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AmurCon 2021: International Scientific Conference**THE LEVEL OF MARRIAGE AND DIVORCE INDICATORS IN
THE ARCTIC ZONE OF THE REPUBLIC OF SAKHA (YAKUTIA)**

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amosovaam@mail.ru(b) Institute of Psychology, North-Eastern Federal University, 677000, Kulakovskogo st. 42, Yakutsk, Russia,
dorofdm1@yandex.ru**Abstract**

The Arctic regions of the Republic of Sakha (Yakutia) belong to regions with complex socio-economic processes, a deformed socio-economic structure, with a low income level and quality of life, and practically no career prospects. All these factors hinder the development of human capital of residents of the Arctic regions, affecting all major spheres of life, including family life, which can lead to a decrease in the number of marriages and an increase in the number of divorces. Currently, the problem of creating and maintaining a family is undergoing trials related to the processes of growing individualistic moods, reducing the time spent by family members, weakening care for each other, the well-being of the family, children, and ending with the simplification of the legal procedure for divorce. Of course, this problem could not but affect the inhabitants of the Arctic zone of the republic, which could result not only in a reduction, but even in its depopulation. To assess the level of family and divorce indicators, an analysis was made of the number of marriages and divorces in 13 Arctic regions of the Republic of Sakha (Yakutia). As the analysis has shown, in the region there is a negative trend of an increase in the number of divorces relative to the number of marriages for the period from 2011-2019, the coefficient reflecting this trend increased from $k = 0.53$ to $k = 0.65$.

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1. Introduction

The Arctic is a unique region with its own natural, economic, demographic and other conditions (Pilyasov, 2006). The Arctic zone of the Russian Federation includes the territories of the Murmansk region, the Nenets, Chukotka and Yamal-Nenets autonomous regions, the Komi Republic, several regions of the Republic of Sakha (Yakutia), the city of Norilsk, two regions of the Krasnoyarsk region, municipalities Arkhangelsk region. In addition, part of the islands and archipelagos of the Arctic Ocean belongs to the Russian Arctic zone.

1.1. Arctic zone The Republic of Sakha (Yakutia)

Arctic zone the Republic of Sakha (Yakutia) is a priority geostrategic territory of the Russian Federation, located in the Eastern Arctic (Pilyasov, 2007). The Arctic zone of the Republic of Sakha (Yakutia) includes:

13 regions, including 4 national ones;

84 municipalities of the settlement level, including 29 national ones;

119 settlements: 2 cities, 10 urban-type settlements and 107 rural settlements, 22 of which have no permanent population. According to preliminary estimates, the population of the 13 Arctic regions of the republic as of January 1, 2019 amounted to 67.674 people. The most numerous population lives in the Verkhoyansk region - 11.1 thousand people. (16.5% of the population of the Arctic zone), the smallest number is in the Allaikhovskiy region – 2.7 thousand people. (4.0%) (Nikolaev, 2020).

1.2. Socio-economic difficulties of the inhabitants of the Yakutia Arctic zone

Inhabitants of the Arctic regions of Russia are faced with a huge number of socio-economic difficulties associated primarily with the extreme climatic conditions of the territory. The Arctic zone has the lowest average annual temperatures in the country, a long heating season, and ultraviolet deficiency, which are absolutely and extremely uncomfortable zones for human living. Weak development of logistics systems is the result of significant infrastructural constraints, first of all, inaccessibility, the absence of a year-round ground transport system connecting the Arctic zone with neighboring territories and settlements within the zone. Residents of the Arctic regions are exposed to the increasing risk of emergencies associated with the deterioration of the life-support infrastructure and the climatic factor, the absolute dependence of life-support facilities on the northern delivery. Low level of improvement, dilapidation, excessive wear and tear and accident rate of most of the housing stock also significantly affect the quality of life of the population. The lack of comprehensive provision of comfortable conditions for living, working and resting the population, poor availability and quality deficit of basic social services in the spheres of education, health care, cultural and leisure sector and high prices for food and goods leads to a tangible migration outflow of young, able-bodied population aged up to 35 years old. Do not forget about the high vulnerability of natural complexes to anthropogenic impact and the duration of their restoration. It is also necessary to note the serious and rapid cultural, political, social and technological developments taking place in recent decades. All these factors have a huge impact on the inhabitants of

the Arctic regions, affecting all major spheres of life, including family life, which can lead to a decrease in the number of marriages and an increase in the number of divorces.

