The Transition to Adulthood of Russian Migrants in Estonia – An Origin-Destination Comparison

Katrin Schwanitz[1]
Estonian Institute for Population Studies, Tallinn University

Abstract

How the transition to adulthood unfolds for migrants is an important indicator of the socio-cultural integration into the host society. Despite increasing scientific interest in the topic, research that is centered on the historically rooted geography of migration flows between Russia and the neighboring European countries is scarce. A better understanding of migrants' family lives and of the inequalities of opportunities between the migrant and native populations can provide helpful input for social policy programs. Using census data from Estonia and Russia in 2010 and 2011 and applying a synthetic cohort approach, we conduct origin-destination comparisons of second-generation Russian migrants' transition to adulthood. We examine if and how these different country contexts produced very different timing, sequencing, and heterogeneity patterns among men and women aged 15-35 and to what extent second-generation Russian migrants are (dis)similar to young adults in the origin and destination country. First results indicate signs of convergence between second-generation Russian migrants and native Estonians; these are particularly evident among women and with respect to the family transitions (union entry and parenthood). Dissimilarities in the timing, sequencing, and heterogeneity in the transition to adulthood play out mainly in the non-family transitions (education completion, labor force entry, residential independence).

Keywords

Transition to adulthood; second-generation Russian migrants; Estonia; Russia

[1] Please direct all correspondence to Katrin Schwanitz (katrin.schwanitz@tlu.ee), Estonian Institute for Population Studies, Tallinn University, Uus-Sadama 5-556, Tallinn 10120, Estonia; Tel: +372 6454 125

1. Introduction

A growing body of research has started to explore how the transition to adulthood unfolds for young adults with a migration background in Europe (Baykara-Krumme and Milewski 2017; Ferrari and Pailhé 2017; Hannemann and Kulu 2015; Huschek, de Valk and Liefbroer 2012; Huschek, Liefbroer and de Valk 2010; Impicciatore, Gabrielli and Paterno 2020; Kleinepier, de Valk and Van Gaalen 2015; Lübke 2015). Compared to the large share of research focusing on migrants from predominantly Mediterranean and North-African countries (e.g., Turkey or Morocco) in Western Europe (e.g. Ferrari and Pailhé 2017; Huschek, de Valk and Liefbroer 2012; Huschek, Liefbroer and de Valk 2010), research centered on Russian migrants in European countries is still relatively scarce (cf. Puur et al., 2017; Rahnu et al., 2015).

Motivated by this scarcity of research, we apply a holistic perspective to examine second-generation Russian migrants' transition to adulthood in Estonia. Estonia is an ideal setting for such an endeavor: First, Russian-origin migrants in general are a well-established minority group, with a very similar demographic composition compared to Estonians. Estonia received substantial shares of Russian migrants from the 1940s onwards and people of Russian-origin actually represent the largest immigrant group in contemporary Estonia, consistently making up about a fourth of the population since the 1990s (Statistics Estonia 2021). Second, crucial differences in the transition to adulthood between Estonia and Russia have emerged from prior research (e.g., Billari and Liefbroer 2010; Van den Berg and Verbakel 2021): In Estonia, leaving the parental home occurs early and is increasingly de-coupled from union formation (as indicated by the high shares of single-living immediately after leaving home for the first time), marriage and family formation occur later in the life

course, and the shares of unmarried cohabitation and children born outside married unions are high. In Russia, leaving the parental home also occurs early in the life course but is much more synchronized with partnership and family formation, the share of single-living (directly after leaving home for the first time) is low but has increased in the younger birth cohorts, and the shares of unmarried cohabitation and births outside of marriage are low.

Unlike prior family-demographic research on Russian migrants in Estonia (Puur et al. 2017; Rahnu et al., 2015), this study is not limited to singular aspects of the transition to adulthood. Instead, we simultaneously consider up to five key life course events: education completion, labor force entry, residential independence, entry into a first union, and parenthood. More specifically, our study compares the timing, sequencing, and heterogeneity of these five key life course events in the transition to adulthood between second-generation Russian migrants in Estonia with natives in both Estonia and Russia. Methodologically, the comparison is carried out in terms of descriptive metrics, harking back to an established body of demographic research capturing cross-national and cross-temporal patterns in the transition to adulthood (Modell et al. 1976; Fussell 2005; Fussell, Gauthier and Evans 2007; Grant and Furstenberg 2007; Chaloupková 2010; Bernard, Bell, Charles-Edwards 2014; Tian 2016); we complement this literature by providing a joint origin-destination comparison which is essential to understand family-demographic (dis)similarities between second-generation Russian migrants and their Estonian and Russian peers. To do so, we draw on census data from Russia and Estonia for young men and women aged 15−35 (Statistics Estonia 2011; Minnesota Population Center 2020), which offer detailed coverage of second-generation migrants and allow cross-country comparability.

Conceptually, our study furthermore draws on the premise that differences and similarities in the transition to adulthood between migrants and natives reflect the degree of migrants' cultural integration into the host society (Pailhé 2015). By simultaneously relating the transition to adulthood of migrants in destination countries to those of non-migrants in the countries of origin and the country of destination, however, we can better disentangle if migrants' life course choices are related to the integration process in the host society or to a trend that also occurs in the country of origin. This way our study goes beyond a mere dichotomy between those with and without a migration background, pays attention to diversity in the countries of origin and destination, and meets migration researchers' call to develop a better grasp of migrants' family-demographic behavior (Glick 2010; Van Mol and de Valk 2016).

2. Data and Method

2.1 Sample

This analysis uses samples from two population data sources: the 2010 census for Russia and the 2011 census for Estonia. The sample from the Russian census is a 5% random sample, harmonized by the Integrated Public Use Microdata Series − International project (Minnesota Population Center 2020).[2] For Estonia, we draw on the full population census for 2011 (Statistics Estonia 2011). In both samples we restrict our analyses to young adults (aged 15-35), as well as to natives in Russia and Estonia, and second-generation Russian migrants in Estonia. We define *young adults* as respondents aged 15-35 because of conventions in cross-national studies on the transition to adulthood (e.g., Billari & Liefbroer 2010); our results can thus more easily be compared to extant research. We define *natives*

[2] We apply IPUMS' weights to correct for the probability of being selected into the 5% Russian census sample.

as native-born respondents with a native background. In the Estonian sample this means respondents born in Estonia with two Estonian-born parents. In the Russian sample, however, this means respondents born in Russia whose mother tongue is Russian. This is because mother's and fathers' country of birth is not available for a large share of the Russian IPUMS sample (=51.3%) – namely those who are living in a different household than their parent(s). Here we assume that language is not only used to communicate with others but also to signal and distinguish social-cultural group identity; in prior research having Russian as mother tongue has also been shown to be a good approximation of Russian ethnicity. Finally, we define *Russian-origin migrants* as second-generation migrants who were born in Estonia and have at least one Russian-born parent. These restrictions leave us with a sample size of 1,699,204 native Russians, 260,204 native Estonians, and 64,102 Russian-origin migrants in Estonia.

