Immigrant Integration Policies and Perceived Group Threat: A Multilevel Study of 27 Western and Eastern European Countries

Schlueter, Elmar; Meuleman, Bart; Davidov, Eldad

Abstract: Although immigrant integration policies have long been hypothesized to be associated with majority members’ anti-immigrant sentiments, systematic empirical research exploring this relationship is largely absent. To address this gap in the literature, the present research takes a cross-national perspective. Drawing from theory and research on group conflict and intergroup norms, we conduct two studies to examine whether preexisting integration policies that are more permissive promote or impede majority group members’ subsequent negative attitudes regarding immigrants. For several Western and Eastern European countries, we link country-level information on immigrant integration policies from 2006 with individual-level survey data from the Eurobarometer 71.3 collected in 2009 (Study 1) and from the fourth wave of the European Value Study collected between 2008 and 2009 (Study 2). For both studies, the results from multilevel regression models demonstrate that immigrant integration policies that are more permissive are associated with decreased perceptions of group threat from immigrants. These findings suggest that immigrant integration policies are of key importance in improving majority members’ attitudes regarding immigrants, which is widely considered desirable in modern immigrant-receiving societies.

DOI: https://doi.org/10.1016/j.ssresearch.2012.12.001

Posted at the Zurich Open Repository and Archive, University of Zurich
ZORA URL: https://doi.org/10.5167/uzh-73125
Accepted Version

Originally published at:
DOI: https://doi.org/10.1016/j.ssresearch.2012.12.001
Abstract

Although immigrant integration policies have long been hypothesized to be associated with majority members’ anti-immigrant sentiments, systematic empirical research exploring this relationship is largely absent. To address this gap in the literature, the present research takes a cross-national perspective. Drawing from theory and research on group conflict and intergroup norms, we conduct two studies to examine whether preexisting integration policies that are more permissive promote or impede majority group members’ subsequent negative attitudes regarding immigrants. For several Western and Eastern European countries, we link country-level information on immigrant integration policies from 2007 with individual-level survey data from the Eurobarometer 71.3 collected in 2009 (Study 1) and from the fourth wave of the European Value Study collected between 2008 and 2009 (Study 2). For both studies, the results from multilevel regression models demonstrate that immigrant integration policies that are more permissive are associated with decreased perceptions of group threat from immigrants. These findings suggest that immigrant integration policies are of key importance in improving majority members’ attitudes regarding immigrants, which is widely considered desirable in modern, immigrant-receiving societies.
1. Introduction

A vast number of studies reveal marked differences in how European nation states approach the integration of immigrants with regard to integration policies (for example, see Geddes, 2003; Howard, 2005). Immigrant integration policies are broadly defined here as the institutional practices adopted by state agencies to deal with the settlement of immigrants in host societies (Bourhis et al., 1997). Parallel to this line of research, another set of studies demonstrates persistent cross-national variation in the prevalence of anti-immigrant attitudes among European citizens (Meuleman, Davidov & Billiet, 2009; Semyonov, Rajman, & Gorodzeisky, 2006). However, although immigrant integration policies have long been hypothesized to be important in shaping attitudes regarding immigrants (Bourhis et al., 1997; Favell, 2001), systematic empirical research exploring this relationship is largely absent. Indeed, scholars have repeatedly emphasized the need to account for country-level political characteristics in order to advance understanding of the contextual sources of anti-immigrant sentiments (e.g. Ceobanu & Escandell, 2010, p. 310; Kunovich, 2004, p. 41; Schlueter & Wagner, 2008, p. 169). This study is designed to contribute to this task. We start from the notion that immigrant integration policies can be placed on a continuum ranging from ‘restrictive’ at one end to ‘permissive’ at the other (Bourhis et al., 1997; Geddes, 2003). At the restrictive end of the continuum, the provision of equal rights to immigrants is contingent on several preconditions and is somewhat limited, whereas at the permissive end, equal rights are relatively readily granted and are comprehensive. There are two main views concerning the way in which integration policies affect attitudes regarding immigrants. Following a group conflict model (e.g. Meuleman et al., 2009), the first view suggests that permissive immigrant integration policies will stimulate intergroup competition. Consequently, those taking this perspective predict that integration policies that are more permissive will increase perceptions of group threat from immigrants. The opposing view, informed by the literature on group norms in intergroup relations (Chong, 1994; Pettigrew, 1991), considers integration policies
as inducing social norms for adequate intergroup relations. This implies that immigrant integration policies that are more permissive will decrease the perceived group threat from immigrants. In examining these opposing predictions, we try to improve on earlier work in several ways. As a theoretical contribution, we connect immigrant integration policies as a contextual characteristic, with prior theory and research on group conflict and intergroup norms. As outlined above, doing so produces two opposing predictions regarding the way in which immigrant integration policies shape attitudes regarding immigrants. Empirically, we take advantage of the recently developed Migrant Integration Policy Index (MIPEX, see Niessen et al., 2007) in order to assess immigrant integration policies. This comparative database provides indicators for six different strands of integration policies, and thus offers more detailed information than was available to most prior researchers. Furthermore, in combining this national-level information on integration policies with individual-level data on perceived group threat, we capitalize on an unusually comprehensive data source. Specifically, our data comprises of 27 countries not only from Western, but also from Eastern Europe. This broad set of country-cases substantially enhances the generalizability of our findings. Finally, we are able to cross-validate our results using cross-sectional data from the Eurobarometer wave 71.3 collected in 2009 (Study 1) and from the fourth wave of the European Value Study collected between 2008 and 2009 (Study 2). This replication provides more accurate conclusions on the country and individual-level parameter estimates than was possible in past research (Beckers, 2010; Rosenthal, 1991).
2. Theory and previous research

2.1 Group conflict model

Why would integration policies affect majority group members’ anti-immigrant reactions?

