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VALUE ADAPTATION TO A NEW SOCIAL ENVIRONMENT: IMPACTS FROM COUNTRY OF BIRTH AND COUNTRY OF RESIDENCE ON VALUES OF INTRA-EUROPEAN MIGRANTS

BASIC RESEARCH PROGRAM

WORKING PAPERS

SERIES: SOCIOLOGY
WP BRP 13/SOC/2013

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VALUE ADAPTATION TO A NEW SOCIAL ENVIRONMENT: IMPACTS FROM COUNTRY OF BIRTH AND COUNTRY OF RESIDENCE ON VALUES OF INTRA-EUROPEAN MIGRANTS[2]

This paper challenges the common assumption that basic human values remain stable during the lifetime of an individual. The author demonstrates individual value change by studying migrants' values which are prone to change after a move to a new country. Using cross-sectional data, the author estimated the relative impacts of country of birth and country of residence – and values that are common – on individual values of migrants. Values were measured by Schwartz's questionnaire as well as Inglehart's Self-Expression items. Cross-classified multilevel regression models were applied to the sample of migrants, selected from five rounds of the European Social Survey. The results demonstrated the significance of both the country of residence and the country of birth as well as values which are common in these countries. Surprisingly, the impact of the country of residence on migrants' values appeared to be higher than the country of birth. Furthermore, values which are common in the country of residence have a higher impact on migrant values than values widespread in their country of birth. The findings suggest that values are only partly formed during the formative period and keep changing throughout a person's life.

JEL Classification: Z10.
Keywords: basic values, cross-classified multilevel model, value change, value adaptation, intra-European migrants, European Social Survey

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[2] The author is grateful to Vladimir Magun for the idea for this paper and useful suggestions, as well as to Tatiana Khavenson, Sandy Ross and David Connolly for their helpful comments. Work on this paper was supported by the Basic Research Program at the National Research University Higher School of Economics.

INTRODUCTION

Change in basic human values has always been a tricky question since values, by definition, are relatively stable (Rokeach, 1973, Hitlin & Piliavin, 2004) compared to norms and attitudes, and because values "transcend specific situations" (Schwartz, 1992, p.4). However, evidence on individual and cultural value change keeps increasing (see Kohn & Schooler, 1982; Inglehart, 1997; Schwartz & Bardi, 1997, Bardi, Lee, Towfigh, & Soutar, 2009). Indeed, basic values are stable given static individual circumstances and a frozen society. But this never happens, for instance, the dominant culture may change during an individual's lifespan. Which would define an individual's values – the society into which one was born or one's current social environment?

Individuals born in a given society have socially determined tendencies to share values that are widely disseminated in that society, their social networks and family. This constitutes individual path dependency, or value inheritance. Most researchers assume the relative stability of basic values after a "formative period" (for a review see Hitlin & Piliavin, 2004). Alwin and Krosnick (1991) developed the impressionable-years and the ageing-stability hypotheses that support the idea of a formative period, or primacy, which states that values change and develop until early adulthood and they become more and more stable during the rest of a person's lifetime. Inglehart (1997, Inglehart & Baker, 2000) mentions the economic development of an individual's country and the dominant culture in which an individual was socialized during his/her formative period.

Yet societies can change quite rapidly. Or, in the case of migration, individuals change their socio-cultural environments in an extreme way. These new socio-cultural conditions may affect individuals' values. Thus, inherited values and values transmitted by the society to which migrants move may conflict, changing an individual's values. In the contemporary world where societal and cultural change is increasingly accelerated, and transportation and migration become much easier, an individual must react to these "liquid" conditions (see Bauman, 2000); people must be able to change not only their behavior, but their attitudes and perhaps deeper aspects of their personality, such as their values.

Thus, the idea of a formative period clearly contradicts the idea of rapidly changing societies and an emerging need for value adaptation. Our paper investigates whether personal values are attached to an inherited culture or can change significantly during an individual's life, and whether the main effect on values is limited by person's formative years.

A clear difference between an inherited culture and a current cultural environment can be found among migrants. Migrants are the rare case in which these two sources of values are explicit, and hence measureable. This is the reason why we focus our study on migrants. In a recent paper Schiefer (2012) demonstrated in regard to group-related attitudes that "individuals with migration background are less strongly guided by the cultural values of the society in which they live, because they are additionally exposed to cultural values originating from their heritage culture" (p.1). The purpose of our study is to identify the degree to which migrants' values are determined by their country of birth and the country of their current residence, as well as the values in the birth country and country of their residence.

Bardi & Goodwin (2011) suggested that people are likely to adapt new values in the ways activated by new social environments and leading to the acceptance of the prevalent values. They also suggested calling this "value adaptation". By value adaptation we mean an individual's values change after moving from one culture to another, and the consequent replacement of the values close to the ones common in their country of birth, with ones common in their country of residence.

The question of migrants' values, attitudinal and behavioral stability during their lifetime is considered mostly within the framework of Berry's theory of acculturation (Berry, 1984, 1986, Sam & Berry, 2010). Acculturation involves a wide range of psychological processes that take place after a person moves to a new country or culture. It includes changes of attitudes, values, identities, acquiring new social skills and norms, changing reference groups and membership, and the emergence of an emotional attachment to the changed environment. Since acculturation is not limited to value change, this approach can be applied to the study of values with some limitations. First, value adaptation does not necessarily mean successful acculturation (Masgoret & Ward, 2006), but can be viewed as an indicator of successful assimilation.[3] Therefore, a second limitation is that value adaptation can be an indicator of only one type of acculturation, namely assimilation, it is not indicative of the other acculturation types. This does not constrain our study to a certain circle of migrant groups, since it seems to be a mainstream way of acculturation in Europe:

> *"most nations… tend to have an assimilation ideology, which implies that immigrants are expected to abandon their cultural… distinctiveness and adopt the core values of the host society… this tendency has become stronger after "9/11," particularly in Europe"*
>
> (Van Oudenhoven, 2006, p.170).

[3] Assimilation takes place "when individuals do not wish to maintain their cultural identity and seek daily interaction with other cultures" (Berry, 2006, p.35). Its key proposition is that the immigrants, become over time more similar to the native population in norms, values, and behaviors (Gordon, 1964).

Hypotheses

So far, some key hypotheses can be stated. We distinguish the effects of the country that has many characteristics, and values in a country that are particular features of the country itself. Variability of individuals' values is our main interest, so our first hypothesis is very general:

H1. Migrants' values depend both on the country of residence and the country of birth.

If this hypothesis turns out to be true, a more specific statement can be proposed; it considers the values of a country, which is a specific part of the country effect.

H2. Migrants' values depend on values common both in the country of residence and the country of birth.

Based on a general consensus in literature (Alwin & Krosnick, 1991, Inglehart, 1997; Hitlin & Piliavin, 2004) considering the low change in values during a person's lifetime and the conception of a "formative period", which postulates the formation of values in early years and their stability during the rest of individual's life, it is reasonable to expect the following:

H3. Migrants' values are determined by country of birth to a higher degree than by country of residence.

If migrants' country of birth itself has a higher impact on migrant values, it is reasonable to state that values in this country have a higher impact on migrants' values.

H4. Migrants' values are determined by values in their country of birth to a higher degree than by values common in their country of residence.

Background and moderating factors

Our hypotheses reflect the relations between the two types of variables involved in the process of acculturation and, as we suggest, in value adaptation (see figure 1): first, group-level variables, including the country of birth and the country of residence, and second, variables that reflect the results of acculturation, namely, the socio-cultural and the psychological adaptation of migrants, which is expressed in values, attitudes and social norm change. Beside these Berry (2006) allocates moderating variables, which are able to facilitate or impede the process of adaptation (social background, duration of staying in a new country, citizenship, etc.). Moderating variables can also have an independent impact on acculturation. To be able to test our hypotheses we must consider moderators that can predetermine effects of countries.

Important moderators are the values themselves. Values in the country of birth can moderate the effects of values in the country of residence. For instance, a high spread of Openness values in the country of birth may either increase the migrant's adaptation to the host nation's commonly higher level of importance of Openness.

Individual-level predictors of acculturation are well-studied and can be applied to our model of value adaptation as well. The most straightforward moderator is the time that migrants have spent in new countries. The longer migrants live in a new country the closer their values are to the ones there and the farther from values in their country of birth (Szapocznik, 1975).

Among intra-European migrants there are people who have a connection with their new country before moving there. Migrants whose parents were born in the country of migrant's current residence experience less stress and do not have to give much effort to adapt to values in the new country because of the cultural connections and identification with this country before moving. Such migrants can be labeled repatriates. They can also adapt to the new values after moving but much more easily than the non-repatriates. Being a repatriate strengthens the effect of values in the country of residence and weakens the impact of values of the originating country.

