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## The Role of Self-Education in Preservation and Development of Human Capital in the Republic of Karelia: Socio-Cultural Aspect \*

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**Abstract.** The problem of preserving human capital in the context of globalization is due to processes in the economic, social and cultural spheres. The search for a solution to this problem in the field of humanities is associated with aspects of personality self-development. Among the most important components of personality self-development, the majority of researchers in the humanities note self-education as a motivator for labor and social activity. Therefore, the identification of socio-cultural factors affecting the level and need for self-education requires a comprehensive interdisciplinary approach with regional specifics taken into account. Objective is to identify the factors influencing the level of self-education of residents in the modern economic and socio-cultural conditions of the Republic of Karelia. The material for cultural analysis was the results of field studies obtained during a scientific expedition to the Karelian Arctic, northern and southern border regions of Karelia. As a research methodology, an integrated cultural approach was used. Among the effective methods were focus groups on thematic cases, standard and non-standard questionnaires, interviews, polls, factor analysis, statistical and normative methods. For the first time in scientific practice possible sources, channels and preferences of the population of Karelia in self-educational activities have been researched. As a result, it was concluded that the combination of economic indicators is the determining socio-cultural factor for self-educational activity of the residents of the investigated areas and geographical indicator, which allows the inhabitants of Karelia to realize their spiritual and material needs at a high level and to preserve human capital as the main value of society in the unstable situation of a globalizing world.

**Keywords:** *human capital, self-education, migratory process, socio-economic development, adult education, complex expedition.*

### Introduction

The preservation of human capital is one of the main problems of the socio-economic development of the Republic of Karelia. According to statistics<sup>1</sup>, the migration loss in 2019 started to decline, but still shows negative values. In this regard, the situation requires a comprehensive analysis and identification of the reasons for the negative migration balance. From the generally accepted point of view, the reason for the migration loss in Karelia is associated with economic and social aspects. However, from a scientific standpoint, such a vision is considered one-sided, since only a comprehensive interdisciplinary study is able to identify cause-and-effect relationships and, as a result, determine ways to solve the problem.

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<sup>1</sup> General results of migration of the population of the Republic of Karelia for January–August, 2019. URL: [https://krl.gks.ru/storage/mediabank/73284\\_08.pdf](https://krl.gks.ru/storage/mediabank/73284_08.pdf) (accessed 18 June 2019).

The concept of human capital, rooted in science of the 20th century thanks to T. Schultz, G. Becker, L. Turov, J. Kendrick and others, has a multifactor structure. The positivist approach is used by economists [1, Gvozdeva M.A., Kazakova M.V., Kiblitckaya T.R., p. 46] and is a convenient tool for scientific analytics [2, Buranshina N.A.]. However, “the solution to the problem in the form of identifying methods for preserving human capital is largely associated with intangible culture, which is diverse, spontaneous, local and requires a special approach” [3, Smirnov A.K., p. 19].

Similar practice is carried out by scientists of different directions: I.A. Krutiy and O.V. Krasina in the field of sociology [4, p. 127–130], Ya.M. Roshchina [5], J.B. Avey, F. Luthans, S.M. Jensen [6, p. 678], F. Luthans, J.B. Avey, J.L. Patera [7] in economic psychology, A.J. Elliot and M.V. Covington [8], I.N. Semenov<sup>2</sup>, A.L. Zhuravlev, D.V. Ushakov in psychology, A.I. Yuriev, A.V. Selezneva, E.P. Dobrynina, I.S. Burikova<sup>3</sup> in political psychology. But since the concept of human capital is multifactorial [9, Korchagin Yu.A., p. 61], its study should be not only interdisciplinary, but also complex.

An important aspect is the understanding of human capital as a volume of investments in education and self-education [10, Armstrong M.], education, health care [11, Vidal-Salazar M., Hurtado-Torres N., Mathias-Reche F.], security [12, Zacharatos A., Barling J., Iverson R.D.], vocational guidance, culture, as well as consumer needs of the population.

Regional problems of preserving human capital are actively studied in modern Russian science [13, Grachev S., Donichev O., Malkova T., p. 68]. Meanwhile, Karelia has only once become an object of socio-cultural scientific research [14, Pivoev V.M. et al.].

In the modern world, self-education is given priority. “The key to professional success is not knowledge acquired once in a lifetime. The ability of people to find their way through a vast field of information, the ability to find solutions independently and to implement them successfully comes to the forefront”<sup>4</sup>.