2.2 Life Course Transition Measures

We consider up to five key statuses in the transition to adulthood: education completion, labor force entry, residential independence, entry into a union, and parenthood. These five statuses are operationalized as binary variables: (1) young adults who are currently attending school (=0) and those who are not (=1); (2) young adults who are in the labor force (=1) and those who are not (=0); (3) young adults who are residentially independent (=1) and those who are not (=0)[3]; (4) young adults who have ever entered into a union (=1) and those who never have (=0)[4]; (5) young adults who have had at least one child (=1) and those who have not (=0). In both the Estonian and Russian census the information on

[3] Respondents who are either household head or spouse/partner of the household head are considered as residentially independent.

[4] Respondents who are married/partnered, divorced/separated, or widowed are considered as having ever entered into a union.

children ever born was only collected for female respondents aged 15 and older. Therefore, young women have five and young men four life course states in our analysis. The statuses held at any given age between 15 and 35 indicate whether a young adult has made specific life course transitions. For example, if a young woman scores 1 on all five status variables, this indicates that she has accomplished all five life course transitions (education completion, labor force entry, residential independence, entry into a union, and parenthood).

2.3 Analytic Plan

The analysis of the data proceeds in three steps, differentiating by migrant status and sex. In the first step, we assess the timing in the transition to adulthood. Timing means the specific ages at which particular life course transitions (or combination of transitions) occur; it captures how the transition to adulthood is chronologically organized. The timing of each life course transition is measured as the proportion of young adults occupying each status at every age between 15 and 35. In the second step, we assess the sequencing in the transition to adulthood. Sequencing captures the ordering of life course states in the transition to adulthood. Because census data do not collect information about the exact ages at which life course transitions occurred – only whether or not respondents occupy certain states at the time of the census – we examine sequencing indirectly by tracing differences in the distributions of status combinations. Specifically, we calculate the percentage of ordered and unordered status combinations against the total status combinations. Sequencing of transitions was considered as *ordered* if the three transitions education completion, labor force entry, and residential independence occurred before union and family formation. If young adults' life course status conflict with this sequence (e.g., getting into a union before

finishing school, or becoming a mother before establishing residential independence), it is categorized as *unordered*. Additionally, we assess the relationships between pairs of transitions – that is in which order sequences of life course transitions are completed and the extent to which pairs of transitions are (de-) coupled.

In the third step, we assess the heterogeneity in the transition to adulthood. Heterogeneity measures the diversity of age-specific status combinations held by young adults; it captures the dynamic changes in a sequence of linked life course states over time. We use the entropy index (Fussell 2005) to delineate population-level diversity of status combinations in a given age-cohort group:

$$H = \sum_{i=s}^{S} p_s * log\ (\frac{1}{p_s}) \quad (1)$$

where S is the number of life course states and p_s is the proportion of young adults in each status combination s. The entropy index ranges from zero, when there is perfect homogeneity (i.e., all young adults are concentrated in a single status combination), up to the maximum entropy, when there is perfect heterogeneity (i.e., all young adults are equally distributed across all status combinations). The number of life course status combinations differs for young men and women, which means that the maximum entropy is 32 *(1/32)* log(1/(1/32)) = 1.51 for young women and 16 *(1/16)* log(1/(1/16)) = 1.20 for young men in our analysis. To make the index's interpretation more intuitive, however, we transform it into a percentage of the maximum entropy ranging from 0 to 100. Thus, the closer to 100%, the greater the dispersion of young adults in different status combinations; the closer to 0%, the greater the concentration of young adults in some limited life course status combinations.

To evaluate how much each single life course transition contributes to the overall diversity in the life course between the ages 15 and 35, we also determined the percentage change in maximum entropy when one life course status is omitted:

$$H_{observed} = \left(\frac{H_{full} - H_{reduced}}{H_{full}}\right) * 100 \quad (2)$$

If the observed percentage change in maximum entropy is higher than predicted based on maximum entropy distributions, the omitted life course status contributes substantively to the overall heterogeneity. Again, the number of life course status combinations differs for young men and women, which means that the maximum entropy is 16 *(1/16)* log(1/(1/16)) = 1.20 for young women and 8 *(1/8)* log(1/(1/8)) = 0.90 for young men once a state is omitted. That means that when any life course state is omitted, the predicted percentage change is ((1.51-1.20)/1.51*100) = 20% for women and ((1.20-0.90)/1.20*100) = 25% for men.

All measures described in these three analytical steps are derived from synthetic cohort data via indirect method. Such an approach has proved particularly useful to generate a descriptive insight into the age-specific patterns of different life course transitions (Fussell 2005; Fussell, Gauthier and Evans 2007; Grant and Furstenberg 2007; Chaloupková 2010; Bernard, Bell, Charles-Edwards 2014; Tian 2016), even if a caution needs to be applied. Status reversals (e.g., temporarily dropping out of school or the labor force) cannot be picked up with cross-sectional census data, which could potentially warp (heterogeneity) measures by deflating the prevalence of life course states. Overall in our study, we do not deem this problem too serious for "one-way", low reversibility transitions (e.g., leaving home, ever having a first child) or even for more reversibility prone transitions

(i.e., temporarily dropping out of school or the labor force for women) given the specific country context in Russia and Estonia (i.e., the traditionally high shares of female employment).

