Economic conditions, group relative deprivation and ethnic threat perceptions: a cross-national perspective

Meuleman, Bart ; Abts, Koen ; Schmidt, Peter ; Pettigrew, Thomas F ; Davidov, Eldad

Abstract: Explaining negative attitudes towards immigration in general and threat due to immigration, in particular, has been a major topic of study in recent decades. While intergroup contact has received considerable attention in explaining ethnic threat, group relative deprivation (GRD), that is, feelings that one's group is unfairly deprived of desirable goods in comparison to relevant out-groups, has been largely ignored in cross-national research. Nevertheless, various smaller-scale studies have demonstrated that GRD can have a decisive impact on prejudice. In the current study, we examine the association between GRD and ethnic threat systematically across 20 European countries, thereby controlling for intergroup contact and value priorities. The 7th round of the European Social Survey (ESS) includes questions assessing respondents' feelings of group deprivation compared to immigrants and offers for the first time an opportunity to contextualise the threat-inducing effect of GRD across Europe. A multilevel structural equation model (MLSEM) demonstrates a considerable association between GRD and ethnic threat both on the individual and country levels. The results indicate that GRD is not only an important mediating factor between social structural positions and perceived threat, but also fully mediates the relation between contextual economic indicators and ethnic threat.

DOI: https://doi.org/10.1080/1369183X.2018.1550157

Economic conditions, group relative deprivation and ethnic threat perceptions: A cross-national perspective

Bart Meuleman*, University of Leuven

Abts Koenraad, University of Leuven

Peter Schmidt, University of Giessen

Thomas F. Pettigrew, University of California

Eldad Davidov, University of Cologne and University of Zurich

* Corresponding author

This is an electronic version of an article published online in ***Journal of Ethnic and Migration Studies*** on 22-Feb-2019. This journal is available online at: www.tandfonline.com. The definitive publisher-authenticated version of this article is available online under

https://doi.org/10.1080/1369183X.2018.1550157

Acknowledgments

The fifth author would like to thank th University of Zurich Research Priority Program Social Networks for their support. The authors would like to thank Lisa Trierweilr for the English proof of the manuscript.

Bios

Bart Meuleman is Associate Professor and head of department at the Centre for Sociological Research (CeSO) at the University of Leuven (Belgium). He currently (2017-2019) acts as president of the European Survey Research Association (ESRA). His main research interests are cross-cultural survey methodology and cross-national comparisons of value and attitude patterns.

Koen Abts is lecturer at the Sociology department of Tilburg University and research coordinator of the Belgian National Election Study (BNES) at the University of Leuven. His research focuses on resentment, welfare attitudes, prejudice, populism and Euroscepticism.

Peter Schmidt is Professor Emeritus of Social Research Methods and Political Science at the University of Giessen, at the department of political science, Germany. His research interests are the foundations and applications of structural equation models, analysis of panel data, and empirical testing of rational choice theory. Applications include national identity, immigration, and environmental behavior.

Thomas Pettigrew is Research Professor of Social Psychology at the University of California, Santa Cruz. A Harvard Ph.D., he also taught at Harvard (1957-1980) and the University of Amsterdam (1986-1991). He was a Fellow at the Center for Advanced Study in the Behavioral Sciences and the Netherlands Institute for Advanced Study. He was president of the Society for the Psychological Study of Social Issues and received the Society's Lewin Award, twice its Allport Intergroup Research Award, the American Sociological Association's Spivack, Cooley-Mead and Cox-Johnson-Frazier Awards, the Society for Experimental Social Psychology's Distinguished Scientist Award, the Lifetime Achievement Awards of the International Academy for Intercultural Research, the Society for Peace, Conflict and Violence, and the International Society of Political Psychology as well as the University of

California’s Panunzio Distinguished Emeriti Award and Harvard University’s Centennial medal.

