

GRANDPARENTING AS A RESOURCE OF FERTILITY: RUSSIAN MODELS AND SITUATION

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Abstract

Russia is experiencing a low birth rate, which is significantly below the level of simple reproduction. In the paper, grandparenting and grandparental labour are considered as a resource of fertility. The research aims to identify specific regional situations – models of grandparental labour in the socio-economic space of Russia. As a source of information, we used data from a statistical monitoring of people's living standard carried out by The Russian Federal State Statistics Service. Based on some of the questions of the survey in 2018, it was possible to construct indicators of grandparental labour. We used hierarchical cluster analysis to identify territorial models of parental labour. In the course of the analysis, 6 groups of regions were revealed, in which various models of grandparents' labour were observed. The analysis conducted allowed to characterise the grandparental labour models established in Russian regions according to the labour's pervasiveness and intensity, features of its actors, and common regional socio-economic indicators. Considering these results may help to realise federal projects in Russian regions more effectively.

Key words: grandparenting, grandparents' labour, l time expenditure, cluster analysis, models

JEL Code: J11, J14, C38

Introduction

Russia is experiencing a low birth rate, which is significantly below the level of simple reproduction. Despite the efforts made by the state to support the birth rate, its level has been declining annually over the past few years. Demographic forecasts on its dynamics are negative; therefore, it is crucial to search for new determinants of fertility and identify its resources.

Since 2019, Russia has been realising the national project "Demography", aimed at increasing healthy life expectancy at birth and a total fertility rate, increasing a share of people with healthy lifestyles and of those who consistently exercise. The project includes such

subprojects as “The Older Generation” and “Financial Support to Families with Children” with their own targets (see Table 1).

Tab. 1: Some targets of the National Project “Demography”

Indicator	Years						Expected Increase (Decrease) for 2019-2024, %
	2019	2020	2021	2022	2023	2024	
Life expectancy of population aged 55	24.82	25.27	25.71	26.14	26.60	27.08	9.1
Mortality of population above working age per 1000 people of the corresponding age	37.6	37.3	37.0	36.7	36.4	36.1	-4.0
Total fertility rate	1.63	1.65	1.66	1.68	1.69	1.70	4.3

Source: National project “Demography”. Official website of the Ministry of Labour of the Russian Federation. Retrieved from <https://mintrud.gov.ru/ministry/programms/demography> (access date 23.09.2020).

When planning the project, the state primarily relies on financial resources. For example, the subproject “Financial Support to Families with Children” involves such key activities as monthly benefits for the first and the second child, maternity capital when giving birth, mortgage subsidies. Significantly less attention is given to the instruments related to the non-economic factors’ impact on fertility.

According to a number of foreign studies on grandparenting (e.g., Chapman et al., 2018; Hilbrand et al., 2017) and on determinants of fertility in Russia (e.g., Bagirova et al., 2016), we believe the targets related to fertility and those associated with life expectancy are interrelated. One of the requirements to achieve them is to stimulate the grandparental labour – that is to encourage grandparents to take part into their grandchildren’s lives. We consider activities grandparents perform in relation to their grandchildren as a specific resource for improving fertility in Russia. We believe the resources for improving fertility may be of different nature: economic (e.g., governmental economic measures), infrastructural (e.g., buildings and equipment of kindergartens and schools, outdoor children’s playgrounds, etc.), human. We associate human resources for improving fertility in Russia not only with young prospective parents, but also with the people who may be involved in fulfilling certain parental responsibilities (e.g., taking care of the children and developing them).

The level of older generation’s involvement in taking care of the grandchildren may be associated with different factors. At the meso (regional) level, it may be predetermined by the following factors:

1) The level of urbanisation in the region. Woods (2020), Henderson and co-authors (2017) refer to the peculiarities of the factor. In Russia, it may have a considerable impact on grandparents' taking part in raising their grandchildren due to a pronounced regional differentiation by the level of urbanisation (Table 2).