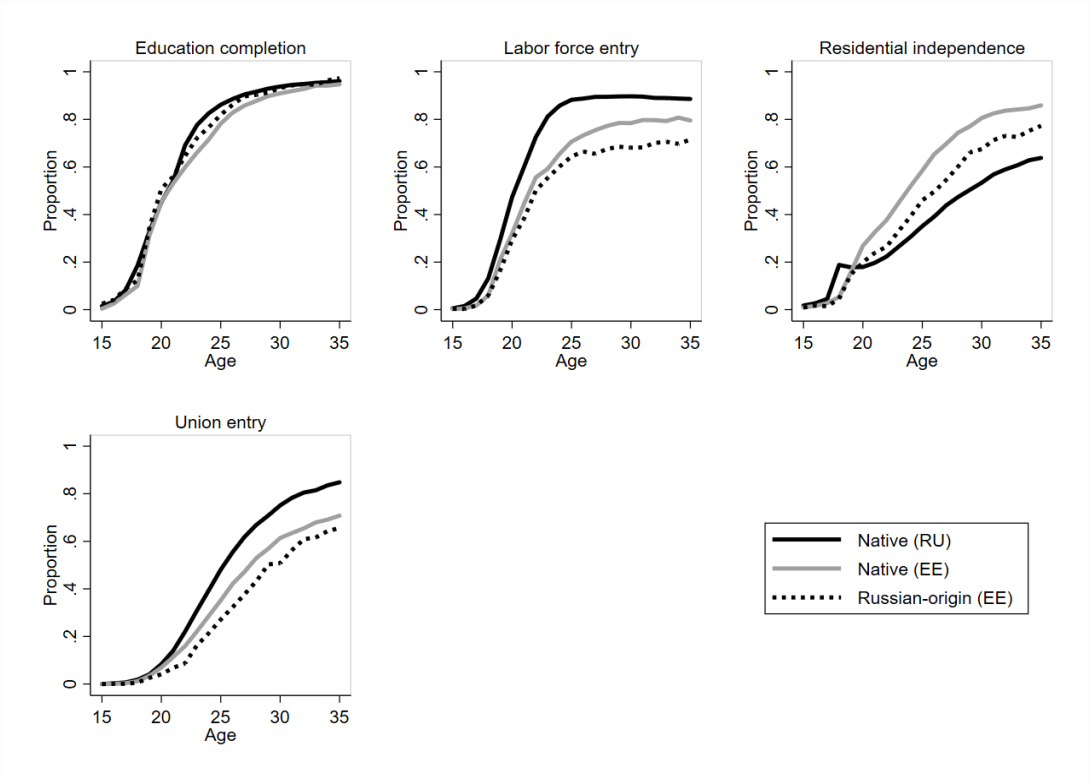
3. Results

3.1 Timing

Figure 1 shows the timing of each life course transition for men (by migrant status); it reveals substantive cross-group variations among the native Russians and Estonians and the Russian-origin migrants in Estonia. This is particularly evident in the transitions to residential independence, labor force entry, and union formation. First, with respect to residential independence, both native Estonian and Russian-origin men reach higher proportions between the ages 20 and 35 than their native Russian counterparts. But native Estonian men clearly establish residential independence faster and more successfully across the life course than Russian-origin men. Second, with respect to labor force entry, both native and Russian-origin men reach lower proportions between the ages 15 and 35 than their native Russian counterparts. Compared to native Estonians, Russian-origin men do worse at older ages, with the gap widening after age 25. Third, with respect to union formation, native Estonian men and Russian-origin men are more similar to each other – the proportion of those ever being in union across the life course is lower for both compared to native Russian men. Out of all three, Russian-origin men do worse in union formation compared to both native Russian and native Estonian men, however. It is possible that the relative weaker labor force position of Russian-origin men in Estonia also correlates with the union formation behavior.

It is also noteworthy that the timing of education completion is quite similar across all three groups, with native Russians reaching higher proportions between the ages 23 and 26 than both Russian-origin migrants and native Estonians. The latter perhaps indicating that young men in Estonia in this age range stay longer in (higher) education than Russians.

Figure 1 Age-specific distribution of four life course statuses; Men

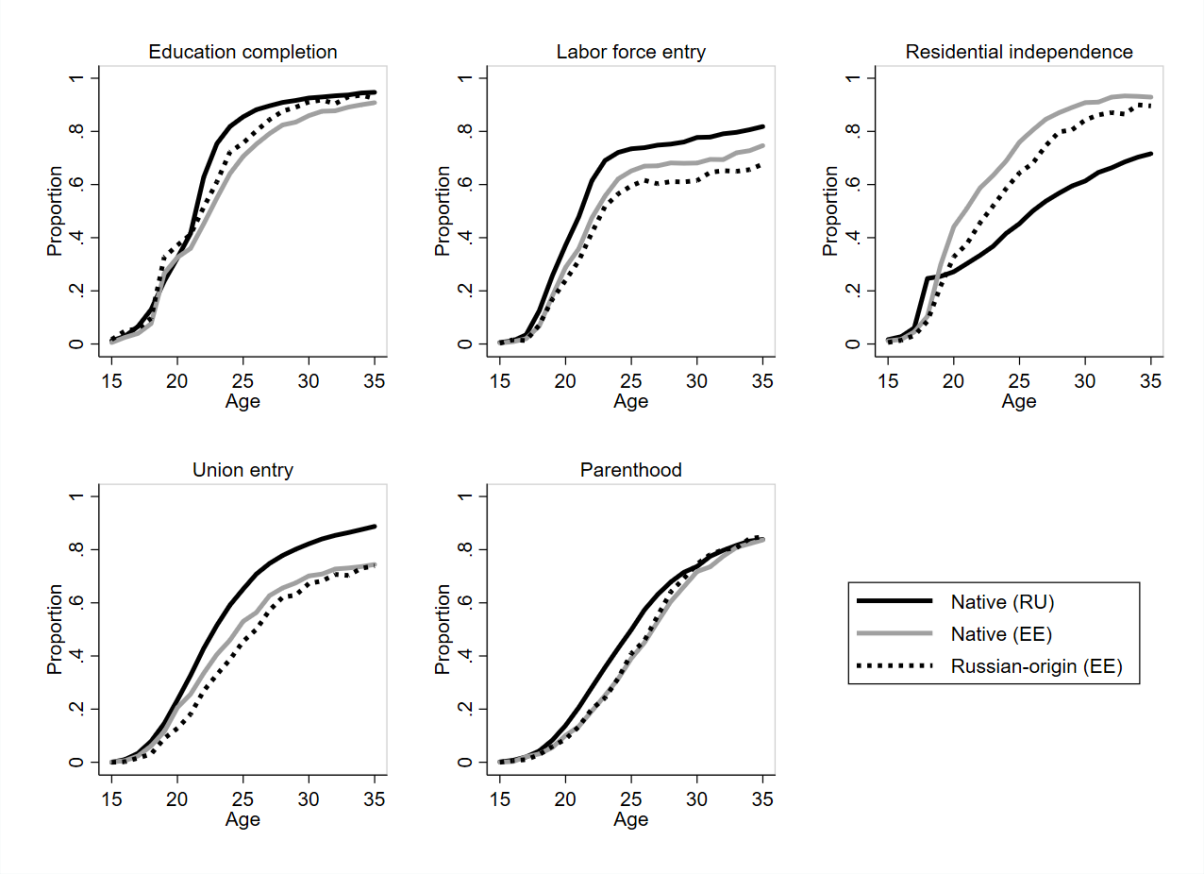


Source: Census data of 2010 from IPUMS and 2011 from Statistics Estonia. Own calculations.

