digital environment and its acquisition in the process of interaction with younger generation. The initial stage of the research is a pilot survey of older people and adolescents about the possibilities of intergenerational interaction in the field of digital space exploration. The organization of such cooperation requires preliminary psychological support work, which increases the willingness of both generations to interact. For this purpose, training programs have been developed for representatives of older and younger generations.

The purpose of the training for the elderly: formation of readiness for intergenerational training in order to master digital technologies. The challenges: formation of positive self-perception; focus on acquisition of digital space; development of skills for constructive interaction with young people.

The purpose of training for adolescents: development of skills of interpersonal communication with older people. Objectives: overcoming misunderstanding and hostility towards elders; development of communication skills; increasing willingness to help the elderly in acquisition of the digital sphere.

The sample consisted of 68 respondents aged from 58 to 84 years, average age 69.62 (51 women, 17 men); 163 teenagers (91 girls, 72 boys), average age 13.27, living in Russian cities (St Petersburg, Moscow, N. Novgorod).

Research methods - semi-structured interview, questioning.

The training programs were attended by 2 groups of 7 people, older participants aged from 63 to 86 years, the average age of  $69.25 \pm 7.4$ , including 12 women and 2 men.

132 people participated in trainings for teenagers between the ages of 13 and 17, the average age  $14.45 \pm 1.24$ , students of schools and colleges of St Petersburg (Russia), 66.7% are girls (88 people), 33.3% are boys (44 people).

In training programs the following methods were used: mini-lectures, group discussions, work in small groups, reflexion and communication skills enhancement exercises, role-playing games, imitating situations of intergenerational interaction, relaxation exercises, and art therapy elements. The analysis of the results of the training programs was carried out using survey methods, questionnaires, and projective techniques.

## IV. RESULTS AND DISCUSSION

### A. Aerobic Survey Results

The majority of elderly respondents answered affirmatively to the question of whether they could use the modern possibilities of the digital space more if they were provided assistance (67.7%). Additionally, a quarter of respondents gave an unequivocal positive answer (26.5%), and even more people answered less firmly *Rather yes* (41.2%). Negatively - *Rather no* (14.7%) and *No* (8.8%) in total about a quarter of respondents (23.5%) answered. 8.8% of respondents found it difficult to answer. Representatives of the younger generation positively assessed the possibilities of their grandparents: 87.2% of adolescents answered affirmatively; only 9.2% of adolescents negatively evaluated the possibilities of the elderly.

Older people considered their children, other relatives (60.3% of answers) and grandchildren (69.1%) could help them master digital technologies (the question allowed the choice of several alternatives, as a result of which the sum of answers may exceed 100%). About 16.2% of respondents indicated specially organized training courses. According to the opinion of adolescents, the children, other relatives (76.1% of the answers) and grandchildren, i.e. teenagers themselves (73.6%) could help older people to acquire new technologies. It can be said that in this part of the survey, the ideas of the generations and the expressed willingness to interact are very close. As for other sources of assistance, adolescents more often than the elderly themselves mentioned different types of social support: special training courses for the elderly (22.7% and 16.2%, respectively), assistance of younger colleagues, neighbors (23, 3% and 10.3%), other elderly people who know how to use digital technologies (19.0% and 4.4%), volunteer organizations (11.7% and only 2.9%).

In general, the results of the pilot study showed that respondents were optimistic about the capabilities of older people in mastering digital technologies, stressing the importance of assistance from other people, primarily family members and grandchildren.

Along with the ideas shared by both generations about the need for training and psychological support, certain differences in the perception of the problem were revealed:

adolescents talked more about the uncertainty of the elderly and exaggerated, in comparison to the elderly themselves, the difficulties associated with physical health.

**B. The results of the Training Programs**

Table 1 presents obtained data that illustrate the attitude of older people to acquisition of digital technology and intergenerational interaction.

The discussion of questions about the possibilities of personal development and improving the quality of life provided by digital technologies with older people has brought a positive effect. The overwhelming majority of the participants of the training positively assessed the role of modern information technologies, the Internet for realization of their interests and improvement of the quality of life (in total 85.8%). Most of older people answered that they understood the importance of intergenerational communication and tried to communicate positively with the young people, although 14.3% did not always succeed in interacting with the young generation.

