

Accepted version for *International Journal of Intercultural Relations*,  
Volume 87, 2022, Pages 85-97, ISSN 0147-1767,  
<https://doi.org/10.1016/j.ijintrel.2022.01.008>.  
(<https://www.sciencedirect.com/science/article/pii/S0147176722000098>)

**Sometimes it is the little things: A meta-analysis of individual and contextual determinants of attitudes toward immigration (2009-2019)**

**Lenka Dražanová**

**Abstract:** Attitudes toward immigration have attracted much scholarly interest and fuelled extensive empirical research in recent years. Many different hypotheses have been proposed to explain individual and contextual differences in attitudes towards immigration. However, it has become difficult to align all of the evidence that the literature has produced so far. The present article contributes to the systematization of political science empirical research on public attitudes toward immigration in the last decade. Using a simplified combined-tests technique, this paper identifies the micro- as well as macro-level factors that are consistently linked to attitudes toward immigration. It reports findings from a meta-analysis of the determinants of general attitudes toward immigration in published articles in thirty highly ranked peer-reviewed political science journals for the years 2009 – 2019. The results warrant a summary of factors affecting attitudes to immigration in a systematic, measurable and rigorous manner.

**Keywords:** attitudes toward immigration, immigration attitudes, public opinion, meta-analysis, intergroup attitudes, migration

Words: 7308

## Introduction

Attitudes to immigration, immigrants and refugees have become a highly salient issue in many countries, particularly in the aftermath of the so-called “migration crisis”. While increasing proportions of immigrants in Western societies are viewed positively by some, stressing immigration benefits, others view these demographic changes with suspicion. Consequently, social scientists and, in particular, political scientists, have dedicated considerable attention to the factors that might explain individual attitudes toward immigration in recent years. However, as many hypotheses and factors have been proposed, ranging from intergroup contact and residential context to the role of personal predispositions, it has become increasingly difficult to see the wood for the trees.

Disagreement over what drives people’s attitudes to immigration persists. The literature on public opinion toward immigration predominantly focuses on two main types of factors affecting these attitudes. The first factor is individual-level indicators such as age, gender, education, left-right positioning, etc. The second approach is to look at macro-level indicators such as Gross Domestic Product (GDP) per capita, the share of the population that is unemployed, or the share of immigrants in the country. This article aims at assessing recent empirical evidence on what individual and contextual level factors are consistently linked with general attitudes to immigration and which are not. I make a contribution to the literature by (a) providing a systematic overview of factors linked to individual-level attitudes toward immigration in the political science literature and (b) evaluating which of these factors were consistently found to explain individual-level attitudes toward immigration in empirical research.

Several publications (Ceobanu & Escandell, 2010; Hainmueller & Hopkins, 2014; Dinesen & Hjorth, 2020) have already provided comprehensive reviews regarding factors affecting attitudes to immigration. While these reviews have many merits, this article intends to advance previous work in several ways. Firstly, the above-mentioned studies are mostly concerned with attitudes to immigration policy in North America and Western Europe (Hainmueller & Hopkins, 2014) or they limit their review to studies that make use of multinational survey projects (Ceobanu & Escandell, 2010). In contrast, this article assesses general attitudes regarding the *effect* of immigration, without limiting its scope geographically and also including single country studies. For instance, data from Central and Eastern Europe are also included, as well as those from New Zealand. Secondly, given recent developments in many countries around the world, epitomized by Donald Trump’s victory in the American presidential election in 2016 and the Brexit vote, empirical research regarding attitudes to

immigration has unprecedentedly flourished in recent years. Therefore, new data have been released (new waves of cross-country longitudinal datasets such as European Social Survey (ESS), European Values Study (EVS) and the World Values Survey (WVS)). New theories (see for example Pardos-Prado and Xena's (2019) theory regarding individuals with low transferable skills in the labour market articulating a subjective sense of job insecurity and consequently higher hostility toward migrants) and new hypotheses (see for example Aarøe et al.'s (2017) proposition of individuals high in behavioural immune sensitivity being more opposed to immigration) have been also proposed. Thirdly, I propose a more advanced technique to assess the determinants of attitudes to immigration compared to the systematic narrative reviews available so far (Ceobanu & Escandell, 2010; Hainmueller & Hopkins, 2014; Dinesen & Hjorth, 2020). I advance a quantitative (meta-analytical) procedure used to systematically and statistically combine the results of previous studies regarding each factor that is consistently linked to attitudes to immigration.

Recently, there have also been meta-analyses concerning attitudes to immigration (Pottie-Sherman & Wilkes, 2017; Kaufmann & Goodwin, 2018). Nevertheless, their focus has been different. While both studies analyze attitudes to immigration as the dependent variable, they focus only on the effect of ethnic diversity (Kaufmann & Goodwin, 2018) and group size (Pottie-Sherman & Wilkes, 2017) on these attitudes. In contrast, the present meta-analysis is concerned with identifying what indicators are most frequently used in quantitative studies in top political science journals to explain individual attitudes to immigration, instead of concentrating on solely one explanatory factor. Moreover, the ultimate goal is to identify, within the political science literature, what individual and contextual indicators are consistently found to influence individual attitudes to immigration.

The analysis presented here is part of a larger project that seeks to systematize the literature on the factors affecting attitudes to immigration. In general, the determinants of attitudes to immigration are studied by several social science fields, such as political science, economics, psychology, sociology and migration studies. The reasons to focus the present meta-analysis on political science are mostly twofold. Firstly, immigration has become one of the polarizing political issues in many countries. Immigration attitudes are a salient political cleavage affecting many diverse political outcomes such as voting behaviour, social cohesion, citizenship acquisition policy and access to welfare. Thus, understanding what factors affect attitudes to immigration is directly relevant to explaining key phenomena in political science. This is reflected in the discipline's flourishing interest in explaining these attitudes and the prominence of the topic in its top journals, while other fields such as, for example, economics consider attitudes to immigration a rather marginal topic. Admittedly, in some

other social science disciplines, such as what is commonly referred to as “migration studies”, explaining differences in attitudes to immigration also plays a rather prominent role. However, migration studies are a highly specialised discipline with few outlets and published papers per year. To maintain the comparability of the quality of the journals with the other four larger disciplines, only a handful of journals could be used. Secondly, the focus of this meta-analysis on political science is determined by the dependent variable analyzed. For instance, psychology mostly focuses on explaining feelings towards immigrants, sociology on individual preferences to allow more or fewer immigrants into one’s country and ethnic and migration studies on attitudes towards a specific migrant group based on country of origin, certain religion or behaviour. As I am interested in reviewing factors affecting attitudes regarding the consequences of immigration for the receiving societies, this type of immigration attitude is mostly studied by political scientists compared to a rather sporadic interest of other fields in this type of attitude. This is, nevertheless, not to say that there are articles published outside the field of political science that would not fit the established selection criteria in terms of the dependent variable. Unfortunately, this ad hoc selection of articles based on their usefulness and relevance to the present meta-analysis would be against the good practice of pre-defining the meta-analytical selection criteria a priori and thus need to be disregarded.

This article is structured in four parts. I begin by presenting the sample of quantitative studies and the research strategy. I then systematically analyze the individual factors which are most frequently used in these quantitative studies to explain attitudes to immigration. I then shift to contextual level factors at the regional and country level. Finally, I summarize my findings and discuss some possibilities for further research.

## **Data and Methods**

This section provides information about the literature search, research design and meta-analytical strategy.

### *Studies retrieval*

The aim of this meta-analysis is not the selection of all studies, or a representative selection of all studies, but rather the selection of ‘best’ studies (van Ham & Smets, 2014), meaning high-quality studies, published in the last decade. Published work in the top-ranked political science journals has gone through the process of rigorous peer review and is therefore supposed to be of high quality and report more reliable results than unpublished work or work from less prestigious journals. However,

I am aware that journal rankings have their specific drawbacks and might not be an optimal representation of the quality of a journal. They are, for example, prone to manipulation (Fong, 2017). However, even with all these drawbacks, there are no other readily available metrics that can be used to judge journal quality rather objectively.

My goal is to include general political science journals as well as journals specializing in attitudinal research. I also aim to strike a balance between European and American journals. I have chosen the top-ranked political science journals as a combination of the ranking of Clarivate Analytics and Google Scholar rankings. Table 1 provides a list of political science journals that have been included as information sources.