Eldad Davidov is Professor of Sociology at the University of Cologne, Germany and the University of Zurich, Switzerland and co-director of the University Research Priority Program 'Social Networks'. His research interests are applications of structural equation modeling to survey data, especially in cross-cultural and longitudinal research. Applications include human values, national identity, and attitudes toward immigrants and other minorities.

Economic conditions, group relative deprivation and ethnic threat perceptions: A cross-national perspective

Abstract

Explaining negative attitudes towards immigration in general and threat due to immigration in particular has been a major topic of study in recent decades. While intergroup contact has received considerable attention in explaining ethnic threat, group relative deprivation (GRD), that is, feelings that one's group is unfairly deprived of desirable goods in comparison to relevant out-groups, has been largely ignored in cross-national research. Nevertheless, various smaller-scale studies have demonstrated that GRD can have a decisive impact on prejudice. In the current study we examine the association between GRD and ethnic threat systematically across 20 European countries, thereby controlling for intergroup contact and value priorities. The 7th round of the European Social Survey (ESS) includes questions assessing respondents' feelings of group deprivation compared to immigrants and offers for the first time an opportunity to contextualise the threat-inducing effect of GRD across Europe. A multilevel structural equation model (MLSEM) demonstrates a considerable association between GRD and ethnic threat both on the individual and country level. The results indicate that GRD is not only an important mediating factor between social structural positions and perceived threat, but also fully mediates the relation between contextual economic indicators and ethnic threat.

Keywords:

Ethnic threat; group relative deprivation (GRD); intergroup contact; European Social Survey (ESS); multilevel structural equation modelling (MLSEM)

1 Introduction

Leading European human rights organisations[1] have claimed that Europe's most severe economic crisis since the 1930s (Hemerijck, Knapen, and Van Doorne 2010) that took place in 2008 might reinforce the prevalence of ethnic intolerance and racially motivated violence. Indeed, in times of economic hardship, soaring unemployment rates and decreasing budgets for social protection, minority groups may be vulnerable and under the risk of becoming scapegoats (Kuntz, Davidov, and Semyonov 2017). This is often illustrated by electoral successes of populist radical right parties in different European countries (Funke, Schularick, and Trebesch 2016). These parties blame minorities in general and immigrants in particular for the social and economic hardships in the country.

Drawing upon group conflict theory, numerous cross-national studies have evidenced that individual indicators of socio-economic positions, such as employment status, income or education (Gorodzeisky 2011; Kunovich 2004; Raijman, Semyonov, and Schmidt 2003), as well as national-level economic conditions (Quillian 1995; Schneider 2008; Semyonov, Raijman, and Gorodzeisky 2006; Meuleman, Davidov, and Billiet 2009) are predictive of ethnic threat perceptions. Most of these empirical studies specify a direct link between individual and contextual economic indicators on the one hand and exclusionary attitudes on the other. Material hardship and vulnerability in these studies are assumed to have a quasi-automatic impact on citizens' threat perceptions. However, since Stouffer's introduction of the concept 'relative deprivation' (Stouffer et al. 1949; Pettigrew 2015) and Blumer's (1958) seminal paper '*Race prejudice as a sense of group position*', it is known that the perceived *relative* positioning of social groups may mediate the effect of absolute positioning on threat perceptions and play an important role in explaining it. Research into Group Relative

1 See, for example, the joint statement of the Office for Democratic Institutions and Human Rights (ODIHR), the European Commission against Racism and Intolerance (ECRI) and the European Union Agency for Fundamental Rights (FRA) of 21 March 2009 (http://fra.europa.eu/sites/default/files/fra_uploads/355-evt-21March-jointstatement-09_en.pdf).

Deprivation (GRD) convincingly shows that feelings that one's group is unfairly deprived of desirable goods have a far more decisive impact on prejudice compared to living conditions per se (Vanneman and Pettigrew 1972; Walker and Pettigrew 1984; Runciman 1966; Smith et al. 2012; Walker and Smith 2002). Yet, surprisingly enough, the concept of GRD has largely been neglected in cross-national research on ethnic threat.

