

# Directions and Prerequisites for the Outflow of Youth from the Arctic Zone of Russian Federation

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**Abstract**—The article is devoted to the study of prerequisites and directions of the outflow of youth from the country's Arctic territories. Based on the data from the interviews in 2019, it was determined that educational migration has recently become one of the main factors of the outflow of young people from the Arctic municipalities. The lack of higher education institutions in the autonomous Arctic regions forces young people to leave the territory in order to obtain a higher level of education. The presence of existing leading universities in the territory does not solve the problem of outflow of youth, which is associated with the quality of education, the choice of areas of training and further professional implementation. As a result of the study, it was determined that the goal for departure from the Arctic territories is formed in childhood and strengthens over the years. The results can be used by state authorities, educational and scientific institutions in solving problematic issues in the field of youth education and migration in the Russian Arctic.

**Keywords**—*population outflow, youth, education, Arctic zone of the Russian Federation.*

## I. INTRODUCTION

Over the past ten years, population in the Arctic of different countries has decreased significantly, which, according to researchers, is mainly due to migration processes. Schmidt J.I., Aanesen M., Klovov K.B., Khrushchev S., Hausner V.H. note that in general, the Arctic has experienced a migration outflow, only Iceland and two regions in Canada can be characterized by a positive migration inflow [1]. There is still a rapid outflow of population from the Russian Arctic regions. The reasons for the population's departure from the Russian Arctic are various, including housing problems [2], high unemployment [3], industrial closure [4], reduced effectiveness of the guarantee payment system in the North [5], unattractive living and working conditions [6] and others. It is worth noting that these issues concern mainly the working-age population. However, a very young population, having received only basic general or complete secondary education, is actively leaving the Arctic territories. The main reason for the negative trend in recent years is the lack of professional and higher educational institutions in the Arctic territories,

especially in rural areas. Consequently, young people are deprived of the opportunity to increase their level of education and gain a particular profession.

The leading universities of Russia mainly carry out scientific and educational activities in the Arctic territory: Northern (Arctic) Federal University named after M.V. Lomonosov, Murmansk Arctic State University, Norilsk State Industrial Institute, as well as branches of several universities in Moscow and St. Petersburg. However, despite this, young people are rapidly leaving even relatively large Arctic cities (by northern standards) for educational purposes. This trend can be observed in almost all the northern and arctic regions of Russia. In this regard, there is a need to identify the prerequisites for the educational migration of young people from the Arctic territories of the country, which determined the relevance of this study.

## II. LITERATURE REVIEW

A significant amount of work by foreign and domestic researchers is devoted to the study of factors of population migration in the Arctic territories. As a comparative analysis of scientific research in the Arctic shows, the reasons for the arrival and departure of the population are differentiated by territory. For example, Hamilton L.C., Saito K., Loring P.A., Richard B., Lammers R.B., Henry P., Huntington H.P. called the climate change as the main factor in the migration movement of the population in Alaska, that is, people living in this territory are forced to leave [7].

In the last decade, the attention of state authorities of the Russian Federation has been riveted to the development of the country's Arctic territories. The Russian Arctic has been characterized by a systematic outflow of population for more than twenty years [8]. At present, reducing the scale of migration outflows is one of the tasks of state policy in terms of maintaining and effectively realizing the demographic potential [9]. The influence of various factors on the decision of the population to leave the Arctic territories is described in various scientific studies. So, for example, Druzhinina I.V., Kurushina E.V., Kurushina V.A. revealed that the provision of new housing and social infrastructure for the population is important for all migrants in the North and in the Arctic [10]. Karmakulova A.V., Grigorishchin A.V. note that the investments' inflows, as well as the purchasing power and unemployment rate in the territory, affect the migration

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movement in the Russian Arctic [11]. In the works of scientists/north-specialists, Fauzer V.V., Pilyasov A.N., Loginova V.G., Lazhentseva V.N., Sukneva S.A., Skufina T.P. and others, the problem of migration outflows from the northern and Arctic Russian territories is considered from different perspectives.