Table 1. List of political science journals included as the source of information for selection of studies with the final number of articles selected from each journal

Name of Journal	Number of articles selected for meta-analysis
American Journal of Political Science	2
American Political Science Review	3
The Journal of Politics	2
Comparative Political Studies	2
British Journal of Political Science	4
Journal of Democracy	0
Party Politics	0
Annual Review of Political Science	0
West European Politics	2
European Journal of Political Research	2
Political Studies	2
Electoral Studies	0

Governance	0
Political Behavior	4
Political Research Quarterly	1
World Politics	0
Political Analysis	0
Political Psychology	6
Perspectives on Politics	0
Public Administration	0
Review of International Political Economy	0
International Organization	0
Journal of Conflict Resolution	0
Regulation and Governance	0
Socio-economic Review	1
African Affairs	0
Journal of European Public Policy	0
Public Opinion Quarterly	2
JCMS: Journal of Common Market Studies	0
Democratization	0
<b>Total</b>	<b>33</b>

---

The sample of articles for the meta-analysis below has been selected based on a search for all articles fulfilling the established criteria directly in peer-reviewed political science journals' own database, within the publication timeframe 2009-2019. Admittedly, the ten-year timeframe is not based on a rigorously defined pre-established criterion but has been selected as an ad hoc reflection of recent

developments in the empirical political science research of attitudes toward immigration. The first pre-selection was done by at least two independent coders, who used the search terms “immigrant” and “immigration”. In cases where they disagreed, a third coder assessed the inclusion of the article. The criteria for the final selection of the dependent variable used are described in detail below. The relevant studies for the main as well as expanded meta-analysis were identified using a detailed pre-registered protocol describing the inclusion criteria (e.g. how attitudes toward immigration are defined, the unit of analysis for the dependent variable etc). The full protocol is reported in the Online Supplement and the anonymized version of the pre-registration can also be found at the OSF data archive.<sup>1</sup> The criteria for the final selection of the dependent variable used are described in detail below.

### *Dependent variable*

This meta-analysis focuses only on studies explaining attitudes regarding the consequences of immigration for the receiving societies. This may include attitudes regarding the general effect of immigration on society. It might also include other attitudes regarding the effects of immigration on culture, economics, crime rates, etc., but only when these items are aggregated into summative or averaging multi-item indices. Studies that look at only one factor on the effect of immigration (for instance, the effect of immigration on the national economy) are excluded from this analysis. Composite measures were chosen to avoid measurement error and to reveal issue preferences that are well structured and stable (Ansolabehere et al, 2008). Similarly, focusing on one type of dependent variable and excluding, for instance, dependent variables that focus on the willingness to admit immigrants with questions such as “should the number of immigrants from foreign countries permitted to come to live here be increased a lot or decreased a lot?” is done for comparability reasons. It is plausible that factors affecting attitudes regarding the effects of immigration might affect attitudes to immigration policy differently.

As shown in Figure 1, 2692 potentially relevant studies were identified. From these, 152 articles have been identified as using attitudes to immigration, broadly defined, as their dependent variable. Further restrictions concerning the eligibility criteria have been applied to make the models explaining attitudes toward immigration as comparable as possible. These have been further reduced to 33 research articles. Table 2 provides a list of studies that have been used for the meta-analysis of variables presented in this article. Nevertheless, as the overall number of variables used in the studies is

---

<sup>1</sup> [https://osf.io/be2kf/?view\\_only=9fc5a2e3062e4aa8b19efc9d8181161c](https://osf.io/be2kf/?view_only=9fc5a2e3062e4aa8b19efc9d8181161c)

extremely high (115 in total), describing each of the variables separately is well beyond the possibilities of this paper. I, therefore, present only a selected number of variables.<sup>2</sup> Some of the articles include more than one independent sample – for instance, Aarøe et al. (2017) use four samples of respondents across the United States and Denmark to test their hypothesis. Therefore, although the meta-analysis is based on 33 published studies, it relies, in fact, on 37 independent survey samples.

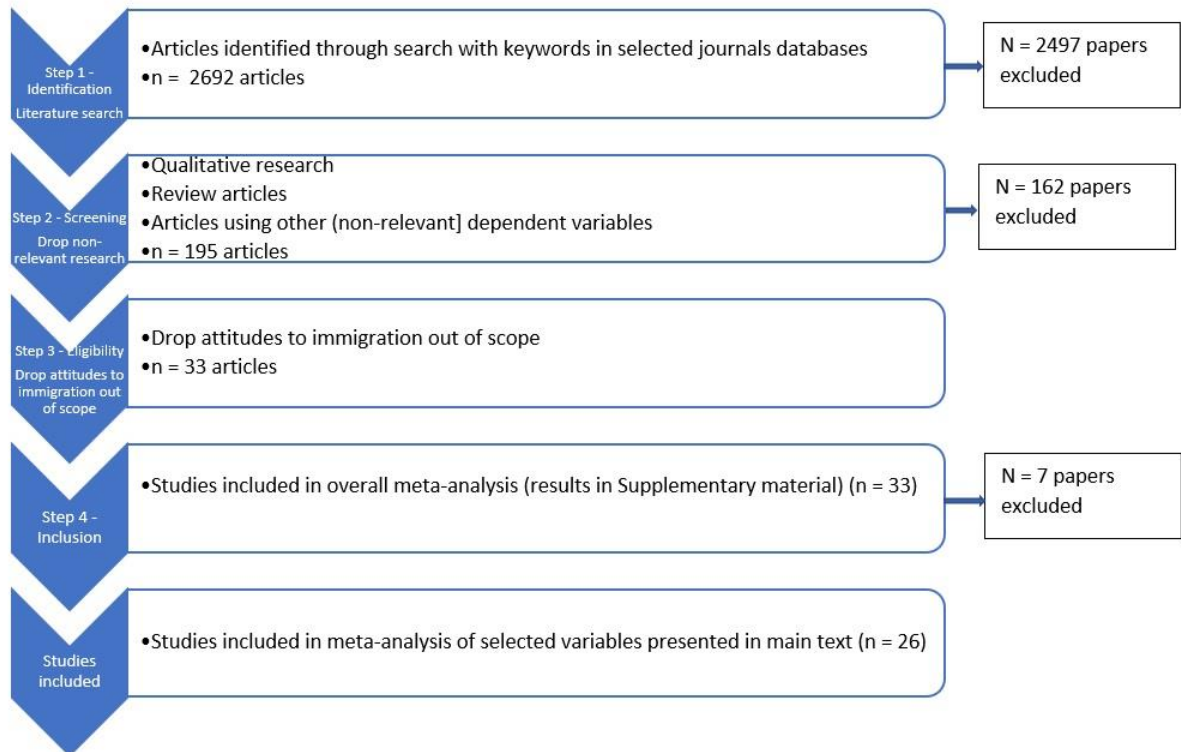


Figure 1. Flow diagram of article identification for meta-analysis

The items comprising the different indices are not necessarily the same across all studies. Furthermore, even when items used to measure attitudes to immigration are, in fact, the same and based on the same data source, many researchers seem to apply a different and unique terminology. For instance, while using the same set of items, the explanatory variable might be labelled as diversely as anti-immigration attitudes (Pardos-Prado & Xena, 2019), anti-foreigner sentiment (Frølund Thomsen & Olsen, 2017) or perceived consequences of immigration (Just & Anderson, 2015). Thus,

<sup>2</sup> When counting only the studies which contain the independent variables of interest, it further reduces the number of studies *de facto* used for the principal analysis into 23.



the outcome variables to be considered in this meta-analysis are selected according to the question(s)/indicator(s) used to measure them rather than according to their name.