2. Problem Statement

Recently, the study of the Arctic from various fields has expanded. A lot of works are devoted to the study of the health of people living in the Arctic zone (Auersperg et al., 2019; Baron et al., 2019; Belaya et al., 2020; Kiecolt-Glaser, 2018), demography (Barashkova, 2020; Laptander, 2017), economics (Gassiy & Potavny, 2019), as well as the study of aspects of family life (Katorin, 2018; Ready, 2018). Today the quality of life and social well-being of single mothers, children and large families is given special attention in the sphere of social policy of most states around the world. Of course, the residents of the Arctic and the North require special treatment due to their low population density, large outflow, and poor acceptance of new settlers, as evidenced by the targeted social policy of Iceland, Denmark, Canada, Norway, Russia, the USA, Finland and Sweden. For example, in 2012, the Ministry of the Russian Federation for the Development of the Far East and the Arctic was established. However, this does not mean that such a policy began in our country only in the 21st century. Back in the 50s. XX century The Commission for the Problems of the North, the Council for the Study of the Productive Forces under the Academy of Sciences of the USSR, was created, which was subsequently transferred to the State Planning Committee of the USSR. Since that time, the “localization” of the economic development of the North began, including the articulation of social problems of the Arctic zone. Since 1958, a serial issue of "Problems of the North" has been published (Kugaevsky & Vinokurova, 2016).

3. Research Questions

To assess life in the Arctic zones, there are various assessment indicators, for example, such as ASI (Arctic Social Indicator) and ASI-II (Arctic Social Indicator), consisting of the following indices: life expectancy, level and health, population size, material and social well-being (Larsen & Edwards, 2014; Larsen et al., 2015). It can be assumed that many of them are directly or indirectly related to family well-being. That is why the assessment of the ratio of divorces and marriages in a long-term trend in the Arctic regions can more objectively reflect the social environment of the creation and breakdown of families.

3.1. Measuring Change in Arctic Human Development in Republic of Sakha

According to overall results from the Sakha Republic (Yakutia) case study suggest - based on some indicators - that human development in the Sakha Republic is improving, while based on other indicators certain facets of life are still challenging. The results further suggest that regional and rural-urban differences persist, and like many other regions of the North, the areas inhabited by numerically small peoples experience lower-than-average attainments for most of the applied ASI indicators. Socio-economic conditions continue to be depressed outside of the capital, and especially in rural areas. It appears this situation of declining wellbeing is even more notable in the northernmost areas of Sakha Republic (Yakutia).

ASI indicators on material wellbeing indicate that there has been a substantial increase in per household average income in the republic, the improvement is much less marked in rural areas. The fact of high out-migration and stagnant unemployment rates suggest that wellbeing is not improving throughout much of Sakha Republic (Yakutia), especially in the Arctic regions (Larsen et al., 2015).

3.2. The problem of creating and maintaining a family in the Arctic

However, despite the targeted social state policy of supporting families, the improvement of the living conditions of the population of the North and the Arctic cannot be “restrained” by the general trend of increasing family breakdown and a decrease in the level of marriages. Today, the problem of creating and maintaining a family is "in step" starting with the growth of individualistic moods, reducing family members' time together, weakening care for each other, the well-being of the family, children, and ending with the simplification of the legal procedure for divorce. Of course, this problem could not but affect the inhabitants of the Arctic zone of the republic, which could result not only in a reduction, but even in its depopulation. Especially considering the poor survival rate of migrants in these harsh climatic conditions unfavourable for permanent residence.