One important theoretical perspective from which to approach this question is through using the group conflict model, or equivalently the group threat model (for example, see Meuleman et al., 2009; Scheepers et al., 2002; for theoretical origins, see Blalock, 1967; Blumer, 1958). The key assumption underlying this perspective is that majority group members and immigrants are locked into competitive intergroup relationships. According to this approach, anti-immigrant sentiments and behaviors result from perceived group threat, broadly defined here as concerns that immigrants challenge the well-being of the majority group (Stephan & Renfro, 2002, p. 197; Riek, Mania & Gaertner, 2006, p. 336). On an empirical level, most researchers have modeled perceived group threat as a single construct (Scheepers et al., 2002; Semyonov et al., 2006; Kunovich, 2004; Schlueter & Wagner, 2008; Davidov & Meuleman, forthcoming). It is nevertheless instructive to note that such threat perceptions typically refer to resource-based, economic matters, as well as to symbolic, cultural issues (McLaren, 2003; Stephan & Renfro, 2002). To expand on this, economic threats reflect concerns about intergroup competition with immigrants for valued goods, such as well-paid jobs or welfare state resources. Cultural threats refer to concerns that immigrants adhering to different morals, norms, and values endanger the cultural order of the majority. The group conflict model contends that such subjective experiences of intergroup rivalry are centrally shaped by the characteristics of the contexts within which intergroup relationships take place. In this line of thinking, countries have proved to be important contextual units of analysis (for example, see McLaren, 2003; Kunovich, 2004; Scheepers et al., 2002). Indeed, it is at the country level where policies concerning the integration of immigrants are usually drafted. Given that integration policies regulate immigrants’ access to valued goods, it seems appropriate to connect integration policies with the group conflict approach. For example, consider
integration policies that provide immigrants with relatively encompassing rights. Such institutional directives might indeed improve immigrants’ opportunities in the domains of educational participation, political decision making, or employment. However, according to the group conflict approach, members of the majority group will perceive such gains on the part of the immigrant population as a loss of their own group’s important resources. This means that integration policies that are more permissive will promote notions of intergroup competition, and thereby heighten majority members’ perception of group threat. This logic also holds true for threats referring to symbolic issues, where it is presumed that majority group members wish to maintain the cultural predominance of their own group. Therefore, challenges to this predominance - such as integration policies that ease the recognition of immigrants as national citizens - should also result in heightened perceptions of group threat.

2.2 The role of norms in intergroup relationships

The group conflict model outlined above suggests that immigrant integration policies that are more permissive will increase perceived group threat. However, such policies can also be seen as institutionalized norms regarding the desired role of immigrants in society. Intergroup norms have long been considered as “major sociological means of understanding intergroup relations” (Pettigrew, 1991, p. 3), and have considerable potential to shape majority group members’ attitudes regarding immigrants (Bourhis et al., 1997). For example, Allport (1954) contends that prejudice - an immediate consequence of perceived group threat (Schlueter, Schmidt & Wagner, 2008; Stephan & Renfro, 2002) - is reduced when social norms become more tolerant, just as less-tolerant social norms increase prejudice (Allport, 1954, p. 471). Two broad perspectives illuminate how the normative influences of integration policies on intergroup attitudes might occur. Focusing on short-term changes in intergroup attitudes, the first view suggests that majority group members adapt their pre-existing attitudes in response to legislative measures, presumably because they recognize that deviations from a social norm
produce negative sanctions. To put it in the words of Allport (1954): “It is a well-known psychological fact that most people accept the results of an election gladly enough after the furore has subsided […] They allow themselves to be reeducated by the new norm that prevails” (p. 471; see also Chong 1994, p. 32). In line with this perspective, research on interracial relations in the U.S. has documented that changes in public sentiment in response to policy changes often occur within a relatively short space of time (Chong 1994, p. 37f.; Colombotos, 1969, p. 319f.). Consistent with a group norm perspective (Sherif & Sherif 1953, p. 202f.; Merton, 1968), Friedman (1984) attributes widespread attitudinal change in this domain to “peer pressure (or other messages from the crowd)” (Friedman 1984, p. 220). A second view on how immigrant integration policies affect majority members’ intergroup attitudes derives from the literature on political socialization (Almond & Verba, 1963; Jaros, 1973; Rohrschneider, 1999). Focusing on long-term changes in intergroup attitudes, the idea underlying this view is that a country’s immigrant integration policies are also reflected by the curricula of the country’s educational institutions (Eurydice, 2005). Accordingly, younger generations of majority group members which become exposed to these curricula during their formative years are expected to internalize what is considered as normatively appropriate intergroup relations in a given country (Weil, 1985; Westie, 1964, pp. 583-584). This approach clarifies how integration policies might lead to long-term changes in intergroup attitudes via cohort replacement. While the two approaches outlined above focus on different (short-term vs. long-term) aspects of how immigrant integration policies might affect individual-level attitudes, they do not appear mutually exclusive. Rather, both processes are likely to operate in tandem and converge, reinforcing the prediction that integration policies that are more permissive will decrease majority members’ perceived group threat.
2.3 Hypotheses

To sum up, the primary concern of this study is to examine the contribution of immigrant integration policies for cross-national variation in majority members’ levels of perceived group threat. A group conflict perspective suggests integration policies that are more permissive will stimulate interethnic competition, which in turn will increase perceptions of group threat. If this view is correct, then country-level policies that are more permissive will be positively related with perceived group threat. By contrast, the normative theory of intergroup relations lead us to expect that immigrant integration policies prescribe what is considered as adequate intergroup relations in a given country. This approach predicts that immigrant integration policies that are more permissive will reduce perceived group threat. If this is the case, then the association of country-level policies that are more permissive with perceived group threat will be negative.

2.4 Previous research

Interestingly, to date the hypotheses outlined above have received only little scholarly attention. Moreover, the few studies which explicitly focus on the nexus between integration policies and anti-immigrant attitudes leave considerable room for improvement. For example, Weldon (2006) used multilevel regression models to investigate survey data collected in 1997 from 15 Western European countries. He found that majority group members’ tolerance of ethnic minorities was systematically linked to the citizenship regimes and cultural policies that were implemented. Higher levels of tolerance were found in countries that provided more opportunities for the acquisition of nationality and provided comparatively greater cultural rights to immigrants. Irrespective of the innovative character and careful design of Weldon’s study, there are some obvious methodological problems with it. Clearly, the study fell somewhat short in terms of country coverage. Due to data limitations, as Weldon himself noted (2006, p. 346), the sample of countries in his study was restricted to a rather
homogenous set of Western European countries. However, perhaps the most important limitation of his study is related to the operationalization of the integration policies context. Weldon (2006) classified countries into three discrete ideal-types. Although useful, it remains unclear to what extent this classification adequately reflected the considerable diversity in immigrant integration policies characterizing contemporary European nation states. Jacobs and Herman (2009) followed a different approach. Their study operationalized immigrant integration policies using a set of quantitative indicators from the Migrant Policy Index (MIPEX, see Niessen et al., 2007 - an approach we describe in more detail below). Jacobs and Herman (2009) assess aggregate, country-level correlations by using answers to various immigration-related items from the Eurobarometer and the European Social Survey Series. In virtually all cases the authors found positive correlations between generous integration policies and positive attitudes regarding immigrants. However, for several reasons this contribution is also problematic. Proper inferences regarding the association between country-level integration policies and attitudes measured at the individual level require adequately accounting for the hierarchical structure of such data (Raudenbush & Bryk, 2002). Unfortunately, Jacobs & Herman (2009) conducted aggregate analyses only. Additionally, most correlation coefficients in their study do not reach conventional levels of significance, a fact which is probably due to insufficient statistical test power. Finally, it must be noted that the survey data used by Jacobs & Herman (2009) was collected several years prior to the implementation of the integration policy indicators compiled by Niessen et al. (2007). In light of this, the results are essentially mute regarding the question if and to what extent preexisting immigrant integration policies are associated with subsequent attitudes regarding immigrants.