This paper addresses this gap in the literature by testing the simultaneous relationships between GRD and perceived ethnic threat from a cross-national perspective, thereby controlling for competing predictors (such as intergroup contact and value priorities). We conceptualise GRD and intergroup contact as mediating factors between individual-level as well as contextual economic indicators and majority-group members' threat perceptions (Schmidt, Darowska, and Fischer, in press). We focus on the relation between GRD and threat perceptions rather than opposition to immigration. The reason is that, according to the theoretical model underlying this special issue (see the figure in the introduction, Heath et al. 2018), perceived ethnic threat is the most direct consequence of feelings of deprivation.

Concretely, we attempt to answer the following questions: (1) Are feelings of GRD rooted in individual economic position and on economic conditions in a country? (2) Does GRD have a cross-nationally robust association with threat perceptions? And (3) to what extent does GRD mediate the relation between individual and contextual economic indicators and threat perceptions? To answer these questions, we analyse data from the immigration module included in the European Social Survey (ESS) 2014 using a multilevel structural equation model (MLSEM). The present paper is to the best of our knowledge the first to address these questions across a large set of European countries.

2 Theoretical background

In order to examine the relation between GRD and perceived ethnic threat[2] across various European countries, we focus on two complementary theories on the nature of the relationships between ethnic groups, namely Group Conflict Theory (GCT) and Group Relative Deprivation (GRD). We furthermore supplement these frameworks by related explanatory models, namely Intergroup Contact Theory (ICT) and basic human values.

2.1 Group Conflict Theory (GCT)

The central proposition of GCT is that real competition over scarce resources can result in ethnic conflict and negative attitudes towards out-groups. The genesis of prejudices is thus seen as a defensive reaction of the majority group to the perception that prerogatives of their own group are threatened (Sherif and Sherif 1969). In its most basic formulation, the GCT argues that hostility between members of ethnic groups reflects real group conflicts of material interests. Since objective deprivation provides the direct basis for interethnic threat, low skilled individuals and low income groups with little education are more likely to feel threatened by interethnic competition, while at the same time majority members' threat perceptions are also influenced by contextual factors such as economic conditions (Blalock 1967; Olzak 1992; Gorodzeisky and Semyonov 2016). Thus, the theory argues that majority group members' social and economic vulnerability instigates perceptions of threat. At the group level, this framework assumes that ethnic threat perceptions become more widespread as a response to competitive conflict increases when the economic circumstances are difficult (Blalock 1967; Quillian 1995; Schneider 2008). Although several empirical studies have confirmed the relationship between objective vulnerability (as measured by social and economic status) and perceived realistic threat and have illustrated that anti-immigration attitudes are more widespread in adverse economic contexts (Quillian 1995; Lahav 2004;

2 In line with Blumer (1958), we define perceived threat as an individual perception that minority groups pose a threat to the in-group social position and the established social order.

Scheepers, Gijsberts, and Coenders 2002; Semyonov et al. 2006; Schneider 2008), the observed effects are not always consistent (Bobo 1983; O'Rourke and Sinnott 2006; Sides and Citrin 2007).

It should be noted that perceptions of threat might not only reflect realistic material competition, but can also stem from fear of identity and status loss. Out-groups can be seen as a challenge not only to the collective economic interests, but also to the cultural identity and political power of the in-group (Riek, Mania, and Gaertner 2006). In particular, the Integrated Threat Theory (Stephan and Stephan 1993, 1996) distinguishes realistic and symbolic threat. Realistic or socio-economic threat is caused by competition over material resources such as well-paid jobs, affordable housing and welfare provision (Olzak 1992), and is rooted in perceptions that outsiders threaten these scarce resources. Symbolic or cultural threat originates in intergroup conflict over the established social order, cultural traditions, and shared norms, values and beliefs. In this sense, symbolic threat is experienced when ingroup members perceive that their way of life is challenged by an out-group (Stephan et al. 1998). Importantly, distinct out-groups can be perceived either as a realistic threat, a symbolic threat or a combination of both (Hjerm and Nagayoshi 2011; Meuleman et al. 2018).[3]