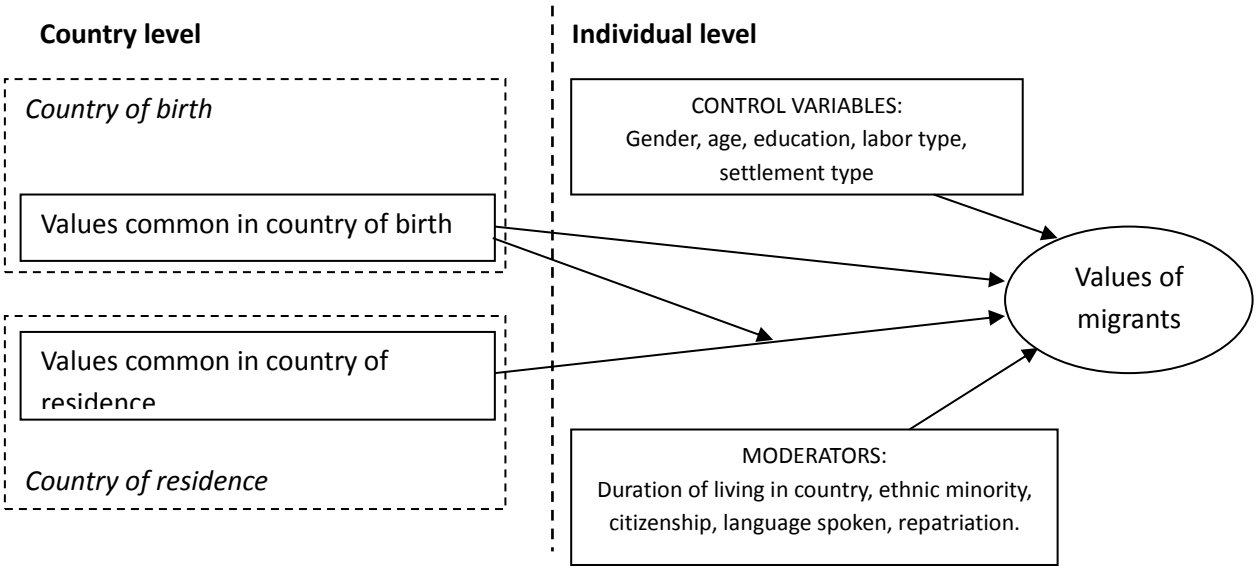
Language must be taken into account when studying acculturation. Migrants' language equivalence to the official language of their country of current residence can have two sources. This could happen naturally, for instance if a German citizen moves to Austria. Or a person could conform to the dominant culture and change their spoken language. In both cases, when migrants' language matches one of the official languages of their new country, it facilitates the acculturation process and value adaptation particularly.

There are also ethnic barriers, namely, self-identification as a member of an ethnic minority, which can show either a strong connectedness to a migrant's original culture or difficulties in adaptation, or both. It is reasonable to expect that migrants who report themselves as belonging to an ethnic minority are affected by the values of the originating country and experience difficulties in adapting to the values of the country of residence.

Citizenship status in the country of residence can affect rights to live, work and vote. Citizenship status may have psychological impacts that affect migrants' identities. So, the closer the official status of a migrants is to a full citizenship, the higher the possibility of their smooth adaptation. Obtaining the citizenship makes a migrant feel attached to the country of residence, and weakens their identification with their country of birth. In other words it increases the effect of values in the country of residence and decreases the ones of the country of birth.

It is important to use all available control variables, since migrants are usually very heterogeneous groups. There are large differences between migrant-laborers and international non-manual workers, between migrants to rural places and to urban ones, between Muslim, Eastern Orthodox and the other religious groups of migrants. These variables, as well as all listed above are controlled for when testing our key hypotheses.

Figure 1. Value adaptation in the theory of acculturation framework (modified chart of Berry, 2006)



To test the hypotheses concerning the impact of the country of residence and the country of birth we will first conduct an analysis of variance, which is a standard "empty model step" in a multilevel analysis. Analysis of variance provides a size and relative size of between-country variances for both country of residence and country of birth. Second, hypotheses 2 and 4 will be tested, which concern the effects of values in the country of residence and the country of birth on migrant's individual values. For that we will provide zero-order correlations of country averages, and then will turn to a full cross-classified regression with all the interactions, moderator and control variables included. And in the final section we will check the robustness of our results taking into account the role of the formative period and cross-value connections.

DATA AND METHOD

Sample

We used data from five rounds of European Social Survey (ESS) gathered in 2002-2010 (Jowell et al., 2007), comprising 232,973 respondents in 34 countries. Davidov (2008) identified only tiny changes in values during short periods of time, so it is justifiable to pool them. From this data we constructed a subsample of migrants (N=11220) of maximum possible size, using all five ESS rounds because the number of migrants in single rounds was insufficient. Respondents were chosen using two criteria. First they do not live in the country where they were born; second, they were born in one of the countries included in the ESS, which means we have value scores for both country of birth and country of residence.

Every person who was not born in their current country of residence was considered as migrant, regardless of what age they had come to live there. We did not consider whether migrants spent their "formative years" in birth countries or not. To control for the "formative period" as well as for the fact that family indirectly connects migrants with cultures of birth, we consider the duration of stay in the country of residence and age in our analyses. A special discussion and test of "formative years" effects are presented in our robustness tests.

The output sample includes 43% males, 44% of people occupied with non-manual labor, 42% of respondents live in big cities by respondent's judgment, 11% have status of repatriates. The sample is unbalanced by age groups as well, 15-30 years – 16%, 31-59 years – 52%; 60 and over – 32%. Generally, such an age structure is typical for migrants (Eurostat, 2011a, p. 29).

Some groups of migrants are over- or under-represented in the sample, which is a result of migration trends and divisions between of immigrant versus emigrant countries (see table 1). For instance, migrants to Switzerland and Germany are over-represented in the sample, since these countries are major receivers of intra-European migrants. Contrarily, migrants to Romania and Turkey are under-represented because these countries are not popular migration destinations. For similar reasons, migrants from Russia, Germany and Poland are over-represented, and migrants from Luxembourg and Cyprus are under-represented. Such sample bias reflects patterns of European migration flows very well. Eurostat (2011, p.23) confirms that "the largest numbers of foreign-born persons reside in Germany, France, the United Kingdom, Spain and Italy". However, sample bias may potentially affect the results of our analyses, making them more reliable for over-represented groups of migrants and less reliable for under-represented ones. To avoid such bias, we used a number of controlling variables.

Since 45% of overall European migration is intra-European migration between 2002 and 2008 (Eurostat, 2011), our sample is representative of half of all European migration.

Table 1. Sample sizes of migrants born in one of the 34 European countries and moved to another of these countries

	Was born in…	Currently lives in…
Austria	156	349
Belgium	155	502
Bulgaria	133	40
Croatia	277	42
Cyprus	20	131
Czech Republic	228	196
Denmark	111	198
Estonia	56	1114
Finland	228	163
France	589	274

Germany	1078	923
Greece	102	275
Hungary	145	117
Iceland	22	9
Ireland	91	834
Israel	17	1042
Italy	541	21
Latvia	84	206
Lithuania	111	54
Luxembourg	16	455
Netherlands	212	279
Norway	67	294
Poland	687	71
Portugal	427	132
Romania	545	6
Russia	2376	158
Slovakia	207	168
Slovenia	46	238
Spain	189	253
Sweden	194	486
Switzerland	73	1239
Turkey	590	23
Ukraine	673	589
United Kingdom	773	341
Total	11220	11220

Value measures

We employed Schwartz's approach to the measurement and conceptualizing of human values. Following Schwartz, "values (1) are concepts or believes, (2) pertain to desirable end states or behaviors, (3) transcend specific situations, (4) guide selection or evaluation of behavior and events, and (5) are ordered by relative importance. They…differ from attitudes primarily in their generality or abstractness and in their hierarchical ordering by importance". (Schwartz, 1992, p.4). Values differ by the type of goal that they express, so values can be differentiated by an underlying goal. Schwartz derived ten distinct values, namely Universalism, Benevolence, Self-Direction, Stimulation, Hedonism, Achievement, Power, Security, Tradition and Conformity. Values are organized into a system of dynamic relationships, which is found in many cultures around the world and which is represented with a Schwartz's circle. Closely related values can be combined into higher order values, that is, Conservation, Openness to Change, Self-Enhancement and Self-Transcendence, which in turn, can be combined into the two orthogonal higher order value dimensions Conservation – Openness to change, and Self-Enhancement – Self-Transcendence.

