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Individual values, cultural embeddedness, and anti-immigration sentiments: Explaining differences in the effect of values on attitudes toward immigration across Europe

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Abstract During the last decade, many European countries have faced sizeable immigration inflows accompanied by high prevalence of negative sentiments toward immigrants among majority members of the host societies. We propose that basic human values are one important determinant of such negative attitudes, and we seek to explain variation across countries in the strength of the effects of values. Based on Schwartz' (1992, 1994) basic human value theory, we hypothesize that universalism values are conducive to positive attitudes toward immigration, while conformity-tradition reinforce anti-immigration sentiments. We furthermore hypothesize that these value effects are moderated by two contextual variables. Both value effects are expected to be weaker in countries with a higher level of cultural embeddedness. Furthermore, negative effects of conformity-tradition values are hypothesized to be cushioned by a lower proportion of immigrants in the country. A multilevel analysis of data from 24 countries from the fourth round of the European Social Survey (2008–2009) supports these hypotheses. Moreover, we demonstrate

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that the measurement properties of the theoretical constructs exhibit equivalence across countries, thereby justifying statistical comparisons.

Individuelle Werte, kulturelle Einbettung und immigrations-feindliche Einstellungen: Wie sich die Unterschiede in den Wirkungen von Werten auf Einstellungen zur Immigration in Europa erklären lassen

Zusammenfassung Im letzten Jahrzehnt sind viele europäische Länder von einer beträchtlichen Zuwanderung betroffen gewesen, begleitet von negativen Einstellungen der Majorität gegenüber den Immigranten. Wir schlagen vor, dass Werte eine wichtige Determinante solcher negativen Einstellungen sind, und erklären die Variation in der Stärke der Effekte von Werten in den einzelnen Ländern. Auf der Grundlage der Theorie grundlegender menschlicher Werte von Schwartz (1992, 1994) nehmen wir an, dass Universalismus Werte zu positiver Einstellung gegenüber der Zuwanderung führen werden; im Gegensatz dazu führen Konformität und Tradition zu immigrationsfeindlichen Gefühlen. Wir nehmen ferner an, dass diese Wirkungen von Werten durch zwei Kontext-Variablen moderiert werden. Beide Effekte von Werten sind niedriger in Ländern mit einem höheren Grad von kultureller Einbettung, und weiter, negative Effekte der Werte-Konformität und Tradition werden vermutlich durch einen niedrigen Anteil von Immigranten in einem Land gedämpft. Eine Mehrebenen-Analyse mit Daten von 24 Ländern der vierten Welle des European Social Survey (2008 bis 2009) stützen diese Hypothesen. Darüber hinaus zeigen wir, dass die Messeigenschaften der theoretischen Konstrukte über die Länder hinweg äquivalent sind und deshalb die statistischen Vergleiche rechtfertigen.

1 Introduction

European countries have faced a constant increase of immigration in recent decades (Hooghe et al. 2008). Approximately 3.4 million people immigrated into countries belonging to the EU-27 in 2004, the number increased to 3.8 million in 2008, and this trend appears to be continuing.[1] Not surprisingly, substantial sociological research has been devoted to understanding the consequences and implications of this upsurge in migration. Much of this research has focused on one implication that is considered particularly worrisome, i.e., the level of anti-immigrant sentiment among members

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[1] See http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/.

of the host societies. Several studies reveal a rapid rise and/or a high level of anti-foreigner sentiment: Substantial proportions of the population of host societies favor denying equal rights to immigrants and perceive them as a threat to social cohesion and order, culture, and traditions, and their economic well-being (Raijman et al. 2008; Scheepers et al. 2002; Schlüter et al. 2008). In many European countries the popularity of anti-immigrant politicians or parties has risen and public opinion has shifted to a less welcoming position (Lubbers et al. 2002).

Previous research has sought to delineate the mechanisms underlying the genesis of negative attitudes of majority members toward immigrants. It has focused on both individual and contextual determinants of such attitudes. A first line of research maintains that socioeconomic vulnerability, reflected in low education levels, weak labor market positions, and economic deprivation, accounts for the negative attitudes. Various studies have tested these propositions with international datasets like the European Social Survey and conclude that vulnerable individuals fear losing their jobs due to competition from newcomers to the labor market who are willing to accept lower wages (Gorodzeisky 2011; Kunovich 2004; Pichler 2010; Raijman et al. 2003; Semyonov and Glikman 2009; Semoyonov et al. 2006, 2008). Yet some studies also demonstrate reductions of perceived threat due to contact with immigrants (e.g., Semyonov and Glikman 2009).

A second line of research proposes that ideological dispositions are an important source of anti-immigrant attitudes and that political conservatism mobilizes negative sentiments that induce hostility to and prejudice against immigrants. Empirical studies have demonstrated repeatedly that right-wing individuals tend to reject immigration more strongly (Gorodzeisky 2011; Raijman et al. 2003; Semyonov et al. 2006, 2008).

A third set of studies explains the emergence of anti-immigrant prejudice as due to *contextual* variables that affect negative attitudes directly or that moderate the effects of individual-level variables. These studies suggest that unfavorable economic conditions on the country level accompanied by large-scale immigration are perceived as a threat to the economy and may induce hostile attitudes (Gorodzeisky 2011; Meulemann et al. 2009; Pichler 2010; Quillian 1995, 1996; Scheepers et al. 2002; Semyonov et al. 2006). Other contextual variables identified as sources of hostile attitudes are negative media coverage (Schlüter and Davidov 2011) and national immigration policies (Schlüter et al. 2013; Weldon 2006).

In recent years, a number of authors have also noted the important role that human values play in the explanation of negative attitudes toward immigrants (Davidov and Meuleman 2012; Davidov et al. 2008a; Sagiv and Schwartz 1995; Schwartz 2006a, 2007). These studies adopted Schwartz' (1992) definition of basic human values as beliefs about the importance of broad goals as guiding principles in life. They used individual differences in values to explain negative attitudes toward immigrants over and above the effects of social structural position. Values are found to exert robust effects, some of which varied across countries.

Research has yet to examine the *conditions* that affect the influence of basic human values on attitudes toward immigration, that is, the circumstances under which values contribute more or less to the explanation of anti-immigrant sentiments. Nor have researchers proposed a theory that might explain the variation in value effects

across countries. This study investigates *variation* in the effects of values on attitudes toward immigration across 24 European countries from different European regions. We will argue that an aspect of cultural values—cultural embeddedness (Schwartz 2006b), that is, the extent to which individuals in the society are expected to strive toward shared goals rather than their own—serves as a moderator of the impact of values on anti-immigration attitudes. By trying to explain variation in the effect of individual values on attitudes toward immigration across countries in a systematic way, our study contributes to a better understanding of the conditions under which values are more prominent in explaining negative sentiments toward immigration.

To test these hypotheses empirically, we utilize an internationally comparable dataset that includes large samples from many European countries, the European Social Survey (ESS; Jowell et al. 2007). We derive latent variables that take measurement errors into account (Bollen 1989) for our main theoretical constructs, and we test the equivalence of our constructs across countries (Billiet 2003). Testing for construct equivalence has rarely been practiced in studies that apply multilevel analysis, although such equivalence is a necessary condition for a meaningful interpretation of multilevel analyses (Kim et al. 2012). Before turning to the empirical analyses, we present the theoretical background and propositions of the study.

