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What factors explain anti-Muslim prejudice? An assessment of the effects of Muslim population size, institutional characteristics and immigration-related media claims

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What factors explain anti-Muslim prejudice? An assessment of the effects of Muslim population size, institutional characteristics and immigration-related media claims

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Acknowledgements

Bios

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Abstract

What factors explain majority members' anti-Muslim prejudice? This is an increasingly important question to ask, but to date only relatively few studies have sought to provide answers from a cross-national comparative perspective. This study aims to help fill this gap. Using data from the 7th round of the European Social Survey (ESS) linked with country-level characteristics, our results indicate that (a) a larger Muslim population size, (b) more liberal immigrant integration policies and (c) greater state support of religion are all associated with lower levels of majority members' negative attitudes towards Muslim immigration – our indicator of anti-Muslim prejudice. Such attitudes, however, prove to be unrelated to (d) cross-national differences in the frequency of negative immigration-related news reports as measured by the ESS media claims data. Collectively, these findings bring us one important step closer towards a better understanding of interethnic relations between majority members and Muslim immigrants in European host societies.

Keywords:

Anti-Muslim prejudice; immigrant integration policies (MIPEX); state support of religion; group threat theory; European Social Survey (ESS)

Introduction

A constant increase in immigration has been one of the most crucial structural social changes that European countries have undergone during the last decades. At the same time, negative attitudes towards immigrants and immigration have also been on the rise (Semyonov, Raijman, and Gorodzeisky 2006), contributing to interethnic tensions and creating high social costs. For example, past research demonstrates not only a robust positive association between individual anti-minority attitudes and manifest discriminatory behaviours (Dovidio, Kawakami, and Gaertner 2002; Schütz and Six 1996). In addition, aggregate public opinion on immigrants and immigration is also viewed to provide the procedural norms motivating explicit anti-immigrant violence. Consequently, to the extent that avoiding interethnic tensions between majority members and immigrants is considered desirable, describing and explaining host society members' negative attitudes towards immigration is of primary importance (see Heath et al. 2018 for an introduction to the Special Issue). Of course, we are not the first to make this observation. However, while a large body of the literature has studied negative sentiments towards immigrants in general, only few studies exist that focus on variations in negative attitudes towards *Muslim* immigrants in particular (Fetzer and Soper, 2005). But it is this latter group of immigrants and their descendants that currently represent a prime target of negative attitudes among many citizens of European nation states (see, e.g., Strabac and Listhaug 2008; Helbling 2014; Statham 2016; see also the study of Heath and Richards, 2018 in this volume).

Taking previous theory and research on anti-immigrant attitudes as the vantage point, this study seeks to improve our understanding of the sources driving cross-national variation in prejudice towards immigrants of Muslim faith. To this end, we focus on country-level characteristics and examine simultaneously demographic, institutional and mass media sources of citizens' negative attitudes towards Muslim immigration – our indicator of anti-Muslim prejudice. Empirically, our analysis takes advantage of recently acquired large-scale

survey data from the 7th round of the European Social Survey (ESS) that we combine with several country-level characteristics, and it applies multilevel modelling techniques for testing our predictions.

The paper will proceed as follows. We will begin with a discussion of the theoretical considerations leading us to expect how various country-level characteristics may explain cross-country differences in negative sentiments towards Muslim immigrants. Next, we will present the country- and individual-level data and variables we use to test our predictions. Then we will describe the empirical part and present the results of the multivariate analysis using multilevel modelling. We will finalise with a summary and some concluding remarks.

Theoretical background

Which sources account for cross-national differences in majority members' anti-Muslim prejudice?[1] In part, such variation in intergroup attitudes might certainly result from aggregated individual differences of majority members living in different nation states (i.e. compositional effects). However, previous theory and research on anti-immigrant prejudice in general shows that the *contexts* within which intergroup relations take place affect majority members' reactions towards immigrants as well. Building on and extending this body of research, we will test if and how anti-Muslim prejudice is shaped by (1) the relative group size of the Muslim population, (2) institutional characteristics, and (3) immigration-related

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1 Some comments on terminology are in order before we outline our theoretical expectations. In this paper, we adapt Crandall and Eshleman's (2003, 414) general definition of prejudice as 'a negative evaluation of a social group or a negative evaluation of an individual that is significantly based on the individual's group membership' to designate majority members' negative attitudes towards Muslim immigrants. The empirical and theoretical focus of anti-Muslim prejudice certainly encompasses multiple dimensions. However, it is the immigration of people of Muslim faith that figures particularly high on the public agenda of European host societies, and it is thus this facet of anti-Muslim prejudice that is focused on in the present study.

news reports. Below we will discuss the theoretical foundation of each of these explanatory factors.