The ESS questionnaire includes a Portrait Values Questionnaire, an instrument developed by Schwartz (2010) to measure 10 basic human values. It consists of 21 value portraits of fictitious persons which should be evaluated by similarity with a respondent on the scale from "Very much like me" (1) to "Not like me at all" (6).[4] In order to provide measurement invariance between countries, Davidov, Schmidt, Schwartz (2008) proposed to aggregate these items into 7 instead of 10 indices. We employed even more aggregate measures of values, that is, higher-order values, Conservation, Openness to Change, Self-Enhancement and Self-Transcendence. This follows Schwartz's theory, which argues that values have a continuous structure which can be captured by indices of any level of integration, particularly by the four listed value categories. For a composition of the higher-order values see Appendix 1.

In addition to Schwartz's values we included another popular indicator of values, namely a widely known concept of Self-Expression which opposed Survival values developed by Inglehart and his colleagues (Inglehart, Baker, 2000, Inglehart & Welzel, 2005). This cultural dimension makes a strong link with the economic and democratic development of countries all over the world (Inglehart, 1997). The main source of the level of Self-Expression at the individual level has been argued to be a product of culture and socio-economic conditions and to be established during the formative period of an individual's life. To the best of our knowledge there is no evidence considering the sustainability of an individual's Self-Expression after the formative years and whether the level of Self-Expression can change in new cultural and economic conditions during an individual's lifetime. The framework of our analysis enables the testing of individual value change in new social environments.

Self-Expression was measured with 5 ESS items that are very close to the original World Values Survey items. Most ESS items replicate the original ones with minor differences, specifically, interpersonal trust was measured by the 11-point Likert scale instead of a dichotomous forced-choice question, participation in signing petitions was measured by behavioral question ("signed last 12 months") instead of behavior-attitudinal ("have done" or "might do" versus "would never do"), subjective happiness was measured by the 11-point scale, instead of the 4-point original version; the justification of homosexuality question had slightly different wording, but used the same 11-point agreement scale. The major difference was the Postmaterialism index, which was substituted with one item, namely "Government should reduce differences in income levels". Original items versus the ones used in the current study are listed in the Appendix 2. Inglehart and Welzel (2005) used the principal component analysis to

[4] For the current analysis the scale is reversed in such a way that the higher similarity (and consequent higher importance of value) relates to the higher scores of the indices. Every value index was centered in order to adjust scores for scale use bias (Schwartz, 2005).

construct a value index of Self-Expression, as well as another value dimension. Since we were interested only in Self-Expression, a summative index was composed. For this, the items described above were *z*-standardized and summated. The output index of Self-Expression correlates with the original one with 0.95 at the country level across European countries (N=30).

In summary we consider Conservation, Openness to Change, Self-Enhancement and Self-Transcendence values, and Self-Expression cultural syndrome as the variables of our interest.

Cross-classified multilevel regressions

Since our hypotheses consider independent variables belonging to the group level (country of current residence and country of birth), we employed a multilevel analysis. Countries of residence and countries of birth do not coincide among migrants by definition, and each respondent is nested both in the country of residence and the country of birth. So, every respondent is classified twice, and these two classifications are not hierarchical, they are cross-classifications. Ordinary multilevel regressions are of hierarchical nature, i.e. every next level's units are nested within the previous level units. It is not the case when two classifications are crossed – there are two independent groupings, country of residence and country of birth, which are not in hierarchical relations with each other. Thus, a cross-classified multilevel regression (CCMR) is the most appropriate for our purpose. CCMR distinguishes the variance of a dependent variable into three parts: variance across countries of residence, variance across countries of birth and the residual individual-level variance. A major strength of CCMR is its capability to estimate effects of variables linked to different classifications of individuals. In CCMR each part of the variance is reported, so the explanatory power of every independent variable on each level is demonstrated (Fielding, Goldstein, 2006).

There are few studies employing CCMR in a similar context. Zaccarin and Rivellini (2002) by means of CCMR found that regardless of a model specification, a woman's place of residence is a more important factor for predicting fertility than the place where these women spent their formative period. These authors took into account a woman's origin, but missed substantial characteristics such as the average fertility rate in a place of their origin. A similar approach was used by Luttmer & Singhal (2008), although they employed OLS-regressions instead of CCMR. These authors were interested in the sustainability of redistribution attitudes among intra-European migrants, and based their analysis on ESS data. In their analyses, Luttmer & Singhal took into account a migrant's country of birth and redistribution attitudes common in this country, but the country of residence was included just as a matter of fact, without any details. Dronkers & de Heus (2012) in their multilevel study of academic achievements of

migrant adolescents used substantive characteristics of both country of residence and country of origin. We find their approach to be the most constructive, since it does not assume the prevalence of impact of the country of residence or of the country of origin and tests it directly using both mere indication of countries and their substantial characteristics.

So, in order to evaluate the relative impact on migrants' values from their country of residence and their country of birth, as well as from values in these countries, we employed cross-classified multilevel regression, based on the fact that each migrant is nested in both the country of birth and the country of residence. Dependent variables in all the regression models are the individual-level migrants' values.

Country-level predictors

For indicators of migrants' value environment we used aggregated individual-level values. Since we are interested in the spread of certain types of individual values in countries, and not in cultural differences themselves, individual level values have been used instead of cultural values which are structured differently and have different labels in Schwartz's theory. We had to use individual value aggregates instead of cultural values, since there is evidence that "prevailing cultural orientations in societies are a determinant of mean individual values though not of individual differences in values" (Schwartz, 2010). Leung and Bond (2004) named group aggregates of individual-level values as "citizen scores" and Schwartz (2010) found them legitimate.

Country averages of value indices reflect not only cultural differences but the age and educational composition of a country's population. In order to get scores that demonstrate cultural and not structural differences between societies, we filtered out natives, i.e. persons who were born and still live in the same country, and computed regression coefficients for dummy variables of countries controlling for age, education and domicile, in which dependent variables were individual values of Conservation, Openness, Self-Transcendence, Self-Enhancement and Self-Expression. The coefficients are listed in Appendix 3. The regression coefficients of country dummy variables indicate how different this country is from the others in terms of importance of a certain value. It can also be said to express the impact of the country on the native people's values. It can be thought of as an adjusted country average, since these country effects correlate with averages of 0.85 or higher. To make the description simpler we call these scores "country of residence values" and "country of birth values". At the next step these regression coefficients have been assigned to every migrant twice – first as a variable representing country of residence values, second, as a variable representing country of birth

values. For example, if the dependent variable is migrants' Openness to change values, the key predictors are Openness values in the country of residence and Openness values of the country of birth.

Moderation effects can be tackled with interaction terms between country-level values. In addition to the direct effects of country values, interactions between values of country of residence and country of birth were considered as well, since value adaptation in the country of residence may depend on the values in the country of birth. In order to avoid multicollinearity, interaction terms were computed as a product of z-standardized country values.

Individual-level predictors

Several moderator variables that can influence effects of key variables were included in the models. Duration of stay in a country of residence was measured by five categories: less than 1 year, 1-5 years, 6-10 years, 11-20 years and more than 20 years. Duration of stay in the country of a migrant's birth[5] was not directly measured, so we indirectly indicate it by interaction between time spent in the country of residence and age of respondent. Technically, an interaction term is a product of dummy variables and *z*-standardized age. This interaction term shows how effects of time spent in a country of residence differ in different age groups. Repatriate status is defined as having one parent born outside the respondent's country of residence. Respondent's language was measured by variable that takes value of 1 if the language spoken at home matches one of the official languages of the country of residence; and 0 if not. Citizenship and identification with ethnic minorities were measured with direct questions.

The following variables were included in the model as controls: education measured in years of full time education, type of migrant's occupation – whether it is manual or non-manual (codes 1, 2 and 3 from International Standard Classification of Occupations), settlement type, as well as gender, age and religion (only large religious groups represented among European migrants were included as dummies, and the reference group is lack of identification with any religion).

[5] It became possible in data from 5th round of ESS, where variable measuring a time spent in a country of residence was converted from categorical (1-5 years, 5-10 years and so on) into continuous scale.

RESULTS

Analysis of variance – impact of countries

Our first hypothesis concerns the general impact of the country of residence and the country of birth on migrants' values. To test it we employ an empty model which is analogous to analysis of variance. In a multilevel analysis it also serves as a benchmark for models with predictors. This model demonstrates the amount of variance explained by the country of residence and the country of birth. The empty model decomposes the variance of the dependent variable into three components, two group-level parts, i.e. those explained by the country of residence and the country of birth (grouping variables), and residual individual-level variance. The estimation of variance of the country of birth is made on the control of the country of residence and vice versa, so this model addresses our intention to distinguish these two factors. The share of variance explained by each of the grouping variables is also called the Intra-Class Correlation (ICC). Table 2 lists the ICCs for the country of residence and the country of birth. All variances are significantly different from zero, which shows that both the country of residence and the country of birth are significant factors in predicting migrants' values. Thus, it supports hypothesis 1.

