# Living Arrangements of Older Ethnic Russians in Estonia

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#### Abstract

The changes in household patterns due to the processes during the SDT are primarily related to the younger age groups, but their consequences do not leave the older age groups and their household situation opportunities in later life untouched. In this study, we analyse the living arrangements of the older people within an immigrant sub-population. Comparative studies involving immigrant populations suggest that, the integration process would decrease their differences with the host population and close-up their living arrangements' preferences. Therefore, it is expected that immigrants who have lived most of their lives in host society, have adopted its norms and behaviours. The Estonian case is interesting, as the post-WWII inflow of Russian-origin immigrants have resulted in a large Russian diaspora, most of which members arrived in their young age and spent most of their life in Estonia. Our hypothesis is that patterns of living arrangements of old Russians in Estonia differ somewhat from those of the native population, but the level of difference may vary across socio-demographic groups. Theoretical mechanisms, discussed in literature allow assuming that better integrated socio-demographic groups of immigrants, such as having host country citizenship and language skills demonstrate also closer patterns of living arrangements. Closer patterns to natives could be also expected in those who immigrated at younger age or have higher level of education. Our results show that, in the specific conditions of diaspora living in Estonia, the living arrangements' patterns of older ethnic Russians stay rather far from those of the native population.

# Introduction

The theory of the second demographic transition foresees that households all-around the World would converge towards the nuclear family, leaving less place for intergenerational and kinship-based households (Lesthaeghe, 2014). Although these changes in household patterns are primarily related to the younger age groups, their consequences do not leave the older age groups and their household situation opportunities in later life untouched. Observed trends among older adults in numerous countries confirm the expected tendency for more independent living arrangements such as living all alone and living alone with a partner, not only among younger generations (Eurostat, 2022; Kamiya & Hertog, 2020) but also among the older (Poulain, et al 2020).

In this study, we analyse the living arrangements of the older people within an immigrant sub-population. Immigrants bring with them attitudes and behaviours from their country of origin and therefore may have distinctive demographic, socioeconomic and health profiles compared with population of destination country, and that may have impact to their living arrangements (Gurak & Kritz, 2013). However, comparative studies involving immigrant populations suggest that, the integration process would gradually decrease the differences with the host population and close-up their living arrangements' preferences. Therefore, it is particularly interesting to study how older non-natives who have immigrated at their young age, have adopted the norms and behaviours prevalent in the society where they have lived most of their lives. Converging trends in living arrangements may indicate the level of integration of immigrants in the host society. The Estonian case is interesting for such study, as the continuous inflow of Russian-origin immigrants since the WWII resulted in a large subpopulation of ethnic Russians that represent one fourth of the population of Estonia. A large part of them immigrated in their young age, in their twenties and thirties and spent the most of their adult life in Estonia.

In this study, we identify the possible similarities or dissimilarities of ethnic Russians in Estonia compared with their peers in Russia and Estonians in Estonia. We analyse some factors that may influence differences in their living arrangements and provide possible explanation for the specific situation among ethnic Russians in Estonia compared to Estonians.

### Scientific findings and theoretical considerations

The scientific literature shows that living arrangements, defined as individual's household status, represent the most important social environment for older persons. These have generally impact on wellbeing and indicate if a potential caregiver is available at home when aging and decline in health makes difficult to live on its own. Contacts at distance with family members may be sufficient for satisfying need for communication and may alleviate loneliness. Nevertheless, the presence of a person in the household may become essential at oldest ages for activities linked to the practical daily needs, including the need for a sense of security. Moreover, poor economic subsistence and risk of poverty are associated unequally with various living arrangements. For example, the difficulties or disadvantages linked to financial insecurity and social isolation, are often associated with certain types of living arrangements, particularly for those living alone, in population groups such as lower educated (Wilmoth, 2001; Shaw et al., 2018). Such situation may be dramatic in the counties where the support from the government resources to the old-aged people is rather limited. The poverty endangers older people particularly in post-socialist East Europe where the average income from old-age pension may be not sufficient to maintain basic standard of living (Sumil-Laanemaa et al., 2021).

Several studies have shown that migrants' and non-migrants' household composition and individual living arrangements may differ (Van Hook & Glick, 2007; Liu et al., 2019). Some types of living arrangements may be associated with higher risk of social isolation for older people with migration background, and the situation may be even more problematic due to poor integration and possibly more reduced kinship networks. There could be various reasons why the living arrangements may differ among subpopulations in a given country especially related to migration context. The cultural environment may be different between the country of origin and the one of destination. Pre-migration cultural beliefs and social practices related to family and kinship ties may influence immigrant's behaviour patterns and can be transmitted to the second