**TABLE I. ATTITUDE OF OLDER PARTICIPANTS TO INTERGENERATIONAL EDUCATION IN THE PROCESS OF DIGITAL SOCIALIZATION**

Table Head No	Results of Participation in Trainings	
	Questions	Number of responses of older people (%)
1	Do you think that digital technologies provide great opportunities for realization of your interests and hobbies?	
	Yes	57,2
	Rather yes	28,6
	Rather no	0
2	How do you assess your readiness for intergenerational interaction?	
	I understand the importance of intergenerational communication and try to communicate positively	85,7
	I understand the importance of intergenerational communication, but I cannot communicate	14,3
	There is no need for such interaction, I make no effort	0
3	Would you like to participate in similar training programs in future?	
	Surely	14,3
	Rather yes	78,5
	Rather no	7,2
	No	0

To analyze the attitude of adolescents to interacting with older people, the data obtained with the help of non-verbal and verbal projective techniques and interview results were used.

**TABLE II. ATTITUDE OF YOUNGER PARTICIPANTS TO INTERGENERATIONAL EDUCATION IN THE PROCESS OF DIGITAL SOCIALIZATION**

Table Head No	Results of Participation in Trainings	
	Questions	Number of young people mentioning a category (%)
1	Have you ever been involved in helping older people learn digital technology?	
	Yes, I explained to my relatives and friends and helped to use various mobile phone options.	71,1
	Yes, I explained to my relatives and friends (a) and showed (a) how to use the possibilities of the Internet:	39,1
	Yes, I helped older people on the street, at ATM, etc.	17,1
	No, I did not take any part, but I would like to.	5,9
	No, I did not take any part, I just did not think about it	6,9
2	What feelings do you mainly experience in the process of interaction with older people?	
	Positive	71,3
	Neutral	25,6
	Negative	3,2
3	Attitude towards helping older people to acquire digital technologies	
	I want to help, they need it	12,1
	I managed to help	8
	I failed to help	4
	I do not help, they do not need it	5
4	Difficulties in communicating with older people	
	“do not understand”	44,7
	“another views”	41,5
	“don't give a word to say”	16,0
	“I have no difficulties”	25,5
	“there is no mention of difficulties in the text”	10,6

In 17.4% of the projective drawings, the zone of communication with the elderly was generally absent, but in the vast majority of drawings (82.6%) this zone was highlighted. Older people in their own family were perceived by most adolescents as members of their close surroundings, which could in some cases reflect the real situation of interaction in the family, when, with large employment of parents, ancestors performed many of their functions. The results were confirmed by direct statements of adolescents during the training.

Thus, the attitude towards older people in their family was described as *positive* by the overwhelming majority of adolescents (75.8%), only 1.6% rated it as *negative*, and

almost a quarter of adolescents (22.8%) treated the ancestors *neutrally*. In communicating with older people, adolescents valued their experience, wisdom - 12.2% (*you can learn a lot of wisdom when communicating with them*), turning to roots - 5.3% (*you need to talk, you can learn a lot new*), personal qualities - 9.5% (*life according to conscience, kind and ready to help*) (only 27% of statements of the total).

The answers of older and young participants of the training programs, presented in Tables 1, 2, confirm the significance of the intergenerational interaction in the process of digital socialization of older people.

According to the trainer's reports, work with older people was more emotional than with adolescents. Participants were active, sharing their impressions, asking questions, etc. They noted that communication with adolescents was often quite problematic, but in spite of this fact, it was necessary to try to establish conflict-free relations. As a result, it was found that adolescents are more tolerant to older generation than the elders to them.

In general, the success of training sessions and the achievement of planned results largely depend on the degree of internal involvement of participants in the educational process, their attitude to the proposed goal, the significance of the proposed subject matter, readiness and need to take certain positions in the intergenerational interaction system. It is referred to the awareness of the personal meaning of what is happening by training participants.

