

# **THE ROLE OF THE EDUCATION SYSTEM IN REGULATING REPRODUCTIVE BEHAVIOURS: THE CASE OF THE RUSSIAN FEDERATION**

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## **Abstract**

Adverse demographic forecasts force us to look for new ways to address issues related to human reproduction in Russia. One possible instrument for effecting change could be the education system.

This paper presents the results of sociological and demographic research carried out over the last eight years. We surveyed entrepreneurs, public servants, and university students.

The outcomes of the research highlighted the expediency of changing education programmes to include components that are focused on strengthening intentions towards reproductive behaviours among the population and building the requisite skills among trainees. Thus research conducted with entrepreneurs showed that business structures have significant scope to affect the demographic situation. Interviews with public servants showed a largely superficial level of competency and understanding as regards existing demographic problems and prospects for demographic development. Survey of university students showed that in the period of their studies it is possible to strengthen reproductive intentions and influence future reproductive behaviours.

We have developed special programmes that would help boost their contribution to solving demographic problems. The implementation of these proposals could be an effective and low-cost means of managing the reproductive behaviours of the Russian population.

**Key words:** human reproduction, education system, reproductive behaviours.

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## **Introduction**

Several social institutions shape a society's demography subsystem: family, labour and healthcare are the most important. Family as a social institution directly influences demographic processes and determines key indicators, including birth, marriage and divorce rates. The state of healthcare determines human reproduction population movement. The labour market depends on birth rates, migration, the quality of human capital, the level and composition of mortality rates. Direct and indirect relationships are observable between a population's demographic behaviours and the institutions of public administration (Rønsen, 2004), culture (Johnson & Hassan, 1982; Bachrach, 2014), mass media (Tuchkova, 2012) and leisure (Wang, Yip & Scotese, 1994).

Societies with negative demographic forecasts should increase the number of entities involved in addressing demographic issues. Our research is based on the hypothesis that in Russia the education institution could become one of the new social entities with specific potential to influence demographic processes.

The education system could become an instrument for addressing demographic problems related to birth rates for the following reasons:

1. As a component of social practices and an outcome of social policies, education is “responsible” for the political, socio-cultural and economic development of society, and also for ensuring the stability of this development. Such stability is possible when the system produces individuals who have a wide spectrum of cultural, professional and personal competencies. In this context, a person's preparedness for parenthood and parental labour (as detailed in (Ekert-Jaffé, 2011), (Gustafsson & Kjulin, 1994), (Sotomayor-Peterson, Baca, Figueredo & Smith-Castro, 2013) and others) should be one of the key personal competencies.

2. The education system in modern-day Russia has the organisational and human resources to pursue the implementation of reproduction-focused tasks. Today's education system is indeed highly dynamic. It has shown its ability to achieve a variety of goals in science, innovation, the improvement of educational technologies and international collaboration (Tikhomirova, 2014).

We suppose that in the context of adverse demographic trends, Russian education can and should evolve, becoming geared towards reproduction. In talking about reproduction-focused education, we mean a targeted human development and education process pursued in the interests of the individual, the family, the society and the state. Ultimately, it gives the individual the knowledge, skills, values and competencies required to realise their reproductive potential and perform high-quality parental labour in the future. In order to

justify the need to bring to life this new educational emphasis, we have completed several empirical studies.

## **1 Data and Methods**

In order to identify opportunities for the participation of the education system in regulating reproductive behaviours of the population, we carried out the following empirical studies:

1) Research with a group of female students of Russian universities, potential future parents. In 2014, we carried out a sample survey of female students at Russian universities (stratified sampling, sampling error less than 3%). One of the objectives of the research was to ascertain the dynamics of perceptions about families and parenthood during the time that the young women were at university. In order to do this, we surveyed first and fourth-year students.

2) Research with a group of public servants. We interviewed 15 public servants from the Urals region. All of them were heads of executive agencies involved in the implementation of family and demographic policies (2013). In the course of these interviews, we assessed the levels of their awareness of existing demographic problems and their expectations for how the demographic situation would evolve.

3) Research with a group of entrepreneurs, as consumers of human capital. We carried out:

3.1) In-depth interviews with entrepreneurs from Russia's Urals region (2008). We interviewed 10 sole traders involved in the production of bread and baked goods, meat products and timber;

3.2) Multivariate statistical analysis of official Russian statistics data to identify a potential correlation between entrepreneurial activity and certain reproductive behaviours (2007-2009). We used cluster analysis to classify Russian regions based on the level of development of individual business;

3.3) A case-study at one of the largest metallurgical companies in Russia with around 40,000 employees - the Magnitogorsk Iron and Steel Works (2011). This Russian company provides a pregnancy and parenting support program. In order to carry out the case study, we developed a methodology to assess the socio-economic effectiveness of the programme. In particular, we evaluated its impact on workers' decisions to have children and the impact on the dynamics of the company's social and economic indicators.