generation of migrants (Foner, 1997; xxx). Therefore, different frameworks have been suggested in the literature. According to Phinney et al. (2001), ethnical identity and behavioural traits from country of origin may create important stress that works against assimilation as immigrants could have a strong desire to retain their identities. When a multicultural and pluralistic perspective is encouraged or accepted in the host country, it may generate behavioural patterns that differ from both host and origin societies, particularly for family and kinship networks. For example, Giuliano (2007) found that the South-North European difference in patterns of leaving home of adult children are mirrored among immigrants of respective origin in the US. In addition, the culture in the society of origin of immigrants is changing and family patterns in the sending society have undergone significant changes since the older immigrants left their country of origin (Foner, 1997). Moreover, migrants and their children usually adapt their household behaviours to the norms and values dominant in the destination context because of the social, political, cultural, and labour market conditions (Alba & Nee, 1997; Mesoudi, 2018). The combination and interplay of possible opposing influences of the origin and host societies can lead to patterns observed in the country of destination of migrants, which may be relatively different from those of both their country of origin and destination. Adoption of demographic behaviours prevalent in the county of residence is more attributed to younger generations (Kulu & González-Ferrer, 2014). However, as different generations interact with each other, such behaviours can also spread among older people, when it concerns to their family, household and living arrangements. Drawing parallels with the fertility hypothesis is also relevant because the living arrangements of older parents may also reflect the family formation choices of their adult children.

Initiatives taken towards integration would support becoming closer to the host society. Acquiring the citizenship of the country of residence manifests a sign of willing to belong to this society whereas country of birth still refers to the possibility of influence of culture of the origin. The language knowledge and level of education are of great importance to support communication and help individual to understand and adopt the norms of the host country. Better language knowledge and higher level of education have not only direct effect on individual living arrangements but act also as mediators supporting increasing identification with the host culture (Cleveland et al., 2015; Sheikh & Anderson, 2018). Concentration of non-native population in some places and their

density may hinder any effort to adopt local behaviours and norms. When people with immigration background are concentrated, they tend to intermarry and compose more mono-ethnical households and these behaviours may tend to increase rather than decrease in the second generation (Puur et al., 2021). The living arrangements of older immigrants are also associated with the length of time they lived in the country. Those who immigrated in their youth are often better integrated in the host country and could have adopted more features of the native population including their pattern of living arrangements. At contrary, those who immigrated at older age have to rely more on their close family members and are less likely to live independently (Boyd, 1991). There are at least two reasons for this. First, their resources may be not sufficient for independent living and, secondly, the reason to migrate at older age is rather moving closer to emigrated children than starting a new independent life relatively far from them.

# Installation and growth of the post-WWII Russian diaspora in Estonia

The history of the large Russian origin migration in Estonia goes back to the after WWII decades. A big proportion of these migrants belong today to population of older ages and have lived a large part of their lives in Estonia. More than half of them immigrated at their young adult age in the 1950s and the 1960s. Starting from there, the non-native population grow from few percentages to over 30% of the total population for the end of Soviet period, according the census 1989. Moreover, the Soviet political environment supported the immigrant population with the Russian-origin to maintain their cultural environment by favouring Russian language in all areas of the society over the Estonian language. In addition, the migration policy supported selective distribution of migrant workers in certain branches of industry, and the housing policy favoured migrants, most of them of Russian origin, to non-migrants when distributing the housing facilities in newly build city areas. As the consequence, the immigrant population was rather narrowly located in few industrial centres and housing areas where they compiled majority of the population, which lived rather independently from the social and cultural life of the rest of Estonia. These specific conditions were responsible on strong segregation of the migrant and non-migrant populations in Estonia that did not disappear despite of decades after the Soviet regime collapsed (Mägi et al., 2020). Thus, conditions existed in Estonia for the immigrant population with Russian origin to maintain intact the cultural preferences origin from their country of origin. This could be particularly true for the older population segments, despite of they lived a large part of their lives in Estonia.

# Aim of the study and research questions

While differences have been observed in the demographic behavior between native Estonians and people with an immigrant background, most of whom come from Russia (Katus & Puur, 2006), yet the household situation of elderly people with an immigrant background has not been thoroughly studied. Since most of the older Russian immigrants arrived in Estonia at a younger working age, it can be assumed that they have adopted the patterns prevalent among Estonians to a greater or lesser extent and lost the patterns still prevalent in Russia. Therefore, we will check how much the living arrangements' patterns of Russians in Estonia are similar with the ones of Estonians or they stay closer to the ones of older Russians still living in Russia. We also intend to find out which specific groups of Russians in Estonia have more adopted the norms and values common among Estonians

Our main hypothesis is that the patterns of living arrangements of old Russians in Estonia are not anymore similar to those of Russians in Russia, and that these differences may vary between across socio-demographic groups. Considering the above theoretical mechanisms, we assume that older Russians in Estonia adopted closer living arrangements patterns to Estonians in socio-demographic groups that are better integrated, such as people Estonian citizenship and Estonian language skills. We also expect to see patterns closer to Estonians in those who immigrated at younger age and who have higher level of education,

Our research questions are:

 To what extent does the distribution of living arrangements of older Russians in Estonia differ from that of Estonians in Estonia and Russians in Russia? Are their living arrangements' patterns (still) close to their peers in Russia or are these more similar to Estonians'.