2.2 Group Relative Deprivation (GRD) and perceived ethnic threat

The seminal work of Samuel Stouffer (Stouffer et al. 1949) as well as Herbert Blumer's (1958) study on prejudice and threat as a sense of group position argue that, rather than objective economic conditions, it is the perceived *relative* positioning of social groups that ultimately explains threat. Intergroup hostility essentially emerges from historically and collectively developed beliefs about the legitimate proprietary claims over scarce and socially valued resources, statuses and privileges, as well as the proper social positions that dominant

3 Several studies combine realistic and symbolic threat perceptions into a single general factor of threat because it is not possible to distinguish between the two aspects (see, e.g., Hercowitz-Amir, Raijman, and Davidov 2017).

in-group members should rightfully occupy relative to subordinate out-group members (Bobo and Hutchings 1996; Bobo 1999; Sears et al. 2000). Individuals who perceive that their own group is losing status in comparison to a relevant out-group are more likely to express feelings of threat and prejudice towards out-groups (Merton 1957; Runciman 1966), because they experience the loss of status as an illegitimate intergroup injustice.

This expectation occupies a central position in theories on relative deprivation (Stouffer et al. 1949; Pettigrew 1967; Runciman 1966). Relative deprivation concerns a perception that one or one's in-group is unfairly disadvantaged compared to a relevant referent (Vanneman and Pettigrew 1972). According to Smith and colleagues (2012, 204), relative deprivation consists of three aspects: (1) people make comparisons with others; (2) resulting in the perception to be at a relative (dis)advantage compared to others; and (3) the perceived (dis)advantage is interpreted as (un)fair invoking feelings of resentment or contentment (see also Pettigrew et al. 2008; Pettigrew 2016). As such, feelings of relative deprivation are 'a sense of violated entitlement' (Cook, Crosby, and Hennigan 1977, 312) and refer to a perceived unjustifiable discrepancy between what is and what ought to be. Repeated research demonstrates that this type of perceived injustice of current outcomes is an important motivator of threat perceptions, resentment and social protest.

Runciman (1966, 33-35) introduced a crucial distinction between egoistic (Individual) Relative Deprivation (IRD), a feeling of being unfairly disadvantaged as an individual, and Group Relative Deprivation (GRD), a feeling that one's *in-group* is deprived compared to relevant out-groups. Although both types of relative deprivation may have effects on anti-immigrant attitudes (see Schmidt et al. 2006), it is GRD that appears to be most conductive to perceptions of injustice and threat (Pettigrew, Wagner, and Christ 2007). Conversely, IRD is more strongly related to outcomes at the personal level, like well-being (Runciman 1966; Vanneman and Pettigrew 1972; Walker and Mann 1987; Pettigrew and Meertens 1995;

Pettigrew et al. 2008; Smith et al. 2012).

2.3 Individual and contextual sources of GRD

GRD might be a subjective phenomenon; yet it is at the same time embedded in social space. Relative deprivation stems from competitive social comparisons that result in a negative discrepancy between the actual situation on the one hand, and what is perceived as just on the other (Gurr 1970). As a result, GRD is a fundamentally positional phenomenon: Among individuals in lower socio-economic positions there is a higher risk that social comparisons turn out negative and exhort feelings of deprivation. Especially the lower educated, blue-collar workers and lower income groups – i.e. the so-called losers of modernization (Betz 1994) are confronted with disadvantage, insufficient resources and a lack of exit options, and therefore tend to develop feelings of relative deprivation and societal discontent (Kriesi et al. 2006; Walker and Mann 1987; Jones and Wildman 2008). A study among Belgian voters confirms that the educational level, employment status and income have the anticipated effects (Van Hootegem, Abts & Meuleman 2018). This argument thus implies that it is precisely because lower-status individuals experience that their social group is relatively deprived, they tend to develop stronger feelings of intergroup threat.