## 2 Results

We obtained the following results in the course of our research.

1. The survey of female Russian university students showed that as respondents grew older, their ideas about family and parenthood evolved. Students were asked about the purpose of a family (“Why do you think one needs a family?”), the essence of parenthood (“What does 'being a parent' mean?”), its advantages and disadvantages. Comparing the opinions and assessments of first and fourth year students, we found that:

- In later years, children play an increasingly dominant role in the image of a family; at the same time, perceptions about family not connected to having children lose their significance (Table 1).

**Tab. 1: Female students' views on the purpose of a family (% of respondents)**

One needs a family for...	First year students	Fourth year students
Regular sex	28	10
Spending time together	59	64
Having children	33	45
Bringing up and developing children	74	79
Business	3	0
Psychological support	82	73
Other	3	1

Source: data of the survey

- Fourth year students demonstrated a more profound understanding of their future parenthood and a greater realisation of the significance of children in actualising life strategies. When asked about the advantages of parenthood, older students remarked that children enable self-actualisation and raise social status two to three times more often than their younger counterparts. Moreover, towards the end of their studies, fewer respondents saw children as a constraint on the professional activities of the parents: in the first year, 18 % of respondents said that having children was an impediment to finding a good job, by fourth year, that view was only held by 7 %.

Furthermore, fourth year students held a stronger view that “being a parent” was synonymous with “individual self-actualisation” and “being a happy person”. Towards the end of their studies, the number of respondents who thought that having children got in the way of enjoying life halved. On the other hand, there was a greater understanding of the

economic pressures involved in having children: 30 % of first year students highlighted the economic burden of having children, whereas by fourth year, this had grown to 39 %.

2. A common trend was evident in our interviews with public servants: they generally saw positive dynamics in the current demographic situation (Bagirova & Voroshilova, 2014). Their level of competency and understanding of current demographic issues and trends is largely superficial and generally limited to the short term. These views have not come about through scientific rigour and clearly cannot drive competent demographic management.

3. Our micro-level analysis of the business community (expert interviews with entrepreneurs) showed that they do not believe demographic problems to be a significant issue for business, which warrants their involvement. At the same time, even small businesses can have a positive impact on birth rates: all polled experts had at least two children (actual or expected). This is significantly higher than average indicators for Russia.

Through macro-level analysis of the business community (multivariate statistical analysis), we identified two groups of Russian regions with significant differences in the level of business activity. We found that regions with differing levels of the development of individual business had significant gaps in birth rates, age dependency ratios, natural increase and net migration, unemployment and labour market tension, consumer spending indicators and the overall size of regional markets. The results of our analysis showed a direct relationship between entrepreneurial and reproductive activity: if one is higher, the other will be as well, and vice versa (Shubat, 2014).

Finally, our case study at the Magnitogorsk Iron and Steel Works showed a specific example of how a large company can have a positive impact on the demographic situation. The results of our study confirmed that support for fertility and parental labour has not only social but economic effects as well (Bagirova, Shubat & Dorman, 2014).

### **3 Discussions**

The results of our survey of university students showed that this period in their lives is a time for when perceptions and stereotypes about children and parenthood evolve in a positive way. We believe that there should be concerted targeting of these processes throughout this very period. This will help to reinforce reproductive beliefs among young people and influence future reproductive behaviours. An education system focused on reproductive intentions and behaviours, which would be a core component of the entire university education process, could be an instrument of such influence.

Interviews with public servants highlighted low levels of demographic competency and a shortage of analytical skills. Such a state of affairs undermines the effectiveness of the demographic policies being implemented in the country and calls for appropriate compensatory measures. One of these could be the development of further education focused on reproductive matters, especially for public servants.

