"**Who prefers zero? Attitudes toward childlessness in Russia and in its capital city"**

Extended abstract

Transformation of fertility comes both from the ideational shifts during the second demographic transition progress and from economic factors influence. In Russia high educational level of women which keeps rising continuously is combined with high female labor force participation. In Russian capital city — Moscow — these trends grow particularly strong.

During the second demographic transition the rank of the desire for having children in the personal values systems of individuals usually changes. At the same time the attained fertility level strongly depends on reproductive preferences and intentions. The individual reproductive preferences emerge in youth, but then they can be modified under the influence of different life circumstances (hypothesis first formulated by Udry 1983).

Miller and Pasta (1995) report a positive association between childbearing and the desired number of children. Intention to have the first and the second child tend to lower for elder individuals (Philipov et al. 2004). Women with a marital experience show higher desired number of children comparing to those who have never been married (Engelhardt 2004). Education also influences reproductive preferences, in particular, higher education raises desired number of children (Heiland et al. 2005). Furthermore growing up in a two-parent household, having more siblings, and being Catholic — all these factors are associated with a greater desired family size (Heiland, Prskawetz, Sanderson 2008).

Fewer studies are devoted to the determinants of the voluntary childlessness. Although Merz and Liefbroer (2012) corroborated importance of individual-level expectations on the role of gender and socioeconomic status in relation to this type of reproductive behavior.

This study focuses on the question *who* are childless individuals in nowadays Russia. Existing evidence of Moscow being a leader among all Russian regions in the second demographic transition track stipulates for examining it separately.

Despite the dominating in Russia two-child ideal family model, most families have only one child. Russia has long been a country with low fertility level, but until now the number of childless women remained very low (Frejka 2008; Zakharov 2008). However the last census data revealed the growth of the share of childless women in the total female population. In 2010 11.5% of the Russian women aged 35-39 were childless. By the end of their reproductive age this rate will hardly be lower than 10%, which is higher than among previous generations of women. In Moscow the share of childless women among 35-39 year olds mounts to 17.1% (Table 1).

Table 1 – Share of childless women by the age of 35-49, percent

Age group	Census-2010		Census-2002	
	Russia	Moscow	Russia	Moscow
35-39	11,52	17,15	7,42	10,69
40-44	8,03	11,58	5,97	8,04
45-49	6,55	8,96	5,83	7,84

Now it becomes evident that the social acceptance of childlessness gradually becomes more common in Moscow, though we still cannot rank it as a social norm yet. Nevertheless there is still a principal question to what extent this status is compulsory (i.e. when reproductive norms are lowered to zero due to unfavorable life circumstances) or truly voluntary.

While conducting the present analysis we use a sub-sample of childless men and women aged 18-49.

Comparing Moscow and Russia on the whole we observe significantly higher share of individuals declaring *zero* as a desired number of children in the capital city. MaCS[1] shows 17% population of

[1] Moscow and its Citizens Survey, conducted in the Russian capital in 2013. The sampling covers 3109 respondents aged from 18 (each respondent represents one household), the survey is representative on a city scale.

reproductive age planning to have no children at all, while GGS[2] displays 5.3% of those in the country population.

The analysis of "zero child preference" factors is based on binary logistic regressions. Number of cases observed restrained analysis opportunities. Specifically we could not use separate regressions for sub-samples of males and females.

Both in Russian GGS and MaCS surveys desired number of children was recognized through an open question, which can be translated from Russian as *«If it was entirely up to you: How many children in total do you want or rather would you have wanted?»*

Different social and economic variables, namely, education and income levels as well as employment status were included into the analysis.

Table 2 and Table 3 present binary logistic regression results for a series of models examining the factors of non-parenting preferences. Chi-squared presented at the bottom of these tables are statistically significant.

Table 2 – Coefficients and odds ratios for determinants of "zero child preference" (binary logistic model), Moscow

	B	**Odds ratio**
women		1*
men	.353	1.423*
18-29 years old		1.0***
30-39 years old	-.328	.72
40-49 years old	1.067	2.907***
3 children in parental family		1.0**
2 children in parental family	.690	1,994*
1 child in parental family	1.059	2.882***
Has a cohabitation experience		1
No cohabitation experience	.037	1.037
Low education (ISCED 4 and lower)		1*
Specialized professional education (ISCED 5B)	.676	1.967*
Higher education (ISCED 5A and higher)	.718	2.05**
Low and middle income groups		1.0
High income group	.350	1.419*
Opinion: "Happiness is *impossible* without children"		1***
Opinion: "It's hard to tell if happiness is possible without children"	.036	1.037
Opinion: "Happiness is *possible* without children"	.637	1.891***
Born out of Moscow		1*
Born in Moscow	,572	1.773*
Opinion: "Official marriage registration is necessary for cohabitation"		1*
Opinion: "Cohabitation is necessary before official marriage registration"	.001	1.001
Opinion: "Official marriage registration is not necessary at all"	.646	1.908**
Nagelkerke R-squared		*0.159*
Log likelihood		*-348.5*
χ^2 *(df)*		*84.1 (14)*
Number of observations		*815*

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

[2] The sampling of 2013 covers 11183 respondents aged from 18 to 79 years (each respondent represents one household) from 32 regions of Russia ensuring the survey representativeness on a country scale.