Relative size of the Muslim population

A popular contextual-level explanation attributes majority members' anti-minority attitudes and behaviours to the relative size of the minority population (Blalock 1967). Most studies following this approach adhere to the assumption that for part of the majority population, a larger minority group size increases perceptions of intergroup competition for scarce or valued goods. Presumably, such intergroup competition results in manifest anti-minority prejudice. To date, a considerable number of cross-national studies on anti-immigrant attitudes provide evidence for the assumption that a larger immigrant group size increases various forms of anti-immigrant attitudes (Quillian 1995; Semyonov, Raijman, and Gorodzeisky 2006; Schlueter and Wagner 2008). However, more recent studies tend to find less support for the presumed nexus between immigrant group size and anti-immigrant attitudes (e.g. Kuntz, Davidov, and Semyonov 2017; Schlueter, Meuleman, and Davidov 2013). This also holds for the cross-national study on anti-Muslim prejudice by Strabac and Listhaug (2008), who report that the size of the Muslim population exerts no statistically significant influence on majority members' social distance towards their Muslim neighbours.

Interestingly, an alternative theoretical perspective suggests that a larger minority group size might actually *improve* anti-minority attitudes. Specifically, intergroup contact theory (Pettigrew 1998) has been linked to the proposition that a larger minority group size is often associated with an increased chance for personal, positive intergroup contacts (Blau and Schwartz 1984; Schlueter and Wagner 2008). Such contacts,and intergroup friendships in particular,are well-known as channels to improve intergroup attitudes (Pettigrew 1998; Pettigrew and Tropp 2006). Similarly, research on the mere exposure effect – the notion that repeated exposure to a stimulus results in improved attitudes towards that stimulus (Zajonc

1968) – leads one to expect less anti-minority prejudice vis-á-vis a larger outgroup (see Kalin and Berry 1982), at least as long as pre-existing hostile attitudes are relatively absent (Crisp, Hutter, and Young 2009). Taken together, these latter theoretical perspectives converge in suggesting that a larger size of the Muslim population will be associated with less anti-Muslim prejudice.

Institutional characteristics

Next, we shift our focus to country-level institutional characteristics. We first consider two opposing, yet logically equally plausible theoretical perspectives on the role immigrant integration policies might play for shaping anti-Muslim prejudice (Schlueter, Meuleman, and Davidov 2013). A group threat perspective (Blalock 1967) leads one to expect that granting minorities more rights as indicated by more encompassing policies will enhance majority members' anti-minority reactions. This prediction rests on the assumption that majority members will perceive granting more encompassing rights to the minority group as a loss of their own (perceived) privileges, with greater negativity serving to defend or restore such rights. On the other hand, group norm theory (Pettigrew 1991; see Schlueter et al., 2013) could be taken to imply that policies also function as normative expectations about appropriate intergroup relations. This view predicts that in contexts characterised by more permissive (restrictive) policies concerning the position of the minority group, majority members will show less (more) anti-minority prejudice. Empirically to date, most studies examining the role of immigrant integration policies for majority members' anti-immigrant prejudice find that more permissive policies are associated with more positive attitudes towards immigrants (Schlueter, Meuleman, and Davidov 2013; see also Heizmann 2015; Hooghe and de Vroome 2015; Callens and Meuleman 2016; Green et al., 2018).

Immigrant integration policies, however, are certainly not the only institutional characteristic affecting citizens' attitudes towards Muslim immigrants. Recently, Helbling and Traunmüller (2016) developed a novel approach according to which the religious policies of governments are a major factor for shaping majority members' anti-Muslim attitudes. Helbling and Traunmüller (2016) suggest that in political contexts where religious minorities (i.e. Muslims) receive more government support, members of the majority will perceive such gains as a loss of their own group's cultural resources and, hence, react with greater negativity towards the Muslim minority. In clear support of their theoretical predictions, the authors find that citizens living in Swiss cantons with a higher degree of religious regulation show more negative attitudes towards Muslims. Notice that this evidence deviates from the alternative view that policies on government–church relations granting the Muslim minority more rights could reduce anti-Muslim attitudes (Fetzer and Soper 2005). This alternative view also suggests that people may perceive strengthening Islam as strengthening the position of religion in Europe in general – including Christianity – rather than as a zero-sum game (Carol, Helbling and Michalowski 2015). This, in turn, may bring about positive attitudes toward Muslims and reduce prejudice, particularly among Christian respondents. While Helbling and Traunmüller (2016) test their expectations on a sub-national level, it may be potentially fruitful to apply their theoretical model for explaining also *between-country* differences in negative attitudes towards Muslim immigrants across Europe (Helbling and Traunmüller 2016, 394). Accordingly, in the present paper we will also shed new empirical light on the prediction that granting Muslims more comprehensive religious rights increases anti-Muslim attitudes.