At the same time, it is clear that the variance explained by the country of residence is generally higher than the one explained by the country of birth. In other words, the values of migrants are more dispersed between the countries of residence, than between the countries of birth, hence a more powerful factor, explaining migrants' values is the country of residence, and less powerful explanatory factor is the country of birth. All the differences between the first and second columns of table 2 are statistically significant for all values listed except Self-Enhancement. This contradicts Hypothesis 3 which states that the country of birth is more important than the country of residence. The differences are quite large for Openness and Conservation values and Self-Expression (more than 10%), and quite low for Self-Enhancement and Self-Transcendence values. The latter is due to a lack of country level variance of Self-Enhancement and Self-Transcendence values: 7% at sum for Self-Enhancement and 8% for Self-Transcendence.

Table 2. Shares of variance of migrants' values explained by country of residence and country of birth (intra-class correlations)

Value indices	Share of variance explained by country of birth	Share of variance explained by country of residence	Share of variance explained by countries of birth and residence
Openness to change	2%	12%	14%
Conservation	2%	14%	16%
Self-Transcendence	2%	6%	8%
Self-Enhancement	2%	5%	7%
Self-Expression	4%	25%	29%

Note. All variances are different from zero with p<.05 level. N=9372.

The use of a multilevel model is considered to be reasonable if the share of variance explained by variables at the country level is equal to or greater than 7% (Meulemann, 2010). Since there are two grouping variables, this criterion could be applied to the sum of shares of variances explained by them, or each grouping variable could be regarded separately. In case this criterion is applied to each grouping variable separately, the use of the country of birth turns out to be problematic. Since the main interest of this paper is to explore the simultaneous impacts of the country of residence and the country of birth in a single model, we apply the criterion to the summed share of explained variances and this criterion fits well. Additionally, a multilevel analysis is reasonable because all the variances explained by each grouping variable are significantly different from zero, thus, there is something to be explained by country-level variables.

Country-level correlations

Now we turn to testing more specific issues. It was hypothesized that migrants' values are determined both by the importance of the corresponding values in the country of residence and the country of birth (H2) and that the latter have a bigger impact on migrants' values then the former (H4). First we look at Pearson correlations between country averages and then turn to full-featured multilevel regressions.

We split migrants by country of birth, computed their value averages and then correlated these value averages with average values shared by natives in their countries of birth. Then we computed average migrants' values by their country of residence and correlated them to the values of natives' in the country of residence. The resulting correlations between values of migrants and corresponding natives of countries of birth and residence are listed in Table 3. All the correlations are significantly different from zero, which is evidence of the significance of the

effects of values spread both in the countries of residence and birth (supporting H2). At the same time, the correlations between migrants' values Self-Transcendence, Self-Enhancement and the same values in countries of their birth are consistently (and significantly) lower than the correlations with values spread in the country of residence. This contradicts hypothesis H4, but fits well the analysis of variance described above. Differences between correlations of Openness to change and Conservation values as well as Self-Expression with corresponding values in the country of residence and the country of birth are non-significant, indicating that the impact of values in the country of birth and the country of residence are similar.

Table 3. Correlation coefficients between migrants' own values and average values of natives living in migrants' countries of birth in their countries of residence

Value indices	With values of natives living in countries of migrants' birth	With values of natives living in countries of migrants' current residence
Openness to change	0.72(.09)	0.75(.08)
Conservation	0.69(.10)	0.77(.08)
Self-Transcendence	0.68(.09)	0.90(.03)
Self-Enhancement	0.65(.10)	0.90(.04)
Self-Expression	0.92(.03)	0.96(.01)
N	30*	30**

Note: All correlation coefficients are significant at p<0.05. Bootstrapped standard errors are indicated in parenthesis.
** Cyprus, Iceland, Israel, and Luxembourg have been excluded from correlations due to small sample size (less than 40 respondents).*
*** Italy, Iceland, Romania, and Turkey have been excluded from correlations due to small sample sizes (less than 40 respondents).*

Thus, correlations indicate that there are clear links between values of migrants and values both in their country of residence and country of birth. Values of Self-Enhancement and Self-Transcendence in the country of residence seem to be more important for predicting corresponding migrants' values than the ones in the country of birth. This is an important but crude result, since there are multitude of variables that should be controlled for.

Full model – impacts of values in countries of birth and residence

There are five cross-classified multilevel regression models, one for each of the four values and for Self-Expression as dependent variables. Independent variables are listed in the Data and Method section.

The quality of the models is measured as a share of variance estimated in empty models that was explained by entered variables (also called R^2). Since there are three components of variance, every model has three parameters of quality, assigned to the individual level, and the

two country-level classifications. Table 4 lists R^2 for each component of each value model. In general, the explanatory quality of country-level variables is quite high, and in some cases is even comprehensive (i.e. the residual variance is not significantly different from zero).[6] The amount of migrant value variance explained by values in the country of residence is systematically higher than the ones in the country of birth. The most striking differences were found in the models explaining Openness to change and Conservation and Self-Transcendence values. It is also important to mention the difference in the overall impact of individual-level variables in different models. Self-Transcendence and Self-Enhancement values seem to be the least explained variables at the individual level (R^2 are 0.05 and 0.07), on the contrary Conservation and Openness have the highest R^2 at the individual level.

Table 4. Share of migrant value variance explained by the same values in their country of residence and country of birth and by individual-level variables (R^2)

Dependent variables	Country-level predictors		Individual level predictors
	Values in the country of migrants' birth	Values in the country of migrants' residence	
Openness to change	0.60	0.93	0.13
Conservation	0.73	0.93	0.18
Self-Transcendence	0.73	0.97	0.05
Self-Enhancement	0.89	0.90	0.07
Self-Expression	0.98	0.99	0.09

The regression coefficients for country-level and individual level predictors for five regression models are in Table 5. To avoid sample composition bias, the significance of the regression coefficients was bootstrapped, which adjusts the standard errors by resampling and controlling for outliers.

Country-level predictors

Regression coefficients for values in the country of residence are significant and significantly higher than coefficients for values in the country of birth in all the models. It supports the conclusion suggested by the correlations which demonstrated a higher impact of values in the country of residence on migrants' values. The effects of values in the country of migrants' birth are still significant, although lower in its size than the ones of values in the

[6] Some country-level R^2 may seem to be unreasonably high, since in multilevel regressions R^2 represent shares of between-country variance, which is quite small. A fact that we predict individual values with corresponding country-level aggregates has its impact on the high R^2. Strictly speaking, R^2 may be treated as a reversed indication of value distance between migrants and their neighbors and ex-neighbors, not a reason for their values. But the implication stays the same – country of residence and values common in there has the highest impact on migrants' values.

country of residence. This is an important result taking into account migrants' connection with their native culture. The effect sizes of values in countries of migrants' birth and current residence have mostly non-significant differences across models, i.e. across different values as dependent variables.

Interactions between values in the country of residence and the country of birth are significant only in models predicting Openness, Conservation and Self-Expression, and have different signs. Taking into account that effects of values in the country of birth and in the country of residence are positive, negative interaction between them implies that among respondents who were born in countries with higher Openness, the effect of Openness in the country of residence is lower (or even insignificant) than for those respondents who were born in countries of low Openness. Similarly, positive interaction implies that adaptation to the new levels of Conservation is easier for those who were born in countries with low value of Conservation. The same is true for Self-Expression, country-level interaction is highly significant and positive, that is the migrants from countries with high Self-Expression levels are more prone to adapt even higher levels of Self-Expression in their countries of residence. It is worth mentioning that country-level interactions are not significant for Self-Enhancement and Self-Transcendence values. It implies that the effect of values in the country of residence is independent of the country of birth for the two latter values, which implies the effect of values in the country of residence is equal for those who were born in countries with higher and lower levels of Self-Enhancement or Self-Transcendence.

Table 5. Unstandardized coefficients (B) of cross-classified multilevel regressions. Dependent variables are migrant's values and Self-Expression score, N=9372. Bootstrapped standard errors are in parenthesis.