2 Theoretical considerations

2.1 The value theory

Human values are 'desirable transsituational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity' (Schwartz 1994, p. 21). Individuals' values are ordered in a hierarchy of importance that is quite stable across time and situations.[2] Schwartz (1992)[3] has postulated that the full range of values recognized across societies form a motivational continuum; extensive research in over 80 countries has supported this theory that distinguishes 10 values (universalism, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation, and self-direction). We will focus on the two values universalism and the unified value conformity-tradition, because they have been found to predict attitudes

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[2] In contrast to values, attitudes are not ordered hierarchically, are less stable, and refer to positive and negative evaluations of objects rather than to the importance of goals (Rokeach 1968; Schwartz 2006a). Values, but not attitudes, serve as standards to judge people, actions, and events.

[3] We employ the Schwartz value theory rather than the Inglehart theory (e.g., Inglehart and Baker 2000) mainly for three reasons. First, Schwartz (1992, 1994) makes a better theoretical and empirical distinction between values and attitudes. Such a distinction is crucial for using values to explain attitudes and for guaranteeing discriminant validity between the concepts. Second, Schwartz makes a clear distinction between individual-level and societal-level values whereas Inglehart does not make such a distinction on the measurement level. We propose mechanisms to explain attitudes toward immigration on the individual level. Therefore, the Schwartz theory is better suited to test them empirically. Finally, the database we chose to test our propositions is the European Social Survey, which includes measures of anti-immigrant sentiments across a large set of European countries. This dataset included measurements for Schwartz' rather than Inglehart's values. See Becker et al. (2012) and Datler et al. (2012) for a discussion about differences between the two theories.

toward immigration[4] (Davidov and Meuleman 2012; Davidov et al. 2008a; Sagiv and Schwartz 1995; Schwartz 2007).

2.2 Relations of values to attitudes toward immigration

2.2.1 The individual level

What mechanism links values to attitudes toward immigration? Values whose expression, attainment, or motivation may be promoted or blocked by immigration to a country are likely to affect attitudes toward immigration (Sagiv and Schwartz 1995). This mechanism is particularly relevant for two values, namely, universalism and conformity-tradition. Universalism values express the motivation to appreciate differences among individuals as well as to understand, tolerate, and protect the welfare of all people, with an emphasis on the weak and vulnerable who are different from the self (Schwartz 2006a). Admitting immigrants who left or even fled their country of birth in search of a better life provides opportunities to realize the goal of promoting the welfare of the weak and vulnerable. Therefore, we expect a positive effect of universalism on attitudes toward immigration (hypothesis *H1*).

In contrast, we hypothesize that tradition and conformity values lead to negative attitudes toward immigration (hypothesis *H2*). This is because these values express the motivation to maintain the beliefs, customs, and practices of one's culture and family and to avoid violation of conventional expectations and norms. The arrival of newcomers threatens the attainment of these values because immigrants from different cultures are liable to introduce new and unfamiliar practices and beliefs, to question common norms and conventions or to violate them out of ignorance, and to bring about change in the existing societal order.

Previous individual-level research has demonstrated the effects of the values universalism, tradition, and conformity on attitudes toward immigration in numerous countries (e.g., Davidov et al. 2008a; Davidov and Meuleman 2012; Sagiv and Schwartz 1995; Schwartz 2007). The current study will provide a rigorous test of Hypotheses *H1* and *H2* by trying to replicate the finding across 24 countries. But at the same time, we take current knowledge a step further by addressing the following questions: How do value effects vary across countries, and how can this variation be explained?

2.2.2 Variability in value effects

The above hypotheses and the reasoning underlying them are stated as applicable across societies. We expect, however, that the strength of the effects of these basic human values varies across societies. In order for values to affect attitudes and behav-

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[4] In many empirical studies it was not possible to distinguish between tradition and conformity (see, e.g., Davidov 2010). Therefore, we decided to unify them in this study. This does not contradict the theory due to their shared motivation and proximal location in the value space. We did not use security as a predictor because of the different meaning it may have across countries which may lead to conceptual confusion. Furthermore, in additional exploratory analyses, security only has a relatively small effect because of its close content to conformity and tradition.

ior, they must be activated in specific situations or contexts (Schwartz 2006a). Contextual variables are likely to influence the intensity with which values relevant to immigration attitudes are activated.

The first contextual variable we consider is cultural embeddedness, a cultural dimension for comparing societies (Schwartz 2006b). In so-called 'embedded cultures', people are viewed as entities embedded in the collectivity. Meaning in life comes largely through social relationships, through identifying with the group, participating in its shared way of life, and striving toward its shared goals rather than pursuing one's own goals. Embedded cultures emphasize maintaining the status quo and restraining individuals' actions that might disrupt in-group solidarity or the traditional order. In contrast, in less embedded cultures, people are viewed as autonomous entities who are encouraged to cultivate and express their own preferences, feelings, ideas, and abilities, and to find meaning in their own uniqueness.

Embeddedness assumes that a person's roles in and obligations to collectivities are more important than her unique ideas and aspirations, and in less embedded societies individuals are encouraged to express their uniqueness and independence in thought, action, and feelings (Schwartz 2006b). As such, cultural embeddedness should be distinguished from Hofstede's (2001) concept of collectivism: Whereas collectivism refers to the way in which individuals and the surrounding group are actually related, embeddedness refers in addition to the norms that dictate how they should be related.[5]

This analytical framework implies that individuals' personal values are more likely to be salient, to be activated rather than suppressed, and to influence their attitudes and behavior in societies with less embedded cultures. Lesthaeghe and Moors (2000, p. 11) also inferred that 'value orientations are … predictive for choices… in contexts with … high degrees of individual autonomy'. On these bases, we hypothesize that values have stronger effects on attitudes toward immigration in less embedded societies (hypothesis *H3*).

Our second contextual variable is the proportion of immigrants in a country. Group threat theory posits that people who live in conditions of intense competition for scarce goods are more likely to perceive immigrants as a threat (Stephan et al. 2005; Coenders 2001; Scheepers et al. 2002; Quillian 1995, 1996). A high proportion of immigrants in a country has been associated with negative attitudes toward immigration at the country level (Scheepers et al. 2002; Semyonov et al. 2006). We hypothesize that this is also the case across the 24 European countries we study here (hypothesis *H4*). Empirical evidence for an effect of the proportion of immigrants on attitudes toward immigration is mixed with some authors finding support while others do not. For example, Quillian (1995, 1996) or Coenders et al. 2004) found supportive evidence for the effect of immigrant group size, but Semyonov et al. (2004) or Strabac and Listhaug (2008) did not. The test of Hypothesis *H4* in the current study provides a rigorous test of this effect across numerous countries.

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[5] *Our* choice to focus on cultural embeddedness rather than on collectivism is not only justified based on theoretical considerations, but is also supported by empirical arguments. We reproduced the analyses presented below using collectivism as a moderator for value effects (results not shown but are available upon request). Cross-level interactions for collectivism are insignificant (with Tradition-Conformity) or considerably weaker than is the case for cultural embeddedness.

Yet more central to the purpose of this study, we hypothesize that the higher the proportion of immigrants in the country, the stronger the negative effect of conformity and tradition on attitudes toward immigration will be (hypothesis *H5*). As noted above, immigration threatens the attainment of these values by introducing new and unfamiliar practices and beliefs. It increases the number of people who may question or violate common norms and conventions. The greater the proportion of immigrants from dissimilar cultural backgrounds, the greater the pressure for change in the societal institutions that people who emphasize conformity and tradition values cherish. Hence, we expect that these values will then show a stronger relationship with anti-immigration sentiment.