4. Purpose of the Study

To analyze the number of marriages and divorces in the Arctic regions of the Republic of Sakha (Yakutia), we will consider: Abyisky, Allaikhovsky, Anabarsky, Bulunsky, Verkhnekolymsky, Verkhoyansky, Zhigansky, Momsky, Nizhnekolymsky, Oleneksky, Srednekolymsky, Ust-Yansky, Eveno-Bytusy regions. As the main documents for assessing the number of marriages and divorces, the “Reports on the activities of the registry office under the government of the Republic of Sakha (Yakutia)” from 2011 to 2020 were considered.

5. Research Methods

For the assessment, the official statistics of marriages and divorces were considered and a coefficient was introduced $k = \frac{\text{the number of divorces}}{\text{the number of marriages}}$ for the entire Republic of Sakha (Yakutia) in the period from 2011-2019. It should be noted that in the "Report on the activities of the registry office under the government of the Republic of Sakha (Yakutia)" for 2020 there is no data on the number of marriages and divorces, only data on the number of applications filed in paper form and online are provided. It can be noted that the number of marriages and divorces in Yakutia over a 9-year period has a negative trend (Fig. 01), and the coefficient k reflecting the ratio of the number of divorces to the number of marriages has a positive trend (Fig. 02). Based on the official data, it can be concluded that the number of divorces in relation to the number of marriages increased from $k = 0.53$ to $k = 0.65$, despite the general tendency of a decrease in the number of marriages and divorces in general over the period under review.

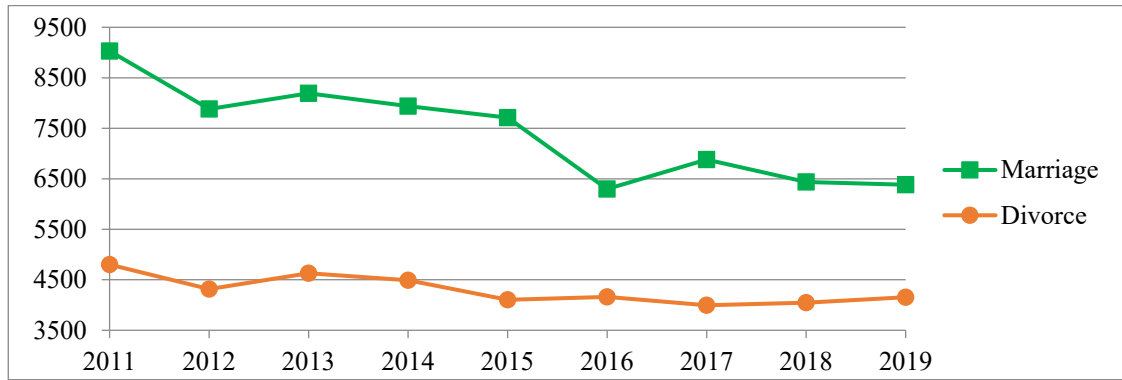


Figure 1. Type your title here The number of marriages and divorces in the Republic of Sakha (Yakutia) from 2011-2019

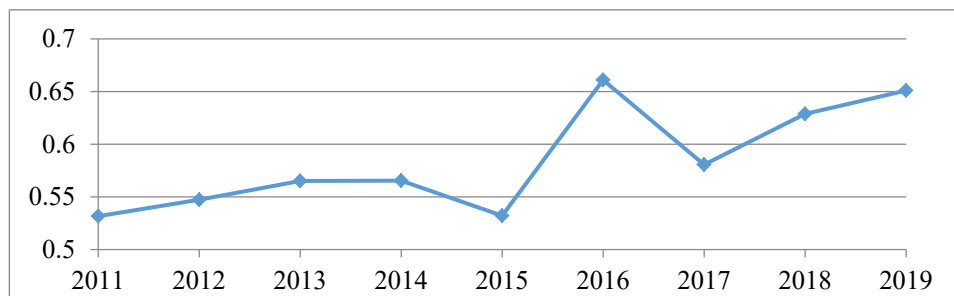


Figure 2. Coefficient $k = \text{number of divorces} / \text{number of marriages}$ in the Republic of Sakha (Yakutia) from 2011-2019