Because GRD relates to the position of the group rather than to that of the individual, a similar argumentation can be constructed at the contextual level. Not only individual positions, but also specific contextual settings can be conducive to the genesis of GRD. Drawing on the insights of group conflict theory (Blalock 1967; Olzak 1992), a logical point of departure is to assume that the economic context is a primary contextual driver of GRD. Difficult economic conditions make questions on the redistribution of scarce goods more compelling, and can therefore increase competitive social comparisons between groups. As a result, GRD can be expected to be less prevalent among citizens living in prosperous

economies. Individuals living in countries experiencing an economic downturn are conversely more likely to harbour feelings of GRD, irrespective of their personal socio-economic position. Because labour market competition plays a prominent role in the conflict between majority group members and immigrants (Scheve and Slaughter, 2001), we expect that especially the unemployment rate in a country will be related to GRD.[4] In sum, analogous to the individual level, we assume that GRD plays a mediating role between the unemployment rate and perceived ethnic threat.

2.4 Related theoretical frameworks: Intergroup Contact Theory (ICT) and basic human values

Besides GRD and GCT, we take two complementary explanations into account that may interfere with the impact of relative deprivation on perceived ethnic threat. First, Intergroup Contact Theory (ICT) (Pettigrew 1998) has identified encounters across group boundaries as a factor affecting intergroup attitudes. Allport's ([1954] 1979) formulation of ICT proposes that contact with out-group members under appropriate conditions typically reduces intergroup prejudice. These conditions are (1) cooperative contact between groups (2) of equal status in the situation (3) directed at common goals that (4) are positively sanctioned by authorities. A meta-analysis by Pettigrew and Tropp (2006) provides general support for the thesis that intergroup contact tends to reduce prejudice, but finds that Allport's key conditions were facilitative but not necessary for contact's positive effects. Green and colleagues (2018 in this volume) provide support for the expectation that contact reduces threat. Work by Islam and Hewstone (1993) suggests that the quality of intergroup encounters might be more relevant than the mere amount of such contact.

According to these arguments, one can expect that GRD and ICT jointly affect threat

4 A similar argument could be made for income inequality (e.g., Wilkinson and Pickett 2007), but this is beyond the scope of this paper.

perceptions. The causal relationship between GRD and ICT is, however, unclear. In a recent study, Schmidt and Weick (2017) argue that increasing GRD increases the socio-emotional costs of contacts with foreigners and therefore hypothesise that GRD has an impact on the propensity of contacts. Yet at the same time, positive contacts with foreigners could also reduce the feeling of GRD. Given this endogeneity problem (Paxton, Hipp, and Marquart-Pyatt 2011), we include in our model a correlation between these variables (rather than a causal effect) to avoid a specification error.

Furthermore, previous studies have identified value priorities as crucial factors shaping individuals' attitudes towards ethnic minorities and immigrants (Beierlein, Kuntz, and Davidov 2016; Davidov et al. 2008; Sagiv and Schwartz 1995). According to Schwartz' (1992) theory, basic human values are 'desirable transsituational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity' (Schwartz 1994, 21). Values whose expression or attainment are promoted or blocked by the presence of minorities in a country are likely to affect perceptions of ethnic threat (Sagiv and Schwartz 1995). Previous research has shown that this mechanism is particularly relevant for two value types, namely universalism (i.e., the motivation to appreciate differences among individuals, as well as understand, tolerate and protect the welfare of all people) and conformity-tradition (i.e., the motivation to maintain the beliefs, customs and practices of one's culture and family and to avoid violation of conventional expectations and norms) (Beierlein et al. 2016; Davidov and Meuleman 2012; Davidov et al. 2014). The presence of different ethnic groups offers opportunities to realise universalism values, and at the same time challenges conformity-tradition values.

We postulate that values are causally antecedent to GRD and intergroup contact as well. After all, basic human values are more stable and general characteristics (Schwartz 1992, 1994) than both contact and GRD. One's value priorities are likely to have an impact on

contact-seeking or contact-avoidance behaviours as well as on feelings of being deprived. By way of contrast, contact or GRD are not likely to change basic values because of the transsituational nature of the latter. A recent empirical analysis including a test of feedback relations between the three constructs confirms this conceptualisation (Schmidt et al. in press).