3. The present research

The primary goal of the present research is to establish whether the degree of permissiveness of immigrant integration policies is positively or negatively associated with the majority
members’ perceived group threat. We conducted two studies to accomplish this goal. We used quantitative indicators to assess country-level immigrant integration policies and employed individual-level survey data collected in 25 (Study 1) and 27 (Study 2) Western and Eastern European countries. This broad empirical source has both strength and limitations. As mentioned above, it is unusually rich in terms of country coverage. As an added advantage, it also provides alternative – albeit similar – measurements of perceived group threat. These features help in cross-validating the pattern of results, a strategy which heretofore seems underused in cross-national comparative research. On the other hand, our data shares the typical design problems of cross-sectional studies without random assignment. This means that we cannot make claims of causality and all of our results should be considered as correlative. However, we take several steps to increase confidence in our results. Specifically, we attempt to alleviate concerns of omitted variable bias by including several individual-level and country-level control variables. Further, in order to establish temporal precedence of our central independent variable, we use a time-lagged measurement of immigrant integration policies. Using a lagged measure is also advantageous because it is likely to take some time for country-level policies to affect individual-level perceptions of threat.

3.1 Study 1

3.1.1 Dataset

In Study 1, we examine our theoretical expectations using data from the Eurobarometer 71.3 wave (Gesis, 2011). Face-to-face interviews for this survey were conducted based on nationally representative samples of respondents aged 15 years and above in 31 European countries between June and July 2009. We selected 25 countries for which immigration policy indicators were available, and excluded all non-nationals from the samples. The final pooled sample size comprised of \( N_i = 21,799 \) individuals nested in \( N_j = 25 \) countries, namely: Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany,
Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, and Sweden.

3.1.2 Variables

3.1.2.1 Dependent variable. We assess our dependent variable, perceived group threat, using the respondents’ assessments of four statements. These statements are: (i) “Immigrants can play an important role in developing greater understanding and tolerance with the rest of the world”; (ii) “People from other ethnic groups enrich the cultural life of [our country]”; (iii) “The presence of people from other ethnic groups increases unemployment in [our country]” and (iv) “We need immigrants to work in certain sectors of our economy”. To illustrate, negative answers to the statements (i) or (ii) reflect perceived cultural threats. The domain of economic threats is tapped by items (iii) and (iv), the logic being that, for example, disagreeing with the idea that a country’s economy profits from immigrants in the labor market reflects some form of negativity towards immigrants. Original response options were given in a dichotomous format (1 = tend to agree, 2 = tend to disagree). We coded all items so that higher scores reflect a higher degree of perceived group threat. Before testing our structural hypotheses based on multilevel modeling, we examined the cross-national comparability of the average scores for perceived group threat using multigroup confirmatory factor analyses. Employing robust, weighted least squares estimation procedures to account for the ordinal scaling of the four indicator variables (Millsap & Tein, 2004), the results support partial equivalence across countries. This means that within-country changes on the latent factor lead to similar changes on the four indicator variables across the 25 country samples. We then used the sum of the single responses from the four indicators to create an index of perceived group threat. In order to ease interpretation of the unstandardized regression coefficients, we rescaled this index to range from a minimum score of 0 to a maximum score of 100 (Cohen, Cohen, Aiken & West 1999).
3.1.2.2 Independent variable. We assess country-level immigrant integration policies, our central independent variable, by taking advantage of the 2006 version of the Migration Policy Index (MIPEX, see Niessen et al., 2007). This comparative measurement of the integration policies of European countries combines several desirable features. First, the MIPEX includes a wide variety of policy domains. This makes it possible to use a conceptualization of integration policy that goes beyond just legislation on the acquisition of nationality, a factor that has often been used previously. Specifically, the MIPEX comprises six policy strands: (1) access to the labor market; (2) long-term residence; (3) family reunification; (4) political participation; (5) access to nationality; and (6) anti-discrimination. Second, the MIPEX is based on ratings by independent experts. This clearly increases the degree of objectivity in the evaluation of integration policies. Finally, as an added advantage the MIPEX also offers a very timely assessment of national integration policies, which might help in drawing applied conclusions from our findings. The MIPEX evaluates each policy domain using scores between 0 (worst practice) and 100 (best practice). Because preliminary analyses indicated substantial correlations among the indicators of the six policy dimensions (Cronbach’s $\alpha = .83$), we averaged these scores to provide a single measurement of integration policies.