Table 2. Full list of included research articles

Aarøe, Aarøe, L., Petersen, M. B., & Arceneaux, K. (2017). The Behavioral Immune System Shapes Political Intuitions: Why and How Differences in Disgust Sensitivity Underlie Opposition to Immigration. <i>American Political Science Review</i> , 111(2), 277–294.
Berg, J. A. (2009). Core Networks and Whites' Attitudes Toward Immigrants and Immigration Policy. <i>Public Opinion Quarterly</i> , 73(1), 7–31.
Bramlett, B. H., Gimpel, J. G. & Lee, F. E. (2011). The Political Ecology of Opinion in Big-Donor Neighborhoods. <i>Political Behavior</i> , 33, 565-600.
Carreras, M., Irepoglu Carreras, Y., & Bowler, S. (2019). Long-Term Economic Distress, Cultural Backlash, and Support for Brexit. <i>Comparative Political Studies</i> , 52(9), 1396–1424.
Cavaille, C., & Marshall, J. (2019). Education and Anti-Immigration Attitudes: Evidence from Compulsory Schooling Reforms across Western Europe. <i>American Political Science Review</i> , 113(1), 254–263.
Donnelly, M. J. (2016). Competition and solidarity: union members and immigration in Europe. <i>West European Politics</i> , 39(4), 688-709.
Fielding, D. (2018). Traditions of Tolerance: The Long-Run Persistence of Regional Variation in Attitudes towards English Immigrants. <i>British Journal of Political Science</i> , 48(1), 167–188.
Finseraas, H., & Kotsadam, A. (2017). Does Personal Contact with Ethnic Minorities Affect Anti-immigrant Sentiments? Evidence from a Field Experiment. <i>European Journal of Political Research</i> , 56, 703-722.
Frølund Thomsen, J. P., & Olsen, M. (2017). Re-examining Socialization Theory: How Does Democracy Influence the Impact of Education on Anti-Foreigner Sentiment? <i>British Journal of Political Science</i> , 47(4), 915–938.
Thomsen, J. P. F., & Rafiqi, A. (2020). Ideological Biases Weaken the Impact of Social Trust on Ethnic Outgroup Threat. <i>Political Studies</i> , 68(2), 523–540.
Grönlund, K., Herne, K. & Setälä, M. (2015). Does Enclave Deliberation Polarize Opinions? <i>Political</i>

<i>Behavior</i> , 37, 995-1020
Ha, S. E. (2010). The Consequences of Multiracial Contexts on Public Attitudes toward Immigration. <i>Political Research Quarterly</i> , 63(1), 29–42.
Harell, A., Soroka, S. & Iyengar, S. (2017). Locus of Control and Anti-Immigrant Sentiment in Canada, the United States, and the United Kingdom. <i>Political Psychology</i> , 38, 245-260.
Harteveld, E., Kokkonen, A., & Dahlberg, S. (2017). Adapting to Party Lines: the Effect of Party Affiliation on Attitudes to Immigration. <i>West European Politics</i> , 40(6), 1177-1197.
Hatemi, P. K. (2013). The Influence of Major Life Events on Economic Attitudes in a World of Gene-Environment Interplay. <i>American Journal of Political Science</i> , 57, 987-1007.
Herreros, F., & Criado, H. (2009). Social Trust, Social Capital and Perceptions of Immigration. <i>Political Studies</i> , 57(2), 337–55.
Homola, J., & Tavits, M. (2018). Contact Reduces Immigration-Related Fears for Leftist but Not for Rightist Voters. <i>Comparative Political Studies</i> , 51(13), 1789–1820.
Hooghe, M., & Quintelier, E. (2013). Do All Associations Lead to Lower Levels of Ethnocentrism? A Two-Year Longitudinal Test of the Selection and Adaptation Model. <i>Political Behavior</i> , 35, 289-309.
Hopkins, D. J. (2011). National Debates, Local Responses: The Origins of Local Concern about Immigration in Britain and the United States. <i>British Journal of Political Science</i> , 41(3), 499–524.
Hopkins, D. J., Sides, J., & Citrin, J. (2019). The Muted Consequences of Correct Information about Immigration. <i>The Journal of Politics</i> , 81(1), 315-320.
Johnston, C. D., Newman, B. J., & Velez, Y. (2015). Ethnic Change, Personality, and Polarization Over Immigration in the American Public. <i>Public Opinion Quarterly</i> , 79(3), 662–686.
Just, A., & Anderson, C. J. (2015). Dual Allegiances? Immigrants' Attitudes toward Immigration. <i>The Journal of Politics</i> , 77(1), 188-201.
Langsæther, P. E., & Stubager, R. (2019). Old Wine in New Bottles? Reassessing the Effects of Globalisation on Political Preferences in Western Europe. <i>European Journal of Political Research</i> , 58, 1213-1233.
Maxwell, R. (2019). Cosmopolitan Immigration Attitudes in Large European Cities: Contextual or Compositional Effects? <i>American Political Science Review</i> , 113(2), 456–474.
Pardos-Prado, S. and Xena, C. (2019). Skill Specificity and Attitudes toward Immigration. <i>American</i>

<i>Journal of Political Science</i> 63, 286-304.
Polavieja, J. G. (2016). Labour-market Competition, Recession and Anti-immigrant Sentiments in Europe: Occupational and Environmental Drivers of Competitive Threat. <i>Socio-Economic Review</i> 14(3), 395–417.
Renshon, J., Lee, J. J. & Tingley, D. (2015). Physiological Arousal and Political Beliefs. <i>Political Psychology</i> , 36, 569-585.
Sanders, D. (2012). The Effects of Deliberative Polling in an EU-wide Experiment: Five Mechanisms in Search of an Explanation. <i>British Journal of Political Science</i> , 42(3), 617–640.
Schwartz, S. H., Caprara, G. V. & Vecchione, M. (2010). Basic Personal Values, Core Political Values, and Voting: A Longitudinal Analysis. <i>Political Psychology</i> , 31, 421-452.
Schwartz, S. H., Caprara, G. V., Vecchione, M., Bain, P., Bianchi, G., Caprara, M. G., Cieciuch, J., Kirmanoglu, H., Baslevant, C., Lönnqvist, J.-E., Mamali, C., Manzi, J., Pavlopoulos, V., Posnova, T., Schoen, H., Silvester, J., Tabarnero, C., Torres, C., Verkasalo, M. ... Zaleski, Z. (2014). Basic Personal Values Underlie and Give Coherence to Political Values: A Cross National Study in 15 Countries. <i>Political Behavior</i> 36, 899-930.
Sibley, C. G., Duckitt, J., Bergh, R., Osborne, D., Perry, R., Asbrock, F., Robertson, A., Armstrong, G., Wilson, M. S., & Barlow, F. K. (2013). A Dual Process Model of Attitudes towards Immigration. <i>Political Psychology</i> , 34, 553-572. <a href="https://doi.org/10.1111/pops.12009">https://doi.org/10.1111/pops.12009</a>
Valentino, N. A., Brader, T. & Jardina, A. E. (2013). Immigration Opposition Among U.S. Whites: General Ethnocentrism or Media Priming of Attitudes About Latinos? <i>Political Psychology</i> 34, 149-166.
Van Assche, J., Roets, A., De keersmaecker, J., & Van Hiel, A. (2017). The mobilizing effect of right-wing ideological climates: Cross-level interaction effects on different types of outgroup attitudes. <i>Political Psychology</i> , 38(5), 757–776.

### ***Meta-analytical strategy***

This study aims to provide an overview of recent research evaluating factors affecting general attitudes to immigration. Thus, I analyze results from previous studies and summarize the findings via quantitative methods (Smets & van Ham, 2013). By doing so, I conduct “an analysis of analyses”

(Glass, 1976, p. 3). The articles in my sample use different statistical techniques and therefore provide different test statistics. Moreover, given the vast heterogeneity of the operationalization of independent variables such as education or age, comparing the effect sizes of certain variables is often not possible. Following common practice within meta-analytical studies in such cases, I use the vote-counting procedure (Imbeau et al., 2001; Smets & van Ham, 2013) which classifies each independent variable into one of three categories. A variable is considered a “success” if it is significantly related to the dependent variable and its effect is in the hypothesized direction. On the other hand, an independent variable is considered a “failure” when its effect on the dependent variable is non-significant. Finally, a variable is considered an “anomaly” when its effect is statistically significant, but in the opposite direction than hypothesized. I consider the two-tailed  $p < 0.05$  level as the cut-off point for significant effects.

While the majority of studies frame the dependent variable in negative terms (with higher numbers meaning more anti-immigration attitudes), some studies focus on favourable attitudes towards immigration, thus using the scale of the dependent variable in the opposite direction. To make the effects comparable across studies, the classification of variables from studies where higher numbers of the dependent variable will reflect more positive attitudes to immigration has been reversed. Therefore, all hypotheses and classifications of the independent variables have been done in relation to anti-immigration attitudes.