- It may be also that Russians in Estonian have specific features that are different from both other populations and might be linked to their migration experience.
- What characteristics indicating the level of integration can be associated with the patterns of living arrangements of older Russians living in Estonia that are closer to Estonians?

# Data and methods

Data used in the study is extracted from the 2011 Estonian Population and Hposing Census database maintained by Statistics Estonia. Selected data include persons who were usual residents in Estonia, and aged 65 years or older at the time of census and self-defined themselves ethnic Russians or ethnic Estonians (further in the text 'Russians in Estonia' or 'Estonians' respectively). Main characteristics of these two populations and of total population of Estonia are given in Table 1. The question about ethnic affiliation was not compulsory in census but 99,9 % of the enumerated population gave their answer. Ethnic Russians formed the biggest ethnic group after Estonians in 2011. In this study, we include both ethnic Russians who were born in Estonia and those who immigrated regardless if they hold or not the Estonian citizenship.

A remarkable feature of older ethnic Russians in Estonia is that only a third of them have acquired the Estonian citizenship (19 178 persons or 35,5%). In fact, only a quarter have skills in Estonian language that is the official language of their country of residence (12 982 persons or 24%) even if only a very small number of them have lived in Estonia less than 20 years or at very old age (1273 persons or 2,2%)

	Total population	%	Populatio n aged	%	Russians aged 65+	%
	• •		65+		0	
Total population	1 294 455	100,0	229 440	100,0		
Estonians	902 547	69,7	159 031	69,4		
Russians	326 236	25,2	54 043	23,6		
Other ethnicities	65 672	5,1	16 366	7,0		
Total population	1 294 455	100,0	229 440	100,0	54 043	100,0
Estonian-born	1 096 859	84,7	151 695	66,1	4 573	8,5
Foreign-born	197 596	15,3	77 745	33,9	49 470	91,5
of which						
Russian born	134 984	10,4	56 365	24,6	43 064	79,7
Total population	1 294 455	100,0	229 440	100,0	54 043	100,0
Estonian citizens	1 102 618	85,2	183 827	80,1	19 178	35,5
Foreign citizens of which	181 837	14,8	45 613	19,9	34 865	64,5
Russian citizens	90 510	7,0	29 716	13,0	25 334	46,9
Citizenship	85 960	6,4	13 275	5,8	9 261	17,1
undetermined (grey passport holders)						
Has knowledge of official language of host country					12 991	24,0
Immigrated before 1990			0011		44 485	82,2

Table 1. Main characteristics of older ethnic Russian population compared with total and older population in Estonia

Source: Statistics Estonia, Population and Housing Census 2011.

The typology of living arrangements for this study was built up based on the relationship with household reference person combined with the presence of spouse in household, marital status or consensual union. The method consists in applying relevant inclusion and exclusion criteria for identification the type of living arrangements in each individual record of census data. The first selection was based on the number of household members. Persons having household size one, were considered as living alone and left aside from further selections. Thereafter, from two-member households, married or cohabiting partners, and people living with child or someone else were identified and excluded from further selections. From households having more than three members those having a spouse or partner in household or not, and those with children and without children were distinguished. Finally, those who did not have spouse, consensual partner, or child in household were considered altogether as living with other persons, including in nursing homes. The latter type of living arrangements was not separately distinguished due to the data limitations.

Similar data for older Russians living in Russia were obtained from a 5% sample of Russian 2010 census available in the IPUMS database (IPUMS, 2021). Differently from Estonian data, as self-defined ethnicity was not available, Russian mother tongue was used for selecting ethnic Russians (further in the text 'Russians in Russia'). The same living arrangements typology as used for Estonian data, is applied to Russian census data.

Our typology of living arrangements allows generalizing and simplifying the personal status and social environment for each person regardless of the size and complexity of the household composition. Other socio-demographic characteristics considered in the analysis of the three studied populations are age (in 5-years groups from age 65 till age 85 or more) and sex, marital status (never-married, married or in partnership, divorced and widowed) and level of education (primary or less, secondary and higher).

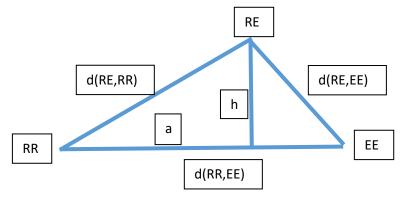
In the first part of analysis, for identifying similarities of living arrangements patterns of Russians in Estonia compared with Estonians and with Russians in Russia, we compute proportion of people in each living arrangement and compare the patterns of the distributions between pairs of these populations. More precisely, we compute the distance between two relative distributions as the sum of absolute differences between proportions in pairs of the three groups, Russians in Estonia (RE), Russians in Russia (RR) and Estonians (EE), using following formulas:

 $d(RE,RR) = \sum |p(i,RE) - p(i,RR)|$  $d(RE,EE) = \sum |p(i,RE) - p(i,EE)|$  $d(RR,EE) = \sum |p(i,RR) - p(i,EE)|$ 

where i are the different living arrangements. The larger value of these distances indicate bigger difference in living arrangement patterns of two studied populations.