The authors of this article also conduct research to identify factors and barriers to migration [12]. The main results were previously obtained using various theoretical research methods, as well as methods of statistical analysis and mathematical modeling. In the course of research it was determined that in recent years, the country's Arctic municipalities have been left by the majority of young population, which is necessary in the future for the integrated development and development of the Russian Arctic. All of the abovementioned have additionally updated the research topic.

### III. RESEARCH METHODOLOGY

In identifying the prerequisites and trends of youth migration, we relied on a sociocultural approach. General issues of this methodology are contained in the works of A.S. Akhiezer, M. Weber, S.N. Gavrova, N.I. Lapina, R. Merton, P.A. Sorokin, T. Parsons, and L. White. The main methods of this study were inter-regional comparisons of migration processes and interviewing representatives of the youth community of the urban population, as well as young people who left the Arctic territories, as their permanent place of residence. The interviews were carried out in 2019. The total number of respondents was 104 people, an average of 10-12 people, depending on the number of youth in the territory. This number of young people meets the requirements when conducting qualitative sociological research [13]. The research was carried out in the following sequence: at the first stage, the research object was determined, which was made by representatives of the young population living in the Arctic cities, where the leading universities and their branches were located: the Republics of Karelia, Komi, Sakha (Yakutia), Arkhangelsk and Murmansk regions, the Nenets, Yamal-Nenets and Chukotka Autonomous Okrugs, as well as the Krasnoyarsk Krai. At the second stage of the research work, a list of questions for interviewing young people was developed. At the third stage of the study, using a unified methodology, interviews were carried out for representatives of the abstract group in Arctic cities. The results were processed and interpreted in the fourth stage of the study.

### IV. RESEARCH RESULTS

The respondents from the Republic of Karelia named the main reason for the youth's departure "lack of work in the region, especially for university graduates", as well as increasing transport accessibility to the country's capital by rail or air. It should be noted that the Republic of Karelia is a border region and respondents noted that young people also leave to Finland and the Czech Republic. In republican schools, a large bias is being made in the study of English, Finnish, French and German, that is, those that future applicants can apply in the future. Interviewees also indicate frequent holding of "language camps", as well as a large number of international exchange programs.

In the Arkhangelsk and Murmansk regions, the majority of respondents note that, as a rule, "the best ones, with Unified State Exam scores close to 300" leave the region and apply mainly for the "most prestigious universities". Young people indicate the diversity of higher education institutions and the presence of specialties that they do not have in the regions, in particular military universities. There is an established opinion among teenagers in 10<sup>th</sup>-11<sup>th</sup> school grades that it will be easier to find work and more opportunities for self-realization in general after graduation in Moscow and St. Petersburg. Young people are not satisfied with the arrangement of territories, the high cost of real estate, which is comparable to the prices of St. Petersburg. In addition, the respondents of the Arkhangelsk region and the Republic of Karelia note that public opinion has a high influence on the decision of youth to leave to study in St. Petersburg or Moscow, that "the level of education in these cities is higher".

In the Arctic territory of the Krasnoyarsk Territory, there is only one higher educational institution in the city of Norilsk, which is focused on the mining industry. There are also secondary vocational schools, but mostly specialists are trained to work in the mining and metallurgical company Norilsk Nickel. Consequently, in the Arctic municipalities of the Krasnoyarsk Territory there is no diversification of specialties, which forces young people to migrate for educational purposes to other regions. "Initially, some of the young people are going to return, but in the end, as a rule, they arrange their lives in other cities, including those where there are relatives and friends". Respondents indicate that "for most young people, parents have housing outside of Norilsk, where they strive to leave". If young people decide to stay to study in Norilsk, then later there are difficulties with suitable work outside the city, since the specialties acquired have certain specificity. In this regard, young people strive to get professions that are in demand not only in Norilsk, but also in other regions, so that even when they return they have the opportunity to leave.