There is mixed evidence for an effect of immigration levels on relations of values to immigration attitudes. Davidov et al. (2008a) found that values had a weaker effect on attitudes in countries with higher immigration levels. But Davidov and Meuleman (2012) found no variation across countries that differed in immigration levels in the effects of conservation values on immigration attitudes. Immigration levels are not equivalent to the proportion of immigrants. However, the two are sufficiently related so that the mixed findings for the former are relevant to the interaction of the latter with values that we predicted (hypothesis *H5*). No studies have examined the possible cross-level interaction effect of cultural embeddedness on relations of individual values with attitudes toward immigration which are postulated in hypothesis *H3*.

3 Data and measurement

3.1 Data

The analyses utilize the data of the fourth round (2008–2009) of the European Social Survey (ESS) (Jowell et al. 2007). In each of 24 European countries, strict probability samples of the noninstitutionalized populations aged 15 years and older were selected. In all, 41,965 respondents reported their attitudes and opinions regarding various social and political issues, their basic values, and a full list of background variables. The following countries, with their abbreviation and effective sample sizes in parentheses, were included in the analyses: Belgium (BE; 1,586), Bulgaria (BG; 2,210), Cyprus (CY; 1,119), Czech Republic (CZ; 1,968), Denmark (DK; 1,505), Estonia (EE; 1,207), Finland (FI; 2,138), France (FR; 1,907), Germany (DE; 2,501), Great Britain (GB; 2,100), Greece (GR; 1,946), Hungary (HU; 1,513), Ireland (IE; 1,476), Latvia (LV; 1,643), Netherlands (NL; 1,602), Norway (NO; 1,412), Poland (PL; 1,595), Portugal (PT; 2,228), Romania (RO; 2,007), Slovakia (SK; 1,755), Slovenia (SI; 1,175), Spain (ES; 2,341), Sweden (SE; 1,611), and Switzerland (CH; 1,368).[6]

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[6] For further documentation about the data collection procedures, see http://www.europeansocialsurvey.org/. Data can be downloaded from http://ess.nsd.uib.no/.

3.2 Variables

Attitudes toward Immigration. Respondents were asked three questions: To what extent do you think [your country] should allow people (1) of the same race or ethnic group (2) of a different race or ethnic group (3) from poorer countries outside Europe, to come and live in your country? Response categories ranged from 1 (allow many to come and live here) to 4 (allow none). We recoded responses so that higher scores indicate greater willingness to allow immigrants into the country. Confirmatory factor analysis (CFA) (Bollen 1989; Jöreskog 1971) demonstrated that the three questions load positively and strongly on a single factor. These questions were averaged to form an index that we named Allow.

Values. The ESS Human Values Scale is a modification of the Portrait Values Questionnaire (Schwartz 2007). It includes brief verbal portraits of 21 different people, gender-matched to the respondent. Each portrait describes a person's goals, aspirations, or wishes that point implicitly to the importance of a single value. For example, the following item describes a person for whom universalism values are important: "She thinks it is important that every person in the world be treated equally. She believes everyone should have equal opportunities in life." For each portrait, respondents answer the question: 'How much like you is this person?' choosing one of six labeled boxes ranging from 'very much like me' (1) to 'not like me at all' (6). Respondents' own values are inferred from their self-reported similarity to people who are described in terms of particular values. We reversed the scores so that higher scores indicate greater value importance.

We used the three universalism items that tap the importance of tolerance, equality, and environmental concern, two tradition items that tap the importance of tradition, customs, religion, and modesty, and two conformity items that tap the importance of following rules, doing what one is told, and behaving properly. In CFA analyses, all items loaded strongly on their respective value factor. We therefore averaged the items to form two indices that we named Universalism (UN) and Conformity-Tradition (COTR).

Cultural embeddedness. In each country, we utilized scores based on responses of urban school teachers and university students to the Schwartz Value Survey (for details see Schwartz 2006b). School teachers' values are considered a good proxy of society's values as in their educational function in schools they are expected to convey and disseminate norms and values among young pupils and future generations. Data were gathered between 1990 and 2007. Evidence in Schwartz (2006b) reveals very little change in cultural embeddedness scores across extended periods of time even in countries that underwent major political and institutional change. We therefore combined the data from this whole period for the index. The items included were validated empirically as indicators of cultural embeddedness by means of multidimensional scaling with countries as the unit of analysis (Schwartz 2006b). The cultural embeddedness score was the average ratings in each country of the importance of 15 value items: social order, tradition, forgiving, obedience, politeness, being moderate, honoring elders, national security, cleanliness, devoutness, wisdom,

self-discipline, protection of one's public image, family security, and reciprocation of favors.

Both the individual values and the country scores for embeddedness were derived from questionnaires distributed among individuals. However, embeddedness is a characteristic of national cultures on which societies differ whereas conformity and tradition values are variables on which individuals differ. The former refers to the prescriptions in a society for how people should relate, the latter to the goals that motivate individuals. The former emerges in analyses in which country means are the unit of analysis, the latter emerge in analyses in which individuals' value priorities are the unit of analysis. These two levels of analysis are conceptually and statistically independent. Moreover, the value items that fit together in theory and emerge empirically to measure conformity-tradition and cultural embeddedness, while partially overlapping, differ in a number of particulars. Of the 15 embeddedness items, seven measure individual values from conformity-tradition, but the other seven measure security, power, benevolence, and universalism values at the individual level. The latter include, for example, 'wisdom' and 'forgiving'.[7]

Proportion of immigrants in a country. We operationalized this variable as the percentage of non-EU immigrants (foreign born) in the population of each country.[8] The data for 2007 were downloaded from the website of the MIMOSA project (http://mimosa.gedap.be/).

Control variables. Gender was scored 0 for males and 1 for females. Age was measured in years. Education was measured by the highest level of education achieved (0= no education up to 5= tertiary education completed). Subjective income was measured by responses to the question "Which of the descriptions … comes closest to how you feel about your household's income nowadays?" on a 4-point scale (1= living comfortably on present income, 4= finding it very difficult on present income). Political orientation was measured by self-placement on a 0 (left) to 10 (right) scale. Finally, religiosity was measured by responses to the question "…how religious would you say you are?" on a scale ranging from 0 (not at all religious) to 10 (very religious).

3.3 Modeling strategy

We used multilevel analysis to take account of the two-level structure of the data, where individuals are nested within countries. We estimated a series of increasingly more complex models as proposed by Hox (2010). After estimating a so-called empty model, we included the sociodemographic variables as control variables. In the third

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[7] Data on embeddedness across countries may be provided by the 4th author upon request.

[8] The two countries with the largest share of non-EU immigrants are Estonia and Latvia. These countries host a very large minority group of ethnic Russians who have lived there for an extended period of time but did not receive citizenship after the collapse of the Soviet Union. Because of this specific context in the Baltic States, the percentage of non-EU immigrants might represent a different reality and our indicator might lack comparability. To rule out the possibility that this distorts our conclusions, we replicated all analyses in this paper excluding Estonia and Latvia. Results (available upon request) are virtually identical, and do not alter the conclusions.

model, we added the universalism and conformity-tradition values at the individual level and the cultural embeddedness score and the percentage of non-EU immigrants at the country level. Finally, we included random slopes for the values and cross-level interactions to test the hypothesized variations in the effect of individual values across countries.