Tab. 2: Regional differentiation in Russia by some socio-economic indicators

Indicator	Minimum	Maximum	Maximum-to-Minimum Ratio
Share of urban population	29.2 % (Altai Republic)	96.1 % (Magadan Region)	3.29
Life expectancy at birth, years	63.58 (Chukotsky Autonomous Region)	82.41 (Ingushetia)	1.30
Crude birth rate	7.6 (Leningrad Region)	20.7 (Chechen Republic)	2.72
Divorces per 1000 population	0.6 (Chechenskaya Republic)	5.6 (Sakhalin Region)	9.33
Net migration per 10000 population	-187 (Magadan Region)	239 (Leningrad Region)	— (the absolute difference is 426)

Source: Russian Regions. Social and Economic Indicators. (2019). Moscow: Rosstat. Retrieved from <https://fedstat.ru>

2) Life expectancy at birth. The lower life expectancy is, the less time – under equal conditions – grandparents objectively have to take care of their grandchildren. This indicator is one of the most significant among the grandparenting demography indicators, which were suggested by Leopold and Skopek (2015). Life expectancy may also vary quite significantly according to the region in Russia (see Table 2).

3) Birth rate. Geographical differences in birth rate lead to differences by grandparents' involvement in taking care of grandchildren. Margolis and Arpino (2019) concluded that countries differ by this indicator. The regional differentiation in Russia by birth rate is presented in Table 2.

4) Sustainability of families. In their studies, Nozawa (2020), Zilincikova and Kreidl (2018), Albertini and Tosi (2018) discuss the grandparenting when the parents divorce. In Russia, this factor may significantly influence how grandparents contribute to raising their grandchildren due to the considerable regional difference by the sustainability of families (see Table 2).

5) Migration. It impacts grandparenting when the older or the younger generation migrate. Migration adds to the geographical dimension of a relationship between grandparents and grandchildren; however, it may influence its content and forms differently. In their research, Ho and Chiu (2020) studied grandparenting in the context of migration. Regional differences by the level of migration in Russia testify to a potentially considerable effect of this factor on grandparenting.

6) Religion and national traditions. The impact of this factor is studied by, for example, Margolis and Verdery (2019). According to the latest 2010 census, Russia is inhabited by 194 ethnic groups, with 18 of them having more than 500 thousand people.

7) Megapolises in the region. The specific nature of the urban lifestyle is highlighted by urban sociologists (e.g., Hunter et al., 2018). 16 out of 85 Russian regions have cities with more than 1 million dwellers; they inhabit more than 34.5 million people, which accounts for nearly a quarter of the Russian population.

The grandparents' involvement in raising and taking care of their grandchildren is impacted by different meso-level factors, whereas Russian regions differ greatly according to them; therefore, we decided to characterise the situation in the country through modelling. Our study aims to identify specific regional models of grandparenting in Russia.

1 Data and Methods

Grandparenting in Russia is still poorly researched; thus, we used the only available resource – a 2018 survey by The Federal State Statistics Service of the Russian Federation “Comprehensive monitoring of living conditions” (2018). The survey includes all Russian regions and is conducted every two years. Its certain questions allow modelling the grandparental labour to a first approximation.

To identify regional models of grandparental labour, we used cluster analysis; it was conducted based on the following variables:

- a share of grandmothers involved in the grandparental labour daily (among the total number of grandmothers);
- grandmothers' time costs on fulfilling grandparental labour (hours per week);
- grandmothers' level of education (the total number of years spent on education);
- health self-assessment (ranging from 1 – “very bad” to 5 – “very good”);

- grandmothers' social activity (a calculated rate – a total of different social activities grandmothers participated in: theatre and cinema visits, sport and religious events, cafe and restaurant visits, travelling around the country and abroad).