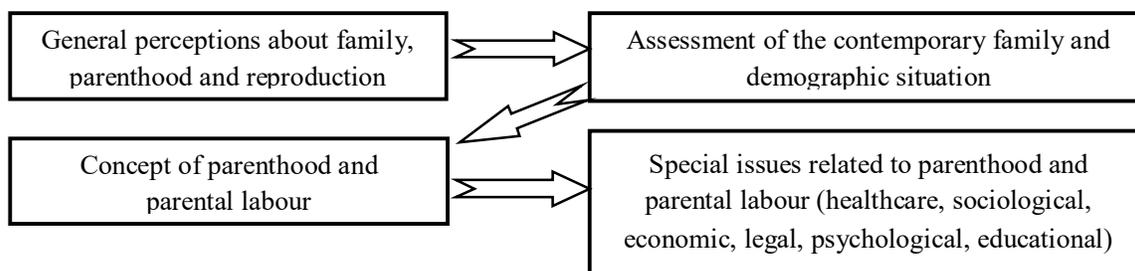
The results of our study of entrepreneurs highlighted positive experiences of involving business in the resolution of demographic problems at both the macro and micro levels. We believe that business structures are key consumers of current and future human capital and should thus share responsibility for its preservation, development and replenishment with the state. We believe there is scope to extend the one-off positive experience through a series of seminars and training events aimed at creating a positive image of parenthood and fostering positive attitudes to family among businesspeople.

Based on the outcomes of our research, we have created tailored programmes, study modules and disciplines, which would enable the different categories of trainees to make a greater contribution to resolving demographic problems. In our view, reproduction-focused education needs to be implemented at all levels. It should enhance and be organically integrated into general, professional and vocational education. The particulars of implementing reproduction-focused education for different groups of trainees is detailed below.

We believe that the development of reproductive and parenthood values among *university students* is particularly effective through reproduction-focused education at the baccalaureate level. Building in a reproductive focus into university education means that as well as acquiring professional skills, young men and women also prepare for future parenthood. The study logic for this is presented in Figure 1.

This no doubt requires certain adjustment to existing curricula, like adding topics related to family and parenthood to some current disciplines. For instance, the “Philosophy” discipline could include topics on marriage and family in philosophy; the universal nature of the family and the ways in which the “idea” of family is brought to life; exposure to a functional approach to studying the family. The sociology discipline could include a detailed look at problems of reproductive behaviours for families and individuals, and its components: reproductive norms and values, reproductive attitudes and motives, reproductive decisions; the need for children in an individual’s overall needs hierarchy; the development of an

**Fig. 1: Overall study logic in a framework of reproduction-focused education for university students**



Source: Developed by authors

individual's reproductive values; the ideal, desired and expected number of children in a family. Moreover, we propose introducing a specialist course wholly dedicated to the theory and practice of parental labour. We obtained the following results in the course of our research.

Reproduction-focused vocational education could and should develop family and reproduction values among *members of the Russian business community* and help to establish their active public stance in addressing social and demographic issues.

We have developed reproduction-focused modules that could be organically integrated into different training programmes currently offered by various training centres. We propose four modules in total:

1. *Module 1: "Fundamentals of demographic competence"*, focused on providing business people with basic skills for analysing and assessing the demographic situation;

2. *Module 2: "Social solidarity: business and state as equal centres of social demographic responsibility"*, focused on increasing business people's understanding of the links and interdependencies of economic and socio-demographic processes (particularly at the regional level);

3. *Module 3: "How companies can influence regional socio-demographic dynamics"*, aimed at enhancing trainees' awareness of the means through which business can have a positive impact on the socio-demographic situation;

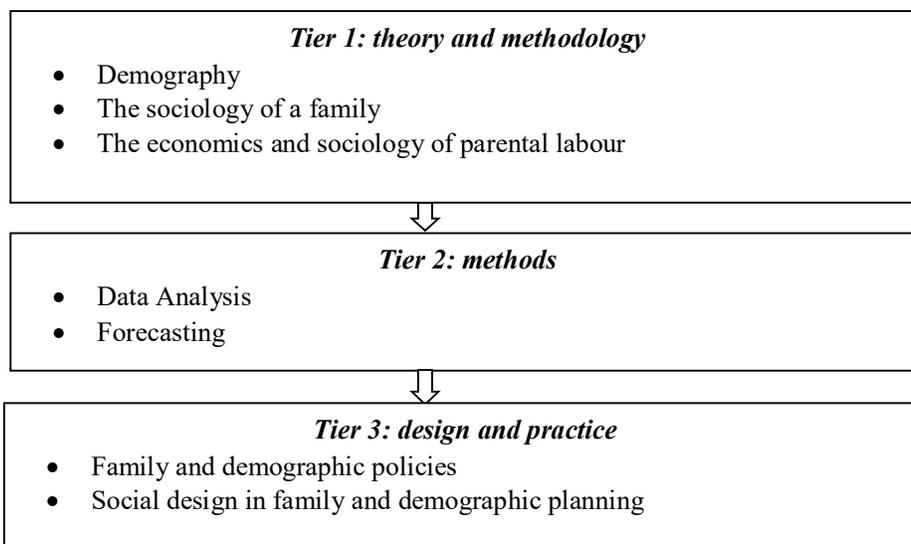
4. *Module 4: "Assessing the effectiveness of corporate programmes for the support of parenting and family"*, geared towards training members of the business community on ways to assess the effectiveness of measures aimed at influencing the demographic situation.