As the three observed populations are not expected to have the same sociodemographic composition, above mentioned socio-demographic characteristics are further included in the analysis. The distance between patterns of living arrangements of pairs of populations is therefore computed for groups distinguished by each of the socio-demographic characteristics given above. Further analysis of these differences will be based on two indexes computed by considering the geometric perspective shown in figure 1. and the measure of 'a' and 'h'.





As  $h^{*2} = d(RE,RR)^{*2} - a^{*2} = d(RE,EE)^{*2} - ((d(RR,EE)-a)^{*2})^{*2}$ 

the two measures 'a' and 'h' allows computing the two following indexes that may be computed and compared for groups specified by gender, age, marital status and level of education.

### Based on

I = a / d(RR, EE)

that characterises the position of RE between RR and EE on a linear way (from 0 to 1) and

### s = h / d(RR, EE)

that characterises the specificity of the pattern of living arrangements of Russians in Estonia compared to both Russians in Russia and Estonians in Estonia. This index is 0 when the position of Russians in Estonia is aligned on the linear road between Russians in Russia and Estonians, and is different from 0 when the pattern of Russians in Estonia diverges from that.

In the second part of the analysing, we compare the distribution of living arrangements between different subgroups of Russians in Estonia, the analysis includes selected characteristics associated to migration background and integration. Therefore, regression models in this analysis include the Estonian language knowledge, citizenship, country of birth and age at the time of immigration.

# Living arrangements' differences in three studied populations

The first part of the analysis aimed identifying if the pattern of living arrangements of Russians in Estonia is closer to the patterns of Estonians in Estonia or present more similarities with Russians in Russia. Whereas, as expected, the general patterns of the relative distribution of living arrangements in three observed populations demonstrate rather similar situation, there is a specific feature that distinguishes two populations in Estonia from that of in Russia. More precisely, in Russia remarkably bigger proportion of older people live with their child but without partner. As concerns to distribution Russians in Estonia by living arrangements, it presents the intermediate position between that of Russians in Russia and Estonians (Table 1).

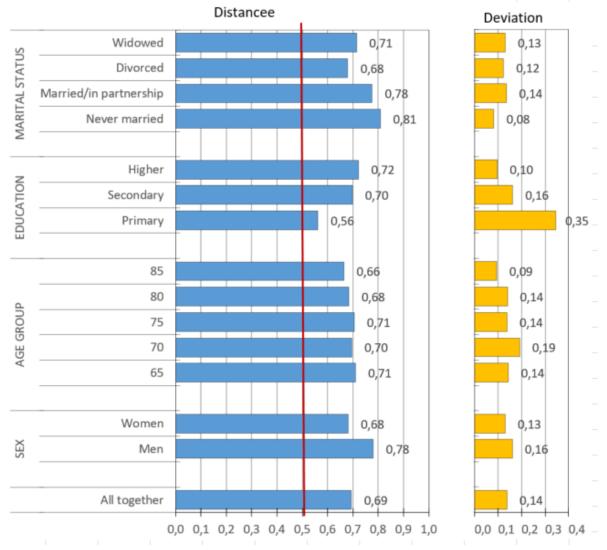
	Russians in Russia		Russians in Estonia		Estonians in Estonia	
Alone	4 770 780	30,5	20 484	37,9	61 662	38,8
With partner	3 938 000	25,2	16 689	30,9	54 427	34,2
With partner and child	1 573 220	10,1	4 477	8,3	11 367	7,1
With partner and others	392 120	2,5	250	0,5	1 133	0,7
With child	4 344 780	27,8	10 349	19,1	22 378	14,1
With others incl in institutional households	615 640	3,9	1 794	3,3	8 064	5,1
Total	15 634 540	100,0	54 043	100,0	159 031	100,0

Table 1. Distribution of people aged 65 and over by living arrangementsobserved populations

Socio-demographic composition of the three populations could not be the same, and that may have impact to their relative distribution by living arrangements. Therefore, the differences in the patterns of living arrangements were identified separately for each population group distinguished by sex, age-groups, marital status and level of education. The Figure 1 shows in which distance (left side of Figure 1) the pattern of

living arrangements of various socio-demographic groups of Russians in Estonia is between the respective pattern of their peers in Russia (at point 0) and Estonians (at point 1). It also shows how big is the deviation (right side of Figure 1) of each this pattern from the linear way between Russians in Russia and Estonians. Russians in Estonia demonstrate clearly that their living arrangements are closer to Estonians than to Russians in Russia.