## V. FINDINGS

- Intergenerational education is a reserve of successful digital socialization of older people in the digital environment.
- Older people and adolescents are optimistic about intergenerational interactions.
- The majority of adolescents are emotionally interested in the success of older people in acquisition of digital technologies.
- To overcome the barriers of misunderstanding between adolescents and older people it is necessary to carry out preliminary work on the development of communicative competence of both participants.

## VI. CONCLUSION

The modern world is characterized by fundamental changes in the social paradigm. The development of digital technologies and virtual space has created new living conditions under which there is a "change of roles": today the older generation needs the help of young people in acquiring new realities. Our study shows that both older people and adolescents are optimistic about the prospects of intergenerational interaction in the field of digital

education. It is important that for the young people of the sample communication with the elderly retains important socializing functions: transfer of family history, demonstration of examples of overcoming difficult life situations, education of altruistic traits. We can conclude that both generations - teenagers and grandparents – are capable of constructive interaction, need each other, can give a lot to each other. Certain barriers in mutual perception and understanding can be overcome, in particular, in the course of specially organized training programs. Thus, intergenerational education can be considered as one of the important resources of digital socialization of older people.

## REFERENCES

- [1] S.H.Tak, C. Beck, E. McMahon, "Computer and Internet access for long-term residents: perceived benefits and barriers", *Gerontol Nurs*, 2007, No 33(5), pp. 32 – 40.
- [2] C.-h. Ng, "Motivation among older adults in learning computing technologies: A grounded model", *Educational Gerontology*, 2008, No 34, pp. 1 –14.
- [3] L. Darinskaia, N. Moskvicheva, G. Molodtsova, "Elderly person and digital space: points of contact", *Man and education*, 2016, No.3 (48), pp. 151-158.
- [4] T. Westin, "Inclusive Digital Socialisation. Designs of Education and Computer Games in a Global Context", Academic dissertations for the Degree of Doctor of Philosophy in Computer and Systems Sciences at Stockholm University, Stockholm, 2017. Retrieved from URL: <https://www.diva-portal.org/smash/get/diva2:1086949/FULLTEXT01.pdf>
- [5] E. Zgurskaya, "Resocialization of people of the third age as a sociocultural problem", *Bulletin of St. Petersburg State University of Culture and Arts*, 2016, No 3 (28), pp. 172 – 174.
- [6] F. Carl, "Generations and Society: Intergenerational Programs", *Psychology of Maturity and Aging*, 2003, No 2 (22), pp. 114 –116.
- [7] M. Postnikova, "Psychological knowledge in the system of intergenerational relations (to the formulation of the problem)", *Bulletin of the Pomor University. Series: Physiological and psychological-pedagogical sciences*, 2007, No. 1 (11), pp. 74 – 78.
- [8] S. Mititelu, "Internet and media – abstract intermediaries in the intergenerational conflict", *Academy of Professional Education*, 2016, No. 10 (64), pp. 60 – 64.
- [9] M. Heinz, P. Martin, J.A. Margrett et al, "Perception of technology among older adults", *Journal Gerontol Nurs*, 2013, No 39 (1), pp. 42 – 51.
- [10] K. Ala-Mutka, N. Malanowski, Y. Punie, & M. Cabrera, "Active Ageing and Potential of ICT for Learning". Institute for Prospective Technological Studies (IPTS), JRC, European Commission, EUR 23414 EN, 2008. Retrieved from URL: <http://ftp.jrc.es/EURdoc/JRC45209.pdf>
- [11] K. Goodall, P. Ward, L. Newman, "Use of information and communication technology to provide health information: what do older migrants know, and what do they need to know?", *Qual Prim Care*, 2010, No18 (1), pp. 27-32.
- [12] L. Darinskaia, G. Molodtsova, "Diagnosis of Difficulties in Introduction Older People to the Digital Space", *INTED2018 Proceedings, 12th International Technology, Education and Development Conference, Valencia, 5-7<sup>th</sup> of March, 2018, IATED Academy, 2018, pp. 5001 – 5007.*
- [13] M.V. Starchikova, "Adaptive strategies of elderly and senile people in intergenerational interaction", The dissertation author's abstract on the competition of a scientific degree of the candidate of sociological sciences, Altai State University, Barnaul, 2013.