	Openness to change	Conservation	Self-Transcendence	Self-Enhancement	Self-Expression
COUNTRY LEVEL					
Values in the country of birth	0.29(0.05)*	0.30(0.06)*	0.21(0.05)*	0.18(0.04)*	0.26(0.03)*
Values in the country of current residence	0.77(0.05)*	0.91(0.06)*	0.74(0.06)*	0.73(0.05)*	0.75(0.03)*
Interaction of values in the country of residence X values in the country of birth	-0.03(0.01)*	0.02(0.01)*	-0.01(0.01)	0.01(0.01)	0.11(0.04)*
INDIVIDUAL LEVEL					
Language spoken at home is one of the official languages of country of living	0.06(0.01)*	-0.04(0.01)*	0.01(0.01)	-0.03(0.02)*	0.29(0.06)*
Citizen of the country	0.01(0.01)	0.02(0.01)	-0.003(0.01)	-0.04(0.02)	0.17(0.06)*
Belongingness to ethnic minority	-0.03(0.02)	0.01(0.02)	-0.02(0.01)	0.05(0.02)*	-0.01(0.07)
Repatriate (at least one of parents was born in the country of residence)	0.04(0.02)*	-0.03(0.02)	-0.01(0.02)	0.003(0.02)	-0.18(0.07)*
Duration of stay in the country of current residence (1 year or less - reference group)					
1-5 years	0.06(0.12)	0.04(0.11)	-0.19(0.11)	0.08(0.12)	0.23(0.45)
5-10 years	0.03(0.12)	-0.01(0.10)	-0.12(0.11)	0.10(0.12)	0.23(0.44)
11 years or more	0.08(0.11)	0.002(0.10)	-0.13(0.10)	0.02(0.12)	0.20(0.42)
Interaction: age X duration of stay in the country of current residence (1 year or less - reference group)					
Interaction: age X duration of stay 1-5 years	-0.12(0.09)	-0.001(0.08)	0.14(0.08)	0.01(0.09)	0.11(0.35)
Interaction: age X duration of stay 5-10 years	-0.01(0.03)	0.04(0.03)	-0.07(0.03)*	0.04(0.04)	-0.03(0.13)
Interaction age X duration of stay 11 years or more	0.01(0.03)	-0.06(0.03)*	-0.01(0.03)	0.09(0.04)*	-0.05(0.13)
Belongingness to religious group (does not belong to any religious group - reference group)					
Roman Catholic	-0.18(0.02)*	0.22(0.02)*	-0.05(0.02)*	0.01(0.02)	-0.18(0.07)*
Protestant	-0.17(0.02)*	0.22(0.02)*	-0.03(0.02)	-0.04(0.03)	0.07(0.09)
Eastern Orthodox	-0.11(0.02)*	0.12(0.02)*	-0.05(0.02)*	0.04(0.03)	-0.12(0.09)
Judaism	-0.02(0.04)	0.05(0.04)	-0.1(0.03)*	0.11(0.05)*	0.33(0.14)*
Islam	-0.18(0.04)*	0.27(0.04)*	-0.08(0.03)*	-0.02(0.05)	-0.85(0.16)*
Other religious groups	-0.14(0.04)*	0.16(0.04)*	0.06(0.03)	-0.09(0.04)*	0.02(0.16)
Gender (male)	0.08(0.01)*	-0.08(0.01)*	-0.17(0.01)*	0.21(0.01)*	-0.04(0.05)
Age (years)	-0.01(0.0005)*	0.01(0.0004)*	0.01(0.0004)*	-0.01(0.0005)*	-0.02(0.002)*
Duration of full-time education (years)	0.01(0.002)*	-0.02(0.002)*	0.01(0.002)*	-0.005(0.002)*	0.10(0.01)*
Interaction age X duration of full-time education (years)	0.01(0.01)*	-0.003(0.01)	-0.002(0.01)	-0.01(0.01)	-0.06(0.02)*
Non-manual occupation (ISCO-codes 1,2,3)	0.06(0.01)*	-0.11(0.01)*	0.003(0.01)	0.08(0.02)*	0.57(0.06)*
Big city	0.03(0.01)*	-0.04(0.01)*	-0.04(0.01)*	0.06(0.02)*	0.03(0.05)
ESS Round	Yes	Yes	Yes	Yes	Yes
Intercept	0.60(0.23)*	-0.74(0.21)*	-0.11(0.21)	0.25(0.25)	2.05(0.91)*

** $p<.05$*

Individual-level predictors

Now we briefly describe effects of moderator variables.

The duration of stay in the country of residence is not as an important factor of value adaptation as was expected – none of the regression coefficients is significant.

Interactions between duration of stay in a country of residence and respondent's age are mostly insignificant, so the effects of the number of years spent in a host country on migrant values are similar across different age groups. Only a few coefficients in the models predicting Conservation, Self-Transcendence and Self-Enhancement values are significant. They imply that in the older groups of migrants the effect of time spent in the country of residence on Self-Enhancement values is higher and on Self-Transcendence and Conservation values this effect is lower.

Citizenship is a formal indicator of adaptation, so it increases importance of Self-Expression values and has no significant effect in all the other models.

Being a repatriate increases migrants' importance of Openness to change values and decreases importance of Self-Expression. Having one parent born in the country of residence could facilitate value adaptation, therefore compared to the other migrants these respondents have higher Openness values. The same group demonstrates lower Self-Expression, which is contrary to what can be expected.

The linguistic factor has a much higher effect. The correspondence between the language spoken at home and the official language of the country of residence has a significant effect in four out of five values. This fact increases Openness to change values and Self-Expression, and decreases importance of Conservation values. The concurrence of languages of a migrant and the surrounding population is a part of adaptive behavior and helps migrants to absorb the values of their new cultural environment.

Migrants' identification with an ethnic minority is a symptom of an acculturation strategy different from assimilation. It affects values of Self-Enhancement positively, which may be interpreted as these migrants' intention to keep to their own culture. Another interpretation assumes a fail to integrate into a new society and the consequent deprivation of basic needs which leads to the higher importance of "deficit" value Self-Enhancement.

As for control variables, they generally replicate the tendencies described by Inglehart (1997), Schwartz (2007), Magun & Rudnev (2012), Meulemann *et al.* (in press), i.e. the results obtained on the basis of representative unbiased samples. Younger people and males favor Openness to change and Self-Enhancement values and they do not favor Conservation and Self-Transcendence values; more educated people favor Openness and Self-Transcendence and

disprove Conservation and Self-Enhancement.[7] Younger and more educated people favor Self-Expression as well. Interaction between age and education increases importance of Openness to change but decreases Self-Expression. Non-manual occupations are linked with higher importance of Openness to change, Self-Enhancement and Self-Expression, and with lower Conservation values. Living in a big city makes people emphasize Openness and Self-Enhancement values and disprove Conservation and Self-Transcendence. The models were also controlled for a year of data gathering, i.e. for the round of European Social Survey.

Religious denomination is an intermediate variable between control and moderator variable. Belonging to a religion in most cases affect Conservation values positively and Openness and Self-Transcendence values negatively. Judaism has a positive impact both on Self-Enhancement values and on Self-Expression values, and Islam and Roman Catholicism exert strong negative effect on Self-Expression.

ROBUSTNESS TESTS

Formative period hypothesis

One of the critical points of the results described above is a notion of migrant, as a person born outside country of their residence. The place of birth might be of minor importance as a source of values if a person was socialized in another environment. There is a general consensus in the literature on the role of a "formative period" as a special time when the surrounding culture exerts its main effect on respondent's basic values, the effect of which is much more important than the effects taking place during other periods of a person's lifetime. Since our main interest lies in investigating relative impacts of originating and surrounding cultures on a person's values, we need to check whether our conclusion concerning the impact of the country of birth and country of residence on basic values is robust or depends on whether a migrant spent his/her formative years in their country of birth.

Different authors point to vary vague definition of formative period as "early adulthood" or "impressionable years". We stick to Zaccarin and Rivellini's (2002) criterion of a formative age and selected those respondents who were born and lived in their country of birth during their childhood and adolescence (until aged at least 15). As already mentioned, ESS data do not allow us to measure precisely the time spent by respondent in their country of birth, because except in the 5th round, the time spent in the country of residence is a categorical variable (less than 1 year, 1-5 years, 6-10 years, 11-20 years, more than 20 years). So, by combining these categories with

[7] In representative samples Self-Enhancement is positively linked with higher levels of education.

age we arrived at our selection criterion, which identified those respondents who lived in their country of birth until approximately aged 15 or older. More specifically, the respondents who socialized in their country of birth were aged 15 and 16 and lived in the country of residence for less than 1 year, or 17-20 years old and lived in the country of residence for 2 to 5 years, or 21-26 years old and lived in the country of residence for 6-10 years, or 26-35 years old and lived in the country of residence for 11-20 years. All the other respondents moved to a new country before age 15, so they were included in a group socialized in a country of residence. We analyze these two groups separately in order to find the differences in impacts from the country of birth and their country residence. If the formative period really does matter for value socialization as much as researchers claim, the impact of the country of birth (and the values there) should be higher than the impact of the country of residence (and the values there) on values of those who spent their formative years in their country of birth compared to those who socialized in their country of residence.