Figure 2 shows the timing of each life course transition for women (by migrant status); it reveals that although the timing patterns are also different among young women, overall Russian-origin women resemble more closely native Estonian than native Russian women. This is particularly apparent in the transition to union and parenthood, where there are only smallest timing differences among the two groups in between the ages 15 and 35. With respect to residential independence, both native Estonian and Russian-origin women reach higher proportions between the ages 20 and 35 than their native Russian

counterparts. Across the ages 15 and 35 the gap between native Estonian and Russian-origin women is also smaller than among men. With respect to education completion, the differences among the three groups are more pronounced than among men. Again, this could indicate that both native Estonian women and Russian-origin women stay longer in education between age 25 and 30 than their Russian counterparts. With respect to labor force entry, there is a modest increase after age 25 for all women (and thus not really reaching a plateau as for men). Similar to men, Russian-origin women in Estonia have the lowest proportion of labor force participation between age 20 and 35 relative to both native Russians and Estonians.

Figure 2 Age-specific distribution of five life course statuses; Women



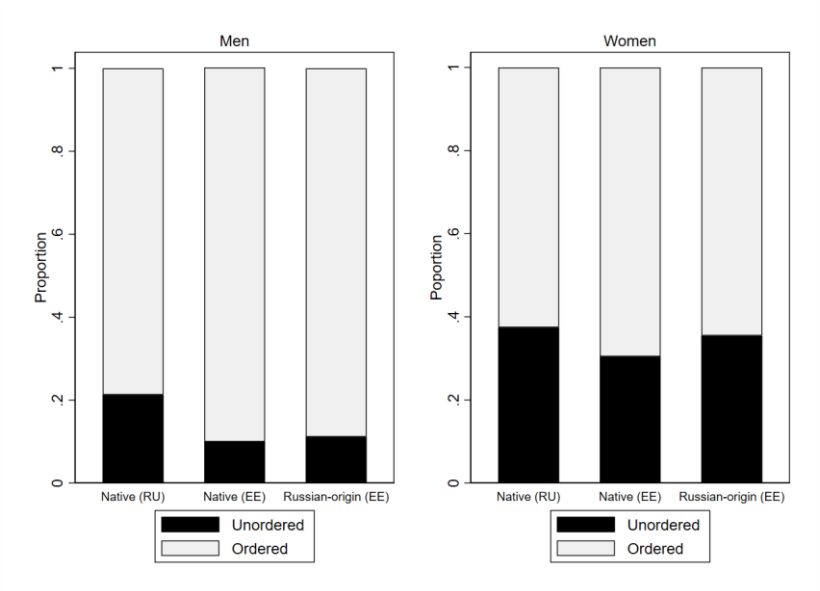
Source: Census data for 2010 from IPUMS and 2011 from Statistics Estonia. Own calculations.

In sum, the congruence in life course timing is more pronounced among women, the timing profiles in the transition to adulthood are overall nevertheless remarkably similar between native Estonians and Russian-origin Estonians young adults aged 25 and younger (i.e., birth cohorts 1985 and older, who have been largely socialized in post-Soviet Estonia).

3.2 Sequencing

Figure 3 shows the proportion of ordered and unordered life course status combinations out of all possible status combinations. For both men and women, the proportion of unordered status combinations is higher among Russian natives compared to native Estonians and Russian-origin migrants in Estonia. Compared to men, the proportion of unordered status combinations is generally higher for women, ranging between 30% and 37% for women and ranging only between 10% and 21% for men. This also indicates that differences in terms of ordered/ unordered life course transitions among native Russians and Russian-origin migrants are more pronounced for men.

Figure 3 Proportion of ordered status combinations by migrant status; Men and women



Source: Census data of 2010 from IPUMS and 2011 from Statistics Estonia. Own calculations.

Table 1 Proportion completed first transition of a pair of transitions; Men and women

Transition pairs	Men			Women		
	Native (RU)	Native (EE)	Russian-origin (EE)	Native (RU)	Native (EE)	Russian-origin (EE)
Education completion – Labor force entry	0.103	0.178	0.273	0.181	0.203	0.289
Education completion – Residential independence	0.407	0.228	0.338	0.318	0.114	0.187
Education completion – Union entry	0.296	0.345	0.444	0.188	0.227	0.306
Education completion – Parenthood	--	--	--	0.255	0.238	0.274
Labor force entry – Residential independence	0.383	0.163	0.202	0.292	0.093	0.123
Labor force entry – Union entry	0.278	0.269	0.287	0.193	0.209	0.250
Labor force entry – Parenthood	--	--	--	0.274	0.260	0.236
Residential independence – Labor force entry	0.048	0.120	0.132	0.141	0.231	0.249
Residential independence – Union entry	0.078	0.186	0.169	0.081	0.204	0.189
Residential independence – Parenthood	--	--	--	0.139	0.258	0.198
Union entry – Residential independence	0.171	0.016	0.027	0.199	0.018	0.026
Parenthood – Residential independence	--	--	--	0.168	0.026	0.051

Source: Census data of 2010 from IPUMS and 2011 from Statistics Estonia. Own calculations.

Table 1 presents the proportion of men and women, who have completed the first of a pair of life course transitions (but not both). The smaller the proportion, the closer the two transitions are to occurring simultaneously and the less compatible become a pair of statuses. From the table we can see that there are clear differences in the sequencing and ordering of family transitions between native Russians and Estonians (both natives and Russian-origin migrants): For men and women in Estonia – irrespective of migrant status – union entry and parenthood are age congruous with residential independence, whereas the opposite is the case for native Russian men and women. (The proportions for the transition pairs “Union entry – Residential independence” and “Parenthood – Residential

independence" do not exceed .05). This could suggest that Russian-origin migrants have adapted to Estonian context, where norms of neolocality seem to be stronger than in Russia. Furthermore in Russia, residential independence is tied to unmarried or married cohabitation – as indicated by the low proportion for the transition pair "Residential independence – Union entry" for native Russian men and women. For men and women in Estonia (both natives and Russian-origin migrants) these two transitions are less age congruous, suggesting that residential independence does not occur simultaneously with union formation (and leaving room for solo-living or living with non-family after setting up independent housing).