3.1.2.3 Control variables. Our primary aim in this research is to examine the association between preexisting immigrant integration policies and cross-national differences in perceived group threat. However, as noted earlier, our research design is based on cross-sectional data without randomization. Therefore, to reduce concerns that the associations we present reflect the influence of some omitted variable, we include several individual-level and country-level variables. To begin with, higher levels of educational attainment are known to be associated with lower levels of perceived group threat.
and more positive attitudes towards minority groups in general. This relationship is attributed to multiple mediators, such as a broadened worldview, greater cognitive sophistication or increased empathy (Vogt, 1997). Educational attainment is assessed using four categories based on the age at which the respondents left full-time education (1 = no full-time education; 2 = 15 years or below; 3 = 16 to 19 years; and 4 = 20 years or above/still studying). We also include a measurement of respondents’ employment status (0 = other; 1 = unemployed), the rationale being that self-interest theories of interethnic competition state that perceptions of immigrants as economically threatening are increased for unemployed individuals (Scheepers et al., 2002). Living in a larger community presumably leads to greater exposure to social heterogeneity, with improved attitudes towards minority groups as a result (Stouffer, 1954). Community size is measured using a dichotomous indicator (0 = other, 1 = living in a larger community). Because scapegoat theories of prejudice suggest that general feelings of frustration can become projected upon minority groups (Glick, 2005), we also include a four-category single measure of respondents’ life satisfaction (1 = very satisfied to 4 = not at all satisfied). We recoded this indicator so that higher scores indicate more life satisfaction. As is the convention in previous research, we additionally consider the relationship of respondents’ age (measured in four categories, 1 = 15 to 24 years; 2 = 25 to 39 years; 3 = 40 to 54 years; 4 = 55 years and above) and gender (1 = male; 2 = female) with perceived group threat. We also examine the relevance of several country-level characteristics other than immigrant integration policies. A larger immigrant group size is often seen to give rise to increased perceived group threat (Semyonov et al., 2006), and can certainly be related to the integration policies that are implemented (Ruhs & Martin, 2008). We assess immigrant group size as the national percentage of non-EU immigrants in 2007, the latest year for which data was available. This data was taken from the Mimosa project (Mimosa, 2008). Unfavorable economic conditions are also considered to intensify interethnic competition, and thereby to increase negative sentiments towards immigrants (Semyonov et al., 2006; Cummins &
Rodriguez, 2009). To measure unfavorable economic conditions, we use the national unemployment rates for 2008 (ILO, 2010). Two additional country-level controls we include are conservatism and welfare state extensiveness. Specifically, it is conceivable that both immigrant integration policies and majority members’ perceived group threat follow from the prevailing degree of conservatism in a society\(^1\). To account for this possibility, we include the cabinet share of conservative parties (Armingeon et al., 2012) into our models. One further alternative hypothesis refers to the degree of a country’s welfare state expansiveness. Crepaz & Damron (2009) report that majority members in countries with more extensive welfare states tend to hold less discriminatory attitudes towards immigrants. Presumably, welfare states that are more extensive are characterized by a greater general inclusiveness, which expands to immigrants. Thus, any correlation between a country’s general social policy and its more specific immigrant integration policies might bias our findings. To control for this possibility, we also introduce the total amount of public social expenditures in our models (Eurostat 2012).

3.1.3 Method

With respondents (individual level) being nested in countries (contextual level), our data is presented as a hierarchical two-level structure. To adequately deal with this nested information, we estimate a series of linear multilevel regression models (Raudenbush & Bryk, 2002) which build incrementally. After calculating the initial amount of country-level variance in perceived group threat, model 1 accounts for the associations of the individual-level control variables on this dependent variable. In model 2, the measurement of immigrant integration policies is included. In models 3 to 6, the contextual-level control variables are added. All models were estimated using maximum likelihood procedures.

3.1.4 Results

\(^1\) We thank an anonymous reviewer for pointing out this possibility.
Figure 1 indicates that European majority populations show considerable variations in levels of perceived group threat, as country-means on the threat scale range from 21.4 (in Sweden) to 81.4 (in Malta). Most Eastern European countries appear at the higher end of the threat scale (Poland is an exception here), whilst the lowest levels of perceived group threat are found amongst the Scandinavian countries. Southern and Western European countries do not indicate any consistency in the perceived threat ranking.

--- INSERT FIGURE 1 ABOUT HERE ---

Considerable cross-country variation is also found for immigrant integration policies, which range from 30 (Latvia) to 85 (Sweden). Overall, the least permissive integration policies are predominantly found in Eastern Europe. The group of countries with the most generous integration policies is very diverse, including traditional immigration countries such as Belgium and the Netherlands, Nordic countries (Sweden, Finland), and countries that have only recently started to experience considerable inflows of immigration (such as Portugal and Italy). Figure 1 displays a clear negative association between immigrant integration policies and the perceived group threat from immigrants ($r = - .69$, $p < .001$; $N_j = 25$). This suggests that more permissive integration policies are associated with decreased perceptions of threatened group interests. However, this preliminary evidence is only based on aggregated data and does not account for any contribution from the individual and country-level control variables. To achieve a more conclusive understanding of how integration policies relate to perceived group threat, we now turn to the results from hypotheses tested using multilevel regression modeling.

--- INSERT TABLE 1 ABOUT HERE ---

We first estimated a random effects ANOVA including no covariates. The corresponding intra-class correlation coefficient (ICC) suggests that approximately 14.8 per cent $[= (198.56 / (198.56 + 1137.29) \times 100]$ of the total variance in perceived group threat can be found at the country level. This result indicates that multilevel modeling is appropriate to account for the
variance existing between countries. Table 1 summarizes these results and presents both unstandardized and standardized regression coefficients. Model 1 controls for the association of the individual-level control variables with perceived group threat. The data show that the parameter estimates for gender, age and being unemployed are insignificant. The remaining findings resemble established knowledge by revealing that higher educational attainment (b = -7.33, p < .001) and greater levels of life satisfaction (b = -4.86, p < .001) show significantly negative associations with perceived group threat. To illustrate the strength of these associations, we can use the total range of the variable scores. For example, within countries, the predicted difference between the respondents with the lowest and highest levels of life satisfaction is around 15 points. The corresponding difference for educational attainment is approximately 22 points. As one might expect, all these individual-level associations lead to a large reduction in the model deviance (Δ -2LL = 7136.26). However, what is more important is the finding that even after controlling for these associations a substantial degree of country-level variance remains (11.7 per cent). In model 2, attention shifts to the test of our central theoretical expectations and the index assessing immigrant integration policies is introduced into the model. Contrary to a group threat perspective, but in line with the normative approach to intergroup relations, the findings demonstrate a significantly negative association between the permissiveness of a country’s integration policies and citizens’ perceived group threat (b = -.64; p < .001; Δ -2LL = 19.49). Taking into account the range of the policies-index, the predicted difference in perceived group threat between countries with the lowest and highest degree of permissiveness in integration policies is around 35 points – a considerable difference. The corresponding standardized regression coefficients is β = -.74. This means that two otherwise similar individuals living in countries which differ by 1 SD in their integration policies can be expected to differ by about 0.73 SD in perceived group threat. We furthermore find that approximately 54% of the total between-country variance in perceived group threat can be attributed to differences in immigrant integration policies. In order to
examine the robustness of these findings, models 3 to 6 account for the country-level control variables. The results reveal that neither the share of non-EU immigrants nor a country’s economic standing are significantly related to citizens’ threat perceptions from immigrants variables (see also: Davidov & Meuleman, forthcoming; Sides & Citrin, 2007; Strabac & Listhaug 2008). The data also provide no support for the assumption that country-level conservatism or the degree of welfare state extensiveness contribute to the cross-national differences in perceived group threat. In other words, these additional findings indicate that the negative association of immigrant integration policies with perceived group threat is unaffected by the control variables in the model.