News reports related to immigration and Muslims

News reports on Muslim immigration and immigrants have long been hypothesised to shape cross-national variation in majority members' anti-Muslim prejudice (Strabac and Listhaug 2008). However, possibly also due to a lack of suitable data sources, to date no study seems to exist that provides a systematic empirical test of the presumed nexus between news reports and negative attitudes towards Muslim immigrants. Historically, the assumption that mass mediated news reports shape intergroup attitudes dates back to the early account of explaining intergroup relations by Blumer (1958) or Allport (1954). The general theoretical vantage point of this literature is the simple notion that the mass media represents an important source of information for majority members' attitudes towards other groups in society. Because news reports about minority groups tend to emphasise problematic and, hence, negative aspects of minority groups and their members, an increase in news reports about minority group members with negative valence presumably increases anti-minority attitudes. Importantly, news reports on minority-related issues might shape anti-minority attitudes not only via individual exposure to the mass media, but also via, for example, interpersonal communication in peoples' proximal social contexts (Schlueter and Davidov, 2013). This opens up the possibility to conceptualise news reports of issues related to immigration as a contextual, country-level characteristic that also results in more negative attitudes towards Muslim immigrants. In the next section we are going to examine the theoretical expectations sketched above across 20 European countries.

Data, variables and method

Data

To examine our theoretical expectations we combined various individual- and country-level data sources into a new data file. At the individual-level, our main data source is the7th round of the European Social Survey (ESS) collected in 2014-15[2]. The ESS is a biennial cross-

2 All data and replication materials are available from the first author upon request.

national survey programme carried out in several European countries that is widely

considered to rely on very high methodological standards in terms of questionnaire

development and fieldwork (see, e.g., Jowell et al. 2007). For each country, representative

samples were collected by means of face-to-face interviews of randomly drawn household

representatives aged 15 years or older. Given that this research focuses on majority members'

attitudes towards Muslim immigrants, we excluded the following respondents from the

sample: those born outside the country of data collection; those without the country's

citizenship; and those respondents who indicated they were Muslims. Furthermore, we

excluded the Israeli sample from the analysis because of the distinct character of immigration

in this country. The remaining total sample size included N_i = 31,557 respondents[3] nested

within N_j = 20 countries.

Dependent variable

We assessed negative attitudes towards Muslim immigrants using the single item available in

the ESS data that explicitly inquired about respondents' view towards Muslim immigration.

Respondents were asked to indicate to what extent they think that their country should allow

Muslims from other countries to come and live in their country. Response options were given

on a four-point Likert-type scale and comprised of the following categories: 1 = 'allow many

to come and live here', 2 = 'allow some', 3 = 'allow few' and 4 = 'allow none'. This is a

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3 The countries (with sample size in parentheses, including cases with missing values) in the analysis were:
Austria (1,543), Belgium (1,480), the Czech Republic (2,092), Germany (2,708), Denmark (1,369), Spain
(1,745), Estonia (1,474), Finland (1,982), France (1,641), United Kingdom (1,924), Hungary (1,662), Ireland
(2,067), Lithuania (2,164), Netherlands (1,702), Norway (1,258), Poland (1,598), Portugal (1,165), Slovenia
(1,107), Sweden (1,541) and Switzerland (1,089). Data were retrieved from
http://www.europeansocialsurvey.org/ where more detailed information about data collection procedures and
methodological documentation is provided.

simple but face-valid indicator, with the item wording clearly assessing negativity towards

Muslim immigrants in the societal domain.[4,5]

Country-level independent variables

Muslim population relative group size. We employed the percentage of Muslims in the

national population for the year 2010 to operationalise Muslim outgroup relative size (Pew

Research Center 2015);[6] these data were compiled from multiple sources such as censuses or

populations registers . Countries with estimated Muslim populations of less than 10,000

persons were assigned the score 0.1%.

Immigrant integration policies. To assess the relation of immigrant integration policies with

negative attitudes towards Muslim immigrants, we used the Migration Integration Policy

Index (MIPEX) overall score for each country for the year 2015 (Huddleston et al. 2015).

These are expert-rated scores covering multiple policy areas such as immigrants' access to

citizenship or their opportunities for political participation. Following previous research

(Schlueter, Meuleman, and Davidov 2013), we used the sum of the scores across the eight

policy areas for each country. Higher scores indicated more liberal immigrant integration

policies, enabling us to distinguish more liberal countries from those with more restrictive

immigrant integration policies.

State support of religious practice. To operationalise state support of religion, we use the

composite measure of religious legislation available from the 'Religion-and-State II' (RAS II)

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4 A recent study (Davidov, Cieciuch and Schmidt, 2018) has shown that the measurement parameters of this item are rather similar across European countries when included in a latent variable that measures attitudes to various specific immigrant groups such as Muslims, Sinti and Roma or Jews.