Differences in the sequencing and ordering of non-family transitions between native Russians, native Estonians, and Russian-origin migrants in Estonia are less pronounced but still evident: Both education completion and labor force entry are more age congruous for men and women in Estonia (both natives and Russian-origin migrants) than for native men and women in Russia. Compared to other family events, however, completing one's education and labor force entry are less of push factors for residential independence. (The proportions for the transition pairs "Education completion – Residential independence" and "Labor force entry – Residential independence" are about .15 to .20 points higher for native Russians). Also, the age congruity between residential independence and labor force entry is higher for native Russians than for men and women in Estonia (both natives and Russian-origin migrants), suggesting perhaps that residential independence is less closely coupled to labor force entry among Estonians (though the proportions are overall not exceeding .15 for men and .25 for women).

In most cases patterns of age congruity are thus quite similar among Estonians and different to those of native Russians, indicating that Russian-origin migrants' pairs of life course transitions follow a prescribed order more common in the Estonian than in the Russian context. There are, however, some transition pairs whose order are distinct for Russian-origin migrants – that is the age congruity is similar to native Russians (this is the case for the transition pair "Education completion – Residential independence" for men and the transition pair "Residential independence – Parenthood" for women, for example) or the age congruity is lower than those of native Estonians (this is the case for the transition pair "Education completion – Labor force entry" for men and women, for example).

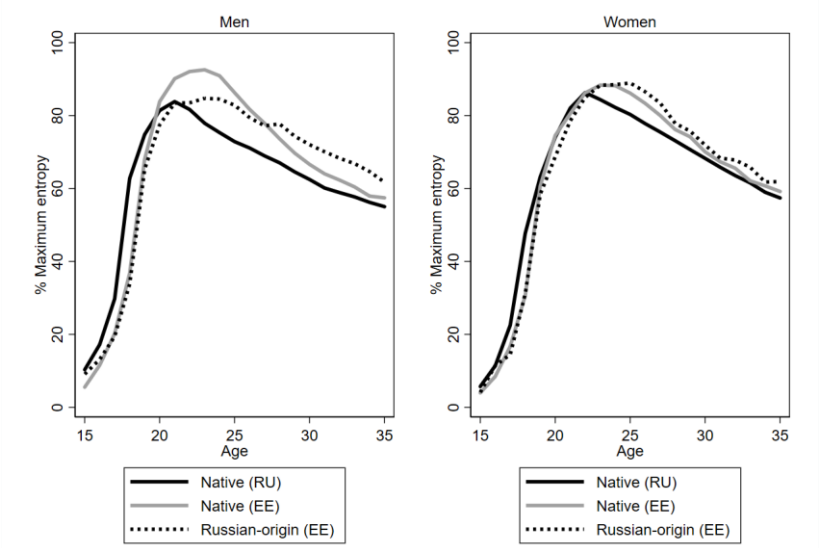
3.3 Heterogeneity

Figure 4 shows the normalized entropy index values by migrant status and sex. This way it is possible to identify and compare when the transition to adulthood begins and ends, as well as when it reaches its maximum intensity. The ages closer to childhood and in the first years of adolescence (when most of the people are concentrated in a combination of specific life course statuses: student, not in the labor force yet, not residentially independent, not ever been in union, and no children) the normalized entropy indices are always the lowest. As age advances and people change their status, assuming new social roles, generally at some point in their youth, the entropy rates begin to increase until reaching their peak, which characterizes the age in which there is greater life course heterogeneity.

For men, differences in life course heterogeneity already start before age 20, albeit quite small. At age 20 the entropy index reaches a peak for native Russian men, to strongly decrease afterwards. For native Estonian men, heterogeneity increases also after age 20 to reach a plateau between around age 22 and 25 to then decrease. By age 35, heterogeneity

among both native Estonian men and native Russian men is quite similar. For Russian-origin men there is a peak after age 20, the decrease starting afterwards with a more gradual levelling off. In sum, there are three quite distinct heterogeneity patterns after age 20 among men in the three groups – Russian-origin men resembling neither native Estonian nor native Russian men. For women, heterogeneity peaks among native Russian women around age 23, whereas it keeps increasing for both native Estonian women and Russian-origin women until age 25 to then steadily decrease until age 35. By age 35, life course heterogeneity is quite similar across all three groups. In sum, Estonian and Russian women present different patterns, but there is much more congruence in life course heterogeneity among native Estonian women and Russian-origin women.

Figure 4 Age-specific percentage of maximum entropy by migrant status; Men and women



Source: Census data of 2010 from IPUMS and 2011 from Statistics Estonia. Own calculations.

Tables 2 and 3 evaluate how much each life course status contributes to the total entropy, separately for men and women and migrant status, by analyzing the decrease in

Table 2 Average percentage decrease in the entropy index due to omitting one status; Men