Discussion

The results of Study 1 clearly indicate that respondents from countries where more permissive immigrant integration policies prevail perceive less group threat from immigrants as compared to respondents from countries characterized by more restrictive immigrant integration policies. This finding deviates from the expectations we deduced from group threat theory, yet is consistent with the assumptions underlying the normative approach to intergroup relations. In an attempt to further probe into and cross-validate this empirical pattern, we turn next to Study 2.

3.2 Study 2

3.2.1 Dataset

Study 2 capitalizes on data from the fourth wave of the European Value Study, conducted in 2008 and 2009 (EVS, 2010). Face-to-face interviews were conducted with nationally representative samples of respondents aged 16 years and above in 47 European countries. We selected the same 25 countries for which migration policy indicators were available (as in Study 1), plus Norway and Switzerland. After exclusion of non-nationals and people born
outside the country of data collection, the final sample size was \( N_i = 34,412 \) individuals situated in \( N_j = 27 \) countries.

3.2.2 Variables

3.2.2.1 Dependent variable. We use five variables from the EVS 2008 to operationalize perceived group threat. In the questionnaire, respondents were asked “Please look at the following statements and indicate where you would place your views on this scale”. The answer options for the five items all ranged from (1) to (10): (i) “Immigrants take jobs away from natives in a country” vs. “Immigrants do not take jobs away from natives in a country”; (ii) “A country’s cultural life is undermined by immigrants” vs. “A country’s cultural life is not undermined by immigrants”; (iii) “Immigrants make crime problems worse” vs. “Immigrants do not make crime problems worse”; (iv) “Immigrants are a strain on a country’s welfare system” vs. “Immigrants are not a strain on a country’s welfare system” and (v) “In the future the proportion of immigrants will become a threat to society” vs. “In the future the proportion of immigrants will not become a threat to society”. Clearly, these items represent face-valid indicators of majority members’ perceptions that immigrants threaten the well-being of their ingroup. After reversing, higher scores indicate stronger perceptions of group threat. In order to test the idea that these items represent single measurements of one underlying latent variable that is measured in a comparable way across countries, we performed multiple group confirmatory factor analyses. The final model provided support for partial scalar equivalence for most countries, which is sufficient for interpreting the results of a multilevel analysis. We then constructed an index of perceived group threat by adding together the scores for the single items, and rescaled this index to range from a minimum score of 0 to a maximum score of 100.
3.2.2.2 Independent variable. We assessed immigrant integration policies using the 2006 version of the Migration Policy Index (Niessen et al., 2007) in the same way as in the first study.

3.2.2.3 Control variables. The control variables in study 2 are conceptually identical to the control variables we included in study 1. In the EVS 2008/2009, educational attainment was measured by seven categories: 0 = pre-primary education or no education; 1 = primary education or first stage of basic education; 2 = lower secondary or secondary stage of basic education; 3 = (upper) secondary education; 4 = post-secondary non-tertiary education; 5 = first stage of tertiary education; and 6 = second stage of tertiary. Gender was coded with males as reference category (1 = males; 2 = females). Age was measured in four categories: 1 = 15-24 years; 2 = 25-39 years; 3 = 40-54 years; 4 = 55 years and above. Respondents’ employment status was coded as 0 = other and 1 = unemployed. Life satisfaction was measured with a single items (1 = dissatisfied; 10 = satisfied). The indicator for the size of the community where the interview took place ranges from 1 (= fewer than 2000 inhabitants) to 8 (= 500 000 or more inhabitants). All country-level control variables - the percentage of non-EU immigrants, unemployment rate, conservatism and welfare state expansiveness - were measured in the same way as in study 1.

3.2.3. Results

We first explored the relationship between integration policies and perceived group threat on an aggregate level by means of a scatter plot; country-means on the EVS-threat scale range from 47.1 (in Sweden) to 79.3 (in Malta).

--- INSERT FIGURE 2 ABOUT HERE ---

The pattern shown in Figure 2 resembles the clear negative association depicted earlier. In fact, the bivariate Pearson’s correlation coefficient is \( r = -0.51 \) (\( p < .01, N_j = 27 \)). We followed the same modeling strategy as in the foregoing analyses. Table 2 summarizes the results.
The results from a random effects ANOVA show that the approximate amount of country-level variance in the alternative measurement of perceived group threat is about 10.6 per cent \[= \frac{61.62}{61.62 + 518.7} \times 100\] - a proportion which is quite substantial. The subsequent model 1 accounts for the individual-level control variables. Whereas the parameter estimates for gender (\(b = -1.21; p < .001\)), age (\(b = .47; p < .05\)) employment status (\(b = 1.14; p < .05\)) and community size (\(b = -.34; p < .05\)) all reach conventional levels of significance, we note that the size of these associations appear as somewhat negligible.\(^8\) The remaining results reconfirm that higher educational attainment (\(b = -3.39; p < .001\)) and higher degrees of life satisfaction (\(b = -1.15; p < .001\)) are negatively associated with perceived group threat. To illustrate, within countries, the predicted difference between respondents with the lowest and highest level of education is about 20 points on the EVS-threat scale. As to be expected, including the individual-level predictors leads to a considerable reduction in the model deviance (\(\Delta -2LL = 24347\)). However, the primary finding from model 1 is that the remaining country-level variance in perceived group threat (9.7 per cent) cannot be attributed to compositional differences alone. In model 2, we reassess the association of immigrant integration policies with perceived group threat. The results provide renewed evidence of a significantly negative association between the permissiveness of immigrant integration policies and perceived group threat (\(b = -.27; p < .001\))\(^9\). Using the unstandardized regression coefficients and the total range of the policies-index, it turns out that the predicted difference on the EVS-threat scale between the countries with the least and most permissive integration policies is around 14.5 points. Accompanied by a reduction in the country-level variance by about 26%, the standardized parameter estimate is \(\beta = -.51\), which is a sizeable association. As in the foregoing analyses, we next examined whether these findings change when additional country-level characteristics are included. Consistent with the preceding findings, the results from models 3 to 6 show that immigrant group size, the unemployment rate,
country-level conservatism as well as the degree of welfare state extensiveness are unrelated with cross-national differences in perceived group threat.

3.2.4 Discussion

Study 2 reconfirms evidence that immigrant integration policies are key in understanding cross-national differences in perceived group threat among majority group members. Controlling for alternative individual and country-level predictors, relatively more permissive immigrant integration policies proved to be significantly negatively related to perceived group threat. Thus, by replicating the empirical pattern of Study 1 using a different operationalization and a different sample, Study 2 considerably increases our confidence in the negative association of relatively restrictive integration policies and individually perceived group threat.