Figure 1 Location in linear distance between Russians in Russia and Estonians of the patterns of living arrangements in socio-demographic groups of older Russians in Estonia



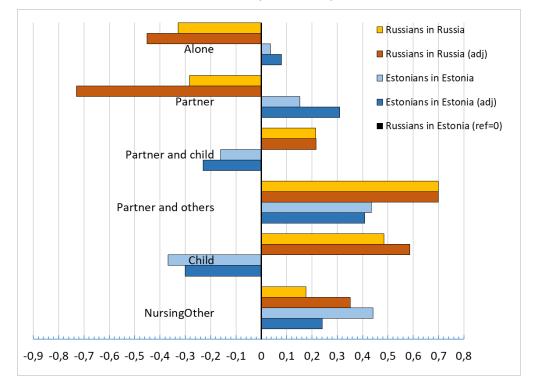
Overall, the location in linear distance for all socio-demographic groups of Russians in Estonia is at the level 0,69 between 0 and 1 with the standard deviation 0,14. All socio-demographic groups of Russians in Estonia have passed more than half of linear distance between their peers in country of origin and the country of current residence.

Nevertheless, there are important differences in the progression by these groups. Men, never married persons and persons currently in partnership appear to be reached closest to the pattern of Estonians, while people having less than secondary education have the least similar situation with Estonians having the same level of education. The latter group demonstrates also the largest deviation, twice compared to any other group. Correlation between the indicator of similarity, presented by linear distance, and deviation from the linearity is negative (- 0,68), revealing that the more assimilation the less deviation exists in patterns of living arrangements.

Logistic regression models were run for each living arrangements adjusted by the above given socio-demographic characteristics and unadjusted in order to identify how much the different compositions of populations has impact on observed differences. In order to more clearly show the situation of Russians in Estonia compared with both other populations, Russians in Estonia were chosen as for reference with which the odds to have each living arrangement of Estonians in Estonia and of Russians in Russia were compared (Figure 2). In overall, this comparison reveals that composition of three populations differ but it does not concern all living arrangements equally. Adjusted and unadjusted models present differences between Russians in Estonia and Estonians in all living arrangements with more remarkable effect in living alone with partner and living in nursing home or other people who are not family members. Compositional differences in these two types of living arrangements are most pronounced also between both populations of Russian ethnicity.

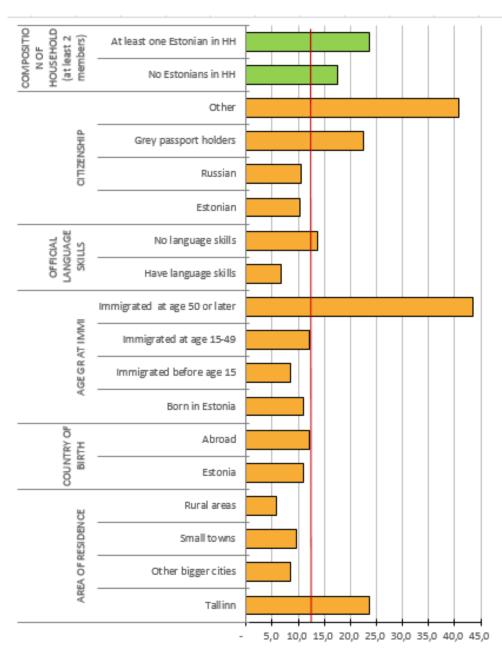
After adjusting the results for socio-demographic characteristics, in the overall, the differences between three populations preserved but the scale of differences changed not similarly in all types of living arrangements. In living alone and living alone with partner, the difference became much bigger for both Estonians and Russians in Russia compared to Russians in Estonia. These two living arrangements are most frequent for older people in Estonia among both Estonians and Russians. In living with partner and child, the adjustment resulted in the same change only in Estonians. In living with child and living in nursing home or other people, difference became bigger for Russians in Russia but smaller for Estonians.

Figure 2. Regression coefficients (b) by types of living arrangements, compared with Russians in Estonia as reference (in value 0)



The second part of the analysis focused on possible association of selected characteristics with the differences of living arrangement patterns between Russians in Estonia and Estonians. The patterns of living arrangements of Russians in Estonia grouped by country of birth, age of immigration and Estonian language skills were compared with that of the share of older Estonians by living arrangements (Figure 3). The dissimilarity of living arrangements' pattern between all Russians and Estonians aged 65 and older was 12,4 (red line in Figure3). For computing the indicator of dissimilarity between two sub-populations, the proportion in each living arrangement were considered as total for Estonians without distinguishing above-mentioned groups. As seen in Figure 3, even if the difference in living arrangement patterns of Russians having Estonian citizenship and those having no Estonian citizenship did not differ largely, those holding Estonian citizenship were closer to Estonians than were those who did not hold it. Difference in Estonian-born and foreign-born Russians was even smaller. Those who immigrated at relatively older age and those having no Estonian language skills demonstrated bigger dissimilarity compared to Estonians. No one of selected groups can be considered as having fully same living arrangement pattern as have Estonians. Area of residence was included considering concentration of the ethnic Russians in few regions of Estonia. It appears that larger difference exists between distribution of Russians in Estonia and Estonians by living arrangements among those residing in the capital city Tallinn compared to other major cities and smaller towns even if in several of these a large part of population have immigrated from Russia. The smallest differences were found, as expected, in villages.