Age	Without residential independence			Without education completion			Without labor force entry			Without union entry		
	Native (RU)	Native (EE)	Russian - origin (EE)	Native (RU)	Native (EE)	Russian - origin (EE)	Native (RU)	Native (EE)	Russian - origin (EE)	Native (RU)	Native (EE)	Russian - origin (EE)
15	7.9	4.8	4.6	9.6	5.0	10.0	6.9	4.3	5.2	5.3	3.2	3.0
16	10.7	6.9	7.0	14.8	11.8	14.3	10.8	6.7	6.0	8.2	4.9	4.6
17	15.3	9.5	6.0	24.3	19.8	21.0	18.5	11.4	9.7	11.9	6.7	4.2
18	**37.5**	18.5	13.4	**45.7**	**32.5**	**28.6**	**41.0**	**26.7**	21.6	**27.4**	16.1	9.1
19	**33.9**	**28.5**	**27.9**	**49.6**	**49.7**	**50.0**	**48.4**	**43.2**	**41.0**	**27.8**	20.9	19.0
20	**30.8**	**36.0**	**30.8**	**49.3**	**56.1**	**53.5**	**49.6**	**52.5**	**51.5**	**29.8**	**28.1**	21.2
21	**28.7**	**35.8**	**32.5**	**47.2**	**55.2**	**53.5**	**45.9**	**55.1**	**56.2**	**32.0**	**30.9**	**24.7**
22	**25.8**	**34.1**	**30.1**	**40.6**	**53.3**	**48.7**	**38.3**	**53.9**	**54.9**	**33.4**	**31.4**	22.8
23	24.6	**32.5**	**28.3**	**33.7**	**49.8**	**43.0**	**30.1**	**51.3**	**51.0**	**34.7**	**32.7**	**25.4**
24	**25.1**	**30.5**	**26.9**	**28.8**	**45.2**	**37.5**	25.0	**47.2**	**47.3**	**36.4**	**33.9**	**26.2**
25	**25.6**	**27.2**	**26.3**	24.6	**38.0**	**32.0**	21.5	**41.8**	**43.8**	**36.7**	**33.6**	**27.6**
26	**26.3**	24.2	**24.5**	21.4	**32.1**	**26.9**	20.3	**38.1**	**41.4**	**35.9**	**33.4**	**27.1**
27	**27.1**	22.6	23.3	18.9	**28.3**	21.8	19.3	**35.5**	**40.1**	**34.8**	**33.6**	**28.1**
28	**27.4**	20.0	23.7	17.2	**25.4**	21.6	19.0	**33.3**	**40.8**	**32.9**	**33.1**	**30.5**
29	**27.4**	18.1	20.8	15.1	21.7	18.5	18.4	**31.4**	**37.6**	**30.9**	**31.6**	**29.9**
30	**27.7**	16.3	20.0	13.8	20.4	15.2	18.4	**31.6**	**36.7**	**28.9**	**30.9**	**29.4**
31	**27.4**	15.5	19.8	12.5	18.8	13.8	18.3	**30.2**	**36.8**	**26.6**	**30.9**	**29.6**
32	**27.2**	14.7	19.0	11.8	17.1	13.6	18.9	**30.0**	**37.3**	24.9	**30.4**	**29.2**
33	**26.9**	13.8	17.4	11.0	15.5	12.6	18.9	**29.1**	**34.9**	24.2	**28.7**	**27.0**
34	**26.7**	13.2	17.3	10.5	13.8	9.3	19.1	**27.6**	**35.4**	22.6	**27.7**	**27.7**
35	**26.7**	13.0	16.6	9.5	13.5	7.7	19.4	**29.5**	**34.9**	21.6	**27.9**	**26.7**

Source: Census data of 2010 from IPUMS and 2011 from Statistics Estonia. Own calculations.
Note: When the observed change is higher than the expected value (= 25%), the value is marked in bold.

Table 3 Average percentage decrease in the entropy index due to omitting one status; Women

Age	Without residential independence			Without education completion			Without labor force entry			Without union entry			Without Parenthood		
	Native (RU)	Native (EE)	Russian -origin (EE)	Native (RU)	Native (EE)	Russian -origin (EE)	Native (RU)	Native (EE)	Russian -origin (EE)	Native (RU)	Native (EE)	Russian -origin (EE)	Native (RU)	Native (EE)	Russian -origin (EE)
15	4.0	2.7	1.5	2.9	1.6	3.7	1.7	1.2	1.0	0.2	0.3	0.0	0.5	0.1	0.0
16	5.7	3.3	3.7	5.3	5.7	9.1	3.0	2.8	4.8	1.8	1.2	1.0	1.4	1.0	2.2
17	9.9	6.0	4.5	9.1	7.4	9.5	6.5	5.1	3.7	4.0	2.8	1.6	2.8	3.5	1.6
18	**26.1**	10.5	11.9	14.4	11.6	15.5	16.7	12.1	14.0	9.3	6.3	5.1	5.7	4.8	6.2
19	**26.1**	**24.3**	**20.2**	**20.1**	**26.8**	**29.3**	**24.9**	**23.6**	**23.2**	13.4	13.1	10.8	8.8	9.6	9.9
20	**26.3**	**27.6**	**24.7**	**23.5**	**29.7**	**31.9**	**29.2**	**30.8**	**29.7**	16.8	19.1	13.8	11.8	14.0	13.7
21	**27.1**	**28.4**	**27.4**	**26.0**	**31.2**	**34.6**	**30.8**	**33.8**	**35.1**	19.4	**22.1**	**19.1**	15.2	17.2	18.6
22	**28.2**	**26.6**	**25.9**	**28.4**	**33.2**	**33.4**	**30.6**	**35.1**	**36.1**	**21.7**	**24.3**	**21.1**	19.3	19.9	**20.8**
23	**28.8**	**25.1**	**26.3**	**24.8**	**34.1**	**34.3**	**27.8**	**34.4**	**37.5**	**22.0**	**25.4**	**23.4**	**21.4**	**22.7**	**24.5**
24	**29.4**	**24.4**	**25.5**	**21.2**	**33.7**	**31.3**	**26.3**	**34.3**	**36.7**	**21.3**	**26.4**	**25.7**	**22.4**	**25.7**	**27.1**
25	**29.8**	**21.8**	**25.6**	18.8	**31.1**	**30.0**	**25.9**	**32.0**	**36.3**	**20.3**	**26.6**	**26.8**	**23.3**	**27.2**	**29.4**
26	**30.1**	19.7	**23.7**	16.6	**29.2**	**26.8**	**25.9**	**31.5**	**35.4**	18.8	**26.8**	**26.3**	**23.0**	**27.8**	**29.4**
27	**30.3**	17.4	**22.0**	15.3	**26.9**	**24.2**	**25.8**	**31.1**	**35.9**	17.9	**26.0**	**26.5**	**22.6**	**27.8**	**29.6**
28	**30.3**	15.5	**19.0**	14.1	**24.3**	**20.7**	**25.9**	**30.7**	**34.5**	17.0	**25.2**	**25.2**	**21.9**	**26.5**	**26.9**
29	**29.6**	14.9	18.6	13.1	**23.6**	**19.1**	**25.4**	**31.3**	**34.7**	16.0	**25.3**	**25.3**	**21.0**	**25.5**	**25.1**
30	**29.3**	12.9	17.1	12.1	**21.5**	16.4	**24.7**	**31.3**	**33.5**	15.4	**24.2**	**25.7**	**20.7**	**23.9**	**23.0**
31	**28.7**	11.9	15.3	11.7	19.8	15.2	**24.7**	**30.5**	**32.7**	14.7	**23.1**	**24.7**	19.3	**22.5**	**21.1**
32	**28.4**	11.1	14.9	11.3	20.0	16.4	**24.1**	**31.3**	**32.3**	14.1	**23.8**	**23.8**	18.4	**21.8**	**20.6**
33	**27.7**	9.9	14.6	10.8	17.7	13.8	**23.8**	**29.2**	**32.8**	13.4	**23.2**	**24.4**	17.5	19.1	**20.3**
34	**27.1**	10.3	13.0	9.9	17.1	13.1	**23.2**	**29.5**	**32.8**	12.7	**22.8**	**23.6**	16.6	18.3	17.8
35	**26.9**	10.5	13.3	9.6	16.2	14.5	**22.5**	**28.5**	**32.2**	12.3	**22.5**	**22.9**	16.6	17.7	17.9