5 The number of missing values in this variable was rather moderate (4.3%). We therefore opted for listwise deletion instead of more sophisticated procedures for dealing with missing data in the analysis. However, supplemental analyses using robust full information maximum likelihood estimations yielded highly similar results to those reported here and are available in tabulated form upon request.

6 More detailed information on different variants of Islamic faith, for example Sunni, Shi's or Alawites, was unfortunately not available, but such a differentiation is beyond the scope of this study.

dataset provided by Fox (2008). All data refer to 2008, the most recent year of data collection

for the index. Higher scores indicated higher levels of support for religious practices.

News reports related to immigration and Muslims. We used the ESS media claims dataset to

examine the role of negativity of news on immigration and Muslims for shaping negative

attitudes towards Muslim immigrants (European Social Survey 2017). These so-called claims

are 'single communicative acts by non-media actors' (Koopmans and Olzak 2004, 13). Data

on the claims were derived in each country from manual content analyses of news reports in

leading national newspapers published during the national field phases of the ESS (ESS

2016). The ESS database on the claims provided the number of positive, neutral or negative

claims during the ESS field phase on various issues including immigration-related ones in

each country (European Social Survey 2016; see Statham and Tumber 2013). For each

country we subtracted the number of positive from the number of negative claims on

immigration-related issues. Because this difference score was considerably skewed across

countries, we computed its median as a simple but more robust measure assessing the

frequency of negative media claims related to immigration and Muslims. Countries were

coded as 1 if their score was higher than the cross-country median and 0 if not.

Control variables

In addition to the aforementioned country indicators of primary theoretical interest, we

included several individual-level control variables in our models. Within countries, the major

purpose of these controls is to reduce concerns that compositional differences between

national samples might bias the results. *Gender* was coded with males as the reference

category (0 = male; 1 = female). *Age* was assessed in years. The highest level of *education*

was measured in the ESS based on a novel coding scheme comprising 28 categories (0 = 'not

completed ISCED 1' up to 800 = 'ISCED 6, doctoral degree'). To distinguish between those

who are *unemployed* and actively searching for a job from others who are not, we used a

dummy variable (0 = other; 1 = unemployed). Furthermore, we included a variable assessing respondents' *subjective feeling on whether their income meets their needs* (1 = 'Living comfortably on present income'; 2 = 'Coping on present income'; 3 = 'Difficult on present income'; 4 = 'Very difficult on present income') as an indicator of economic deprivation. *Religious affiliation* was operationalised using six dummy variables (Roman Catholic, Protestant, Orthodox, Jewish, Eastern Religion, other Christian, other non-Christian). Respondents without any religious affiliation served as the reference category. To measure *friendships with immigrants* (e.g. Quillian 1995; Schlueter and Wagner 2008), respondents were asked 'Do you have any friends who have come to live in [country] from another country?' The original response options were 1 = 'Yes, several', 2 = 'Yes, a few' and 3 = 'No, none'. We recoded this variable so that higher values indicated more contact (for a more detailed examination of the contact effect, see Green et al. 2018, and Meuleman et al. 2018, in this volume). Since the extent of media consumption in the form of watching TV may also explain negative attitudes towards Muslim immigrants (Popescu et al. 2015), we controlled for individual TV exposure as well. The ESS included two such variables: the total number of hours watching TV news (that we labelled 'TV news') and the total number of hours per day watching TV in general. Both were measured on an eight-point scale (ranging from 0 = none to 7 = more than 3 hours). We created a new variable which we labelled 'TV not news'. The latter was calculated by subtracting the scores of the variable 'TV news' from the scores of the variable measuring the total number of hours watching TV[7]. A table summarising the descriptive univariate statistics of the variables described above is presented in the Appendix.

Results

Descriptive results

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[7] Preliminary analyses have shown that the effect of 'TV news' is considerably lower. Therefore we did not include this variable as a control variable in the analysis.

Before considering the multivariate results, we briefly explored the bivariate country-level

relations between negative attitudes towards Muslim immigrants and the main independent

variables.[8]

Figure 1: Bivariate country-level relations between negative attitudes towards Muslim immigrants and (a) relative group size of Muslims, (b) immigrant integration policies, and (c) state support of religion. The y-axis represents the anti-Muslim prejudice scores in a country.