The sample size of the group of respondents who spent their formative years in their country of birth is 563 respondents, so the complex multilevel model could not be applied and complete replication of analysis is impossible. Therefore, we employ classical analysis of variance and OLS-regressions and shrank the list of predictors to the most relevant ones (see footnote to Table 6).

Figure 2 represents F-statistics results from the analysis of variance for two groups of migrants: for those socialized in their country of birth and for migrants who left country of birth before turning 15. The country of residence has a larger impact on Self-Transcendence, Self-Enhancement and Self-Expression values than the country of birth for both subsamples. It confirms the main result that was obtained on the whole sample of European migrants. It means that even among those respondents who spent their adolescence in the same country as they were born, i.e. during their formative period, the country of their current residence has a higher impact on some of their values and Self-Expression. This is not the case for Openness to change and Conservation values, which are approximately equally affected by country of residence and country of birth in the group of migrants who underwent longer socialization in their country of birth. The effects of the country of residence on migrants' values are obviously higher in the group of respondents who were socialized in their country of residence.

So, our main conclusion about the stronger effect of the country of residence than the country of birth on basic values based on the whole sample of European migrants is fully robust for the migrant subsample who left their country of birth before turning 15 and this conclusion is only partly robust for the subsample of migrants who left their country of birth after a longer period of socialization (after turning 15). In the latter subsample Openness to change and

Conservation values are (approximately) equally affected by country of current residence and country of birth. This fact is in agreement with formative period hypothesis and its higher relevance for two values mentioned.

Figure 2. Effects (F-statistics) of the country of birth and the country of residence on migrants' values (A) in the group of migrants who lived in a country of birth at least until 15 years old and (B) in the group of migrants who left a country of birth before turning 15.

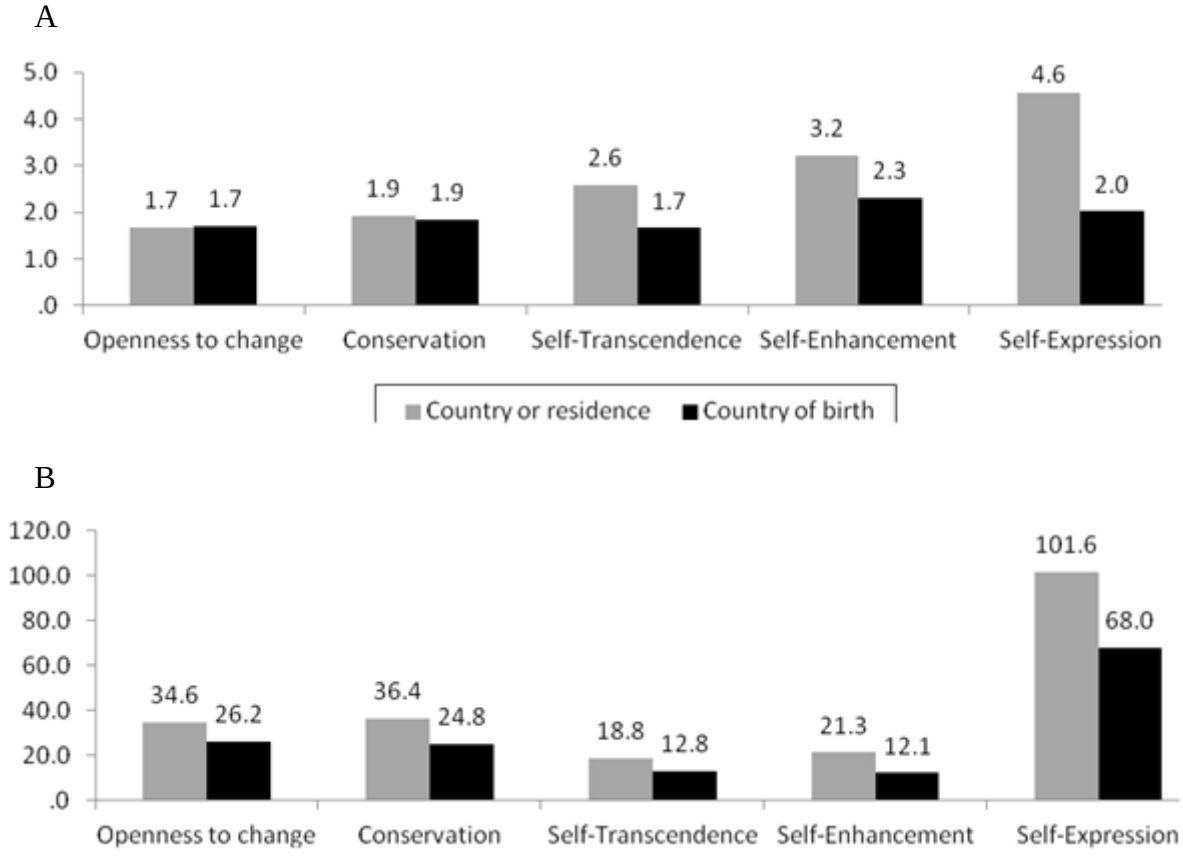


Table 6 lists regression coefficients for the effects of values in countries of migrants' birth and residence for the two subsamples of migrants. The effects presented are controlled for age, gender, education, settlement type, type of labor, religious denomination, citizenship status, belonging to an ethnic minority and parental immigrant experience. All the effects of values in the country of residence on the migrants' values are significant and this is true for both subsamples under consideration. As to the effects of values in the country of birth they are significant in the subsample of migrants who left their country of birth before turning 15 and *not* significant for the subsample of those who spent their formative years in their country of birth. This is a counterintuitive result, though it seems to be correct, since the coefficients of values in

the country of residence are significant in all the models.[8] Thus, the impact of values in the country of residence is higher than the impact of values in the country of birth even in the subsample consisting of the people who spent their formative years in their country of birth. This result is might be due to the small sample and a consequent reduction of the dependent variable between-country variances which are very low even in the total sample (see Table 2).

Table 6. Effects of values in a country of residence and in a country of birth on corresponding values of respondents who moved after turning 15 *(N=563).* and those who moved before turning 15 (*N=10682)* (unstandardized regression coefficients for 10 regression models)

Dependent variable	Sample	Independent variables		R^2
	Respondents left country of birth...	Values of country of birth	Values of country of residence	
Openness to change	before turning 15	0.35*	0.70*	*0.49*
	after turning 15	-0.05	0.50*	*0.31*
Conservation	before turning 15	0.39*	0.72*	*0.53*
	after turning 15	-0.20	0.57*	*0.38*
Self-Transcendence	before turning 15	0.20*	0.77*	*0.37*
	after turning 15	0.21	0.92*	*0.33*
Self-Enhancement	before turning 15	0.20*	0.81*	*0.41*
	after turning 15	0.22	0.75*	*0.36*
Self-Expression	before turning 15	0.24*	0.74*	*0.54*
	after turning 15	0.19	0.76*	*0.58*

Note. The effects are controlled for age, gender, education, settlement type, type of labor, religious denomination, citizenship status, belonging to ethnic minority and parental immigrant experience. The interaction between values of the country of birth and the country of residence were included as well, in all but Self-Expression model they are not significant.

** Significant at p<0.05. Moved before turning 15 N=10682; moved after turning 15 N=563.*

Cross-level and cross-value effects

Until now we regarded the impact on migrants' values from corresponding country-level values, for instance, an individual migrant's Conservation values were predicted with country-level Conservation. However it is possible that one type of country-level value can influence a different type of individual value. For example, the widespread values of Self-Enhancement may generate a certain type of environment that enhances Conservative values among individuals living in this culture. It is possible to check the cross-value connections of different levels, or, to

[8] A problem of applying an OLS regression instead of multilevel one is the underestimation of standard errors which can lead to falsely significant coefficients. However this limitation is applicable to all the coefficients in a model, so although all the coefficients' significance may be overestimated, a difference in coefficients' significances within a single model is meaningful.

put it simply – whether values of one type at the country level can affect individual-level values of another type. The full multilevel model described above was replicated with one difference – instead of a single corresponding value at the country level as a predictor, various combinations of values at the country level were entered into the model. Appendix 4 lists all the effects of country-level variables. It appears that in every model the only significant country-level predictor is the corresponding country-level values. For example, in models predicting Openness to change values we included (beside country-level Openness itself) Self-Transcendence and Self-Expression (Model 1) and by Self-Enhancement and Self-Expression (Model 2). None of the country-level values occurred to be significant except Openness values. So the migrants' values are predicted by the same country-level values and there no crossing predictions. It shows that the main machinery of value determination is conforming to the dominating values, and that cross-value effects are of minor importance.