According to the results of the author's interview, it was revealed that the young population of the Sakha Republic (Yakutia) mainly seeks to stay in the region, even if they went abroad during education. The part of the youth who expressed a desire to leave the Republic, points out as the main reasons for the underdeveloped infrastructure, remoteness from the central regions of the country and low quality of life in the Arctic and Arctic regions.

Table I shows the directions of educational migration of youth from the Arctic zone of the Russian Federation.

As a rule, the territorial factor and the transport accessibility of higher and secondary vocational educational institutions have a significant impact on the decision regarding education.

An analysis of the table allows us to conclude that young people in the European part of the Russian Arctic most often choose higher education institutions of St. Petersburg, Moscow, Yaroslavl, Vologda, Kaliningrad to study undergraduate and graduate programs and, as a rule, focus on technical specialties.

**TABLE I. DIRECTIONS OF EDUCATIONAL MIGRATION OF YOUTH FROM THE ARCTIC ZONE OF THE RUSSIAN FEDERATION**

Departure Region	Preferable country/city for education	Preferable higher education institution
Republic of Karelia	Finland Czech Republic St. Petersburg	St. Petersburg Polytechnic University of Peter the Great St. Petersburg State University of Aerospace Instrumentation
Komi Republic	St. Petersburg Vologda	Plekhanov Russian University of Economics St. Petersburg State Marine Technical University
Arkhangelsk region	Moscow St. Petersburg Yaroslavl Vologda Kaliningrad	Saint Petersburg State University St. Petersburg Mining University St. Petersburg State University of Architecture and Civil Engineering
Nenets Autonomous Okrug	Arkhangelsk St. Petersburg	Yaroslavl State Technical University Moscow Institute of Physics and Technology (State University)
Murmansk region	Moscow St. Petersburg Petrozavodsk	Bauman Moscow State Technical University State University of Management
Yamal-Nenets Autonomous Okrug	Tyumen Moscow St. Petersburg Yekaterinburg	Tyumen Industrial University (former Tyumen State Oil and Gas University I) Novosibirsk National State University Saint Petersburg State University Ural Federal University
Krasnoyarsk Krai	Moscow St. Petersburg Krasnoyarsk Novosibirsk Ivanovo Belgorod Ufa Tula Samara Izhevsk	St. Petersburg State University of Aerospace Instrumentation Krasnoyarsk State Medical University Novosibirsk State University of Architecture and Civil Engineering Ivanovo State Power University Belgorod State Technical University Belgorod State Institute of Arts and Culture The All-Russian State University of Justice — Izhevsk branch Siberian Federal University
Sakha Republic (Yakutia)	Moscow, Novosibirsk, Abroad - China, Canada, South Korea	North-Eastern Federal University Siberian Federal University
Chukotka Autonomous Okrug	Yakutsk	North-Eastern Federal University

Higher educational institutions are completely absent in the Arctic Autonomous Okrugs, which is the main reason for youth to leave, and therefore forced educational migration is forming in these territories.

So, young people of the Nenets Autonomous Okrug move to Arkhangelsk to get higher education at the Northern (Arctic) Federal University named after M.V. Lomonosov and in various higher institutions of St. Petersburg. The priorities among the young population of the Yamalo-Nenets Autonomous Okrug are educational institutions in the capital cities, as well as in Tyumen and Ekaterinburg. For higher education, the youth of the Chukotka Autonomous Okrug mainly choose the North-Eastern Federal University named after M.K. Ammosov in the city of Yakutsk.

#### V. PRACTICAL SIGNIFICANCE

The practical significance of the study lies in the possibility of applying the results obtained by state authorities

in the field of regulating issues of population migration from the Arctic regions of the country, mainly young people and of working age, as well as in the field of educational development. The results can also be applied in institutions of higher and additional education in the framework of disciplines aimed at studying the Arctic and northern territories, demographic and migration policies. Research organizations can apply the results to the development of theoretical, methodological and methodological approaches to preserving the demographic potential, reducing the migration outflow of the population in the Russian Arctic.