We estimated all models with the restricted maximum likelihood procedure implemented in SPSS 19. To deal with item nonresponse, we used multiple imputation (Rubin 1996; Schafer 1997). All variables were standardized (over the pooled dataset), so all effects can be interpreted as standardized effects (Hox 2010; Snijders and Bosker 1994). Furthermore, the two value scales were group-mean centered (Hox 2010, p. 68) before standardization, in order to avoid confusion between processes operating at the individual and country level. This procedure guarantees that the interaction effects we observe are actually cross-level interactions (as our theoretical framework predicts) rather than interactions at the country level (Hofmann and Gavin 1998).

4 Results

4.1 Testing for equivalence

As a first step, we ensured that our measurement of attitudes toward immigration and of individual values of universalism and conformity-tradition, our main constructs, were equivalent across countries (Billiet 2003). Equivalence of concepts is a necessary condition before cross-cultural studies may be meaningfully conducted. In line with previous studies (Davidov 2008; Davidov and Meuleman 2012; Davidov et al. 2008b), we employed multiple group confirmatory factor analysis (MGCFA: Bollen 1989; Brown 2006; Jöreskog 1971) to test for measurement equivalence across the 24 groups (countries) in this study. The tests supported full metric and partial scalar equivalence, thereby permitting meaningful interpretation of a multilevel analysis (Davidov 2010).[9]

4.2 Descriptive overview

Table 1 provides country averages for the scales measuring attitudes toward immigration (Allow) and value priorities (Universalism and Conformity-Tradition) as well as scores on the two contextual variables (cultural embeddedness and the proportion of non-EU immigrants).

Willingness to accept immigrants varied substantially across countries. Attitudes were most positive in Sweden, followed by Poland, Norway, Germany, and Bulgaria. Rejection of immigration was strongest in Greece followed by Latvia, Hungary, Portugal, and to a lesser extent, Cyprus and the Czech Republic. As shown in Table 1, the mean willingness score varied considerably across countries. The difference between the most (Sweden) and least (Greece) positive country was 1.46, which is consider-

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[9] The full analyses are available from the first author.

Table 1 Country scores for attitudes toward immigration, the value scales, and the contextual variables

Country	Allow (country average)	Universalism (country average)	Conformity-Tradition (country average)	% non-EU foreigners	Cultural Embeddedness Score
BE	0.17	0.12	0.03	6.10	3.25
BG	0.30	−0.12	0.32	0.39	3.87
CH	0.28	0.37	−0.29	9.56	3.28
CY	−0.33	0.30	0.43	7.67	4.04
CZ	−0.33	−0.37	−0.10	0.93	3.59
DE	0.32	0.08	−0.27	7.72	3.06
DK	0.22	−0.02	−0.25	5.84	3.19
EE	−0.24	−0.19	−0.30	15.56	3.81
ES	−0.24	0.38	0.39	7.53	3.31
FI	0.00	0.11	−0.16	2.24	3.37
FR	0.03	0.12	−0.38	7.65	3.20
GB	−0.12	−0.07	−0.16	6.96	3.34
GR	−0.63	0.41	0.45	8.22	3.41
HU	−0.46	0.01	−0.04	0.76	3.60
IE	0.07	0.20	0.18	3.97	3.41
LV	−0.51	−0.28	−0.07	14.58	4.46
NL	0.16	−0.03	−0.15	8.34	3.19
NO	0.37	−0.28	−0.21	5.61	3.45
PL	0.50	0.05	0.30	1.14	3.86
PT	−0.45	−0.40	−0.19	5.33	3.43
RO	0.04	−0.24	0.20	0.44	3.78
SE	0.83	−0.19	−0.41	8.05	3.12
SI	0.09	0.15	0.21	9.95	3.71
SK	0.09	0.03	0.43	0.94	3.82

The allow, universalism, and conformity-tradition scales are standardized (Note that in the multilevel models, the value scales were group-mean centered before standardizing in order to guarantee that the interactions with context variables are due to actual cross-level interactions rather than macro-level processes)

able knowing that this is a standardized variable. The multilevel analysis sheds light on the sources of variation in willingness to accept immigrants both within countries and between them.

Embeddedness varied considerably across countries as well. Scores were highest in Latvia, Estonia, Cyprus, Bulgaria, and Poland and lowest in Germany, Sweden, the Netherlands, and Denmark. In the former countries we expect values to exert stronger effects whereas in the latter we expect them to operate less strongly.

4.3 Multilevel analysis

The results of the series of multilevel model analyses are reported in Tables 2 (Models 1–4) and 3 (Models 5–7).

Model 1 included only a random intercept to enable us to determine how much of the variance in the dependent variable is accounted for by individual-level variability and how much by between-country variability. Twelve percent of the variance is due

Table 2 Multilevel models explaining attitudes toward immigration (Models 1–4). (Source: ESS 2008–2009, own calculations)

	Model 1		Model 2		Model 3		Model 4	
	Par.	SE	Par.	SE	Par.	SE	Par.	SE
Fixed effects								
Intercept	0.01	0.07	0.00	0.07	0.00	0.07	0.01	0.06
Gender			0.01*	0.00	−0.01	0.00	−0.01	0.00
Age			−0.12***	0.00	−0.11***	0.00	−0.11***	0.00
Educational level			0.12***	0.00	0.10***	0.00	0.10***	0.00
Subjective income			−0.09***	0.01	−0.10***	0.01	−0.10***	0.01
Conformity-Tradition (COTR)					−0.12***	0.01	−0.12***	0.01
Universalism (UN)					0.14***	0.01	0.14***	0.01
Left-right position					−0.08***	0.01	−0.08***	0.01
Religiosity					0.05***	0.01	0.05***	0.01
Context variables								
Embeddedness							−0.09	0.06
% non-EU immigrants							−0.07	0.06
Cross-level interactions								
COTR x embeddedness								
UN x embeddedness								
COTR x % non-EU immigrants								
Variance components								
Residual variance	0.882***	0.006	0.838***	0.006	0.809***	0.006	0.809***	0.006
Random intercept	0.124**	0.037	0.103**	0.031	0.103**	0.030	0.096**	0.030
Slope COTR								
Slope UN								
Intra Class Correlation	0.12		0.11		0.11		0.11	
Explained variance								
% reduced variance residual			0.05		0.08		0.08	
% reduced variance intercept			0.17		0.17		0.23	

Ni=41,965; Nj=24

Multiple imputation is used to handle missing data. All entries are standardized effects

COTR conformity-tradition, *UN* Universalism

*p<0,05; **p<0,01; ***p<0,001

to country-level variability; hence, it is important to use multilevel analysis (Hox 2010).