6. Findings

Reports on the activities of the Civil Registry Office under the Government of the Republic of Sakha (Yakutia)" do not have a single form and differ in the content of the information provided by year. So, we found the number of marriages and divorces in the Arctic regions in 2011, 2012, 2013, 2018, 2019. The data was analyzed and presented in the form of diagrams (Fig. 03). In certain years, the number of divorces is greater than or equal to the number of marriages and $k \geq 1$. Such cases include Abyisky region in 2013, Allaikhovsky region in 2012, Anabar region t in 2019, Nizhnekolymsky region in 2012 and Srednekolymsky region t in 2018-2019. This distribution is extremely negative for these regions and reflects the tendency of increasing the instability of marriages in the Arctic regions of our republic.



Figure 3. Type your title here Coefficient k = number of divorces / number of marriages in the Arctic regions of the Republic of Sakha (Yakutia) in 2011, 2012, 2013, 2018, 2019

For a more detailed analysis of a separate region of the Arctic zone of Yakutia, let us consider the averaged coefficient k for the years under consideration. Table 01 shows the coefficients k , reflecting the number of divorces in relation to the number of marriages for the 13 Arctic regions, averaged over 5 years.

Table 1. Coefficients k for 13 Arctic regions, averaged for 2011, 2012, 2013, 2018, 2019

№	Arctic regions of Yakutia	k
1	Abyisky region	0.73
2	Allaikhovsky region	0.71
3	Anabarsky region	0.55
4	Bulunsky region	0.72
5	Verkhnekolymsky region	0.67
6	Verkhoyansky region	0.6
7	Zhigansky region	0.56
8	Momsky region	0.5
9	Nizhnekolymsky region	0.74
10	Oleneksky region	0.66
11	Srednekolymsky region	0.84
12	Ust-Yansky region	0.7
13	Eveno-Bytususky region	0.5

Table 1 shows that the Srednekolymsky and Allaikhovsky districts are among the regions with a high level of the number of divorces relative to the number of marriages $k \geq 0.75$, and the Momsky and Eveno-Bytantaysky regions are the regions with a low level of the number of divorces relative to the number of marriages $k \leq 0.5$. To compare the obtained mean value $k = 0.66$ for the Arctic regions, it is necessary to average this coefficient over the Republic of Sakha (Yakutia) for 2011, 2012, 2013, 2018, 2019, the coefficient reflecting the number of divorces relative to the number of marriages $k = 0.58$.

7. Conclusion

The Arctic regions of the Republic of Sakha (Yakutia) belong to regions with complex socio-economic processes, a deformed socio-economic structure, with a low income level and quality of life, and practically no career prospects. These problems certainly affect the institution of family and marriage, hindering the development of human capital (Morozova et al., 2016).

As the analysis has shown, in the region there is a negative trend of an increase in the number of divorces relative to the number of marriages for the period from 2011-2019, the coefficient reflecting this trend has increased from $k = 0.53$ to $k = 0.65$. In the Arctic zone, in some years, the number of divorces exceeds or is equal to the number of registered marriages and $k \geq 1$, which reflects the tendency to increase the instability of marriages in these regions. With an average consideration Srednekolymsky and Allaikhovsky districts are among the regions with a high level of divorce rate relative to the number of marriages $k \geq 0.75$, and the Momsky and Eveno-Bytantaysky regions are regions with a low level of divorce rates relative to the number of marriages $k \leq 0.5$. When comparing, the average value of the number of divorces / the number of marriages for the 13 Arctic regions is equal to $k = 0.66$ and exceeds the average value of the coefficient in the whole republic, which corresponds to $k = 0.58$. Such indicators

may indicate difficult living conditions in the Arctic zone, the consequences of which may be deterioration in family relations, which may lead to an increase in the number of divorces relative to the number of officially concluded marriages.

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