Source: Census data of 2010 from IPUMS and 2011 from Statistics Estonia. Own calculations.

Note: When the observed change is higher than the expected value (= 20%), the value is marked in bold.

entropy when one of the status variables is removed from the index as a percentage of the maximum decrease associated with removing that status. The values in bold indicate a higher than expected percentage change when the particular life course status is omitted. The findings confirm that education and labor force statuses are those that produce the greatest heterogeneity – for men and women as well as for native Russians, native Estonians, and Russian-origin migrants, suggesting that across groups a main component of the increase in heterogeneity lies in the transition from school to employment. The contribution of union entry starts contributing relatively more to life course heterogeneity only after age 25.

Among men, the contribution of employment to life course heterogeneity steadily drops after age 20 for native Russian, whereas the decline for both native Estonians and Russian-origin migrants happens much more gradually and employment continues an important contributing factor until age 35. Similarly, the contribution of education to heterogeneity reaches a peak at age 20 for all men but then differences between native Russians and Estonians (both natives and Russian-origin migrants) start to occur. As regards union entry, the contribution is lower in the twenties but then continues to increase until age 25 to then also gradually decrease for Estonians (both natives and Russian-origin migrants) but not for Russians. For the latter, union entry contributes significantly at ages 28 through 31. While Russian-origin migrants show a similar age pattern to their native Estonian peers, the contribution potential of union entry is higher among native Estonians at each age. Conversely, the contribution of residential independence is restricted to the ages 19 through 26 for native Estonians and Russian-origin migrants; native Russian men

experience higher levels of heterogeneity due to household headship until age 35 than their counterparts in Estonia.

Among women, the contribution of education to life course heterogeneity – across migrant groups - is very similar to those of men. An important gender difference emerges in the contribution of employment: it is quite prolonged across almost the whole age range (ages 19 through 35) for native Russians, Estonians, and Russian-origin migrants alike. Conversely, the union entry contribution is very clearly limited to the ages 22 through 25 for native Russian women; Estonian women (both native and Russian-origin) experience higher levels of heterogeneity due to union entry until age 35. The transition to parenthood contributes to the increased life course heterogeneity mainly of women in their twenties, with the exception of both native Estonians and Russian-origin migrants where it stays important until the early thirties. For women after the age of 30 the contribution of parenthood transition to overall heterogeneity declines, as by then an increasing proportion of young women already have a child.

4. Summary

Using census data from Estonia and Russia in 2010 and 2011, this study provided an origin-destination comparison of second-generation Russian migrants' transition to adulthood. We specifically addressed how similar or dissimilar second-generation Russian migrants in Estonia are compared to both native Estonians and Russia – with respect to the timing, sequencing, and heterogeneity of life course events. Overall, there are signs of similarity in the transition to adulthood among second-generation Russian migrants and native Estonians, particularly relating to family transitions (union entry and parenthood); dissimilarity in the transition to adulthood among second-generation Russian migrants,

native Estonians, and native Russians mainly plays out in non-family transitions (education completion, labor force entry, and residential independence).

With regard to timing, the results suggest that the congruence in life course timing among second-generation Russian migrants and native Estonians is more pronounced for women. The timing profiles in the transition to adulthood are also notably similar between second-generation Russian migrants and native Estonians aged 25 and younger (i.e., men and women of the birth cohorts 1985 and older, who have been largely socialized in post-Soviet Estonia). With regard to sequencing, the results are twofold. First, the similarities in terms of ordered/ unordered life course transitions among second-generation Russian migrants and native Estonians are more pronounced for men. There is no such clear sequencing pattern visible for women, in fact the proportion of ordered/ unordered life course transitions are quite similar among all the groups (second-generation Russian migrants, native Estonians, and native Russians). Second, the similarities in terms of age congruity among second-generation Russian migrants and native Estonians, particularly in the family realm, are evident for both men and women, suggesting that second-generation Russian migrants' life course transitions follow a synchronized order more common in the Estonian than in the Russian context. With regard to heterogeneity, we see some evidence for similarity between second-generation Russian migrants and native Estonians, but much more clearly for women. The remaining dissimilarity in life course heterogeneity between groups (second-generation Russian migrants, native Estonians, and native Russians) occurs as a result of the transition from school to employment.

The results thus suggest that there is increased homogeneity in the transition to adulthood between ethnic groups – that is second-generation Russian migrants and native

Estonians – within the Estonian context, although, interestingly, young men seem to have adopted the less uniform timing, sequencing, and heterogeneity schedules in education completion and labor force entry relative to their native Estonian peers. To some extent the latter finding relates to prior research: second-generation Russian migrants are overrepresented in blue-collar occupations, have higher rates of unemployment and job precarity, and have lower gains from educations than Estonians (e.g., Tammaru and Kulu 2003; Leping and Toomet 2008; Saar and Helemäe 2017) – leading authors to conclude that the (structural) integration of Russian-origin migrants is still incomplete thirty years after Estonian independence (e.g., Tammaru and Kontuly 2011; Rahnu et al. 2015; Puur et al. 2018;). On the other hand, prior research has also highlighted that particularly second-generation Russian migrant men resemble native Estonians in terms of transition rates to first union as well as transition rates to first union dissolution (Rahnu et al. 2015). Our results on men's timing in the transition to adulthood are somewhat at odds with this – although there are notably signs of convergence also among men in terms of synchronized sequencing.