Figure 3. Dissimilarities of living arrangements patterns of Russians in Estonia by groups of population compared with Estonians (Sum of absolute differences between share by living arrangements among Estonians and Russians in Estonia.)



In the last investigation, logistic regression models were run for Russians in Estonia grouped by characteristics related to migration background and the level of integration separately for each living arrangement. Age, sex, education and area of residence were included in models adjusted for socio-demographic characteristics. The results show that those who did not hold Estonian citizenship had higher odds for living with partner and child, and with child only (Table 2a and 2b and Figure 4). In all other living arrangements, the odds were higher for those who hold Estonian citizenship. The respective odds for not holding citizenship were the following: living alone, with partner only, with partner and others, living with partner and child and with child only. Being **born abroad** was positively associated with living with partner, and with partner and child (odds 1,105 and 1,132 respectively). At opposite, it had very strong negative association with living in nursing homes or others than child or partner (0,519). Being not skilled in Estonian language was associated with lower odds in living alone and with partner only (0,892 and 0,894 respectively) whereas a positive association was observed for living with partner and child (1,246) and with child only (1,368). People who immigrated in younger working ages had higher odds to live with partner only (odds 1,121 and 1,135 respectively for aged 15-29 and 30-44 at immigration), and with partner and child (odds 1,140 and 1,226 respectively for aged 15-29 and 30-44 at immigration) compared with those who were born in country or immigrated at childhood. Among persons who immigrated at relatively older age, living with child only had higher odds.

		Country of	Country of	Estonian
		citizenship	birth	language
		Estonia=1	Estonian=1	Skilled=1
	non-adjusted	0,888***	1,038	0,949***
Living alone	adjusted	0,963*	0,996	0,892***
With partner	non-adjusted	1,023	1,025	0,841***
only	adjusted	0,926***	1,105**	0,894***
With partner	non-adjusted	1,273***	1,035	1,202***
and child	adjusted	1,193***	1,132*	1,246***
With partner	non-adjusted	0,594***	0,585**	0,573***
and others	adjusted	0,616***	0,769	0,669***
	non-adjusted	1,092***	1,112**	1,487***
With child	adjusted	1,115***	1,017	1,368***
With others or	non-adjusted	0,843***	0,495***	0,666***
in institution	adjusted	0,854**	0,519***	0,744***

Table 2a. Odds to live in a given living arrangement for ethnic Russian older adults in Estonia by selected integration variables.

Table 2b. Odds to live in a given living arrangement for ethnic Russian older adults in Estonia by age groups at immigration.

	Before age 15, incl	Age 15-29	Age 30-44	Age 45 and above
	born in Estonia=1			
	non-adjusted	1,056*	1,073*	0,947
Living alone	adjusted	0,952*	0.945*	0,738***
With partner	non-adjusted	0,909***	0,960	0,659***
only	adjusted	1,121***	1,135***	0,905*
With partner	non-adjusted	0,922*	0,906*	0,592***
and child	adjusted	1,140***	1,226***	0,999
With partner	non-adjusted	0,336***	0,410***	0,452**
and others	adjusted	0,506***	0,599**	0,940
	non-adjusted	1,233***	1,181***	2,162***
With child	adjusted	0,980	1,017	1,648***
With others or	non-adjusted	0,745***	0,550***	1,087
in institution	adjusted	0,646***	0,458***	0,791*

Conclusively, the main findings of this investigation are the following:

- The living arrangements patterns of Russians in Estonia are similar to neither those of Russians in Russia nor those of Estonians but they are closer to Estonians than to Russians in Russia. The main difference with Russia appears in the ranking of those living with child only that is less frequent among both Russians and Estonians in Estonia than in Russia.
- 2. The socio-demographic composition of the populations can explain only partly the dissimilarities between the two pairs of populations.
- 3. Considering gender, living arrangement patterns of Russian men in Estonia to Estonian men are more similar than are of women in two populations, and more different with Russian men in Russia than are of Russian women in Estonia with their same sex peers in Russia.
- 4. As far as the level of education is concerned, the living arrangement patterns of Russians in Estonia who have a higher education are more similar to Estonians, in both men and women.
- Among characteristics related to migration background, the ability to speak Estonian language seem to favour similar patterns of Russians in Estonia with Estonians.
- Regarding the country of birth, Russians in Estonia born in Estonia, as well as those holding Estonian citizenship, have more similar living arrangement patterns with Estonians.

- 7. Nevertheless, the regression analysis performed for each living arrangements separately demonstrates that the association with the above-mentioned characteristics varies remarkably.
- 8. Other factors might exist not included in this investigation might have impact and explain closer similarities of Russian Estonians with the hosting population.