In a second step, the success rate of each independent variable under consideration is calculated. The success rate is an estimate of the most frequent relationship between the independent variable and attitudes to immigration. It is calculated by dividing the number of “successes” by the total number of times that the variable has been tested in a model. The success rate gives an overview of a variable’s influence on attitudes toward immigration. The higher it is, the more confident one can be that the independent variable has the hypothesized effect in terms of direction as well as significance.

Some studies include more than one analysis regarding the factors affecting attitudes to immigration. For example, certain studies present more than one model per analysis, with each model including additional variables, or they conduct additional robustness tests on the same data. In such cases, there is a risk of artificially inflating the success rate, as these multiple tests might be based on the same data and thus not, in fact, independent from each other. Therefore, I have only included the most inclusive model (i.e., the one where all variables are included) to maintain the independence of

observations.<sup>3</sup> On the other hand, certain studies conduct several analyses based on different data. For example, they conduct a separate analysis for two countries based on two country-specific surveys. In these cases, both models have been included in the meta-analytical review as the independence of models is preserved.

Given that I am interested in the average effects on attitudes toward immigration, I would ideally only include variable estimates based on representative samples from the general population. However, this is not possible in practice given sampling bias and other issues. As a second-best option, I excluded estimates that refer to very specific or idiosyncratic populations. Such estimates may be the result of the sampling strategy in a given study. For instance, many researchers limit their analysis to only the native population in the sample, although their operationalization might differ. Some samples are even more specific, for instance, they include only males (Aarøe et al., 2017; van Assche et al., 2017) or only the young (van Assche et al., 2017). In some instances, the variable is part of an interaction model and thus its effect is estimated across very specific – and in some cases non-existent – subgroups. These might include estimates for individuals with "low right-wing orientation" (van Assche et al., 2017), or skilled workers with offshorable jobs (Langsæther & Stubager, 2019). The coefficients of the independent variables across these narrowly defined subgroups have been excluded. I include, however, estimates for more common samples such as for individuals living in countries considered young democracies (Frølund Thomsen & Olsen, 2017).

To compare the effects of each variable across several studies and classify whether they fall into the category “success”, “failure” or “anomaly”, it is crucial to keep the hypothesized direction of the variables’ effect constant across studies. For instance, certain studies might hypothesize that being religious may affect attitudes to immigration negatively, while other studies may expect that religiosity affects attitudes to immigration positively. For reasons of comparability, it is important to maintain a single expectation (hypothesis) for an independent variable across all studies. In some cases, the theoretical expectations regarding the direction of an independent variable’s effect are apparent (for instance, education is almost exclusively theorized to affect attitudes to immigration positively), while for certain variables a priori theoretical expectations are much less clear and differ from study to study. For instance, following ethnic competition theory, a high number of immigrants in one’s own country can be expected to have negative effects on attitudes to immigration. On the other hand, following

---

<sup>3</sup> Sometimes, an independent variable is, however, only included in one model and not in another. In these cases, the single variable was recorded from the other model.

contact theory, one could expect higher numbers of immigrants to affect individual attitudes to immigration positively. Table 3 shows the hypothesized relationship with anti-immigration attitudes for each independent variable that is held constant across all studies independent of their own theoretical expectations.

### **Predictors of anti-immigration attitudes**

In this section, I report the most commonly included variables thought to explain anti-immigration attitudes.<sup>4</sup> For ease of comparison, I group my findings into several categories, such as sociodemographic or economic factors, and present individual results under each of these categories. However, these categories are arbitrary and not necessarily exclusive. For instance, income can be considered a sociodemographic variable, however, here income is categorised under the “economic factors” category.

#### *Sociodemographic characteristics – age, education, gender and place of residence*

Often, a person's age tends to be included in regression models explaining attitudes toward immigration as a routine demographic control variable. Older respondents are often hypothesized to hold more anti-immigration attitudes. However, recent studies show that when isolating the effect of birth cohorts, a person's biological age is no longer significant (Gorodzeisky & Semyonov 2018) and that older individuals are more averse towards immigrants not because they become more critical towards immigration policies over the life-cycle, but because of cohort or generational effect (Schotte & Winkler, 2018; Jeannet & Dražanová, 2019). It might, therefore, not simply be a matter of older individuals being more against immigration than younger ones. Instead, birth-cohorts, individuals born around the same time, might experience a unique set of common circumstances constituting a shared political socialization that has a long-lasting impact on their attitudes towards immigration. The unclear relationship between age and anti-immigration attitudes is supported by the meta-analytical results. Older respondents are found to be more anti-immigration roughly half of the time, which is reflected in the success rate of 54 percent.

Educational attainment is also one of the most commonly used predictors of anti-immigration attitudes. Theoretically, there is a rather strong consensus within the literature that higher educated

---

<sup>4</sup> I do not report on independent variables that have been used only in few studies as results with only very few observations are not as reliable.

individuals hold less anti-immigration attitudes compared to those with lower education. However, several studies have shown that the strengths of the relationship depends on contextual factors (Borgonovi & Pokropek, 2019) and does not always hold outside the established Western realm (Dražanová, 2017). The expected educational impact is confirmed by the meta-analysis. Higher educated individuals hold, indeed, more pro-immigration attitudes than the lower educated. The meta-analysis demonstrated an 87 percent success rate, with 27 tests out of 31 being classified as successful. However, it should be noted that the countries covered by the meta-analytical sample are mostly the United States and Western Europe. Therefore, more analysis is needed to assess whether this relationship holds also in countries with different political, cultural, economic and historical backgrounds.

Research on anti-immigrant attitudes does not typically systematically analyze gender patterns. Theoretically, it is not entirely clear whether women or men have more anti-immigration attitudes. Studies generally assume men should hold more anti-immigration attitudes, due to their more authoritarian personalities (Adorno et al., 1950) and conservatism (Harteveld et al., 2015, p. 107). However, with the recent politicization of gender in immigration debates (Farris, 2017), native women might view certain immigrants as a threat to gender equality (Ponce, 2017). The meta-analysis shows that gender in most studies is a non-significant factor in explaining individual differences in attitudes to immigration. When significant, women are roughly equally likely, or even slightly more likely, to hold anti-immigration attitudes than men.

Individuals living in urban areas are often predicted to hold more positive immigration attitudes. This is theoretically based on the contact hypothesis or compositional effects (Maxwell, 2019). The empirical link between living in a rural area and being anti-immigration is as strong as expected, with a success rate of 80 percent.

#### *Being native, immigrant background, ethnicity and race*

Citizenship and race are included in models of attitudes to immigration based on the idea that immigrants and ethnic and racial minorities are more favourable to immigration because they can identify more strongly with other immigrants due to their own migration history (Becker, 2019) or due to their similar outgroup status. Being non-White or a member of an ethnic minority such as Maori (Sibley, 2013) was significantly related to attitudes to immigration in about half of the models (50 percent success rate). Interestingly, in two studies being Black (compared to Whites and others) has resulted in significantly more anti-immigrant attitudes (Bramlett et al., 2011; Johnston et al., 2015).

Different studies operationalized being part of the native population in different ways – some include a question specifically asking whether a respondent is a citizen of the country (Just & Anderson, 2015) while some focus on asking whether the individual has been born in a country (Johnston et al., 2015) or whether at least one parent has been born outside of the country (Hooghe & Quintelier, 2013). I combine all these possible operationalizations in a variable comparing the immigration attitudes of respondents who are citizens of the country they reside in and where the respondent and both of their parents have been born and compared this to individuals who do not satisfy all of these three conditions at the same time. The expectation is that native respondents will be more anti-immigration than individuals who are not citizens; have been born outside the country; or have at least one parent born outside the country. The meta-analytical results overall confirm these expectations, although the success rate is only around 55 percent.

#### *Religiosity and church attendance*

The relationship between religiosity, church attendance and ethnic prejudice, in general, has been classified as complicated ever since Allport (1954, p. 413) puzzled over the fact that people who endorsed religious teachings of egalitarian and humanitarian values also showed high levels of (racial) prejudice. It was described as a paradox in which religion both “makes and unmakes” prejudice. The paradox likely reflects basic group dynamics in which identification with a religious in-group promotes out-group derogation. Moreover, religious ingroups are often divided along ethnic or racial lines. Previous research has found religiosity to play a positive effect on attitudes to immigration (Bohman & Hjerm, 2014) as well as, on the contrary, others find that greater religiosity leads to more prejudice (Scheepers et al., 2002). Some research observes that religion does not affect attitudes toward immigrants (Creighton & Jamal, 2015).