Model 2 regressed Allow (the index of attitude toward immigration) on the sociodemographic variables gender, age, education, and subjective income. Compared to the empty model, the individual- and country-level variances dropped by 5.0% and 17%, respectively, indicating that these variables explain considerable

Table 3 Multilevel models explaining attitudes toward immigration (Models 5–7). (Source: ESS 2008–2009, own calculations)

	Model 5		Model 6a		Model 6b		Model 6c		Model 7	
	Par.	SE	Par.	SE	Par.	SE	Par.	SE	Par.	SE
Fixed effects										
Intercept	0.01	0.06	0.01	0.06	0.01	0.06	0.01	0.06	0.01	0.06
Gender	−0.01	0.00	−0.01	0.00	−0.01	0.00	−0.01	0.00	−0.01	0.00
Age	−0.11***	0.00	−0.11***	0.00	−0.11***	0.00	−0.11***	0.00	−0.11***	0.00
Educational level	0.10***	0.00	0.10***	0.00	0.10***	0.00	0.10***	0.00	0.10***	0.00
Subjective income	−0.10***	0.01	−0.10***	0.01	−0.10***	0.01	−0.10***	0.01	−0.10***	0.01
Tradition-Conformity	−0.11***	0.01	−0.11***	0.01	−0.11***	0.01	−0.11***	0.01	−0.11***	0.01
Universalism	0.14***	0.01	0.14***	0.01	0.14***	0.01	0.14***	0.01	0.14***	0.01
Left-right position	−0.08***	0.01	−0.08***	0.01	−0.08***	0.01	−0.08***	0.01	−0.08***	0.01
Religiosity	0.05***	0.01	0.05***	0.01	0.05***	0.01	0.05***	0.01	0.05***	0.01
Context variables										
Embeddedness	−0.09	0.06	−0.09	0.06	−0.09	0.06	−0.09	0.06	−0.09	0.06
% non EU immigrants	−0.07	0.06	−0.07	0.06	−0.07	0.06	−0.07	0.06	−0.07	0.06
Cross-level interactions										
COTR x embeddedness			0.03**	0.01					0.03***	0.01
UN x embeddedness.					−0.05***	0.01			−0.05***	0.01
COTR x % non-EU immigrants							−0.02*	0.01	−0.02*	0.01
Variance components										
Residual variance	0.804***	0.006	0.804***	0.006	0.804***	0.006	0.804***	0.006	0.805***	0.006
Random intercept	0.096**	0.030	0.096**	0.030	0.096**	0.030	0.096**	0.030	0.096**	0.030
Slope COTR	0.003**	0.001	0.002*	0.001	0.003**	0.001	0.003*	0.001	0.002*	0.001
Slope UN	0.003***	0.001	0.004**	0.001	0.001*	0.001	0.003**	0.001	0.001*	0.001
ICC	0.11		0.11		0.11		0.11		0.11	

Table 3 (Continued)

	Model 5		Model 6a		Model 6b		Model 6c		Model 7	
	Par.	SE	Par.	SE	Par.	SE	Par.	SE	Par.	SE
Explained variance										
% reduced variance residual	0.09		0.09		0.09		0.09		0.09	
% reduced variance intercept	0.23		0.23		0.23		0.23		0.23	
% reduced var. slope COTR			0.25		0.00		0.16		0.51	
% reduced var. slope UN			−0.05		0.65		0.01		0.67	

Ni=41,965; Nj=24

Multiple imputation is used to handle missing data. All entries are standardized effects

COTR conformity-tradition, *UN* universalism

*$p<0.05$; **$p<0.01$; ***$p<0.001$

variance on both levels of analysis. Women and those with higher education and income were more positive toward immigration whereas older people were considerably more negative. These findings are in line with what has been reported in the literature (e.g., Semyonov et al. 2006).

Model 3 added the individual values of universalism and conformity-tradition and also level of religiosity and left-right political orientation. These individual characteristics added to the explanation of variance in attitudes toward immigration over and above the effects of the sociodemographic variables, primarily at the individual level. In line with previous studies (Davidov et al. 2008a; Davidov and Meuleman 2012), attitudes toward immigration were more positive among those high in universalism values and low in conformity-tradition values. The two basic values had the strongest effects among the individual-level predictors. The inclusion of universalism and conformity-tradition is responsible for the lion's share in the drop of residual variance between Models 2 and 3 at the individual level. Furthermore, attitudes toward immigration were more positive among more religious individuals and among those with left-wing political orientations. This finding is also in line with previous studies (see, e.g., Scheepers et al. 2002).

Model 4 added the macro-level variables, cultural embeddedness levels, and percentage of non-EU residents in each country, in order to examine their effect on variation between countries in attitudes toward immigration. Based on group threat theory (Quillian 1995, 1996), we hypothesized that greater proportions of immigrants in a country would increase competitive threat and, therefore, lead to rejecting immigration. This hypothesis was not confirmed; proportion of immigrants in a country did not account for significant between-country variability in attitudes to immigration. We had no reason to expect a direct effect of cultural embeddedness on attitudes toward immigration, nor did the analysis reveal such an effect. Thus, neither contextual variable had a direct effect on attitudes toward immigration.

Model 5 investigated whether the effect of individual values on attitudes varied across countries and, if so, to what extent. In this model, we allowed the slopes of universalism and conformity-tradition values to vary across countries. The random slope variances of the two values were significant, indicating that the effects of the values do indeed vary across countries. The random slope variances provide a clear estimate of the size of the difference in the effects of the values. The standard deviation of both random slopes equaled 0.055 (namely, the square root of the random slope variances). This indicates that country-specific value effects deviate on average by 0.055 from the mean value effects over all countries. Inspection of the country-specific value effects (not shown) indicates that—in spite of the considerable cross-national variance in effect sizes—the direction of the effects of universalism and conformity-tradition values on attitudes toward immigration is the same across 24 European countries.