(a) Relative group size Muslims   (b) Immigrant Integration Policies   (c) State Support of Religion
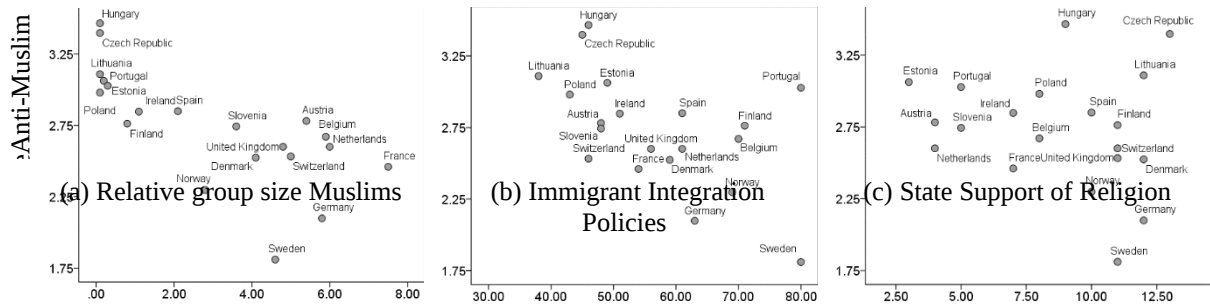
The three panels of the figure show clear between-country variations in attitudes towards

Muslim immigrants, with the country means stretching from a minimum of 1.81 in Sweden to

a maximum of 3.46 in Hungary. The first panel of the figure illustrates remarkable differences

in the percentage of Muslims living in European nation states, ranging from (less than) 0.1%

in several eastern European countries to 5.9% in Belgium. Combined, the first panel

visualises that a higher percentage of Muslims per country is associated with less negativity

towards Muslim immigrants ($r = -0.73$; $p < 0.001$). In the second panel, we find that European

countries with more liberal immigration policies are associated with decreased negative

sentiments towards Muslim immigrants ($r = -0.57$; $p < 0.05$). The third panel of the figure,

displaying the association between country-level negative attitudes towards Muslim

immigrants and the composite measure of state support of religious practice, reveals more

differentiated results. The bivariate correlation for all 20 country cases is only weakly

negative ($r = -0.11$, $p = 0.62$). However, a closer inspection reveals that the data from

Hungary, the Czech Republic and Lithuania present influential cases in that they combine

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[8] No scatter plot is presented for the fourth independent country-level variable, *News reports related to immigration and Muslims*, because it was a dummy variable. Instead, we report its association with country variations in anti-Muslim prejudice below.

very high scores on the single indicator assessing anti-Muslim prejudice with relatively high scores on the state support of religious practice. Indeed, when these three country cases are excluded from the sample, the negative bivariate correlation rises to $r = -0.58$ ($p < 0.05$). This indicates that the data show a negative relation between government support for religious services and majority members' anti-Muslim attitudes for the remaining 17 country cases. We find no statistically significant relation between the dichotomous indicator assessing immigration and Muslim-related claims in news reports and the average levels of anti-Muslim attitudes across countries ($r = 0.23$; $p = 0.33$). To achieve a more comprehensive understanding of these preliminary and aggregate-level findings we next turn to the results of the multilevel analyses.

Multilevel analysis

The data we used were hierarchically structured with respondents nested within countries. We therefore used hierarchical linear regression modelling (HLM) techniques for testing our hypotheses. These multilevel models allow separate residual terms for each level of analysis, which yields adequate standard errors for the parameter estimates (Raudenbush and Bryk 2002). Technically, we fit a series of multilevel models that we estimated incrementally. All models were estimated using restricted maximum likelihood procedures (Maas and Hox 2004) as implemented in SPSS 23 (IBM 2016). We began by calculating the intra-class correlation coefficient (ICC) from a random effects ANOVA.

The ICC indicated that approximately 16.3% [= (.15 /.15 + .78) $\times$ 100] of the total variance in the dependent variable could be attributed to between-country differences, a result which clearly pointed to the potential relevance of country-level sources of anti-Muslim prejudice. Accordingly, Table 1 presents the findings from three multilevel models that are structured incrementally. In Model 1, we included the individual-level control variables. We only briefly consider the parameter estimates for these

variables, as they are not the main focus of our study. The results presented for Model 1 suggested that whereas respondents' age and economic deprivation was associated with greater negativity towards Muslim immigrants, they provided renewed empirical evidence for the known effects of education and intergroup friendships as factors reducing anti-Muslim prejudice. We further found that, as compared to atheists, respondents identifying themselves as Catholic, Protestant or Orthodox reported more negative attitudes towards Muslim immigrants. Importantly, even after accounting for these individual-level characteristics, a substantial amount of country-level variance in the dependent variable remained unexplained (residual ICC = 11%). We therefore added our country-level independent variables in Model 2.