Despite expecting that religiosity, understood as whether the respondent identifies as a member of an organized religious group or self identifies as religious, would have negative effects on attitudes to immigration, results from the meta-analysis show that religiosity (0%) and church attendance (20%) do not contribute to more negative attitudes toward immigration. Had the hypothesis been framed in the reverse and if we had expected that religiosity and church attendance would lead to more positive attitudes to immigration, their success rate would be around 50% for religiosity and 40% for church attendance. Recent evidence from Italy by Ladini et al. (2021) shows that non-religious and highly religious people show more positive attitudes toward immigration than affiliated individuals with low religious commitments. This highlights the need to distinguish between not



only the religious-non religious dichotomy usually measured by religiosity but also the strengths of religious commitment measured by church attendance.

However, it should be noted that the number of tests presented in this meta-analysis is arguably low to jump to any definitive conclusions.

*Economic factors: Income, occupational status, occupational type, and personal and national economic difficulties*

The personal economic situation is often considered as one of the driving forces behind individual differences in attitudes to immigration. This is based on realistic group conflict theory which argues that groups are competing for scarce resources (Quillian, 1995). Studies assume that the most economically vulnerable are the most likely to be convinced by propositions of protectionism and the elimination of competition from immigrants for jobs, welfare benefits and even housing (Hainmuller & Hiscox, 2010). However, the meta-analysis presented here shows that the empirical link between a personal economic outlook and anti-immigration attitudes is less strong than expected. In most instances, income is not a significant predictor of individual anti-immigration attitudes. The success rate of income is arguably low (33 percent) since in most studies income does not reach statistical significance. Even economic satisfaction, which is sometimes considered a better predictor as a personal economic outlook on attitudes to immigration than income, has a low success rate and is found insignificant in most studies.<sup>5</sup>

Based on a similar theoretical framework, known as labour market competition theory, I also expected that those who are unemployed or those working in unskilled or manual jobs were more likely to be against immigration. However, occupational status does not appear to have a significant effect on attitudes to immigration in most models. Experience with unemployment contributed to more anti-immigration attitudes in only around 20 percent of studies. The second variable related to occupation is the type of work individuals have. It proved slightly difficult to combine the employment categories, as different studies use different classifications. For instance, “manual worker” is the only employment category in Pardos-Prado and Xena (2019), which signifies that manual workers are significantly more or less likely to hold anti-immigration attitudes compared to all other employment categories. On the other hand, Langsæther and Stubager (2019) distinguish between several categories of occupations such as higher and lower service class, routine non-manual employees, petit-bourgeois, skilled and unskilled manual workers. In the meta-analysis, I combined categories so that the results

---

<sup>5</sup> Social class, on the other hand, seems to be a better predictor of anti-immigration attitudes. However, it has been used only in two tests and thus it is not included among the main results.

reflect the effects of being an unskilled manual worker compared to all other employment categories. Manual workers are, indeed, found to be more anti-immigration than individuals from other occupations in a majority of studies with a success rate of about 60 percent.

What should be emphasized is that anti-immigration attitudes are not necessarily based on personal economic outlooks, but also on how immigration is perceived to affect society as a whole. Immigrants may be perceived as a risk to the national economy rather than to the personal economic situation, for instance in the form of a tax burden. The meta-analysis indeed suggests that satisfaction with the national economy is a more successful predictor (success rate 75 percent) for anti-immigration attitudes than one's economic situation. These findings are in line with Citrin et al. (1997) who found that beliefs about the national economy and anxiety over taxes were a much stronger predictor of anti-immigration attitudes when compared to personal economic circumstances that played a little role.

Results of the present meta-analysis are in line with recent research, that fails to find empirical support for labour market competition theory (Hainmueller & Hiscox, 2010; Hainmueller et al., 2015; Jeannet, 2018). It appears that non-economic factors grounded at a deeper personal level (such as values and beliefs regarding social and ethnic identity, preferences for homogeneity, cognitive ability and socialization experience) play a more prominent role in determining respondents' attitudes to immigration compared to individual economic factors.

#### *Political attitudes, political/ societal participation, and contact*

Past and recent scholarship seldom places political orientations and ideology at the centre of attention when explaining individual differences in attitudes to immigration. Rather, left-right orientation and/or political ideology are used as control variables. Scholarship studying motivated reasoning associates political ideology with attitudes formation (Brooks et al., 2016). Seeing oneself as liberal or conservative has consequences in differential settings (Lodge & Taber, 2013) to avoid cognitive dissonance. This theory stresses one's internal need for consistency in attitudes and actions in order to avoid negative feelings and discomfort (Festinger, 1962). Similarly, theories of voting behaviour expect voters to vote in a way to minimize the distance between their own ideological correspondence and that of their selected party (Harteveld et al., 2017). Those who identify ideologically as conservatives or with fiscally and socially conservative parties are therefore expected to show greater hostility toward out-groups. Whereas self-identified liberals shall be more tolerant of ambiguity or differences in lifestyle or identity.

Most of the studies reviewed here are not primarily interested in explaining the association between political attitudes and attitudes to immigration (Pardos-Prado & Xena, 2019; Aarøe et al., 2017; Sanders, 2012; Herreros & Criado, 2009). Nevertheless, the results are suggestive. The success rate lies between 65 and 100% for political ideology, party identification and left-right positioning. More identification with social and fiscal conservatism is connected with more anti-immigration attitudes.

The literature also observes a large impact of past attitudes to immigration on current attitudes to immigration (100% success rate). This is not surprising as a series of studies shows that attitudes are relatively stable over the life span. While individuals hold other attitudes that also affect attitudes to immigration, explaining attitudes to immigration by other attitudes is often considered problematic, as it is not entirely clear which type of attitude comes first and then affects the other. Thus, it is a chicken or egg paradox. Does racial prejudice lead to hostility towards immigrants? Or do those who dislike immigrants become racist in the process? My meta-analysis shows that these attitudes are indeed positively related – the success rate of nationalism, ethnocentrism and racial prejudice lies between 66 and 75 percent. Nevertheless, as mentioned above, the direction of the effect is not clear.

Political and societal participation in the form of membership in political parties, social associations, sports clubs, and so on is linked to attitudes to immigration through socialization and resources. Union membership is thought to reduce bias through contact with a diverse set of people, as well as intra-class solidarity. On the other hand, membership in associations such as sports clubs often serves as a proxy for (usually higher) social class – as explained above, individuals with higher social class are expected to hold more pro-immigration attitudes based on the fact that they do not feel threatened by immigrants. The meta-analysis presented here finds that no membership in voluntary organizations or unions leads to more anti-immigration attitudes roughly about half of the time (44 percent). The majority of tests (10 out of 18) report no relationship between societal participation and anti-immigration attitudes.

The meta-analysis also looked at overall general contact with ethnic minorities. The classical contact theory states that contact with the outgroup reduces prejudice towards its members, as individuals become familiar with and less threatened by this group (Pettigrew & Tropp, 2006). On the other hand, intergroup threat theory and ethnic competition theory hypothesize that increasing numbers of minorities in one's everyday life will lead to the native's hostile attitudes as a result of increased competition for political, social and economic resources (Olzak, 1992). Overall, the meta-analysis confirms the contact theory assumptions, with a 71.5 percent success rate. Therefore, more

contact with members of other groups leads to more positive attitudes to immigration. However, it should also be noted that reverse causality may also play a role here – does contact lead to more prejudice, or are those with less prejudice more prone to contact with other minorities? This question can hardly be answered with observational studies.

### **Contextual level variables**

People's attitudes to immigration are affected not only by individual characteristics described above but also by the political, cultural and economic systems that they lived in. Although most of the literature on attitudes to immigration still focuses on the United States, cross-national studies have shown the importance of contextual characteristics in explaining variations in attitudes to immigration. In this section, I review the influence of regional and country variables on attitudes to immigration. Nevertheless, the number of studies researching contextual effects on attitudes toward immigration is quite limited. Only a handful of variables have been used in more than two independent samples. The results below should therefore be taken with caution, as the total number of tests for these variables is generally low.