The essence of self-education is reduced to the possible self-realization of a person in different areas, taking into account his individual characteristics and abilities. In modern information society, a free and wide selection of interactive courses, projects and self-education programs can satisfy any cognitive interests of both professional and non-professional orientation.

The cognitive subject of self-education forms all these skills and abilities in the process and under the influence of the socio-cultural situation to which a person belongs.

The analysis of real socio-cultural situation allows us to identify the main factor that determines the demand for self-educational activities of our contemporaries.

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<sup>2</sup> Semenov I.N. Ekonomicheskoe povedenie cheloveka kak kapitala i razvitie ego reflektivno-tvorcheskogo potentsiala v polikul'turnom biznes-obrazovanii [Economic behavior of a person as capital and the development of his reflective and creative potential in multicultural business education], 2019. URL: <http://fs.nashaucheba.ru/docs/45/index-2576108.html> (accessed 18 August 2019).

<sup>3</sup> Burikova I., Konovalova M., Pushkina M., Yuryev A. Opyt psikhologicheskogo izmereniya chelovecheskogo kapitala [Experience of psychological measurement of human capital]. URL: <https://gtmarket.ru/laboratory/expertize/3251> (accessed 22 August 2019).

<sup>4</sup> Konovodova Yu.A. Samoobrazovanie — eto vazhneyshiy priznak kachestva obrazovatel'nogo protsesssa [Self-education is the most important sign of the quality of the educational process]. URL: <https://moluch.ru/conf/ped/archive/98/4555/> (accessed 22 August 2019).

The purpose of the work is to identify the factors influencing the level of self-education in modern economic and socio-cultural conditions. The analysis of factors influencing the self-education of the inhabitants of the Ladoga region, the Karelian Arctic and the inhabitants of the northern borderlands is among the tasks.

The theoretical significance of the study lies in the possibility of identifying the leading factors of the modern socio-cultural situation, influencing the level and need for self-education of inhabitants of the region, using an interdisciplinary humanitarian approach. The practical significance of the study lies in the possibility of approbation of various humanitarian methods, including self-education questionnaires.

### ***Materials and methods***

The article presents the results of a comprehensive research expedition “Ways of preserving human capital as an urgent problem of Karelia”, conducted in 2019 in some regions of the Republic of Karelia.

The empirical data were obtained by applying an integrated methodology of cultural research, sociology, economics, history, linguistics, psychology and axiology. The following methods were used when working with the adult population of the Karelian Arctic (Kemskiy and Lokhskiy districts), the northern outskirts (Kostomuksha urban district) and the Karelian Priladozhie (Sortavalskiy, Lakhdenpohskiy and Pitkyaranta districts):

- focus groups on thematic cases (history and sociological research),
- standard and non-standard questionnaires (sociological, psychological and economic research);
- description and interpretation of ideas, reactions and assessments of a person on a problematic topic (linguistics and psychological research);
- interviews (historical and sociological research);
- surveys (sociological and economic research);
- factor analysis, statistical and normative methods (economic research).

In the course of processing the obtained empirical data, it turned out to be possible to verify the proposed hypothesis about the main factor that determines the level of self-education of the inhabitants of the republic.

### ***Results***

Opportunities for self-education are undoubtedly greatest in cities. The larger the city is, the more opportunities it has. So, the capital of Karelia, the city of Petrozavodsk, has concentrated most of the offers on the market of Karelian educational services. According to the Internet portal Kareljob.ru<sup>5</sup>, there are 27 adult education centres and educational institutions, all of them are lo-

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<sup>5</sup> Kareljob.ru: Internet portal. Courses for adults. URL: [https://www.kareljob.ru/education/index.php?id\\_rub=1](https://www.kareljob.ru/education/index.php?id_rub=1) (accessed 22 February 2020).

cated in Petrozavodsk. The vast majority of further education offers are in professional fields: accounting, computer skills, IT training, management. Foreign language courses (mainly English and Finnish) are always popular. It is noteworthy that all these offers are of a commercial and practical nature, being a kind of advanced training or professional retraining courses.

However, there are non-commercial offers, represented primarily by non-profit public organisations and state budgetary institutions (museums, libraries, cultural centres) that conduct various educational activities and general culture courses.