2.4 Conceptual model

The abovementioned theoretical considerations can be summarised into the conceptual framework shown in Figure 1. This framework makes a distinction between individual- and country-level relationships. At the individual level, the impact of one's socio-economic position on ethnic threat perceptions is mediated by GRD, the frequency and quality of intergroup contact and value priorities (notably universalism and conformity/tradition). At the country level, aggregate feelings of relative deprivation mediate the relationship between economic context and perceived ethnic threat.[5]

FIGURE 1 SOMEWHERE HERE

3 Data and method

3.1 Data

To test our theoretical expectations, we utilised data from the 7th round of the ESS (2014-2015, edition 2.1). These data contain information from residents aged 15 years and older, selected by means of probability sampling, in 20 European countries. As we investigated threat perceptions among members of the *majority group*, we removed from the sample respondents who were born outside the country, have a foreign nationality or consider

5 Of all individual characteristics, we only include GRD at the country level. GRD is the focus of this analysis, and we find it essential to include it on both levels of analysis. The reason that we do not include any further country-level predictors is that the limited sample at the country level forces us to formulate a parsimonious between-level model.

themselves as a member of an ethnic minority group (see also Sarrasin et al. 2015). The countries included in the analysis (with country abbreviations and the respective sample size in parentheses) were: Austria (AT – 1,552), Belgium (BE – 1,497), Switzerland (CH – 1,070), Czech Republic (CZ – 2,071), Germany (DE – 2,689), Denmark (DK – 1,365), Estonia (EE – 1,317), Spain (ES – 1,740), Finland (FI – 1,968), France (FR – 1,660), Great Britain (GB – 1,875), Hungary (HU – 1,585), Ireland (IE – 2,057), Lithuania (LT – 2,068), the Netherlands (NL – 1,685), Norway (NO – 1,245), Poland (PL – 1,588), Portugal (PT – 1,149), Sweden (SE – 1,527), and Slovenia (SI – 1,105).[6]

3.2 Indicators

Dependent variable: Perceived ethnic threat was measured using five items that inquired about respondents' feeling whether immigrants were a threat for the economy, the labour market, the welfare state, the cultural life and the religious customs.[7] Responses were recorded using 11-point scales. Although Integrated Threat Theory (Stephan and Stephan 1993, 1996) postulates that realistic (or economic) and symbolic (or cultural) threat are two distinct concepts, confirmatory factor analysis evidenced that it is not possible to distinguish between the two concepts with the ESS data. Therefore, we proceeded with a single threat factor. The question wording and descriptive statistics for these items can be found in Table 1. The results of the two-level measurement model (Ruelens, Meuleman, and Nicaise 2018) supporting this decision can be found in Appendix 1.

TABLE 1 SOMEWHERE HERE

6 We excluded Israel from the analysis because of the distinct character of immigration and ethnic minorities in this country.

7 Confirmatory factor analyses suggested that the items included in the ESS immigration module were equivalent across countries, thus allowing a meaningful comparative analysis (Davidov, Cieciuch, and Schmidt 2018)

Individual-level predictors: The immigration module in the 7th round of the ESS included, for the first time, an item measuring perceptions of group relative deprivation (GRD) for our large set of countries.[8] The item inquired about respondents' opinion whether the government treated recently arrived immigrants better or worse than members of their own group (see Table 1 or question wording and descriptive statistics). In accordance with the GRD theory, this item referred to group (rather than egoistic) relative deprivation and explicitly mentioned immigrants as the comparison group. Thus, it matched the level of analysis as implied by the dependent variable ethnic threat (Smith et al. 2012). The item was reversed, so that higher scores expressed stronger perceptions of GRD.