4. Overall Discussion

The central goal of this article was to develop a clearer understanding of how preexisting immigrant integration policies are associated with subsequent perceptions of threatened group interests. To achieve this goal, we developed and tested two opposing theoretical explanations. A group conflict perspective led us to expect that immigrant integration policies that are more permissive would increase perceptions of threatened group interests. By contrast, building on and extending normative theory in intergroup relations, we theorized that integration policies that are more permissive would decrease such threat perceptions. We examined the empirical adequacy of these contrasting expectations from a cross-national, multilevel perspective. For this purpose, the recent availability of innovative integration policy indicators allowed us to assess cross-national differences in immigrants’ access to equal rights much more precisely than previous studies have been able to. Additionally, in following the idea of cross-validation, we have been able to replicate our central results using data from two
independent cross-national survey studies. Collectively, our findings provide cumulative evidence that immigrant integration policies are systematically associated with perceptions of threatened group interests. Controlling for alternative individual-level and country-level variables, we find no support for the assumption that integration policies that are more permissive stimulate intergroup competition and thereby are positively associated with perceived group threat. However, more permissive integration policies prove to display a robust negative association with perceived group threat. This empirical pattern is consistent with our theoretical argument that immigrant integration policies shape the societal norms for what is considered as appropriate intergroup relations which, in turn, affect attitudes regarding immigrants. Thus, the group norm approach outlined here provides a useful framework for conceptualizing how variation on immigrant integration policies may link to variation in perceived group threat. In addition, some limitations of this study need to be acknowledged, in part because they open up promising avenues for future research. First, as noted before, we stress that our research design shares the problems of all cross-sectional studies without randomization. It is critical to note that all results presented in this research are correlational. Of course, we cannot totally discount the possibility that the relationships between immigrant integration policies and perceived group threat we present reflect in part the influence of some omitted variable. However, we have been able to alleviate these concerns in several important ways. To reduce the possibility of omitted variable bias, we included a comprehensive set of control variables suggested by prior theory and research. Moreover, the fact that we were able to replicate our findings across two different cross-national data sets increases our confidence in the reliability of our results. In addition, to increase confidence in the temporal ordering of variables in our main analyses, we used a lagged measurement of immigrant integration policies. Nonetheless, an interesting complementary question is whether a reciprocal relationship
exists in that majority members’ perceptions of threatened group interests also affect national-level policies (Weldon, 2006). Intuitively, the broad idea that policy makers are responsive to the preferences of their electorate seems to imply such a reciprocal relation (Brooks & Manza, 2006; Page & Shapiro, 1983; but see Sharp, 1999). However, most existing theorizing argues against the expectation that immigrant integration policies represent a simple function of anti-immigrant sentiments. For example, Freeman (1995; see also Sharp, 1999) claims that public opinion on immigrants and immigration is typically not sufficiently crystallized to influence the formation of policies in this domain. Relatedly, Massey (1999, p. 313) writes that “Most citizens […] are politically apathetic, leaving immigration policies to be determined quietly by well-financed and better organized special interests operating through bureaucratic channels”. We suspect that negative sentiments towards immigrants might still be important. Specifically, Breunig & Luedtke (2008) suggest that because “courts tend to defend minority rights against majoritarian sentiment” (Breunig & Luedtke, 2008, p. 127), any link from public opinion on immigrant integration policies will be contingent on the presence of judicial review in country. Future research initiatives drawing on cross-national longitudinal data might profitably investigate this line of reasoning. Such research could also benefit from additional methodological perspectives. In particular, small-N case studies (Yin, 2003) might help to shed more detailed light on the nexus of immigrant integration policies and intergroup relations. There are further issues. For example, data limitations prohibited a more thorough test of the short and long-term normative influences of immigrant integration policies on intergroup attitudes as we have discussed. Similarly, the present research could not provide direct evidence for the presumed mediating role of intergroup norms when linking immigrant integration policies to perceived group threat. Future research initiatives containing explicit measurements of intergroup norms might investigate this
macro-micro link more thoroughly. In this study, we attempted to extend previous knowledge on negative sentiments towards immigrants by examining two opposing theoretical views on how immigrant integration policies relate to perceived group threat. In line with this objective, we refrained from investigating which individual-level associations might vary across countries, and which country-level characteristics might moderate such variation. Nonetheless, it is reasonable to ask, for example, how ideological predispositions relate to perceived group threat, and whether the strength and direction of these relationships are contingent on certain structural or political country-level characteristics (Pardos-Prado, 2011). Pursuing these types of questions could considerably advance our understanding of how individual-level and country-level characteristics relate to perceived threats from immigrants. Related to this, the study did not allow investigation of whether the development of social norms proscribing direct expressions of negative attitudes regarding immigrants (i.e. perceptions of threatened group interests) give rise to more socially acceptable forms of such negative sentiments (Allport, 1954; Pettigrew & Meertens, 1995). Investigating these unresolved issues clearly represents a fruitful research perspective. Further opportunities to improve upon this study concern measurement issues. With regard to the quality of comparative data on integration policies, the MIPEX project is certainly a huge leap forward. However, data on some important dimensions of integration policies currently remains unavailable, for example the distribution of cultural rights to immigrants and the degree to which state agencies support the distinctive linguistic or religious characteristics of immigrant groups (Koopmans, Michalowski & Waibel, 2012). Data permitting, a natural extension of this study would be to focus on how cross-national differences in the provision of cultural rights relates to the prevalence of perceived (cultural) group threat\textsuperscript{12}. A more complete understanding of the role of immigrant integration policies in intergroup relationships between majority members
and immigrants might also be achieved by examining the consequences of perceived
group threat, such as policy preferences (Mughan & Paxton, 2006) or anti-immigrant
discriminatory intentions (Schlueter & Scheepers, 2010). In concluding, we also
consider the practical implications of the present research. In short: To the extent that
improved interethnic attitudes are a desired policy objective, our findings suggest that
considering permissive immigrant integration policies offers a fruitful strategy to
understand variations in such attitudes.
References


Riek, B. M., Mania, E. W. and Gaertner, S. L. 2006. Intergroup Threat and Outgroup


Table 1. Multilevel linear regression models for perceived group threat (study 1, EB 2009).