Subsequently, we examined whether the variation across countries in the effects of values could be explained by the contextual variables, thus testing Hypotheses *H3* (cultural embeddedness) and *H5* (percentage of immigrants in country). Because the sample size at the country level is quite limited ($N=24$), three separate models were estimated, each containing one cross-level interaction effect: universalism X cultural embeddedness (Model 6a), conformity-tradition X cultural embeddedness
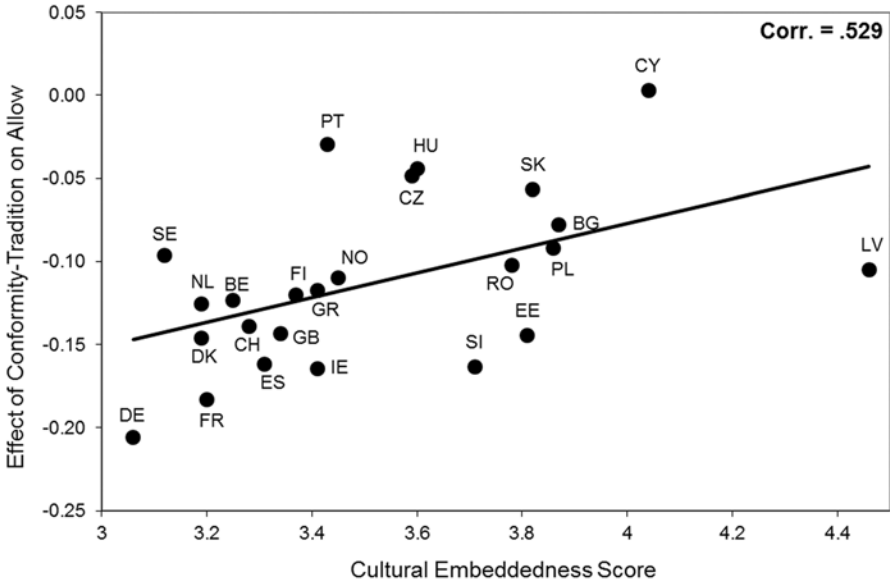
Fig. 1 Variation across countries in the effects of conformity-tradition values on attitudes toward immigration as a function of the level of cultural embeddedness in the country. (Source: ESS 2008–2009, own calculations. For country abbreviations see text)
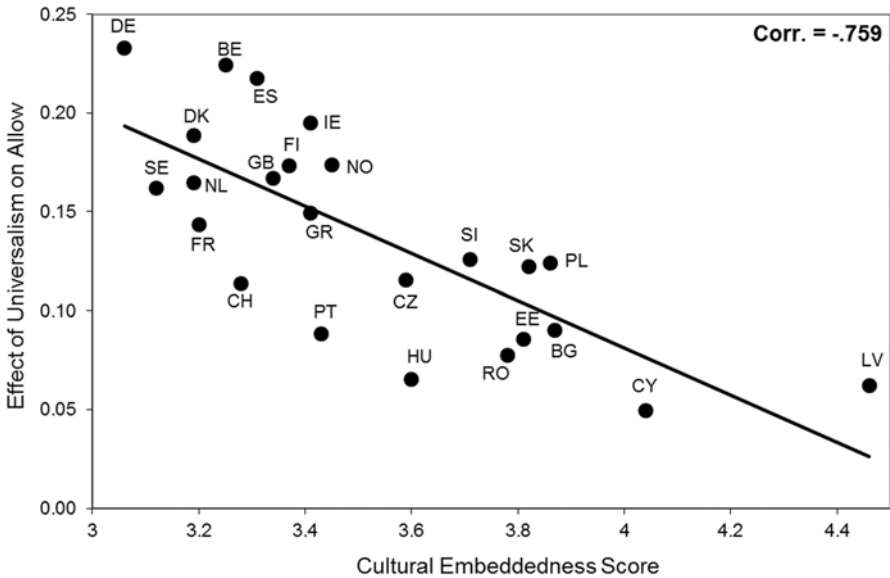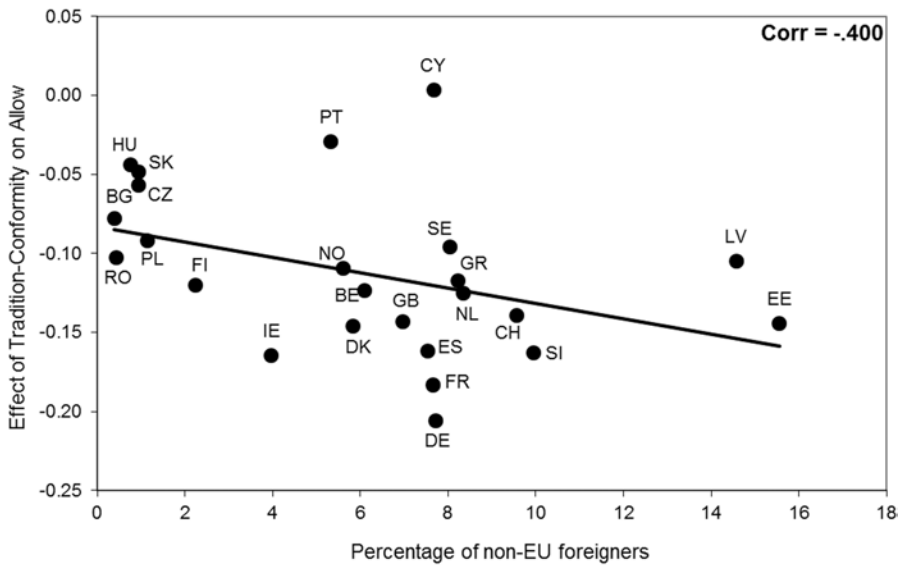

Fig. 2 Variation across countries in the effects of universalism values on attitudes toward immigration as a function of the level of cultural embeddedness in the country. (Source: ESS 2008–2009, own calculations. For country abbreviations see text)

(Model 6b), and conformity-tradition X percentage non-EU immigrants in the country (Model 6c). Additionally, Figs. 1, 2, and 3 visualize how variation in the effects

Fig. 3 Variation across countries in the effects of conformity-tradition values on attitudes toward immigration as a function of the percentage of non-EU population in the country. (Source: ESS 2008–2009, own calculations. For country abbreviations see text)

of the basic individual values is related to the contextual variables. The cross-level interaction terms estimate the size of these relationships.

Models 6a and 6b indicate that the interaction terms of cultural embeddedness were significant with both conformity-tradition values and with universalism values. Thus, the level of cultural embeddedness in a country moderated the effects of universalism and conservation on attitudes toward immigration. In less culturally embedded societies, values had stronger effects on attitudes. The negative coefficient for the interaction between cultural embeddedness and universalism values indicates that the positive main effect of universalism values on attitudes toward immigration was weaker in countries high on embeddedness and stronger in countries low on embeddedness. The positive coefficient for the interaction between cultural embeddedness and conformity-tradition values indicates that the negative main effect of these values on attitudes toward immigration was weaker in countries high on embeddedness and stronger in countries low on embeddedness. In sum, in countries high in cultural embeddedness, individual values had a weaker effect on attitudes toward immigration. Cultural embeddedness can explain 25 % of the variation in the effect of conformity-tradition and no less than 65 % of the variation in the effect of universalism. These findings fit the theoretical argument that individual values are more likely to be activated and to guide attitudes in less culturally embedded societies, that is, societies whose culture encourages pursuing one's own goals and expressing one's unique preferences.

Model 6c reveals a significant coefficient for the interaction term between the percentage of non-EU foreigners in a country and conformity-tradition values. The negative coefficient of this interaction indicates that the negative main effect of con-

formity-tradition values on attitudes toward immigration was stronger in countries where the proportion of the immigrant population is higher, that is, people high in conformity-tradition values reject immigration more strongly in countries with larger immigrant populations, confirming our fifth hypothesis. This fits the theoretical argument that a larger proportion of immigrants in a country increases the potential for societal change, intensifying the threat experienced by people for whom it is especially important to preserve convention, social norms, and customs. Consequently, these people reject immigration even more strongly in countries with large proportions of immigrants. Sixteen percent of the variability in the effect of conformity-tradition on attitudes toward immigration was explained by this cross-level interaction.

Model 7, finally, includes all three cross-level interactions simultaneously. The finding that the results are virtually identical to those of Models 6a–6c essentially corroborates the robustness of the results.

The full set of findings reveals that universalism and conformity-tradition values exert strong effects on attitudes toward immigrants in many different countries. Moreover, the strength of these effects varies significantly across countries. This variation depends to a substantial extent on the level of cultural embeddedness and the proportion of non-EU immigrants in each country.

5 Summary and conclusions

European countries have faced a constant increase of immigration in recent decades, accompanied by a rapid rise in and/or a high level of anti-foreigner sentiment. In many European countries the popularity of anti-immigrant politicians or parties has risen and public opinion has shifted to a less welcoming position. This study built upon previous studies that have shown the important role of basic human values as determinants of negative attitudes to immigrants. We hypothesized that more positive attitudes toward immigration would be found among individuals who give higher priority to universalism values, and contrastingly, more negative attitudes would be found among individuals who give higher priority to conformity-tradition values. The present study sought to explain variation across countries in these effects of values on attitudes. We identified two contextual variables likely to explain this variation, cultural embeddedness and proportion of immigrants in the population. We expected cultural embeddedness to play an important role in moderating these effects across countries.

We hypothesized that the effects of the two basic individual values are weaker in societies whose culture is higher on embeddedness (vs. autonomy). The rationale behind this cross-level interaction is that in more embedded societies, people are socialized and encouraged to maintain group solidarity and to find meaning in life through identifying with and pursuing the goals of the groups of which they are members. In less embedded societies they are socialized and encouraged to cultivate their own unique preferences and ideas and to pursue their own personal goals. Thus, personal values are more likely to be salient, readily activated, and hence to influence attitudes more in less embedded societies. We further hypothesized that the negative effect of conformity-tradition values on attitudes toward immigration is stronger in

countries with a higher percentage of immigrants. Immigrants potentially threaten the maintenance of accepted customs, traditions, and norms, and the larger the proportion of immigrants the greater the threat to the status quo. This threat directly challenges the goals of conformity-tradition values and is, therefore, likely to activate them as sources of influence on attitudes.