In Model 2 we reduced the unexplained variance on the country-level by 68%. The results presented for Model 2 revealed that the observed country-level differences in negative attitudes towards Muslim immigrants were partly due to country differences in the relative size of the Muslim population. In line with the descriptive findings, the results displayed a significant and negative association between the percentage of Muslims and negative attitudes towards Muslim immigrants (Beta = -0.677). Stated differently, with an increase of one standard deviation in the relative size of the Muslim population, anti-Muslim prejudice decreased by 0.677 standard deviation units. This negative association deviated from the expectations derived from group conflict theory that a larger minority group size evokes greater anti-minority negativity, but is consistent with the assumption that increased intergroup contact or familiarity with minority group members can alter anti-minority sentiments. In the second model we added our country-level predictors. Are less restrictive immigrant integration policies associated with decreased anti-Muslim prejudice? The results provided clear support for this expectation (Beta = -0.391). Reconfirming findings from earlier research on immigrants more generally, the data showed that countries with less restrictive policies displayed also more positive attitudes towards Muslim immigrants. In

other words, we found that a one standard deviation increase in the permissiveness of a country's integration policies was associated with a 0.391 standard deviations decrease in anti-Muslim prejudice[9]. Before we examined the role of the state's support of religious practices for cross-national differences in majority members' prejudice towards Muslims, we considered the relation between the relative frequency of negative immigration- or Muslim-related claims in news reports and negative attitudes towards Muslim immigrants. The nonsignificant parameter estimate indicated that the amount of negative claims on immigration in the media is not reliably associated with anti-Muslim prejudice.

Turning our attention to the association between state support of religion and citizens' anti-Muslim prejudice, our preliminary conclusion was that the associated negative parameter estimate cannot be distinguished from zero. However, recall that the results from the bivariate scatterplots suggested that a cluster of three country cases – the Czech Republic, Hungary and Lithuania might had an inordinate influence on the statistical relations between state support of religion and anti-Muslim prejudice. In Model 3, we therefore excluded these three countries from the analysis. In fact, doing so revealed a significant and negative association between state support of religion and citizens' anti-Muslim prejudice (Beta = -0.362) among the remaining 17 West European country samples. This result deviated from the prediction that greater government support of religious practice in general and Muslim religious practices in particular may generally be perceived as threatening the host society's majority group resources. Instead, the negative association between state support of religion and anti-Muslim Prejudice suggested that such state support may foster acceptance of members of minority religious groups in a country and, hence, may reduce negative attitudes towards Muslim immigrants among citizens in European nation states. However, this finding could not be generalized to all 20 West and East European countries in our sample.

9 As suggested by a reviewer, we furthermore examined whether accounting for country-level economic conditions alters the association between immigrant integration policies and respondents' negative attitudes towards Muslims. However, it turned out that an additional model including country-level GDP left the previously observed parameter estimate of immigrant integration policies intact (beta = -.385; b = -.010, p < .05).

Summary and discussion

Existing research has advanced a variety of theoretical approaches to explain majority

members' anti-Muslim prejudice. However, cross-national comparative studies that put these

theoretical expectations under systematic empirical scrutiny are still largely missing (Fetzer

and Soper 2005, p. 131). This study sought to help fill this gap in the literature. To this end,

we examined if and how the relative size of the Muslim immigrant population, institutional

characteristics in the form of immigrant integration policies as well as country support of

religious practices and the negativity of claims in immigrant and Muslim-related news reports

shape majority members' negative attitudes towards Muslim immigrants. Below we

summarize our findings.

First, our results confirm the important role played by the relative size of the Muslim

population as a demographic characteristic shaping majority members anti-Muslim prejudice.

The finding that a larger relative size of the Muslim population was associated with decreased

levels of negativity towards Muslims contradicts a group conflict perspective. Instead, a larger

percentage of Muslim residents seems to provide majority members more opportunities for

positive contact and mere exposure, both of which help to reduce negative sentiments. Future

research may examine these assumptions more closely and investigate the complete link

between the relative size of the Muslim population, anti-Muslim attitudes, and intergroup

contact with Muslims – an indicator not available in the present data – to tap into specific

contacts with Muslims.

Second, the present results provide renewed evidence that institutional characteristics

are crucial for understanding cross-national differences in anti-minority attitudes. Less

restrictive immigrant integration policies were associated with less negativity towards Muslim

immigrants, suggesting that policies shape majority members normative expectations about

appropriate intergroup relations. Relatedly, stronger state support of religious practices proved

to be associated with decreased levels of anti-Muslim prejudice as well (albeit this conclusion held only for a subset of 17 (mostly West European old democracy) countries. Apparently, majority members do not necessarily perceive enhanced state support for the practice of other religions as a threat to the dominant (Christian) population. Instead, respondents may view such policy measures as a normative signal from the state that the practice of Islam in the country is accepted and welcome. Notice, however, that in this study we used a measure of state support of all religions in a country. Thus, it would be interesting to explore in future research the link between negative attitudes to Muslims and state support of the practice of Islam in particular in European countries, when such a more specific measure becomes available.