The only exception is the dependence of migrants' Self-Expression not only on the country-level Self-Expression but on the Openness values in the country of birth. This might be explained by the fact that Self-Expression is not a part of Schwartz's values theory, in which values are clearly distinguished (though correlated). So, there might be content overlap between Self-Expression and Openness to change values (see Dobewall & Rudnev, in press), i.e. Openness and Self-Expression share partly the same content. It also might be a result of the fact that the Self-Expression index is based on respondents' attitudes which are less stable and hence might depend on more sustainable values of the similar content. The significant effect of Openness values in the country of birth together with the lack of significant effect of Openness values in the country of residence on migrants' Self-Expression is a noteworthy result since it points to the primacy of Openness values over Self-Expression, and the continuing effect (or persistence) of Openness values during a migrants' life.

DISCUSSION

Both regressions and analysis of variance supported hypotheses 1 and 2 which stated that the country of residence and the country of birth as well as values in these countries have significant effects on basic values of intra-European migrants. The country-level values which have the strongest effect on values of individual migrants are the corresponding ones, i.e. the country-level values of the same kind as the individual ones predict the latter better than other country-level values.

Hypotheses 3 and 4 were rejected; contrary to our expectations, the country of residence and values in this country do not overcome effect of the country of birth and values in that country on values of individual migrants. Furthermore, values in the country of residence are an

even more powerful predictor of individual values of migrants, than values common among population of the receiving country. This result is also true among the respondents fully socialized in the country of their birth, that is, those who had more chances to adopt the values of their country of birth.

Similarly, the effects of the country of residence are stronger than the effects of the country of birth on individual values for Conservation and Openness to change values, as well as for Self-Expression. Although for the Self-Transcendence and Self-Enhancement values there is no significant differences, the effects of the country of residence tend to be higher than the effects of the country of birth. Probably, the significance was lacking due to the small variance of these values across both countries of birth and country of residence.

In the larger context, these findings might show that migrants' networks, being influenced by receiving societies, fail in reproducing values of their home country. It fits the ideas of Sam & Berry (2007) who state that acculturation is a process of change which results not in a reproduction of either originating or receiving culture, but in something new and unique.

Beside these general points there are some important conclusions which were not hypothesized but are of some interest to the subject. These conclusions concern the differences between various values.

The country of residence has a higher impact on Openness and Conservation values than on Self-Transcendence and Self-Enhancement; it was demonstrated by the higher shares of variance between countries of residence (ICC). It implies that Openness and Conservation values are more influenced by forces of adaptation, and migrants have to change or rethink their values of Openness and Conservation to a higher degree than for Self-Enhancement and Self-Transcendence.

This conclusion is supplemented by differences in interactions between values in the country of residence and country of birth. These country-level interactions were significant for Conservation and Openness values and were not significant for Self-Enhancement and Self-Transcendence. It might be interpreted that moving to a new country changes the Self-Enhancement or Self-Transcendence values of migrants regardless of their own inherited values, whereas for change of Conservation and Openness inherited values do matter.

Summarizing these facts, Conservation and Openness values, as compared to Self-Enhancement and Self-Transcendence are more prone to change with a migrant's move to a new country; and at the same time the effect of the new country values on a migrant's values is dependent on the values of their birth country. That is, Conservation and Openness are simultaneously more prone to change with migration and are dependent on values of the country of birth than the second pair of values. That is, the opposition of stable and labile values is not

quite correct in this case, but values tend to differ by compliance to country influence and dependence on other variables.

Another unexpected outcome is that Conservation and Openness to change values are better predicted by individual-level variables, than the Self-Transcendence and Self-Enhancement values (as was indicated by higher individual-level R^2 in the multilevel models). An important individual-level predictor is respondent's age; religiosity and education have notable impacts as well. It is also confirmed by Magun & Rudnev's (2012) findings based on a representative samples of Europeans. This has an important practical implication. Taking into account that Conservation and Openness values underwent the most intensive change and that they are closely connected to individual differences, it can be hypothesized that overcoming their own conservation values might be a more difficult task for different socio-demographic groups. For instance, it is reasonable to hypothesize that older, more religious and less educated migrants might be less successful in adapting new levels Openness and Conservation.

And finally, we have not hypothesized specific behavior of Self-Expression, but we found that Self-Expression showed strong links to both country of birth and country of residence as well as with corresponding values spread in these countries. Just like basic values, Self-Expression is to a greater degree predicted by the country of residence and by the level of Self-Expression in this country than by the country of birth and level of Self-Expression there. Additionally, there is a significant dependence of migrant Self-Expression on Openness to change values in their country of birth. A specific feature of Self-Expression are the effects coming from country level (both from the country of birth and the country of residence), as well as from individual-level variables. That is, Self-Expression is better explained by characteristics which are acquired during a lifetime, such as a new country and the level of values there, a number of moderating variables, and education, occupation and so on. It shows that Self-Expression as an attitude-based measure is more fluid than values, and Self-Expression is generally more likely to change when migration takes place. Highly significant interactions between commitments to Self-Expression in the country of birth and in the country of residence imply that the higher the spread of Self-Expression in the country of birth the stronger a migrant's capacity to adapt a new level of Self-Expression common in the country of residence. In other words, the level of Self-Expression among migrants from countries with higher levels of this syndrome is more likely to increase. It indicates, that Self-Expression does not have a "ceiling effect", that is, it keeps changing until a circumstances allows it.

LIMITATIONS

Intra-European migrants are mostly voluntary moved groups of people and this might be a problem since it means the migrants might have chosen their country of residence based on their values, therefore the country of residence might not be considered a definitely independent variable. However, over 90% of our sample are migrants who moved to a new country before they turn 15. Therefore, this was not their own decision but in most cases their family's decision. Migrants' family as the most important socialization agent is not a perfect transmitter of national cultural values, since families may share very specific values, which caused them to immigrate, they may be more active than the most of their country's population. The status as migrant is one of the important determinants of values (Hitlin & Piliavin, 2004). Through their parents all these characteristics are applicable to the respondents too, but only to some degree. We cannot check these characteristics of migrants' families, so we assumed that they connected the respondents with their culture of birth, and this assumption seems quite acceptable, since we found the effects of the country of birth significant for their values. But it might be problematic to extrapolate these results to non-migrant populations, for example, for cohort analysis, since migrants are still very a specific group.

Since the majority of the sample got their early socialization partly in the country of their residence, it might make our basic assumption of migrants as people simultaneously belonging to the two cultures too strong. However, many researchers have pointed out the effects of such powerful agents of socialization like family, socio-cultural micro-environment and national media which influence an individual's values even if an individual currently lives abroad. Taking this fact into account, our approach is quite correct, with a note on the very straightforward use of the term "migrant" - those who moved from one country to another regardless their age. Prevalence in the sample of the respondents who socialized partly in the country of their residence could also be responsible for the higher impact of country of residence on migrants' values. However, this is contradicted by the analysis of a subsample of those socialized in their country of birth, in which the country of residence is still the more important predictor. In general, this paper clarifies the impact on basic values from originating culture, which was indirectly measured with country of birth and values in this country.

The large effects of the country of residence might be partly determined by the survey procedure, particularly, the language of the questionnaire. In most cases, both natives and migrants were interviewed in the same language, whereas migrants' peers in their country of birth were interviewed in a different language. This could artificially consolidate respondents by

their country of residence. However, in some cases linguistic minorities were interviewed in their native language, for example, Russian-speaking respondents in Israel and Estonia.

Another important limitation is the sample including only intra-European migrants. It may be problematic to extrapolate our results to migrants to or from different parts of the world. It might be that in countries with less effort to socialize migrants, the country of birth will comprehensively predict values of migrants, i.e. contrary to our results. Testing the eligibility of these conclusions around the world might be a good area for future research.

CONCLUSION

This paper aimed to answer a question of the changeability of basic values and tested four hypotheses based on a sample of intra-European migrants. We identified the degree to which migrants' values are affected by their country of birth and their country of residence, as well as by values in the countries of birth and residence. The results demonstrated that migrants' values are determined both by country of residence and country of birth, as well as by values that are common in these countries. However, contrary to our expectations, the country of residence and values there have a greater impact on migrants' values than the country of birth and values there. In other words, migrants' values are exposed to the effects of the current socio-cultural environment to a higher degree than to the values of the culture of their birth.

We disprove the idea that such results might be partly determined by limitations of our sample which consists mainly of migrants who spend part of their formative period and were socialized in their country of residence. We tested these findings on a subsample of migrants who spend all their formative years in their country of birth; the results demonstrated that key conclusions about the effects of the country of residence and the country of birth (and values there) stay the same.

The country of residence effect on all the values studied support the idea that basic values are subject to change over longer periods of an individual life and not only through one's formative years and, they depend on the changing socio-cultural environment. Although we cannot be too careful in applying these findings to non-migrant populations they might be considered as evidence of lifelong value socialization and value adaptation in the rapidly changing social environment of contemporary societies. It might be stated that values are only partly fixed during the formative period and keep changing throughout an individual life, with certain kinds of values being more stable than the others.