To test our hypotheses, we utilized the data of 24 European countries from the fourth round of the European Social Survey (2008–2009). We analyzed the data with multilevel models because we wished to examine effects at both the individual and country level and to test cross-level interactions. Because constructs are not comparable across countries unless their measurement is equivalent, we used multigroup confirmatory factor analysis to establish the necessary metric and partial scalar equivalence of the value and attitude constructs. This permitted meaningful interpretation of the multilevel analysis.

The analyses largely supported the hypotheses. Previous findings of significant effects of universalism, conformity, and tradition values on attitudes toward immigration were replicated. Universalism values predicted more positive attitudes and conformity-tradition values predicted more negative attitudes. These effects were robust in the sense that they were significantly positive (for universalism) and negative (for conformity-tradition) in virtually all countries. Nonetheless, the strength of these value effects varied across countries. The hypothesized effects of the two country-level contextual variables on the strength of value effects were supported by the data. In countries with less embedded cultures, both values had stronger effects than in countries with more embedded cultures. Moreover, in countries with higher proportions of non-EU immigrants, the effect on attitudes of conformity-tradition values was stronger. The proportion of non-EU immigrants in a country had no direct effect on attitudes toward immigration, replicating previous studies (e.g., Semyonov et al. 2004; Strabac and Listhaug 2008).

The findings demonstrated that individuals' values play an important role in the explanation of attitudes toward immigration even after controlling their sociodemographic characteristics. Indeed, underlining the significance of values, their effects were stronger than the effects of the sociodemographic characteristics in standardized terms. Thus, when designing policies to increase public support for immigration, values within the population should be taken into account. Values are largely shaped and crystallized during adolescence and remain relatively stable thereafter, barring major traumas or therapy (Hitlin and Piliavin 2004; Inglehart 1997). This suggests that policies should be aimed at young people in order to affect the impact of values on attitudes to immigration.

The findings for cultural embeddedness demonstrate that this cultural dimension does not affect attitudes directly. However, its importance and that of the proportion of immigrants in the society may primarily be through increasing or decreasing the likelihood that the values relevant to attitudes will be activated. Indeed, individuals' personal values are more likely to be salient, to be activated rather than suppressed, and to influence their attitudes and behavior in societies with less embedded cultures. Our findings suggest that the individual level effects of values are highly robust, yet they are nonetheless moderated.

This is study is not without limitations. In particular, our conclusions regarding the cross-level interaction might be challenged by the fact that this dimension of national culture correlates substantively with other contextual variables, such as a lower GDP, a lower human development index (HDI), poorer education on average, and having a communist past. Such factors may have reduced the quality of responses to the values questionnaire in high embedded countries and as a result could account for the moderation. Unfortunately, the small sample size at the country level does not allow us to control for these factors and to rule out the possibility that the cross-level interaction is spurious.

Our findings suggest that variability across countries in attitudes toward immigration may be accounted for to a large extent by variability in individual values combined with the level of cultural embeddedness and size of the immigrant population in the country. However, to understand shifts in such attitudes over time, we may need other explanations. Values tend to display high stability over time and do not offer a convincing mechanism for studying longitudinal change in anti-immigrant sentiments. Studies suggest instead that worsening economic conditions (Semyonov et al. 2006, 2008), immigration policies (Schlüter et al. 2013) or change in media coverage (Schlüter and Davidov 2011) may offer, at least in part, explanations for such longitudinal variation in negative attitudes toward immigration.

Given the continuing increase of immigration around the world and the persistence and growth of negative attitudes toward immigration, it is critical to understand the sources of these attitudes. Promoting positive attitudes toward immigration may be beneficial both for immigrants and for their receiving societies. In the long run, immigration has generally strengthened societies economically (Borjas 1995; Dustmann et al. 2010), but opposition from members of the host society undermines social cohesion. In the present study we have (1) identified two relevant values that could be targets of socialization, (2) suggested mechanisms through which these values influence attitudes, and (3) investigated the circumstances in which these mechanisms operate more strongly. Theorizing that identifies other relevant variables and that investigates possible cross-national variation in their effects on attitudes toward immigration is needed. Equally important, it is necessary to deal with the methodological issue of equivalence of measurement when studying these new variables. By ensuring this critical prerequisite, we were able to study the effects of values on a key attitude across countries and to draw reliable conclusions.

References

Beckers, Tilo, Pascal Siegers, and Anabel Kuntz. 2012. Congruence and performance of value concepts in social research. *Survey Research Methods* 6:13–24.

Billiet, Jaak. 2003. Cross-cultural equivalence with structural equation modeling. In *Cross-cultural survey methods*, ed. Janet Harkness, Frons Van de Vijver, and Peter Mohler, 247–264. Hoboken: Wiley.

Bollen, Kenneth A. 1989. *Structural equations with latent variables*. New York: Wiley.

Borjas, George J. 1995. The economic benefits from immigration. *Journal of Economic Perspectives* 9:3–22.

Brown, Timothy, A. 2006. *Confirmatory factor analysis for applied research*. New York: The Guilford Press.

Coenders, Marcel. 2001. Nationalistic attitudes and ethnic exclusionism in a comparative perspective: An empirical study of attitudes toward the country and ethnic immigrants in 22 countries. Nijmegen: ICS dissertation.

Coenders, Marcel, Merove Gijsberts, and Peer Scheepers. 2004. Resistance to the presence of immigrants and refugees in 22 countries. In *Nationalism and exclusion of migrants: cross-national comparisons*, ed. Merove Gijsberts, Louk Hagendoorn, and Peer Scheepers, 97–120. Aldershot: Ashgate.

Datler, Georg, Wolfgang Jagodzinski, and Peter Schmidt. 2012. Two theories on the test bench: Internal and external validity of the theories of Ronald Inglehart and Shalom Schwartz. *Social Science Research* 42:906–925. doi: http://dx.doi.org/10.1016/j.ssresearch (Accessed: 2012.12.09).

Davidov, Eldad. 2008. A cross-country and cross-time comparison of the human values measurements with the second round of the European Social Survey. *Survey Research Methods* 2:33–46.

Davidov, Eldad. 2010. Testing for comparability of human values across countries and time with the third round of the European Social Survey. *International Journal of Comparative Sociology* 51:171–191.

Davidov, Eldad, and Bart Meuleman. 2012. Explaining attitudes towards immigration policies in European countries: The role of human values. *Journal of Ethnic & Migration Studies* 38:757–775.

Davidov, Eldad, Bart Meuleman, Jaak Billiet, and Peter Schmidt. 2008a. Values and support for immigration. A cross-country comparison. *European Sociological Review* 24:583–599.

Davidov, Eldad, Peter Schmidt, and Shalom Schwartz. 2008b. Bringing values back. *Public Opinion Quarterly* 72:420–445.

Dustmann, Christian, Tommaso Frattini, and Caroline Halls. 2010. Assessing the fiscal costs and benefits of a8 migration to the UK. *Fiscal Studies* 31:1–41.