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>( \beta )</td>
<td>b</td>
<td>( \beta )</td>
<td>b</td>
<td>( \beta )</td>
</tr>
<tr>
<td>Sex</td>
<td>.42 (.65)</td>
<td>.012 (.65)</td>
<td>.42 (.65)</td>
<td>.012 (.65)</td>
<td>.42 (.65)</td>
<td>.012 (.65)</td>
</tr>
<tr>
<td>Age</td>
<td>-.92 (.54)</td>
<td>-.029 (.54)</td>
<td>-.92 (.54)</td>
<td>-.029 (.54)</td>
<td>-.92 (.54)</td>
<td>-.029 (.54)</td>
</tr>
<tr>
<td>Education</td>
<td>-7.33*** (.64)</td>
<td>-.187 (.64)</td>
<td>-7.33*** (.64)</td>
<td>-.187 (.64)</td>
<td>-7.33*** (.64)</td>
<td>-.187 (.64)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>.43 (.13)</td>
<td>.013 (.13)</td>
<td>.43 (.13)</td>
<td>.013 (.13)</td>
<td>.43 (.13)</td>
<td>.013 (.13)</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>-4.86*** (.51)</td>
<td>-1.14 (.51)</td>
<td>-4.86*** (.51)</td>
<td>-1.14 (.51)</td>
<td>-4.86*** (.51)</td>
<td>-1.14 (.51)</td>
</tr>
<tr>
<td>Community Size</td>
<td>-1.85* (.72)</td>
<td>-.055 (.72)</td>
<td>-1.85* (.72)</td>
<td>-.055 (.72)</td>
<td>-1.85* (.72)</td>
<td>-.055 (.72)</td>
</tr>
<tr>
<td>Immigrant Integration Policies</td>
<td>--- ---</td>
<td>-6.4*** (.09)</td>
<td>-7.39 (.09)</td>
<td>-6.4*** (.09)</td>
<td>-7.43 (.09)</td>
<td>-6.4*** (.09)</td>
</tr>
<tr>
<td>Immigrant Group Size</td>
<td>--- ---</td>
<td>--- ---</td>
<td>-1.18 (.43)</td>
<td>--- ---</td>
<td>-1.08 (.43)</td>
<td>--- ---</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>--- ---</td>
<td>--- ---</td>
<td>--- ---</td>
<td>-1.11 (.83)</td>
<td>--- ---</td>
<td>-1.18 (.83)</td>
</tr>
<tr>
<td>Individual-level variance</td>
<td>1083.38</td>
<td>1083.38</td>
<td>1083.38</td>
<td>1083.38</td>
<td>1083.38</td>
<td>1083.38</td>
</tr>
<tr>
<td>Country-level variance</td>
<td>144.77</td>
<td>65.39</td>
<td>64.92</td>
<td>65.33</td>
<td>64.73</td>
<td>64.53</td>
</tr>
<tr>
<td>-2LogLikelihood</td>
<td>216028.873</td>
<td>216009.376</td>
<td>216009.195</td>
<td>216009.358</td>
<td>216009.142</td>
<td>216009.059</td>
</tr>
</tbody>
</table>

Note. Parameters are unstandardized (b) and standardized (\( \beta \)) regression coefficients. Numbers in parentheses are standard errors. 
*** p < .001; ** p < .01; * p < .05 (two-tailed).
Table 2. Multilevel linear regression models for perceived group threat (study 2, EVS 2008/9).

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>-1.21*** (.33)</td>
<td>-1.21*** (.33)</td>
<td>-1.21*** (.33)</td>
<td>-1.21*** (.33)</td>
<td>-1.21*** (.33)</td>
<td>-1.21*** (.33)</td>
</tr>
<tr>
<td>Age</td>
<td>.47* (.18)</td>
<td>.47* (.18)</td>
<td>.47* (.18)</td>
<td>.47* (.18)</td>
<td>.47* (.18)</td>
<td>.47* (.18)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>1.14* (.53)</td>
<td>1.14* (.53)</td>
<td>1.14* (.53)</td>
<td>1.14* (.53)</td>
<td>1.14* (.53)</td>
<td>1.14* (.53)</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>-1.15*** (.11)</td>
<td>-1.15*** (.11)</td>
<td>-1.15*** (.11)</td>
<td>-1.15*** (.11)</td>
<td>-1.15*** (.11)</td>
<td>-1.15*** (.11)</td>
</tr>
<tr>
<td>Community Size</td>
<td>-.34* (.14)</td>
<td>-.34* (.14)</td>
<td>-.34* (.14)</td>
<td>-.34* (.14)</td>
<td>-.34* (.14)</td>
<td>-.34* (.14)</td>
</tr>
<tr>
<td>Immigrant Integration Policies</td>
<td>---</td>
<td>---</td>
<td>-2.77*** (.08)</td>
<td>-2.77*** (.08)</td>
<td>-2.77*** (.08)</td>
<td>-2.77*** (.08)</td>
</tr>
<tr>
<td>Immigrant Group Size</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-0.01 (.33)</td>
<td>-0.007</td>
<td>---</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>-.79 (.56)</td>
<td>-.22</td>
<td>---</td>
</tr>
<tr>
<td>Conservatism</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>.65 (.96)</td>
<td>---</td>
</tr>
<tr>
<td>Social expenditure</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Individual-level variance</td>
<td>487.31</td>
<td>487.31</td>
<td>487.31</td>
<td>487.31</td>
<td>487.31</td>
<td>487.31</td>
</tr>
<tr>
<td>Country-level variance</td>
<td>52.51</td>
<td>38.86</td>
<td>38.86</td>
<td>36.1</td>
<td>38.19</td>
<td>38.79</td>
</tr>
</tbody>
</table>

-2LogLikelihood                    | 295937.88        | 295929.84        | 295929.83        | 295927.8        | 295927.38        | 295929.73        |