#### VI. CONCLUSION

The following conclusions can be made. First of all, educational migration in recent decades has become one of the main factors in the outflow of young people from the Arctic territories of Russia. Secondly, the goal for departure from the Arctic territories is formed in childhood and only intensifies over the years. Thirdly, the presence of leading universities in the territory as a whole does not solve the problem of the outflow of youth, since young people make demands on the education quality, the opportunities of missing training areas and further professional implementation, the possibilities of which are quite limited in cities remote from the country's central part.

#### REFERENCES

- [1] J.I. Schmidt, M. Aanesen and K.B. Klovok, "Demographic and economic disparities among Arctic regions," *Polar Geography*, Vol. 38, No. 4, pp. 251-270, 2015. <https://doi.org/10.1080/1088937X.2015.1065926>
- [2] A.N. Pilyasov. And the latter will be the first: the Northern periphery on the path to a knowledge economy. Moscow: Book house Librocom, 2009. (in russ.)
- [3] V.V. Trubin, "Migration and the labor market in Russia," *Obshchestvo i ekonomika (Society and Economics)*, No. 2, pp.32-49, 1995. (in russ.)
- [4] T.E. Aliyev, R.V. Badylevich and S.V. Baranov, North and Arctic in the new paradigm of world development: current problems, trends, prospects. Apatity: KSC RAS, 2016. (in russ.)
- [5] V.S. Celine, "Northern Regions of Russia: Economic Dynamics and Development Problems," *Region: ekonomika i sotsiologiya (Region: Economics and Sociology)*, No. 4, pp. 3-18, 2011. (in russ.)
- [6] L.I. Rozanova and O.V. Potasheva, "Mobility of factors of production in the subjects of the North-West Federal District: the impact of educational level, quality of labor resources and the structure of the economy," *Teoreticheskaya i prikladnaya ekonomika (Theoretical and Applied Economics)*, No. 2, pp. 110-120, 2018. (in russ.) <https://doi.org/10.25136/2409-8647.2018.2.18373>
- [7] L.C. Hamilton, K. Saito, P.A. Loring, R.B. Lammers and H.P. Huntington, "Climigration? Population and climate change in Arctic Alaska," *Population and Environment*, Vol. 38, No. 2, pp. 115-133, 2016. <https://doi.org/10.1007/s11111-016-0259-6>
- [8] A. Emelyanova, "Exploring the future population and educational dynamics in the Arctic: 2015 to 2050," *Finnish Yearbook of Population Research*, Vol. 53, pp. 1-24, 2019. <https://doi.org/10.23979/fypr.70159>
- [9] O.V. Gubina and A.A. Provorova, "Correlation of demographic and innovation priorities of strategic development of the Arctic regions of the Russian Federation," *Voprosy innovatsionnoy ekonomiki (Russian journal of innovation economics)*, Vol. 9, No. 2, pp. 383-400, 2019. (in russ.) <http://doi.org/10.18334/vinec.9.2.40600>
- [10] I.V. Druzhinina, E.V. Kurushina and V.A. Kurushina, "Attractiveness of the arctic zone and the northern territories of Russia for migrants," *International Journal of Ecological Economics and Statistics*, Vol. 38, No. 4, pp. 152-163, 2017.
- [11] A.V. Karmakulova and A.V. Grigorishchin, "Impact of investment attractiveness upon the demographic and migration processes in the regions of the Arctic zone of the Russian Federation," *Problemy sovremennoy ekonomiki (Problems of the modern economy)*, No. 4(56), pp. 235-238, 2015. (in russ.)

- [12] A.G. Shelomentsev, L.V. Voronina, A.V. Ukhanova and E.V. Smirennikova, "Paradox of population migration in the Russian Arctic: factors and barriers," *Upravlenie ekonomicheskimi sistemami: elektronnyj nauchnyj zhurnal (Management of economic systems: electronic scientific journal)*, No. 11(117), pp. 41, 2018. (in russ.)
- [13] S. Kvale, *Research Interview*. Moscow: Sense, 2003. (in russ.)