Finally, our study finds no evidence that more negative media claims about immigrants and Muslims affect between-country differences in anti-Muslim prejudice. We emphasize, however, that the absence of a meaningful relation between the tone of mass mediated news referring to Immigrants/Muslims and anti-Muslim prejudice should be interpreted with caution. Specifically, the ESS media claims data used in this research certainly represent a useful source for the cross-national assessment of mass media coverage. However, the collection and analysis of media claims data within the ESS framework is relatively novel and only limited knowledge exists concerning the comparability of these data collected in different cultural and temporal contexts. Thus, future research initiatives that employ alternative techniques for measuring mass media coverage of Muslim immigrants (including both online and print media as well as social media channels) might offer better insights on the link between media claims and anti-Muslim sentiments.

Before closing, we wish to acknowledge two additional caveats that may limit some of the interpretations of the current findings. Specifically, this research shares the limitations of all non-randomized research designs in that our findings are correlational only and cannot provide strong evidence for causal effects. For example, it is conceivable that Muslim

immigrants choose to immigrate to those countries where attitudes towards Muslim immigrants or immigrants in general are more positive to start with. As a result, in countries with a larger relative size of Muslims we may find less negative attitudes towards Muslim immigration due to a selection effect, deviating from the theoretical assumptions underlying this research. Similarly, immigrant integration policies may also be a consequence (rather than a cause) of majority members' attitudes towards immigration (Wlezien 2004; but see Freeman, 1995). Other researchers may better address the question about the direction of the causal flow by taking advantage of longitudinal cross-national data; Such an endeavour is beyond the scope of the present study. In addition, we would like to underline the fact that the country-level sample size of this study comprised twenty cases only. In Model 3 in which three samples were treated as influential cases and omitted from the analysis, most country cases left included Western European host societies. Taken together, these limitations restrict the possibility to generalize the results of our study to all Eastern and Western European countries. Therefore, additional research that utilizes a larger and more diverse set of countries is essential to help evaluate the generalizability of our conclusions.

In spite of these limitations, our findings demonstrate that contextual factors such as the size of the Muslim population, immigrant integration policies and state support of religion are central for understanding the sources of majority members' prejudice towards Muslim immigrants. These predictors do not exclude each other but rather operate in a complementary way. Thus, we believe that considering them in future explanations of cross-country differences in negative attitudes towards Muslim immigrants in particular, and immigration in general, may contribute to a better understanding and to a fuller delineation of the complex picture that describes and explains how negative attitudes towards immigrant minorities may come about. In so doing, we hope that the benefits of examining various theories on anti-Muslim prejudice cross-nationally will be recognized.

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Table 1. Multilevel linear regression models for explaining anti-Muslim prejudice

	Model 1		Model 2		Model 3	
	b(s.e.)	Beta	b(s.e.)	Beta	b(s.e.)	Beta
Intercept	2.732		3.843		3.641	
Gender	.000 (.019)	.008	.000 (.019)	.000	.002 (.022)	.002
Age	.005*** (.001)	.114	.005*** (.001)		.006*** (.001)	.123
Education	-.001 (.000)	-.195	-.001*** (.000)	-.185	-.001*** (.000)	-.197
Unemployed	-.035 (.018)	-.039	-.035 (.016)	-.04	-.026 (.017)	-.028
Subjective feeling of income	.102*** (.013)	.092	101*** (.013)	.092	.120*** (.011)	.104
Friendships with immigrants	-.234*** (.018)	-.180	-.234*** (.018)	-.180	-.229*** (.021)	-.174
Catholic	.057 (.033)	.064	054 (.033)	.061	.069 (.038)	.076
Protestant	.034 (.023)	.038	.034 (.023)	.038	.041 (.024)	.045
Orthodox	.001 (.043)	.001	.000 (.044)	.000	.038 (.064)	.043
Other Christian	-.083 (.058)	-.093	-.083 (.058)	-.093	-.107 (.067)	-.118
Jewish	-.106 (.224)	-.120	-.106 (.224)	-.121	-.181 (.258)	-.200
Eastern Orthodox	-.094 (.074)	-.106	-.093 (.074)	-.105	-.105 (.076)	-.116
Other non-Christian	-.200* (.084)	-.248	-.221 (.098)	-.249	-.286** (.093)	-.317
TV exposure	.027*** (.006)	.062	.031*** (.006)	.062	.034*** (.006)	.065
Muslim Population	---	---	-.088*** (.013)	-.677	-.053** (.015)	-.545
Immigrant integration policies	---	---	-.011* (.004)	-.391	-.008* (.003)	-.374
State support of religion	---	---	-.017 (.010)	-.167	-.028* (.012)	-.362
Immigration/ Muslim-related news reports	---	---	.120 (.094)	.374	---	---
Within-country variance	.683		.683		.694	
Between-country variance	.110		.035		.021	
Countries	20		20		17	
Individuals	31,557		31,557		26,249	

Note. Parameters are unstandardized (b) and standardized (beta) regression coefficients[10]; standard errors (s.e.) in parentheses. * p < .05; ** p < .01; *** p <. 001, (two-tailed). Because the data from Hungary, Czech Republic and Lithuania proved as influential cases when assessing the role of state support of religion, we excluded these samples in model 3.