Note. Parameters are unstandardized (b) and standardized (β) regression coefficients. Numbers in parentheses are standard errors. *** p < .001; ** p < .01 (two-tailed).
### Table A (appendix). Variables and descriptive statistics (minimum, maximum, mean/SD or percentage).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Study 1</th>
<th>Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Eurobarometer 73.1)</td>
<td>(European Value Study 2008/9)</td>
</tr>
<tr>
<td></td>
<td>Min.-Max. Mean (SD) or percentage</td>
<td>Min.-Max. Mean (SD) or percentage</td>
</tr>
<tr>
<td><strong>Individual-level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex (ref. = male)</td>
<td>0-1 55.7%</td>
<td>0-1 55.3%</td>
</tr>
<tr>
<td>Age</td>
<td>1-4 2.92 (1.05)</td>
<td>1-4 2.96 (1.02)</td>
</tr>
<tr>
<td>Employment Status</td>
<td>0-1 8.4%</td>
<td>0-1 5%</td>
</tr>
<tr>
<td>(ref. = other, 1 = unemployed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>1-4 3.14 (.75)</td>
<td>0-6 3.02 (1.37)</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>1-4 2.05 (.79)</td>
<td>1-10 7.3 (2.08)</td>
</tr>
<tr>
<td>Community Size</td>
<td>0-1 53.4%</td>
<td>1-8 4.18 (2.37)</td>
</tr>
<tr>
<td>(ref. = other, 1 = urban)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Group Threat</td>
<td>0-100 49.07 (36.16)</td>
<td>0-100 59.35 (24.01)</td>
</tr>
<tr>
<td><strong>Country-level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant Integration Policies</td>
<td>30-85 52.84 (14.07)</td>
<td>30-85 53 (13.94)</td>
</tr>
<tr>
<td>Immigrant group size</td>
<td>0.76-15.56 6.33 (3.78)</td>
<td>0.76-15.56 6.42 (3.69)</td>
</tr>
<tr>
<td>(% non-EU immigrants)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>3.40-18.00 9.00 (3.67)</td>
<td>2.50-18.00 8.55 (3.88)</td>
</tr>
<tr>
<td>Cabinet Share of Conservative Parties</td>
<td>1-5 2.74 (1.3)</td>
<td>1-5 2.75 (1.28)</td>
</tr>
<tr>
<td>Social Expenditure (% GDP)</td>
<td>12.7-31.01 23.03 (5.33)</td>
<td>12.7-31.01 23.13 (5.16)</td>
</tr>
</tbody>
</table>
FIGURES:
Figure 1. Immigrant integration policies and perceived group threat (study 1, EB 2009).
Figure 2. Immigrant integration policies and perceived group threat (study 2, EVS 2008/9).
Endnotes
One might speculate that in part, this common practice is due to the typically rather limited number of indicators available in large-scale survey studies. However, Stephan, Ybarra, Martinez, Schwarzwald and Tur-Kaspa (1998) assess perceived group threat in a very detailed and comprehensive manner. Still, these authors report that modelling different forms of threat as belonging to one common construct is superior to more nuanced approaches.

The fit measures of the model we chose was CFI = .962; TLI = .932; RMSEA = .096. We acknowledge that the RMSEA falls somewhat above of what is considered as a good model fit. With this limitation in mind, we examined whether excluding certain countries would alter the results from the multilevel analyses. However, the substantial conclusions remained unchanged. Note that the distinction between metric and scalar invariance used for multigroup analyses of indicators with continuous scales is not salient for multigroup analyses of indicators with categorical scales (Davidov et al., 2010).

For example, see the Citizenship Policy Index [CIP] by Howard (2005). For an overview of related indices, see Janoski (2010, p. 36). Although certainly useful, none of these related indices covers as many European countries as the MIPEX used in this research.

To calculate the standardized regression coefficient $\beta$ for dichotomous independent variables, the unstandardized regression coefficient $b$ was divided by the standard deviation of the dependent variable. In this way, $\beta$ expresses the change for the dependent variable in standard deviation units when the independent variable changes from the reference category to one (Muthén & Muthén 1998-2010, p. 642).

Additionally, we re-estimated Model 2 several times, each time including one of the six specific MIPEX policy strands (see section 3.1.2.2) instead of the general index. All regression coefficients show a negative sign and are of substantial size, ranging from $\beta = -.285$ (for long term residence) to $\beta = -.66$ (for labor mobility), with only the coefficient for long term residence falling slightly below conventional levels of significance ($p = .09$). These more detailed analyses essentially suggest that our conclusions are not driven by a single policy domain, and support our approach of using a general integration policy index. More detailed results can be obtained from the authors.

In supplementary analyses, we also explored whether using the gross domestic national product as indicator of a country’s economic condition would lead to different conclusions. However, this was not the case.

While the fit of the final model was good (CFI = .979; TLI = .974; RMSEA = .075), this model violated partial scalar equivalence: Four countries out of 27 (namely Denmark, Finland, Hungary, and Norway) have only one constrained intercept (instead of two as required for partial scalar equivalence – see Steenkamp and Baumgartner, 1998). However, these unequal measurement parameters turn out hardly to affect country mean estimates. Country means for this final model and the fully scalar equivalent model correlate very strongly ($r = 0.95, p < .001$), indicating that the observed deviations in intercepts and factor loadings are negligible. For these reasons, we decided to retain the four deviating countries in the analysis. As a test of robustness, we repeated the multilevel analyses reported below without the four deviating countries. The conclusions remain identical.

It seems reasonable to attribute the statistical significance of these substantially small associations to the large sample size used in this analysis.

For Study 2, we also estimated several models using one of the six specific MIPEX policy strands instead of the general index. Whereas the negative regression coefficients for long term...
residence ($\beta = -.21, p = .12$) and antidiscrimination ($\beta = -.29, p = .10$) fall just below conventional levels of two-tailed significance, all remaining domain-specific effect parameters are significantly negative at $p < .01$ and substantial in size (ranging from $\beta = -.217$ for long-term residence to $\beta = -.54$ for labour market mobility).

We did not aim to answer the additional question of which factors explain the degree of permissiveness of a country’s immigrant integration policy (see for example Howard, 2005; Janoski, 2010). This may be an important topic for future research that may deepen our understanding of the relationships between immigrant integration policies and threat from immigration, but is beyond the scope of our study.

In supplementary analyses, we used a micro-macro multilevel model (Croon & van Veldhoven, 2007) to explore the possibility of a link from perceived group threat to country-level immigration policies. Such a link would exist if perceived group threat remains significantly associated with subsequent immigrant integration policies after controlling for prior levels of immigrant integration policies (Finkel, 1995). Accordingly, we regressed MIPEX scores from 2010 (Huddleston, Niessen, Chaoimh & White, 2011) on the MIPEX scores from 2007 (Niessen et al., 2007) and country-level variation in perceived group threat from 2009 (study 1) respectively 2008/9 (study 2). The results show strong autoregressive parameter estimates for immigrant integration policies (study 1: $\beta = .96, p < .001$; study 2: $\beta = .96; p < .001$), and non-significant parameter estimates for perceived group threat (study 1: $\beta = -.04; p = .21$; study 2: $\beta = -.004; p = .95$).

It is interesting to note that in contemporary socio-psychological research, there is also an active debate on whether (perceived) multicultural ideologies (which might be seen as a consequence of macro-level institutional arrangements) foster or reduce anti-outgroup prejudice (for example, see Morrison, Plaut & Ybarra, 2010).