As soon as we have different questionnaires in the used surveys we cannot put an identic set of variables in the regressions. This constraint lowers the comparative strength of the models. Nevertheless we can focus on the factors of the voluntary childlessness in each of them.

In Moscow the directions of the different variables influence corresponds well with each other. The highest chances to report preferences for childlessness experience high educated well-paid men born in Moscow, who were the only child in the parent family. Tendency to take marriage to be not necessary generally and children to be not essential for happiness raise the chances severely (Table 2).

From the other hand the strongest effect is observed in the oldest age group. Comparing to the youngest age group with all other variables controlled high age makes chances grow 2.9 times. It could mean that those individuals who have lower real chances to have children (due to health limitations etc.) often tend to explain it with their personal preferences rather than declare inability. It also means that on macro level individuals with "zero" desired number of children do not form a real child-free generation yet, but some sprouts of it already exist. The crucial argument is that these preferences gradually diffuse in the younger generations. A share of child-free individuals among younger age groups with "zero" desired number of children will grow higher.

Regression analysis based on the GGS sub-sample (from which Moscow was excluded) shows different results. The variable characterizing number of children in parental family appears to be nonsignificant here. That means, that the *low fertility trap,* which definitely has an effect in Moscow, doesn't work in the rest part of the country yet. Herewith the role of individuals' age in the country regression is even higher than in Moscow one. High age with all other variables controlled increases chances of "zero" desired number of children 3.4 times. Adherence to the opinion that self-fulfillment is impossible without children has very modest effect (significance at 0.1 level and raise of chances 1.8 times). Higher education, on the contrary, lowers chances of falling into the group with "zero" desired number of children, while living in the rural area again raises them. The largest importance has the respondent's opinion about his or her ability to have children physiologically (Table 3).

The given findings testify to the lower share of voluntary childless along with higher rate of "childless under circumstances" in Russia on the whole comparing to Moscow.

Table 3 – Coefficients and odds ratios for determinants of "zero child preference" (binary logistic model), Russia

	B	**Odds ratio**
Women		1
Men	.417	1.517
18-29 years old		1***
30-39 years old	.538	1.713**
40-49 years old	1.230	3.422***
3 children in parental family		1
2 children in parental family	-.085	.919
1 child in parental family	-.008	.992
High income group	-.369	.691
Low education (ISCED 4 and lower)		1
Specialized professional education (ISCED 5B)	.034	1.035
Higher education (ISCED 5A and higher)	-.563	.570*
Big cities[3]		1
Other cities	.102	1.107
Rural areas	.479	1.615*
Opinion: "I can have children"		1
Opinion: "I cannot have children" *(due to health limitations)*	1.529	4.613***

[3] These cities are Russian region capitals, Moscow is withdrawn from the sample.

Opinion: "Self-fulfillment is *impossible* without children"		
Opinion: "It's hard to tell if Self-fulfillment is possible without children"	.259	1.296
Opinion: "Self-fulfillment is *possible* without children"	.591	1.805*
Nagelkerke R-squared	*0.128*	
Log likelihood	*-301.3*	
χ^2 *(df)*	*71.5 (13)*	
Number of observations	*1 535*	

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

This study for the first time proved existence of relatively broad voluntary childlessness in Russia. The importance of this discovery can hardly be overestimated. Moreover, not only the prevalence of childlessness increased in Russia but also the societal acceptance of this status improved. This socio-demographic process can be noticed in Moscow earlier than in the rest part of the country, which is usual for Russia regarding demographic changes.

Thus the portraits of child-free individuals in Moscow and in Russia differ a lot. We know, that Moscow has been holding the oldest fertility in the whole country for a long time already. Now the voluntary childlessness starts being a rather popular reproductive model here. Generally we could say that Moscow adopted "Austro-German" fertility model. But does that mean the rest of Russia will later follow this path? We will try to find an answer to this question in our further research.

The results of this study have an important policy implication. First of all, they reveal the limitation of the current policy measures addressed to families with 2 and more children. The study shows that the question of voluntary and involuntary childlessness should be taken in consideration while forming the political agenda. Above all policy makers should put their effort for educating the population in the sphere of reproductive health. Postponing the start of fertility careers becomes more and more popular in Russia. Over the low reproductive culture Russian women often reveal their reproductive function disruption for the first time only after 30, when they decide to have the first child. And after that low spread of the assisted reproductive technologies in Russia impedes the fulfillment of their fertility preferences.

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