Appendix A. Variables and descriptive statistics (mean, SD, or percentage) for the variables included in the study.

Variables	Definition	Mean (SD) or percentage
Dependent variable		
Anti-Muslim prejudice	"Using this card, please tell me to what extent you think [country] should allow Muslims from other countries to come and live in [country]?"	2.66 (0.97)
Country-level independent variables		
Muslim population	Size of the Muslim population per country in percent for 2010 (Pew, 2017).	3.02 (2.52)
Immigrant integration policies	Additive index of the Migrant Integration Policy Index (MIPEX) 2015 scores.	56.9 (12.25)
State support of religion	Composite measure of religious legislation 2008 (Religion and state, round II data).	8.65 (3.13)
Immigration/ Muslim-related news reports	Median split based of the difference between the total number of negatively and positively evaluated claims related to immigration and/or Muslims as derived from the ESS media claims data (1 = above the median of the country sample).	54%
Individual-level control variables		
Gender	2 = female	52.4%
Age	in years	48.68 (18.75)
Education	Measured in 28 categories; recoded from 1 = 'not completing ISCED 1' to 28 = 'ISCED 6'.	14.28 (7.75)
Unemployment	0 = not unemployed; 1 = unemployed	5.8%
Subjective feeling of income (whether income meets respondents' needs)	"Which of the descriptions on this card comes closest to how you feel about your household's income nowadays?"	1.9 (.79)
Religious affiliation	Roman Catholic = 35.4%, Protestant = 15.5%, Orthodox = 0.9%, Jewish = 0.1%, Eastern Religion = 0.3%, other Christian = 1%, other-non-Christian = 0.2%; reference category = no religious affiliation = 46.7%.	
Friendships with immigrants	"Do you have any close friends who are of a	'Yes, a few' 35.2%

10   For the dummy-variables in our models, we divided the unstandardized regression coefficient b by the standard deviation of anti-Muslim prejudice. Thus, b expresses the change for anti-Muslim prejudice in standard deviation units when the independent variable changes from the reference category to one (Muthén and Muthén, 1998–2010, p. 642).

	different race or ethnic group from most [country] people?"	'Yes, several' 11.5%
TV exposure	Difference between the variables 'On an average weekday, how much time, in total, do you spend watching television?' and 'And again on an average weekday, how much of your time watching television is spent watching news or programmes about politics and current affairs?'	2.41 (1.75)

Note: Descriptive statistics were calculated using design weights provided by the ESS.

Appendix B: Cross-country variation of the dependent and the country-level explanatory variables

Country	Variables					
	Anti-Muslim Prejudice		Percentage Muslim Population	Immigrant Integration Policies*	State Support of Religion**	News Reports (Median)***
	Mean	SD				
Austria	2.68	.94	5.40	48	4	1
Belgium	2.60	.90	5.90	70	8	1
Switzerland	2.47	.87	5.00	46	11	1
Czech Republic	3.4	.76	0.10	45	13	1
Germany	2.09	.85	5.80	63	12	0
Denmark	2.43	.87	4.10	59	12	0
Estonia	3.05	.92	0.20	49	3	0
Spain	2.67	.97	2.10	61	10	1
Finland	2.71	.88	0.80	71	11	0
France	2.39	.87	7.50	54	7	1
United Kingdom	2.53	.93	4.80	56	11	1
Hungary	3.43	.75	0.10	46	9	1
Ireland	2.73	.95	1.10	51	7	0
Lithuania	3.01	.87	0.10	38	12	1
Netherlands	2.49	.84	6.00	61	4	0
Norway	2.23	.84	2.80	69	10	0
Poland	2.96	.92	0.10	43	8	0
Portugal	2.97	.92	0.30	80	5	0
Sweden	1.82	.80	4.60	80	11	1
Slovenia	2.60	.92	3.60	48	5	1

Notes: Means and standard deviations (SD) of Anti-Muslim prejudice were calculated using design weights provided by the ESS.

* Higher scores indicate more liberal immigrant integration policies.
** Higher scores indicate higher levels of support for religious practices.
*** Frequency of negative media claims related to immigration and Muslims, 1- score of negativity higher than the cross-country median, 0 - otherwise.