### Discussion

This investigation show interesting features of an older immigrant population that was compared with native population in their country of residence and with their peer in country of origin. In general, the results of the study confirmed the posed hypothesis that the immigrant population, even if have lived a large part of life in a country, do not follow the living arrangement patterns of the host population. Nevertheless, the signs of becoming close were observed, as the differences with the country of origin were even bigger. The results also show that within this immigrant population different level of acquisition of local behaviours can be observed depending of the level of social integrated measured by holding host country citizenship, language skills, age at immigration and concentration in certain regions.

Our study show that, in overall, despite of remaining dissimilarities, the signs show that the patterns of living arrangements of older immigrants' of Russian origin in Estonia are approaching to that of the native Estonian population. The tendency for decreasing diversity in distribution of older population by living arrangements in Estonia was observed by another study. The expression of this tendency is increasing proportion of people living alone or with partner only, and decreasing of those living with child with or without partner. With such trends, patterns of living arrangements of older people in Estonia are approaching to their peers in Western- European countries (Herm & Poulain, 2022). From the results of the present study we can supposed that older Russians in Estonia, even not having similar living arrangements' patterns, are following the general trends observed in Estonia, but with some delay. By time, this would result in more homogenous older population in Estonia and support development of better policies addressed on the older population.

Our first investigation was focused on identifying similarity or dissimilarity of living arrangement patterns among older Russians in Estonia compared with Estonians in Estonia and with Russians in Russia. The results confirmed that Russians in Estonia were neither similar to Estonians nor to their peers in Russia. The latter can be attributed to differences in development and current situation in both the socioeconomic and demographic situation in two countries (Kritz, Gurak & Chen, 2000). The dissimilarity of two sub-populations in Estonia needs more explanation. Even if there is an overall tendency all around the developed World towards more independent living arrangements, the availability of resources for the free choice could be different for population groups even in the same country, and can be different for people who have immigrated compared with natives. Whereas the most of older people prefer independent living arrangements, co-residence may actually be more advantageous for older immigrants ensuring the lower risk of social isolation (Wilmoth, 2001). However, this cannot be universal as immigrants having higher income and education, are who more integrated, might be more keen to choose living independently (Lee & Edmonston, 2019). In this study, we included among socio-demographic characteristics, together with sex, age and marital status, the level of education as the proxy indicator for economic resources.

The analysis show that groups of Russians in Estonia distinguished by their sociodemographic characteristics are internally heterogeneous and present different level of dissimilarity compared to both Russians in Russia and Estonians in Estonia. Concretely, in three studied populations grouped by sex, age, marital status and education, no one among Russian in Estonia show the pattern of living arrangements that is similar to Russians in Russia neither to Estonians. The results of analysis reveal that demographic characteristics and the level of education associate with dissimilarities between population with immigration background and native population in Estonia as well as between this immigrant population and their peers in the country of origin. Concretely, the older men as well as persons of both sex who have relatively higher education, or are never-married or cohabiting show a pattern that is more similar to the one of Estonians than to Russians in Russia. In age groups, no important differences appear, the level of dissimilarity in pairs of populations is almost not varying between age groups. Whereas differences appear in population groups distinguished by above-mentioned characteristics, in overall, the results of our study are in line with finding by Wilmoth (2001) based on immigrant groups in the United States, showing that individual-level characteristics such like resources and demographic characteristics do not fully explain the differences in risk of living with family across the sub-populations in country. Comparing older Russians in Estonia with Estonians, we confirm that the differences in living arrangement patterns exist but of varying level in all groups distinguished by socio-demographic characteristics. At the same time, the observed patterns in these groups differ also compared with Russians in Russia. Accordingly, in case of our study observed individual characteristics do not explain all the differences between the native population and population with immigrant background, neither between emigrants and the population in country of origin.

The most remarkable difference in living arrangement patterns between Russians in Estonia and in Russia is in the ranking of the proportion of living with partner only and with child only, that are similarly to Estonians in, respectively, the second and the third position while in Russia these two living arrangement appear in opposite order. Nevertheless, Russians in Estonia live more frequently with children than do Estonians, regardless if partner is or not in household. Such situation could be counted on several factors. Studies have shown positive impact on the poverty alleviation for older immigrants living with kin (Kaida & Boyd, 2011). Therefore, it could be a choice of such living arrangement done in the family, and that is particularly relevant in case if older parents have immigrated after retirement age in order to join their emigrated children. These older immigrants may miss or have nonsufficient state support in country of residence. Another explanation could be that the Soviet-time custom for coresidence of adult children with their parents, which was forced by the chronic housing deficit and low retirement age for women in combination with the sorter generational length, is still followed (Botev, 2012). In fact, the dwelling conditions, which families of immigrants obtained during Soviet time, were not the same as those of the most natives, and that could have influence on further opportunities for independent living or cohabitation with their younger generations. In Estonia, the fact that childlessness was less prevalent among immigrant population may also explain higher proportion of among Russians whereas non-marital childbearing has been least common among Russians than Estonians (Katus & Puur, 2006; Klesment & Puur, 2009, Sakkeus et al.,

2019). It could be thus expected that among older Russians living with child, with or without partner, is relatively more frequent than among Estonians in Estonia.