#### *Regional minority share and density*

Studies controlling for the effects of a minority share in the area (neighbourhood, region or country) on attitudes to immigration are prevalently based on two theories - intergroup contact theory (Pettigrew & Tropp, 2006) and intergroup threat theory (Olzak, 1992). Although measured at the contextual level, the theories' assumptions are inherently based at the individual level. Controlling for shares of minorities in one's area implicitly assumes that the proximal (physical) presence of immigrants leads to contact with minorities, and this may influence ones' attitudes. Rarely do researchers control for actual (daily, weekly, monthly) frequency of contact with minorities and thus the foundation of contact theory. On the other hand, the underlying assumption of threat theory is also questionable –to feel threatened by a group, one must first know of its existence and its relative size. Yet, many natives overestimate the size of the non-native population and even when explicitly corrected, their attitudes to immigration do not change (Hopkins et al., 2019). This leads some scholars to conclude that misperceptions regarding the relative size of minorities might be a consequence, rather than the cause of attitudes to immigration (Hopkins et al., 2019).

The results of the meta-analysis show that lower minority proportion in a small spatial unit<sup>6</sup> such as a neighbourhood, county, or region leads to more anti-immigration attitudes (90% success rate). Nevertheless, less regional population density – which should capture the implications of contact theory – has only about 25 percent success rate in explaining anti-immigration attitudes.

*Unemployment, household income and GDP per capita*

During an economic recession and high unemployment rates, natives may view immigration as economically threatening to themselves (Dancygier & Donnelly, 2014). Therefore, it is hypothesized that high levels of unemployment at both the regional as well as country levels will lead to more negative attitudes to immigration. This is due to increased competition from immigrants on the job market, as well as increased competition for a fixed supply of welfare benefits. Another hypothesis regarding the negative effect of unemployment on attitudes toward immigration is the “fiscal burden argument”, which assumes that either taxes will be raised, or cuts will be made to the welfare budget (Facchini & Mayda, 2009).

However, the meta-analysis does not point in this direction, with a success rate of only about 33% for both levels.

Like unemployment, overall economic prosperity, in the form of regional household income and GDP per capita, appears to affect individual attitudes toward immigration to only a small extent.

It is worth mentioning that studies controlling for these macro characteristics are not primarily interested in the effect of national economic prosperity on attitudes toward immigration.

Table 3. Summary of effects of variables on attitudes to immigration

Variable	Expectation	category	Success	Failure	Anomaly	Total	Success Rate
<b>Individual level</b>							
	Older respondents						
age	more anti-immigration	socio-demographics	18	14	1	33	54.54
education	Less educated more anti-immigration.	socio-demographics	27	4	0	31	87.09
Gender (Male)	Males more anti-	socio-	7	12	8	27	25.92

<sup>6</sup> For the purpose of assessing the effect of the minority share on regional level in the meta-analysis I combined different spatial units such as county (Hopkins, 2011), neighbourhood (Maxwell, 2019) and local region (Berg, 2009).

	immigration	demographics					
	Less urban more	socio-					
place of residence	anti-immigration.	demographics	12	3	0	15	80
	natives more anti-	socio-					
Being native	immigration	demographics	5	4	0	9	55.55
	Whites more anti-	socio-					
race	immigration	demographics	6	4	2	12	50
	Less income more	economic					
income	anti-immigration	factors	10	18	2	30	33.33
	Unemployed more	economic					
(un)employed	anti-immigration	factors	3	11	0	14	21.43
	Unskilled manual						
	worker more anti-	economic					
Type of occupation	immigration	factors	8	5	0	13	61.54
	respondent with a						
	temporary contract						
	more anti-	economic					
temporary contract	immigration	factors	2	2	0	4	50
	Less						
economic	satisfaction/security						
satisfaction	more anti-	economic					
(individual)	immigration	factors	2	5	0	7	28.57
	less satisfaction						
economic	more anti-						
satisfaction	immigration	economic					
(national)	attitudes	factors	3	1	0	4	75
	higher frequency						
	more anti-						
church attendance	immigration	religion	1	2	2	5	20
	more religious more						
religiosity	anti-immigration	religion	0	1	1	2	0
	more right self-						
	placement more	political					
left-right positioning	anti-immigration	attitudes	8	4	0	12	66.66
	more conservative						
	more anti-	political					
ideology	immigration	attitudes	5	0	0	5	100
party ID	more identification	political	9	4	0	13	69.23

	with fiscally and socially conservative parties more anti-immigration more ethnocentrism/racia	attitudes						
ethnocentrism/racia	l prejudice more anti-immigration respondent's past negative immigration attitudes (before treatment) more anti-immigration attitudes more identification with their national community more anti-immigration attitudes no membership in voluntary association/union	political attitudes	6	2	0	8	75	
l prejudice								
previous immigration attitudes		political attitudes	4	0	0	4	100	
nationalism		political attitudes	2	1	0	3	66.66	
voluntary membership/union membership	more anti-immigration respondent has no minority friends/contact with minority more anti-immigration	political/societal participation	8	10	0	18	44	
contact with minority		contact	5	2	0	7	71.42	
<b>Contextual level</b>								
county/region minority share	lower minority proportion more anti-immigration less county/region's density more anti-immigration higher	region characteristics	27	3	0	30	90	
county/region density		region characteristics	1	3	0	4	25	
county/region		region	1	2	0	3	33.33	

unemployment	county/region's unemployment rate more anti- immigration higher country's unemployment rate	characteristics						
unemployment	immigration lower county/region's household income	country characteristic	1	2	0	3	33.33	
county/region household income	more anti- immigration lower country's GDP per capita	region characteristics	2	5	1	8	25	
GDP per capita	more anti- immigration	country characteristic	1	3	0	4	25	

## Discussion

In recent years and especially during and after the so-called “migration crises”, an unprecedented number of variables have been investigated as affecting attitudes to immigration by political scientists. In this research context, it has become difficult to grasp what factors matter the most for general attitudes to immigration. This article assesses in a comprehensive manner where current political science research stands, reviewing 23 articles and 37 independent samples in the top 30 political science journals published between the years 2009-2019. The vote-counting procedure used in this research does not allow me to take into account the size of the effect of each independent variable (Glass, 1976). With a still increasing amount of research regarding factors affecting attitudes to immigration, future studies may call upon directly comparable test statistics. By being able to use a more sophisticated meta-analytical approach, they may provide a meta-estimate of the relationship between attitudes to immigration and a given independent variable of interest.

This research reveals that only a handful of independent variables are systematically included in studies addressing attitudes to immigration. Namely, out of the 115 independent variables included in models throughout all the studies, only age and gender were included in more than half of the studies. The meta-analysis also reveals that factors consistently linked to general attitudes to immigration are



those that are rather stable and hardly subjected to change such as education, place of residence and overall ideology. Thus, future research may consider explaining the reasons behind these factors affecting attitudes to immigration rather than introducing new factors whose influence may be rather weak and unstable over time (political party cues, media effects etc).

Many variables are also included without any motivation or expectations regarding their effects. For instance, while age is the independent variable most often included in models explaining attitudes to immigration, it is often not critically evaluated how the effect of age manifests. Do people, as they age, change their attitudes to immigration? Studies show that attitudes towards immigration are stable over adulthood (Kustov et al., 2021; Hooghe & Wilkenfeld, 2008) and remain remarkably persistent as the person grows older in a similar way to other political predispositions acquired in youth (Neundorf et al., 2013; Vaisey & Kiley, 2021). Assuming that attitudes are formed quite early in life and persist over a lifetime, we would then expect to observe systematic differences in attitudes to immigration across cohorts due to different contextual environments in which each cohort came of age (Schuman & Corning, 2012). However, the possible overlap between cohort and age effects are rarely discussed in the literature. Future research might therefore explicitly address the question of why we would expect certain variables to affect attitudes to immigration rather than just perpetually controlling for them.

In practical terms, researchers shall be aware of two possible problems when explaining attitudes to immigration. Some scholars tend to include high numbers of regressors in their models, risking overfitting, or, in other words, estimating a “kitchen sink regression”. These types of regressions may misleadingly suggest relationships between independent and dependent variables in the data. The more independent variables are included in a regression, the greater the probability that one or more will be found to be statistically significant while in fact having no causal effect on the dependent variable. On the other hand, other researchers tend to include fewer control variables and typically report only a few preferred estimates. This approach might also be misleading because such research may reveal only a small fraction of the possible results and may lead to non-robust, false positive conclusions (Muñoz and Young, 2018). Researchers shall therefore assess the inclusion of regressors in light of their research question. For instance, if they are interested in the effects of income, it may be counterproductive to include other determinants highly associated with income, such as education, employment status and self-evaluation of social class in the same model.