The results of our studies identified opportunities for the participation of the education system in regulating reproductive behaviours of the population. Undoubtedly, the development and implementation of education focused on reproductive intentions and behaviours should involve experts from different fields, both theorists and practitioners. Our

research has shown that there is a rather large pool of potential “consumers” for this type of education. First and foremost, these are young people, who will be carrying out this type of parental labour in the future. Other potential trainees include members of the business community who are interested in high-quality human capital. Finally, such training would be sought after by public servants working in the field of demographic policy. We strongly believe that appropriately funded high-quality targeted training for these groups could become an effective and low-cost instrument of Russian demographic policy. Finally, we have developed a programme for raising the proficiency of *public servants* who are involved in the implementation of regional family and demographic policies.

The study logic of the programme is presented in Figure 2. It entails a three-tiered model of reproduction-focused education.

**Fig. 2: Proposed study logic for reproduction-focused further education of public servants**



Source: Developed by authors

The first tier, *focused on theory and methodology*, provides training on key demographic processes and the social and economic institution of a family. There is also consideration of how a family's reproductive behaviour is structured and how reproductive motives and beliefs fall into place.

*At the next methods-focused tier*, trainees acquire socio-economic analysis and forecasting skills. Trainees are taught how to conduct quantitative analysis of large datasets through specialised applied programmes.

Finally at the *third, design and practical tier*, trainees are taught how to design family and demographic policies and carry out expert evaluations of existing projects.

## Conclusion

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## References

- Bachrach, C. (2014). Culture and Demography: From Reluctant Bedfellows to Committed Partners. *Demography*, 51(1), 3-25.
- Bagirova, A., & Voroshilova, A. (2014). The Formation of Demographic Competencies of Public Servants as a New Feature of Russian Education. In *International Multidisciplinary Scientific Conferences on Social Sciences and Arts SGEM 2014: Conference Proceedings* (Vol. 2, pp. 955-962). Albena.
- Bagirova, A., Shubat, O., & Dorman, V. (2014). Employees' parental labor stimulation in Russian companies: Socioeconomic view. In *The 8th International Days of Statistics and Economics: Conference Proceedings* (pp. 53-62). Prague: Libuše Mácáková, Melandrium.
- Ekert-Jaffé, O. (2011). Are the Real Time Costs of Children Equally Shared by Mothers and Fathers? *Social Indicators Research*, 101(2), 243-247.
- Gustafsson, B., & Kjulin, U. (1994). Time use in child care and housework and the total cost of children. *Journal of Population Economics*, 7(3), 287-306.
- Johnson, N., & Hassan, R. (1982). Ethnicity, Culture, and Fertility: An Exploratory Study of Fertility Behaviour and Sexual Beliefs. *Contemporary Sociology*, 11(1), 49-50.

Rønsen, M. (2004). Fertility and Public Policies - Evidence from Norway and Finland. *Demographic Research*, 10(6), 143-170.

Shubat, O. (2014). Russian business as a potential subject of effective demographic policy. *National Interests: Priorities and Safety*, (26), 45-53.

Sotomayor-Peterson, M., Baca, T., Figueredo, A., & Smith-Castro, V. (2013). Shared Parenting, Parental Effort, and Life History Strategy: A Cross-Cultural Comparison. *Journal of Cross-Cultural Psychology*, 44(4), 620-639.

Tikhomirova, N. (2014). About the future of the Russian education: New modes of learning in higher education. *Journal University Management: Practice and Analysis*, (6), 30-34.

Tuchkova, V. (2012, April 20). Influence of reference groups on the promotion of family values. Retrieved April 14, 2015, from <http://www.mediascope.ru/node/1065>

Wang, P., Yip, C., & Scotese, C. (1994). Fertility Choice and Economic Growth: Theory and Evidence. *The Review of Economics and Statistics*, 76(2), 255-266.

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