The second investigation of this study was focused on checking if some migrationrelated characteristics such as local language fluency, age at immigration, having foreign country of birth and holding no citizenship of country of residence are associated with the type of living arrangement the older Russians in Estonia have. We expected to see if those Russians who developed close contacts with the Estonian society by knowing official language and obtaining citizenship of the country are presenting more similar patters to Estonians than do others. Age at migration can have impact on these processes, as the duration of residence would support acculturation experiences, social connection, and well-being in the host society (Liu et al., 2019). Arrival at young age is believed to be an important predictor of integration of immigrants, related to greater proficiency in local language but also providing more time for getting use with local norms (Myers et al., 2009). The duration of residence has been found to be associated with the type of living arrangements. Burr et al (2012) found that the less time older immigrants lived in the host country, the more likely they lived in a multigenerational or extended household. The difference in odds of living independently of older non-natives compared to natives is associated with the degree of adoption of local norms and behaviours is the most important source of differences (Kritz, Gurak & Chen, 2000). Our study confirm this. Those who immigrated in younger ages and were skilled in Estonian language had largely more similar living arrangement patterns with Estonians than had those who arrived at middle age or later and who did not master official language. Being born in country and having the citizenship of host country had rather similar effect but did not present large difference compared with those who did not have Estonian citizenship and those born abroad, respectively. However, except country of birth, these characteristics cannot be considered as fully independent in case of older immigrants: obtaining official language skills and citizenship of country of residence generally needs some duration of residence in country.

The older immigrants living in rural areas are found to be better assimilated than their urban counterparts (Myers et al., 2009). This is confirmed in case of ethnic Russians in Estonia. We found biggest difference in living arrangement patterns compared with

Estonians among older Russians living in capital city whereas in villages difference was the smallest. The concentration of immigrant population in urban areas in combination with the possibility to get formal education in Russian language have seriously inhibited the distribution of Estonian language skills among immigrated population and thus could support segregation of immigrant population from the native and inhibit the integration.

The characteristics and preferences of immigrants interact with official policies and attitudes of members of the host society. A bicultural or integrated identity is generally associated with higher levels of overall well-being than are the other identity categories (Phinney et al., 2001). Being bicultural involves becoming part of the host society with acquisition of behaviours prevalent in its population. Data used in this study support these opinions. Dissimilarity of the living arrangements of Russian older population compared with Estonians in Estonia is explained at least partly by integration-related characteristics. Despite the most of currently old immigrants arrived to Estonia in the 1950s and 1960s in their young age, their living arrangement patterns are still guite strongly different from of Estonians. We can thus recognize that the integration of this population has been rather weak and support the view that when pluralism is encouraged or accepted in host country, immigrants tend to maintain behaviours inherited from their country of origin, particularly when it concerns to family networks (Phinney et al., 2001). However, having more similar patterns with the majority of population of the country of residence could be favourable for older immigrants, as both migration and aging have tendency to move people to the more vulnerable population segments. We hope that he results of this study would help to better address the challenges in societies having had in past huge inflows of migrants that are weakly integrated at their old age.

Among limitations of this study is that for distinguishing native and Russian-origin population groups in Estonia, ethnicity as reported in 2011 census was used, while the selection of Russians in Russia was done based on mother tongue. We consider that in Estonia data collected on self-declared ethnicity identifies better the Russian-origin population than do data on Russian mother tongue that was often declared also by immigrants of other ethnic origin from former Soviet regions. However, ethnic Russians in Estonia include also a part of people who have lived in Estonia for many generations, and therefore cannot be considered among people with immigration background. As their number is very small, their possibly different behaviour compared with immigrated ethnic Russians would not distort the results of this study. Data on Russians in Russia used in this study is a weighted sample of census data. Because of this and the possible methodological differences in collection of data on household membership, it could be that the full comparability of the typology of living arrangements in two counties was not achieved. Nevertheless, we believe, that the main features of studied populations are sufficiently captured. Difference in economic resources could be assessed in this study only as a proxy based on the level of education. We did not have data on children who are alive but live separately from their old parents. Because of this, it is not possible to assess how much living not with children reflects people's free choice.

Extending the study on living arrangements to younger adult ages and considering the trends and associated characteristics could be useful, as it would shed light on the roots of the living arrangements available for older adults. Enlarging the study above younger ages would also provide possibility to check if the patterns observed among older people in this study are more due to the behaviours of themselves or their the family members. To understand which factors define the remaining differences in our study between native and immigrant-origin population groups, more information including baseline socio-demographic characteristics of the person at immigration and life-long changes in these could be helpful. Finally, interdisciplinary study involving not only measurable individual characteristics but also more general cultural, social and economic atmosphere would be needed.

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