Another critical question future research shall answer is how the relationship between attitudes to immigration and their explanatory factors hold in different contexts. As Hoxhaj and Zuccotti (2020) rightly point out, many factors are often considered as additive explanations of attitudes to immigration and conditionality is rarely studied. However, it has been highlighted by some preliminary studies that the effect of even factors considered to be strongly associated with attitudes to immigration and tolerance, such as education (Dražanová, 2017; Borgonovi & Pokropek, 2019), are conditional upon levels of GDP per capita and lengths of democracy. Similarly, Hoxhaj and Zuccotti (2020) show that a higher minority share in neighbourhoods is associated with more positive attitudes toward immigrants, but that this effect decreases as the area's socioeconomic conditions worsen. All these findings suggest that analysing them in isolation could seriously hinder our understanding of the relationship between factors thought to explain attitudes to immigration.

While a lot of scholarly attention has been aimed at explaining the individual-level factors affecting attitudes to immigration, it appears much less focus has been given to cross-national and cross-regional differences in attitudes to immigration in current political science literature. This is rather surprising given the availability of cross-sectional surveys such as the European Social Survey and World Value Survey. Macro-level conditions affecting individual attitudes to immigration may shed light on increasing differences between countries in their approaches to the increasing numbers of immigrants in recent years. For instance, the literature has paid very little attention to systematically analysing why the new EU Member States have been in sharp opposition to migration, although the number of immigrants in their countries is effectively very low. Moreover, there might not only be variations between countries but also *within* countries over time (Meuleman et al., 2009; Semyonov et al., 2006).

A quick overview of the literature reviewed in this meta-analysis points to a problem often found in other areas of political science – an overt emphasis on Western countries. The analyses presented here has been largely employed in the USA and Western Europe, with a small amount of analysis on (thanks to the European Social Survey) Central and Eastern Europe and only one study on New Zealand. However, this western-focused approach leads to sample bias as these developed countries have relatively fewer immigrants and more capacity to absorb them (Alrababa'h et al., 2020; Gonnot et al., 2020). A critical step in future research is addressing the real causal factors affecting attitudes to immigration. This can be done only by also including countries from other parts of the world in the analysis.

Finally, as this meta-analysis focuses only on one type of attitude to immigration – namely, the perceived effects of immigration on society – future research should assess whether the same factors also affect other types of immigration attitudes, such as attitudes to immigration policy. Some determinants of attitudes to immigration may matter only for certain dimensions of these attitudes. Researchers should thus not merely study the drivers of attitudes that are most commonly used in other scholarly works but always reflect on which determinants can really be expected to matter for the specific dependent variable that is being investigated.

## References

- Aarøe, L., Petersen, M. B., & Arceneaux, K. (2017). The Behavioral Immune System Shapes Political Intuitions: Why and How Differences in Disgust Sensitivity Underlie Opposition to Immigration. *American Political Science Review*, *111*(2), 277–294.
- Adorno, T. W., Frenkel-Brunswik, E., Levinson, D., & Sanford, D. (1950). *The Authoritarian Personality*. New York: Harper & Brothers.
- Allport, G. (1954). *The Nature of Prejudice*. New York: Addison-Wesley.
- Alrababa'h, A., Dillon, A., Williamson, S., Hainmueller, J., Hangartner, D., & Weinstein, J. (2021). Attitudes Toward Migrants in a Highly Impacted Economy: Evidence From the Syrian Refugee Crisis in Jordan. *Comparative Political Studies*, *54*(1), 33–76. <https://doi.org/10.1177/0010414020919910>
- Ansolabehere, S., Rodden, J., & Snyder, J. M. (2008). The Strength of Issues: Using Multiple Measures to Gauge Preference Stability, Ideological Constraint, and Issue Voting. *American Political Science Review*, *102*(2), 215–32.
- Becker, C. (2019). The Influence of a Migration Background on Attitudes Towards Immigration. *Social Inclusion*, *7*(4), 279-292. <https://doi.org/10.17645/si.v7i4.2317>
- Berg, J. A. (2009). Core Networks and Whites' Attitudes Toward Immigrants and Immigration Policy. *Public Opinion Quarterly*, *73*(1), 7–31. <https://doi.org/10.1093/poq/nfp011>
- Bohman, A., & Hjerm, M. (2014). How the religious context affects the relationship between religiosity and attitudes toward immigration. *Ethnic and Racial Studies*, *37*(6), 937-957. <https://doi.org/10.1080/01419870.2012.748210>
- Borgonovi, F., & Pokropek, A. (2019). Education and Attitudes Toward Migration in a Cross Country Perspective. *Frontiers in Psychology*, *10*, 1-17. <https://doi.org/10.3389/fpsyg.2019.02224>
- Bramlett, B. H., Gimpel, J. G., & Lee, F. E. (2011). The Political Ecology of Opinion in Big-Donor Neighborhoods. *Political Behavior*, *33*(4), 565–600. <http://www.jstor.org/stable/41488877>
- Brooks, C., Manza, J., & Cohen, E. D. (2016). Political Ideology and Immigrant Acceptance. *Socius: Sociological Research for a Dynamic World*, *2*, 1–12. <https://doi.org/10.1177/2378023116668881>

- Ceobanu, A. M., & Escandell, X. (2010). Comparative Analyses of Public Attitudes Toward Immigrants and Immigration Using Multinational Survey Data: A Review of Theories and Research. *Annual Review of Sociology*, 36(1), 309–328.
- Citrin, J., Green, D. P., Muste, C., & Wong, C. (1997). Public Opinion Toward Immigration Reform: The Role of Economic Motivations. *The Journal of Politics*, 59(3), 858–881.  
<https://doi.org/10.2307/2998640>
- Creighton, M. J., & Jamal, A. (2015). Does Islam play a role in anti-immigrant sentiment? An experimental approach. *Social Science Research*, 53, 89-103.
- Dancygier, R., & Donnelly, M. (2014). Attitudes toward immigration in good times and bad. In L. Bartels, & N. Bermeo (Eds.), *Mass Politics in Tough Times: Opinions, votes and protest in the great recession*. Oxford: Oxford University Press.
- Dinesen, P. T., & Hjorth, F. G. (2020). Attitudes toward Immigration: Theories, Settings, and Approaches. In *The Oxford Handbook of Behavioral Political Science*. Oxford: Oxford University Press.
- Drazanova, L. (2017). *Education and Tolerance*. Berlin, Germany: Peter Lang Verlag.
- Faccini, G., & Mayda, A. M. (2009). Does the welfare state affect individual attitudes toward immigrants? Evidence across countries. *Review of Economics and Statistics*, 91(2), 295-314.
- Farris, S. R. (2017). *In the Name of Women's Rights: The Rise of Femonationalism*. Durham, NC: Duke University Press.
- Festinger, L. (1962). Cognitive dissonance. *Scientific American*, 207(4), 93–107.
- Fong, E. A., & Wilhite, A. W. (2017). Authorship and citation manipulation in academic research. *PLOS ONE* 12(12), e0187394.
- Frølund Thomsen, J. P., & Olsen, M. (2017). Re-examining Socialization Theory: How Does Democracy Influence the Impact of Education on Anti-Foreigner Sentiment? *British Journal of Political Science*, 47(4), 915–938.
- Glass, G. V. (1976). Primary, secondary, and meta-analysis of research. *Educational Researcher*, 5(10), 3–8.