The census data for Estonia and Russia provide a unique opportunity for analyzing the timing, sequencing, and heterogeneity of key demographic events shaping the transition to adulthood among second-generation Russian migrants in Estonia. Specifically, the origin-destination comparison between the patterns experienced by three different native-migrant groups (native Russians, native Estonians, and second-generation Russian migrants), can shed light on the role of the institutional context and cultural factor transmitted from parents to children. As a caveat it needs to be added that Russian migrants in Estonia may not be strictly considered as a non-selected group and it is difficult to distinguish deeply

rooted cultural traits (in terms of the transition to adulthood) from other norms that may emerge among immigrants as a reaction to the migration process itself. Despite these limitations, however, this study gives an important first holistic insight into the transition to adulthood of the Russian second generation in Estonia.

5. Acknowledgements

The author wishes to acknowledge the statistical office that provided the underlying data making this research possible: Federal State Statistics Service, Russia; Statistics Estonia, Estonia.

6. References

Baykara-Krumme, H., & Milewski, N. (2017). Fertility patterns among Turkish women in Turkey and abroad: The effects of international mobility, migrant generation, and family background. *European Journal of Population*, 33(3), 409-436.

Bernard, A., Bell, M., & Charles-Edwards, E. (2014). Life-course transitions and the age profile of internal migration. *Population and Development Review*, 40(2), 213-239.

Billari, F. C., & Liefbroer, A. C. (2010). Towards a new pattern of transition to adulthood? *Advances in Life Course Research*, 15(2-3), 59-75.

Chaloupková, J. (2010). The De-standardisation of Early Family Trajectories in the Czech Republic: A Cross-cohort Comparison. *Sociologický časopis/Czech Sociological Review*, 46(03), 427-451.

Ferrari, G., & Pailhé, A. (2017). Transition to adulthood in France: Do children of immigrants differ from natives? *Advances in Life Course Research*, 31, 34-56.

Fussell, E. (2005). Measuring the early adult life course in Mexico: An application of the entropy index. *Advances in Life Course Research*, 9, 91-122.

Fussell, E., Gauthier, A. H., & Evans, A. (2007). Heterogeneity in the transition to adulthood: The cases of Australia, Canada, and the United States. *European Journal of Population*, 23(3), 389-414.

Glick, J. E. (2010). Connecting complex processes: A decade of research on immigrant families. *Journal of Marriage and Family*, 72(3), 498-515.

Grant, M. J., & Furstenberg, F. F. (2007). Changes in the transition to adulthood in less developed countries. *European Journal of Population*, 23(3), 415-428.

Hannemann, T., & Kulu, H. (2015). Union formation and dissolution among immigrants and their descendants in the United Kingdom. *Demographic Research*, 33, 273-312.

Huschek, D., de Valk, H. A., & Liefbroer, A. C. (2012). Partner choice patterns among the descendants of Turkish immigrants in Europe. *European Journal of Population*, 28(3), 241-268.

Huschek, D., Liefbroer, A. C., & de Valk, H. A. (2010). Timing of first union among second-generation Turks in Europe: The role of parents, peers and institutional context. *Demographic Research*, 22, 473-504.

Impicciatore, R., Gabrielli, G., & Paterno, A. (2020). Migrants' fertility in Italy: A comparison between origin and destination. *European Journal of Population*, 1-27.

Kleinepier, T., de Valk, H. A., & van Gaalen, R. (2015). Life paths of migrants: A sequence analysis of Polish migrants' family life trajectories. *European Journal of Population*, 31(2), 155-179.

Leping, K. O., & Toomet, O. (2008). Emerging ethnic wage gap: Estonia during political and economic transition. *Journal of Comparative Economics*, 36(4), 599-619.

Lübke, C. (2015). How migration affects the timing of childbearing: The transition to a first birth among polish women in Britain. *European Journal of Population*, 31(1), 1-20.

Minnesota Population Center (2020). Integrated Public Use Microdata Series, International: Version 7.3 [dataset]. Minneapolis, MN: IPUMS. https://doi.org/10.18128/D020.V7.2

Modell, J., Furstenberg Jr, F. F., & Hershberg, T. (1976). Social change and transitions to adulthood in historical perspective. *Journal of Family History*, 1(1), 7-32.

Pailhé, A. (2015). Partnership dynamics across generations of immigration in France: Structural vs. cultural factors. *Demographic Research*, 33, 451-498.

Puur, A., Rahnu, L., Abuladze, L., Sakkeus, L., & Zakharov, S. (2017). Childbearing among first-and second-generation Russians in Estonia against the background of the sending and host countries. *Demographic Research*, 36, 1209-1254.

Puur, A., Rahnu, L., Sakkeus, L., Klesment, M., & Abuladze, L. (2018). The formation of ethnically mixed partnerships in Estonia: A stalling trend from a two-sided perspective. *Demographic Research*, 38, 1111-1154.

Rahnu, L., Puur, A., Sakkeus, L., & Klesment, M. (2015). Partnership dynamics among migrants and their descendants in Estonia. *Demographic Research*, 32, 1519-1566.

Saar, E., & Helemäe, J. (2017). The role of economic and cultural resources in the intergenerational transmission of education in Estonia. In: J. Erola & E. Kilpi-Jakonen (Eds.). *Social Inequality Across the Generations,* (pp. 27-47). Edward Elgar Publishing.

Statistics Estonia (2011). Eesti rahvastik rahvaloenduste andmetel [Population of Estonia by Population Census; dataset]. Tallinn, Estonia.

Statistics Estonia (2021). Statistics Estonia statistical database [electronic resource]. Tallinn, Estonia. http://pub.stat.ee/px-web.2001/dialog/statfile2.asp.

Tammaru, T., & Kontuly, T. (2011). Selectivity and destinations of ethnic minorities leaving the main gateway cities of Estonia. *Population, Space and Place*, 17(5), 674-688.

Tammaru, T., & Kulu, H. (2003). The ethnic minorities of Estonia: Changing size, location, and composition. *Eurasian Geography and Economics*, 44(2), 105-120.

Tian, F. F. (2016). Transition to adulthood in China in 1982–2005: A structural view. *Demographic Research*, 34, 451-466.

Van den Berg, L., & Verbakel, E. (2021). Trends in singlehood in young adulthood in Europe. *Advances in Life Course Research*, 100449.

Van Mol, C., & de Valk, H. (2016). Migration and immigrants in Europe: A historical and demographic perspective. In: B. Garcés-Mascareñas & R. Penninx (Eds.). *Integration Processes and Policies in Europe*, (pp. 31-55). Springer.