It should be noted that according to Kareliastat <sup>6</sup>, in 2019, the educational and cultural systems occupy the third place (after transport and communication services and housing and communal services) in the structure of paid services to the population, amounting to 8.6%. One of the conclusions that can be drawn from the statistics is that the solvent part of the population is ready to invest in education.

Petrozavodsk State University occupies a special place in the market of educational services in Karelia. In 2017, it became the pivotal university of the region and undertook a number of commitments, the most important of which was the preparation of the socio-economic strategy of the region <sup>7</sup>. The development strategy is aimed not only at the introduction of new technologies in all areas of development (Internet, agro-industrial complex, tourist cluster, mechanical engineering, high medical technologies, etc.), but also at the development of human potential in both professional and general cultural aspects. The university contributes to the implementation of projects promoting science and introducing global and traditional culture. The target audience of the projects is primarily schoolchildren who are potential applicants. However, there are a number of educational projects for adults, two examples of which are given below.

Since 2010, the social service "Open University" has been a part of Petrozavodsk University. For more than 10 years of its existence, about 30 courses have been developed and implemented, many of them continue for years. The topics are diverse: world and local history, world and traditional culture, psychology, medicine, plant growing, computer literacy, and so on. Lecturers and teachers of the courses are leading scientists of Petrozavodsk University and the Academy of Sciences. The example of the Open University is interesting, first of all, for its elderly audience. So, according to a survey conducted in 2016 <sup>8</sup>, the percentage of students is as follows: under 25 years old — 6.3%, 25–40 years old — 14.9%, 40–55 years old — 23.1%, over 55 years old — 53.5%. As for the social status of students, it is estimated at 41% of non-working people, 24% of working

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<sup>6</sup> Respublika Kareliya v tsifrakh'2019: kratkiy statisticheskiy sbornik [The Republic of Karelia in figures'2019: a short statistical collection]. Petrozavodsk: Kareliastat, 2019. 65 p. URL: [https://krl.gks.ru/storage/mediabank/02471\(1\).pdf](https://krl.gks.ru/storage/mediabank/02471(1).pdf) (accessed 22 February 2020).

<sup>7</sup> Opornyy vuz: 10 plyusov [Flagship university: 10 pluses]. Informatsionnoe agentstvo «Respublika» [Information Agency "Respublika"], 2017. URL: <http://rk.karelia.ru/social/opornyy-vuz-10-plyusov/> (accessed 22 February 2020).

<sup>8</sup> Babakova T.A., Levina O.R. Otkrytyy universitet kak fenomen obrazovaniya vzroslykh [The open university as a phenomenon of adult education]. Nepreryvnoe obrazovanie: XXI vek, 2016, no. 2 (14), p.26–38. URL: <https://cyberleninka.ru/article/n/otkrytyy-universitet-kak-fenomen-obrazovaniya-vzroslykh> (accessed 28 February 2020).

pensioners, 28.6% of working adults, 6.4% of students. It is noteworthy that 44.8% of the respondents were not previously associated with Petrozavodsk State University (that is, they did not study or work in it). This parameter indicates the attractiveness of the scientific and educational atmosphere of the university, which is open to everyone who wants to acquire knowledge. This is evidenced by the constantly growing audience of the Open University, which amounted to more than 3 thousand people in 2019.

Another unique example of creating scientific and cultural space is the Humanitarian Innovation Park, which began functioning at the end of 2018. The system of innovation parks declared in the program of the supporting university<sup>9</sup> included not only IT and engineering areas, tested by many universities, but also humanities. Thus, for the first time in Russia, the Humanitarian Innovation Park (HIP) was created, which unites scientists from different humanitarian fields: historians, philosophers, philologists, cultural scientists, sociologists, political scientists, lawyers and economists. The purpose of the association is to identify metasubject connections in the humanities and conduct complex scientific research in the humanitarian sphere of the Republic of Karelia. The park also has a scientific and educational function. Spatially, the HIP has been embodied in several sites where scientific, educational and awareness-raising projects are being implemented. In 2019, number of these projects totalled 14 and attracted several hundred participants of different age categories (schoolchildren, students, scientists, adult volunteers). The thematic projects of the HIP relate to the basics of genealogy (building a family tree, searching for ancestors, working with archives), studying foreign languages (Greek or Swedish), philosophy and culturology (the essence of philosophical knowledge and its application in all types of human activity), local history (study of the intangible culture of the Russian North, work with field research data, work with archives). The most ambitious educational project "Karelia to the present day", implemented jointly with the State TV and Radio Company "Karelia", was embodied in a series of TV programs dedicated to the history, culture and nature of the republic. TV shows are broadcast on the federal channel (Russia24) in prime time and have good ratings<sup>10</sup>. The interest of the public can be explained by the need of Karelians to learn more about their region from scientists, which, in turn, can be called an element of self-education.