- Gonnot, J., Dražanová, L., & Brunori, C. (2020). *Global trends and continental differences in attitudes to immigration: Thinking outside the Western box*. Policy Briefs, 2020/42, Migration Policy Centre.  
Retrieved from Cadmus, European University Institute Research Repository, at:  
<https://hdl.handle.net/1814/69111>
- Gorodzeisky, A., & Semyonov, M. (2018). Competitive threat and temporal change in anti-immigrant sentiment: Insights from a hierarchical age-period-cohort model. *Social Science Research*, 73, 31-44.
- Hainmueller, J., & Hiscox, M. J. (2010). Attitudes toward Highly-Skilled and Low-skilled Immigration: Evidence from a Survey Experiment. *American Political Science Review*, 104(1), 61-84.
- Hainmueller, J., Hiscox, M. J., & Margalit, Y. (2015). Do concerns about labor market competition shape attitudes toward immigration? New evidence. *Journal of International Economics*, 97(1), 193–207.
- Hainmueller, J., & Hopkins, D. J. (2014). Public Attitudes Toward Immigration. *Annual Review of Political Science*, 17(1), 225-249.
- Harteveld, E., Kokkonen, A., & Dahlberg, S. (2017). Adapting to Party Lines: the Effect of Party Affiliation on Attitudes to Immigration. *West European Politics*, 40(6), 1177-1197.
- Harteveld, E., Van Der Brug, W., Dahlberg, S., & Kokkonen, A. (2015). The Gender Gap in Populist Radical-Right Voting: Examining the Demand Side in Western and Eastern Europe. *Patterns of Prejudice*, 49(1–2), 103–34. 10.1080/0031322X.2015.1024399
- Herreros, F., & Criado, H. (2009). Social Trust, Social Capital and Perceptions of Immigration. *Political Studies* 57(2), 337–55.
- Hooghe, M., & Wilkenfeld, B. (2008). The Stability of Political Attitudes and Behaviors across Adolescence and Early Adulthood: A Comparison of Survey Data on Adolescents and Young Adults in Eight Countries. *Journal of Youth and Adolescence*, 37(2), 155–167.
- Hooghe, M., & Quintelier, E. (2013). Do All Associations Lead to Lower Levels of Ethnocentrism? A Two-Year Longitudinal Test of the Selection and Adaptation Model. *Political Behavior* 35, 289-309.
- Hopkins, D. J., Sides, J., & Citrin, J. (2019). The Muted Consequences of Correct Information about Immigration. *The Journal of Politics* 81(1), 315-320.

- Hoxhaj, R., & Zuccotti, C. V. (2021). The complex relationship between immigrants' concentration, socioeconomic environment and attitudes towards immigrants in Europe. *Ethnic and Racial Studies*, 44(2), 272-292, 10.1080/01419870.2020.1730926
- Imbeau, L. M., Pétry, F. & Lamari, M. (2001). Left–right party ideology and government policies: A meta–analysis. *European Journal of Political Research*, 40, 1-29. <https://doi.org/10.1111/1475-6765.00587>
- Jeannet, A.-M. (2018). Revisiting the labor market competition hypothesis in a comparative perspective: Does retirement affect opinion about immigration? *Research & Politics* 5(3). <https://doi.org/10.1177/2053168018784503>
- Jeannet, A.-M., & Dražanová, L. (2019). Cast in the same mould: how politics during the impressionable years shapes attitudes towards immigration in later life. EUI RSCAS, 2019/79, Migration Policy Centre. Retrieved from Cadmus, European University Institute Research Repository, at: <http://hdl.handle.net/1814/64549>
- Johnston, C. D., Newman, B. J., & Velez, Y. (2015). Ethnic Change, Personality, and Polarization Over Immigration in the American Public. *Public Opinion Quarterly*, 79(3), 662–686. <https://doi.org/10.1093/poq/nfv022>
- Just, A., & Anderson, C. J. (2015). Dual Allegiances? Immigrants' Attitudes toward Immigration. *The Journal of Politics*, 77(1), 188-201.
- Kaufmann, E. & Goodwin, M. J. (2018). The diversity Wave: A meta-analysis of the native-born white response to ethnic diversity. *Social Science Research*, 76, 120-131.
- Kustov, A., Laaker, D., & Reller, C. (2021). The Stability of Immigration Attitudes: Evidence and Implications. *The Journal of Politics*, 83(4), 1478-1494.
- Ladini, R., Biolcati, F., Molteni, F. Pedrazzani, A. & Vezzoni, C. (2021). The multifaceted relationship between individual religiosity and attitudes toward immigration in contemporary Italy. *International Journal of Sociology*, 51(5), 390-411.

- Langsæther, P. E., & Stubager, R. (2019). Old Wine in New Bottles? Reassessing the Effects of Globalisation on Political Preferences in Western Europe. *European Journal of Political Research*, 58, 1213-1233. <https://doi.org/10.1111/1475-6765.12332>
- Lodge, M., & Taber, C. (2013). *The Rationalizing Voter*. New York: Cambridge University Press.
- Maxwell, R. (2019). Cosmopolitan Immigration Attitudes in Large European Cities: Contextual or Compositional Effects? *American Political Science Review*, 113(2), 456–474.
- Meuleman, B., Davidov, E., & Billiet, J. (2009). Changing attitudes toward immigration in Europe, 2002–2007: A dynamic group conflict theory approach. *Social Science Research*, 38(2), 352–365. <https://doi.org/10.1016/j.ssresearch.2008.09.006>
- Muñoz, J., & Young, C. (2018). We Ran 9 Billion Regressions: Eliminating False Positives through Computational Model Robustness. *Sociological Methodology*, 48(1), 1–33.
- Neundorf, A., Smets, K., & García-Albacete, G.M. (2013). Homemade citizens: The development of political interest during adolescence and young adulthood. *Acta Politica*, 48(1), 92–116.
- Olzak, S. (1992). *The Dynamics of Ethnic Competition and Conflict*. Palo Alto: Stanford University Press.
- Pardos-Prado, S., & Xena, C. (2019). Skill Specificity and Attitudes toward Immigration. *American Journal of Political Science*, 63, 286-304. <https://doi.org/10.1111/ajps.12406>
- Pettigrew, T. F., & Tropp, L. R. (2006). A Meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751-783.
- Ponce, A. (2017). Gender and Anti-immigrant Attitudes in Europe. *Socius: Sociological Research for a Dynamic World*, 3, 1 –17. <https://doi.org/10.1177/2378023117729970>
- Pottie-Sherman, Y., & Wilkes, R. (2017). Does Size Really Matter? On the Relationship between Immigrant Group Size and Anti-Immigrant Prejudice. *International Migration Review*, 51(1), 218–50.
- Renshon, J., Lee, J. J. & Tingley, D. (2015). Physiological Arousal and Political Beliefs. *Political Psychology*, 36(5), 569–585. <http://www.jstor.org/stable/43783885>
- Quillian, L. (1995). Prejudice as a Response to Perceived Group Threat. *American Sociological Review*, 60(4), 586–611.



- Sanders, D. (2012). The Effects of Deliberative Polling in an EU-wide Experiment: Five Mechanisms in Search of an Explanation. *British Journal of Political Science*, 42(3), 617–640.
- Scheepers, P., Gijsberts, M., & Hello, E. (2002). Religiosity and Prejudice Against Ethnic Minorities in Europe: Cross-National Rests on a Controversial Relationship. *Review of Religious Research*, 43(3), 242-265.
- Schotte, S., & Winkler, H. (2018). Why Are the Elderly More Averse to Immigration When They Are More Likely to Benefit? Evidence across Countries. *International Migration Review*, 52(4), 1250–1282.
- Schuman, H. & Corning, A. (2012). Generational Memory and the Critical Period Evidence for National and World Events. *Public Opinion Quarterly* 76(1), 1–31.
- Semyonov, M., Raijman, R., & Gorodzeisky, A. (2006). The Rise of Anti-foreigner Sentiment in European Societies, 1988-2000. *American Sociological Review*, 71(3), 426–449.  
<https://doi.org/10.1177/000312240607100304>
- Sibley, C. G., Duckitt, J., Bergh, R., Osborne, D., Perry, R., Asbrock, F., Robertson, A., Armstrong, G., Wilson, M. S., & Barlow, F. K. (2013). A Dual Process Model of Attitudes towards Immigration. *Political Psychology*, 34, 553-572. <https://doi.org/10.1111/pops.12009>
- Smets, K., & van Ham, C. (2013). The Embarrassment Of Riches? A Meta-Analysis of Individual-Level Research on Voter Turnout. *Electoral Studies*, 32(2), 344–359.
- Vaisey, S., & Kiley, K. (2021). A Model-Based Method for Detecting Persistent Cultural Change Using Panel Data. *Sociological Science* 8(5).
- Van Assche, J., Roets, A., De keersmaecker, J., & Van Hiel, A. (2017). The mobilizing effect of right-wing ideological climates: Cross-level interaction effects on different types of outgroup attitudes. *Political Psychology*, 38(5), 757–776. <https://doi.org/10.1111/pops.12359>
- van Ham, C. & Smets, K. (2014). Meta-Analysis: Why Do Citizens Vote (or Abstain) in National Elections? In *SAGE Research Methods Cases*. <http://dx.doi.org/10.4135/978144627305014529528>