Gorodzeisky, Anastasia. 2011. Who are the Europeans that Europeans prefer? Economic conditions and exclusionary views toward European immigrants. *International Journal of Comparative Sociology* 52:100–113.

Hitlin, Steven, and Jane Allyn Piliavin. 2004. Values: Reviving a dormant concept. *Annual Review of Sociology* 30:359–393.

Hofmann, David. A., and Mark B Gavin. 1998. Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management* 24:623–641.

Hofstede, Geert. 2001. *Cultures consequences: Comparing values, behaviours, institutions and organizations across nations*. 2nd ed. Thousand Oaks: Sage.

Hooghe, Marc, Ann Trappers, Bart Meuleman, and Tim Reeskens. 2008. Migration to European countries: A structural explanation of patterns, 1980–2004. *International Migration Review* 42:476–504.

Hox, Joop J. 2010. *Multilevel analysis. Techniques and applications*. New York: Routledge.

Inglehart, Ronald. 1997. *Modernization and postmodernization: Cultural, economic and political change in 43 societies*. Princeton: Princeton University Press.

Inglehart, Ronald, and Wayne E. Baker. 2000. Modernization, cultural change, and the persistence of traditional values. *American Sociological Review* 65:19–51.

Jöreskog, Karl G. 1971. Simultaneous factor analysis in several populations. *Psychometrika* 36:408–426.

Jowell, Roger, Caroline Roberts, Rory Fitzgerald, and Eva Gillian. 2007. *Measuring attitudes cross-nationally: Lessons from the European Social Survey*. Los Angeles: Sage.

Kim, Eun Sook, Oi-man Kwok, and Myeongsun Yoon. 2012. Testing factorial invariance in multilevel data: A Monte-Carlo study. *Structural Equation Modeling* 19:250–267.

Kunovich, Robert M. 2004. Social structural position and prejudice: An exploration of cross-national differences in regression slopes. *Social Science Research* 33:20–44.

Lesthaeghe, Ron, and Guy Moors. 2000. *Life course transitions and value orientations: Selection and adaption*. Presented at Contact forum: Values orientations and life cycle decisions, results from longitudinal studies, Brussels.

Lubbers, Marcel, Mérove Gijsberts, and Peer Scheepers. 2002. Extreme right-wing voting in Western Europe. *European Journal of Political Research* 41:345–378.

Meuleman, Bart, Eldad Davidov, and Jaak Billiet. 2009. Changing attitudes toward immigration in Europe, 2002–2007: A dynamic group conflict theory approach. *Social Science Research* 38:352–365.

Pichler, Florian. 2010. Foundations of anti-immigrant sentiment: The variable nature of perceived group threat across changing European societies, 2002–2006. *International Journal of Comparative Sociology* 51:1–25.

Quillian, Lincoln. 1995. Prejudice as a response to perceived group threat: Population composition and anti-immigrant and racial prejudice in Europe. *American Sociological Review* 60:586–611.

Quillian, Lincoln. 1996. Group threat and regional changes in attitudes toward African Americans. *American Journal of Sociology* 102:816–860.

Raijman, Rebeca, Moshe Semyonov, and Peter Schmidt. 2003. Do foreigners deserve rights? Determinants of public views towards foreigners in Germany and Israel. *European Sociological Review* 19:379–392.

Raijman, Rebeca, Eldad Davidov, Peter Schmidt, and Oshrat Hochman. 2008. What does a nation owe non-citizens? National attachments, perception of threat and attitudes to granting citizenship rights in a comparative perspective. *International Journal of Comparative Sociology* 49:195–220.

Rokeach, Milton. 1968. The role of values in public opinion research. *Public Opinion Quarterly* 32:547–559.

Rubin, Donald B. 1996. Multiple imputation after 18+ years (with discussion). *Journal of the American Statistical Association* 91:473–489.

Sagiv, Lilach, and Shalom S. Schwartz. 1995. Value priorities and readiness for out-group social contact. *Journal of Personality and Social Psychology* 69:437–448.

Schafer, Joseph L. 1997. Analysis of incomplete multivariate data. London: Chapman & Hall.

Scheepers, Peer, Mérove Gijsberts, and Marcel Coenders. 2002. Ethnic exclusionism in European countries. Public opposition to grant civil rights to legal migrants as a response to perceived ethnic threat. *European Sociological Review* 18:1–18.

Schlüter, Elmar, Peter Schmidt, and Ulrich Wagner. 2008. Disentangling the causal relations of perceived group threat and outgroup derogation: Cross-national evidence from German and Russian panel surveys. *European Sociological Review* 24:567–581.

Schlüter, Elmar, and Eldad Davidov. 2013. Contextual sources of perceived group threat: Negative immigration-related news reports, immigrant group size and their interaction, Spain 1996–2007. *European Sociological Review* 29:179–191.

Schlüter, Elmar, Bart Meuleman, and Eldad Davidov. 2013. Immigrant integration policies and perceived group threat: A multilevel study of 27 western and eastern European countries. *Social Science Research* 42:670–682.

Schwartz, Shalom H. 1992. Universals in the content and structure of values: Theory and empirical tests in 20 countries. In *Advances in experimental social psychology*, vol. 25, ed. Mark Zanna, 1–65. New York: Academic Press.

Schwartz, Shalom H. 1994. Are there universal aspects in the content and structure of values? *Journal of Social Issues* 50: 19–45.

Schwartz, Shalom H. 2006a. Les valeurs de base de la personne: Théorie, mesures et applications. *Revue Française de Sociologie* 47:249–288.

Schwartz, Shalom H. 2006b. A theory of cultural value orientations: Explication and applications. *Comparative Sociology* 5:137–182.

Schwartz, Shalom H. 2007. Value orientations: Measurement, antecedents and consequences across nations. In *Measuring attitudes cross-nationally. Lessons from the European Social Survey*, ed. Roger Jowell, Caroline Roberts, Rory Fitzgerald, and Gilian Eva, 169–203. London: Sage.

Semyonov, Moshe, and Anya Glikman. 2009. Ethnic residential segregation, social contacts and anti-minority attitudes in European societies. *European Sociological Review* 25:709–721.

Semyonov, Moshe, Rebeca Raijman, and Anastasia Gorodzeisky. 2006. The rise of anti-foreigner sentiment in European societies, 1988–2000. *American Sociological Review* 71:426–449.

Semyonov, Moshe, Rebeca Raijman, and Anastasia Gorodzeisky. 2008. Foreigners' impact on European societies: Public views and perceptions in a cross-national comparative perspective. *International Journal of Comparative Sociology* 49:5–29.

Semyonov, Moshe, Rebeca Raijman, Anat Yom-Tov, and Peter Schmidt. 2004. Population size, perceived threat, and exclusion: A multiple-indicators analysis of attitudes toward foreigners in Germany. *Social Science Research* 33:681–701.

Snijders, Tom A. B., and Roel J. Bosker. 1994. *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London: Sage.

Stephan, Walter G., C. Lausanne Renfro, Victoria M. Esses, Cookie White Stephan, and Tim Martin. 2005. The effects of feeling threatened on attitudes toward immigrants. *International Journal of Intercultural Relations* 29:1–19.

Strabac, Zan, and Ola Listhaug. 2008. Anti-Muslim prejudice in Europe: A multilevel analysis of survey data from 30 countries. *Social Science Research* 37:268–286.

Weldon, Steven A. 2006. The institutional context of tolerance for ethnic minorities: A comparative, multilevel analysis of Western Europe. *American Journal of Political Science* 50:331–349.

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