As noted above, the functions of the HIP include scientific research. Their practical implementation was a complex research expedition "Ways of preserving human capital as a topical problem in Karelia". One of the objects of research was the socio-cultural situation and its influence on the self-education of the inhabitants of the republic. The study was carried out in three territorial areas; a total of 661 respondents took part in it. The analysis of the socio-cultural situation in the studied territories was carried out taking into account geographical, demographic, economic, historical and cultural factors.

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<sup>9</sup> Development program of the flagship Petrozavodsk State University for 2017–2021. URL: <https://petsu.ru/docs/counter/6328> (accessed 18 August 2019).

<sup>10</sup> Karelia to the present day. URL: <http://tv-karelia.ru/category/karelia-do-nashih-dney/> (accessed 25 February 2020).

### *Geographic factor*

The geographical position of Karelia is unique. Firstly, the republic has the longest border in the Russian Federation with the European Union (Finland), and, secondly, it is located in relative proximity to the federal centers: first of all, Moscow and St. Petersburg. Both of these factors are especially relevant for the Ladoga area. In addition, this area is the closest to the capital of Karelia, Petrozavodsk city (220 km). The northern regions are the farthest from St. Petersburg and Petrozavodsk, but at the same time, the western regions (Kostomuksha, Loukhi) border Finland.

### *Economic factor*

The territories under study differ in terms of their production development, economic activity and level of wages. The latest figure for 2019 is: 37.810 rubles in the Sortavala municipal district, 36.567 rubles in the Pitkyaranta municipal district and 52.641 rubles in the Kemskiy municipal district.

### *Demographic factor*

The demographic factor is to some extent related to the geographic one, since the proximity of the Ladoga area to St. Petersburg affects the outflow of the population due to labor migration. The statistical data for 5 years (as of January 2019), collected from the local authorities during the expedition, are as follows: Sortavala district — 30914 residents (1286 people left), Pitkyaranta municipal district — 17390 residents (1498 people left). Positive dynamics is observed in the Kostomuksha urban district: a total of 29871 residents, of whom 295 have moved.

### *Historical and cultural factor*

All district centres have numerous objects of cultural heritage, reflecting the centuries-old history of coexistence of Karelians, Finns, Russians and Sami. With the total number of such objects (1023), the largest number of them is located in the Sortavala region (548)<sup>11</sup>. The uneven distribution of cultural objects is combined with their typical diversity. Thus, in Ladoga and Kemskiy districts, the main sights, attracting a large flow of tourists (Valaam and Solovetskiy monastery), are of historical and cultural nature and reflect the milestones of Russian history. Meanwhile, the lack of ancient historical monuments in Kostomuksha is compensated by popularization of the ethno-cultural heritage of Karelians and Finns (Karelian language, Karelian-Finnish epic, traditional crafts) and Kostomuksha itself (the youngest city of Karelia, 41 years old), which is an example of urban architecture, created according to the advanced Finnish technologies.

It is important to note that social and cultural institutions (museums, libraries, cultural centers, etc.) are active in all areas studied. Their activities are aimed not only at preserving historical memory, but also at stimulating the cognitive needs of the population. In total, 450 cultural insti-

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<sup>11</sup> Statistical information on the location of cultural heritage sites of the Republic of Karelia. URL: <http://monuments.karelia.ru/ob-ekty-kul-turnogo-nasledija/statisticheskie-svedenija-po-dislokacii-ob-ektov-kul-turnogo-nasledija-respubliki-karelija/> (accessed 18 June 2019).

tutions operate on the territory of Karelia<sup>12</sup>, and about 4 thousand people work there. The optimal functioning of these institutions is ensured by the State Program of the Republic of Karelia "Development of Culture", which takes into account one of the priority tasks of state policy on the preservation of historical and cultural heritage and its use for upbringing and education<sup>13</sup>.