We chose the indicators of education, health self-assessment and social activity as variables of clustering because, as our previous research showed (Shubat and Bagirova, 2020), grandmothers actively involved in grandparental labour differ statistically from those inactive in this type of labour by these very indicators.

The clustering is based on different measures; we carried out both hierarchical and non-hierarchical clustering to compare the results of regions' distribution by homogeneous segments and to prove the reliability of the distribution.

The profiling of the clusters identified was performed based on average and median values of clustering variables. The models identified were then additionally profiled based on the following indicators: level of urbanisation (a share of urban population); life expectancy at birth; total fertility rate; divorces per 1000 population; net migration per 10000 population.

2 Results

We identified 6 clusters of regions – that is models of grandparental labour in Russia. Table 3 presents their basic features.

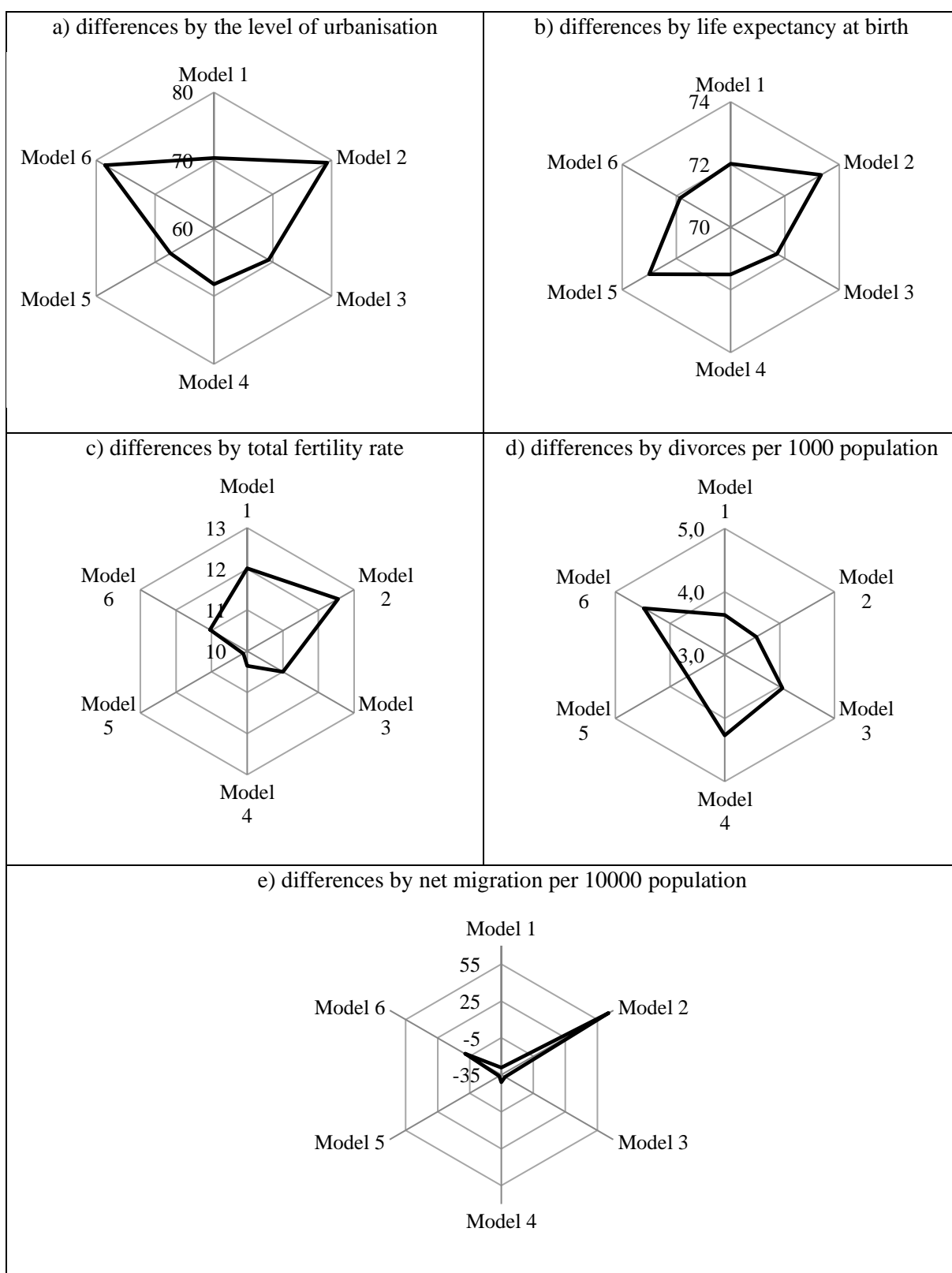
Tab. 3: Models of grandparental labour in the Russian socio-economic space