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Appendix 1. Hierarchy of value indices developed by Sh. Schwartz*

Value categories	10 values	21 questionnaire items
Conservation	*Security*	It is important to him to live in secure surroundings. He avoids anything that might endanger his safety
		It is important to him that the government ensures his safety against all threats. He wants the state to be strong so it can defend its citizens
	Conformity-Tradition	He believes that people should do what they're told . He thinks people should Follow rules at all times, even when no-one is watching.
		It is important to him always to behave properly. He wants to avoid doing anything people would say is wrong
		It is important to him to be humble and modest. He tries not to draw attention to himself.
		Tradition is important to him. He tries to follow the customs handed down by his religion or his family
Openness to change	*Self-direction*	Thinking up new ideas and being creative is important to him. He likes to do things in his own original way.
		It is important to him to make his own decisions about what he does. He likes to be free and not depend on others
	Stimulation	He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life
		He looks for adventures and likes to take risks. He wants to have an exciting life
	Hedonism	Having a good time is important to him. He likes to "spoil" himself
		He seeks every chance he can to have fun. It is important to him to do things that give him pleasure.
Self-Enhancement	*Achievement*	It's important to him to show his abilities. He wants people to admire what he does.
		Being very successful is important to him. He hopes people will recognise his achievements
	Power	It is important to him to be rich. He wants to have a lot of money and expensive things.
		It is important to him to get respect from others. He wants people to do what he says
Self-Transcendence	*Benevolence*	It's very important to him to help the people around him. He wants to care for their well-being
		It is important to him to be loyal to his friends. He wants to devote himself to people close to him
	Universalism	He thinks it is important that every person in the world should be treated equally. He believes everyone should have equal

		opportunities in life
		It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them.
		He strongly believes that people should care for nature. Looking after the environment is important to him.

** There was a special version of questionnaire for female respondents which differed from the listed by using "she" and "her" instead of "he" and "his".*

Appendix 2. Composition of modified Self-Expression index

Items used in index	*Question wording*
Signed petition last 12 months	*"*There are different ways of trying to improve things in [country] or help prevent9 things from going wrong. During the last 12 months, have you done any of the following? Have you signed a petition? Yes (1) – No (2)
Happiness	Taking all things together, how happy would you say you are? Extremely unhappy (0) - Extremely happy (10)
Tolerance to homosexuals	Gay men and lesbians should be free to live their own life as they wish. Agree strongly (1) – Disagree strongly (5)
Interpersonal trust	<…> generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? You can't be too careful (0) – Most people can be trusted (10)
Request for income equality	The government should take measures to reduce differences in income levels Agree strongly (1) – Disagree strongly (5)

Appendix 3. Country effects (dummy variables B regression coefficients) used as measures of value spread of a certain country. Effects are controlled for age, education and type of settlement.

	Conservation	Openness to change	Self-Enhancement	Self-Transcendence	Self-Expression
Austria	0	0	0	0	0
Belgium	0.16*	-0.001	-0.28*	0.03*	-0.83*
Bulgaria	0.48*	-0.39*	0.02	-0.13*	-3.77*
Croatia	0.37*	-0.37*	0.05*	-0.03*	-2.67*
Cyprus	0.44*	-0.25*	-0.19*	-0.07*	-2.74*
Czech	0.38*	-0.16*	-0.08*	-0.2*	-2.00*
Denmark	-0.03*	0.14*	-0.30*	0.10*	1.15*
Estonia	0.29*	-0.10*	-0.32*	0.03*	-2.62*
Finland	0.24*	0.004	-0.50*	0.12*	-0.54*
France	0.13*	0.09*	-0.57*	0.2*	-1.48*
Germany	0.11*	-0.02*	-0.22*	0.07*	-1.10*
Greece	0.34*	-0.25*	0.03*	-0.14*	-3.51*
Hungary	0.25*	-0.06*	-0.09*	-0.15*	-3.59*
Iceland	0.004	0.10*	-0.41*	0.21*	0.33*
Ireland	0.35*	-0.19*	-0.18*	-0.04*	-1.16*
Israel	0.31*	-0.24*	0.14*	-0.19*	-2.21*
Italy	0.41*	-0.38*	0.10*	-0.12*	-2.85*
Latvia	0.21*	-0.07*	0.30*	-0.41*	-3.65*
Lithuania	0.40*	-0.24*	0.31*	-0.44*	-3.89*
Luxembourgh	0.28*	-0.06*	-0.45*	0.09*	-0.76*
Netherlands	0.09*	0.12*	-0.27*	-0.03*	-0.11*
Norway	0.21*	-0.10*	-0.23*	0.05*	0.16*
Poland	0.54*	-0.44*	-0.04*	-0.08*	-3.11*
Portugal	0.13*	-0.12*	0.13*	-0.12*	-2.56*
Romania	0.39*	-0.32*	0.34*	-0.35*	-4.07*
Russia	0.41*	-0.42*	0.27*	-0.22*	-3.96*
Slovakia	0.52*	-0.40*	0.07*	-0.19*	-2.90*
Slovenia	0.22*	-0.03*	-0.04*	-0.19*	-2.85*
Spain	0.39*	-0.22*	-0.41*	0.13*	-1.22*
Sweden	-0.02	0.13*	-0.30*	0.10*	0.34*
Switzerland	-0.08*	0.13*	-0.28*	0.16*	0.16*
Turkey	0.36*	-0.35*	0.25*	-0.22*	-4.20*
UK	0.19*	-0.05*	-0.21*	-0.001	-0.52*
Ukraine	0.46*	-0.47*	0.13*	-0.12*	-3.87*
Years of full-time education completed	-0.03*	0.01*	0.01*	0.01*	0.14*
Age	0.01*	-0.01*	-0.01*	0.01*	-0.02*
Living in a big city	-0.07*	0.05*	0.04*	-0.01*	0.16*
R^2	*0.28*	*0.25*	*0.15*	*0.12*	*0.38*

** The coefficient is significant at p<0.05 level.*

Appendix 4. Cross-values effects

Due to a high multicollinearity between predictor country-level variables Openness and Conservation, as well as Self-Enhancement and Self-Transcendence, only one variable from each pair was included in models. The predictors were combined in order to have all the possible combinations with a limitation that values of originating country and values of residential country were the same, since impacts of both should be controlled simultaneously. Other specifications of the model are possible, although it would be redundant to present all of them, since the result is quite sustainable. Every model included all the predictor variables entered in the Full model, but didn't include an interaction between country-level values.

Model	Dependent variable – migrants' individual values	Openness to change		Conservation		Self-Transcendence		Self-Enhancement		Self-Expression		R^2	
		In the country of residence	In the country of birth	In the country of residence	In the country of birth	In the country of residence	In the country of birth	In the country of residence	In the country of birth	In the country of residence	In the country of birth	*country of residence*	*country of birth*
M1	Openness to change	0.63*	0.26*	-	-	-0.03	0.04	-	-	0.03	0.01	*0.94*	*0.68*
M2	Openness to change	0.64*	0.22*	-	-	-	-	0.05	-0.12	0.03	0.01	*0.94*	*0.73*
M3	Conservation	-	-	0.76*	0.14	0.06	0.01	-	-	-0.02	-0.04	*0.94*	*0.83*
M4	Conservation	-	-	0.73*	0.16	-	-	-0.09	0.07	-0.03	-0.02	*0.95*	*0.85*
M5	Self-Transcendence	-0.01	0.02	-	-	0.72*	0.13	-		0.01	0.01	*0.92*	*0.83*
M6	Self-Transcendence	-	-	-0.04	-0.09	0.72*	0.13	-	-	-0.01	0.01	*0.92*	*0.85*
M7	Self-Enhancement	0.08	-0.02	-	-	-	-	0.75*	0.19*	0.01	0.01	*0.81*	*0.0.82*
M8	Self-Enhancement	-	-	-0.03	0.02	-	-	0.73*	0.19*	0.01	0.01	*0.81*	*0.82*
M9	Self-Expression	0.05	0.63*	-	-	-	-	-0.21	-0.10	0.71*	0.20*	*0.99*	*0.98*
M10	Self-Expression	-	-	0.21	-0.41	-	-	-0.18	-0.26	0.74*	0.22*	*0.99*	*0.98*
M11	Self-Expression	0.12	0.67*	-	-	-0.02	-0.15	-	-	0.73*	0.23*	*0.99*	*0.98*
M12	Self-Expression	-	-	0.25	-0.36	-0.02	-0.10	-	-	0.77*	0.26*	*0.99*	*0.98*

* *The coefficient is significant at p<0.05 level.*

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