It can be assumed that the main condition for self-education is a developed cultural infrastructure. This assumption was tested during a research expedition by interviewing residents of all these areas, working in the public sector, industry, management and agriculture. As a possible option, a questionnaire on self-education of adults was proposed, developed by the Department of Personal Psychology, St. Petersburg State University. The survey had 3 questions about biographical facts and 17 questions about the respondents' activities in various forms of self-education: reading various kinds of literature, visiting libraries and lecture halls, watching popular science and documentary films, visiting exhibitions and museums, participating in cultural events of local centers, professional development, watching theatrical performances and concerts, participating in amateur performances, attending online courses.

In accordance with the instructions, points were awarded for each answer, then the points were summed up, and the total score was calculated. The higher the score was, the more participants were expected to be involved in self-education and self-development activities. Further, the results of the questionnaire were subjected to statistical processing, on the basis of which a level grading of marks was applied. A high level of self-educational activity — from 17 to 23 points — indicated that person was actively involved in self-educational activity and was largely involved in the process of self-development. The average level — from 11 to 16 points — indicated that person's involvement in the process of self-development and self-education is at the average level necessary for the implementation of the process. The low level of this activity — below 10 points — indicates a low degree of involvement in the process of self-development.

The survey involved 661 respondents aged 18 to 72 years, 70% of whom were women, 30% — men. Of the respondents, 72% in Kostomuksha, 67% in the Arctic, and 66% in Ladoga had higher education. A positive fact is 100% coverage of the surveyed respondents with one or another form of self-education, which indicates such a trait as a constant striving for new knowledge, skills and abilities in completely different spheres of human activity.

According to the results of the questionnaire, it can be concluded that the largest number of adults with a high level of self-education is in Kostomuksha (19% of the total number of respondents), which is twice more than the number of respondents with a high level of self-education in the other two areas (9% in the Arctic and 10% in Ladoga area). If the relationship be-

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<sup>12</sup> Respublika Kareliya v tsifrakh'2019: kratkiy statisticheskiy sbornik [The Republic of Karelia in figures'2019: a short statistical collection]. Petrozavodsk: Kareliastat, 2019. 65 p. URL: [https://krl.gks.ru/storage/mediabank/02471\(1\).pdf](https://krl.gks.ru/storage/mediabank/02471(1).pdf) (accessed 22 February 2020).

<sup>13</sup> Ob utverzhdenii gosudarstvennoy programmy Respubliki Kareliya «Razvitie kul'tury» [On the approval of the state program of the Republic of Karelia "Development of culture"]. URL: <http://docs.cntd.ru/document/919511963> (accessed 22 February 2020).

tween the level of formal education and self-education is identified, the data indicate that the vast majority of respondents with a high level of self-education have higher education. It can be concluded that people with a higher level of higher education have a greater motivation for self-education and self-development. The study showed that the vast majority of respondents in Kostomuksha had a higher education, that is, the general level of formal education was quite high (72%).

In comparison with other districts, the number of respondents with an average level of self-education prevails in Kostomuksha (52% of the total number). In Ladoga, the number of respondents with an average level of self-education is about half (49%), most of them have higher education (84%). In the Karelian Arctic and Ladoga area, the same indicator of respondents (40%) with a low level of self-education was revealed, and the number of people with higher education there does not exceed 36%.

### *Discussion and conclusions*

The results of the survey show that the highest level of self-education and formal education is observed among the residents of Kostomuksha urban district. Linking the socio-cultural factors of this area with the results of the study, we can conclude that

- the place of birth does not determine the preservation of human capital in the territory and is not a determining factor in the demographic situation (the lowest birth rate in Karelia refers to Kostomuksha urban district, where, unlike other regions, a demographic increase in the labor force was recorded);
- the highest level of wages in Karelia provides Kostomuksha residents with sufficient opportunities for self-education through participation in domestic and international programmes, courses and projects;
- proximity to the border provides Kostomuksha residents with a high level of international mobility, which also expands the possibilities for self-education;
- cultural and historical factors are not decisive factors in motivating residents to self-education in the studied territories.

Thus, the main factor determining the high level of inhabitants' self-education in the studied regions of Karelia is a combination of economic and geographic indicators that allow Karelians to fulfill their spiritual and material needs at a high level and maintain the growth of human capital.

The main directions of research in future are related to the possibility of expanding the research activities of scientists of the supporting university through expeditionary activities throughout the territory of the Republic of Karelia.

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