Model	Share of grandmothers involved in the grandparental labour daily	Time costs on fulfilling grandparental labour	Educational level	Health self-assessment	Social activity
1	20.4	20.5	11.92	3.14	1.40
2	19.7	14.4	12.69	3.13	1.95
3	19.8	13.6	11.60	3.19	1.31
4	14.0	20.1	11.71	3.28	1.03
5	13.2	13.3	11.19	3.24	0.99
6	12.6	13.7	11.99	3.19	1.19

Source: Authors calculations

The models identified were additionally profiled. The results of the analysis are presented in Figure 1.

Fig. 1: Models' differences by the additional indicators



Source: Authors calculations

3 Discussions

Grandparental labour is most actively preformed in the first model – here we identified the highest values of its pervasiveness and intensity. The additional profiling showed that this cluster has a significantly high birth rate. By the same token, grandmothers in these regions have low health self-assessments; they demonstrate average rates of social activity and education.

The second and the third models are nearly similar in grandparental labour's pervasiveness and intensity – it is quite pervasive but has a low intensity. The differences between these two models lie in the fact that grandmothers from the regions of the second cluster are the most educated and active, whereas in the regions of the third cluster, these indicators are considerably lower. Furthermore, the regions of the second cluster (as opposed to those of the third one) are highly urbanised, demonstrate higher life expectancy at birth, birth rate and net migration.

The forth model demonstrating the involvement in grandparental labour is a direct opposite to the second and the third clusters – here, older women are poorly involved in taking care of the grandchildren; however, if they are committed to it, they fulfil these functions quite intensively. Grandmothers from the regions of this cluster have average rates of education and social activity, whereas health self-assessments are the highest. It is in these regions that the number of divorces per 1000 population is very high. We can suggest that the number of parents' divorce is one of the factors of the grandparental labour's high intensity, which is primarily fulfilled in relation to the children staying with one divorced parent.

In the fifth and the sixth models of regions, grandparental labour is performed passively, as compared to other clusters; here, both pervasiveness and intensity of grandparental labour are low. These clusters differ by the following: in the sixth model, grandmothers are more educated and socially active, there is a high level of urbanisation and a significant number of divorces. In the regions of the fifth model, there is high life expectancy at birth and better grandmothers' health self-assessments.

Conclusions

As our study shows, Russian regions differ greatly in grandparental labour. The analysis conducted allowed us to characterise the models established not only in terms of the pervasiveness and intensity of grandparental labour, but also by the features of its actors and by common socio-economic indicators of the regions. The differentiation identified allows

developing measures specific for the regions. Their realisation may increase the effectiveness of the federal projects “The Older Generation” and “Financial Support to Families with Children” being implemented in the regions. In those regions where grandparental labour is more active, intra-family engagement is higher, and intergenerational transfers are more pronounced. Consequently, these clusters of regions have a lower level of intergenerational inequality and a lower risk of troubled intergenerational relationships; thus, there is a more positive family dynamics and a higher level of social welfare in general. Fostering grandparental labour in those regions where it is less active will allow working-age parents to return to work sooner and will encourage them to have more children.

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