Besides GRD, our model contains intergroup contact and basic human values as mediators. Contact was measured by two separate indicators tapping into the frequency of intergroup contact in daily life as well as the perceived quality of this contact.[9] The two included basic human value types – universalism and conformity/tradition – are measured by means of multiple items from the Portrait Values Questionnaire included in the ESS (Schwartz 2007). Each of the items is a verbal portrait describing a hypothetical person's goals, aspirations or wishes that point implicitly to the importance of a single value. Respondents are asked to indicate how much the person portrayed is like them. Cieciuch et al. (2017) demonstrated that value priorities as measured in the ESS are approximately comparable and may be used in a comparative study meaningfully.

We measured respondents' social and economic position by means of multiple indicators. The highest educational degree obtained is categorised in three broad groups (lower secondary or less; higher secondary; tertiary degree). The variable employment status

8 We would like to note that whereas the large meta-analysis of Smith et al. 2012 on GRD covered 29 countries in total, our data allowed investigating the effect of GRD in 20 countries in a single study with the same measures.

9 4,861 persons reporting no intergroup contact at all were obviously not asked to evaluate the quality of this contact. These persons have a missing value on the quality of contact variable. Since Full Information Maximum Likelihood (FIML; Schafer and Graham 2002) rather than listwise deletion was used, however, these observations are not removed from the analysis.

combines information on the current activity status and occupational group (based on the EGP-scheme; Ganzeboom, De Graaf, and Treiman 1992), and distinguishes between self-employed, higher service class, white collar, blue collar, unemployed and other non-active. As a measure of absolute deprivation, we include an indicator of subjective income (which measured whether respondents feel that their income meets their financial needs). Furthermore, we controlled for respondents' gender and age (in years).

Appendices 2 and 3 list the individual-level predictors (including item formulation and response categories) and their descriptive statistics.

Contextual predictors: To investigate the impact of contextual sources of threat, we included indicators of economic conditions in the analysis. We measure the situation of the economy in a country – and more specifically the labour market – by means of the long-term unemployment rate, averaged over the six years preceding the survey (2009-2014). We additionally tested the impact of immigrant group size. The presence of visible newcomers in society is operationalised as the inflow of non-EU immigrants per 1,000 inhabitants, averaged over the same period. These contextual indicators are retrieved from the Eurostat Statistics Database (indicators *une_ltu_a* and *migr_imm1ctz*; see http://ec.europa.eu/eurostat/data/database).

3.3 Statistical modelling

To test whether and to what extent GRD explains variations in ethnic threat and mediates the impact of social and economic indicators on threat perceptions, we utilised a multilevel SEM approach (MLSEM: Preacher, Zyphur, and Zhang 2010). The point of departure of this model is a population of *i* individuals (at the *within* level) who are hierarchically nested in *g* groups (countries, the *between* level), and an orthogonal decomposition of the variables into group

(i.e. the group average) and individual (i.e. the deviation from that group average) components. Based on this decomposition, pooled within and between variance-covariance matrices are calculated. At both levels, a separate model is formulated to reproduce the within and between data structures as well as possible (Muthén 1994; Mehta and Neale 2005).

Even though our between-level model is rather parsimonious as will be shown later, data availability for only 20 countries might hamper accurate estimation (Meuleman and Billiet 2009). To address this problem, we used a Bayesian estimation procedure[10] that was shown to produce valid estimates with group-level sample sizes as small as 20 (Hox, van de Schoot, and Matthijsse 2012; Stegmueller 2013).[11] We estimated all models using Mplus 7.11 (Muthén and Muthén 1998-2012). Figure 1 illustrates the model we estimated reflecting our theoretical expectations. In particular, on the within level, social and economic indicators as well as value priorities affect GRD and intergroup contact while the latter influence ethnic threat. On the between-level, country unemployment rates (as a measure of economic conditions) affect country-level GRD scores, which in turn affect ethnic threat country scores. The syntax for the model can be found in Appendix 4.[12]

4. Results

10 For the specifications of the Bayesian estimation, we followed the procedures described in van de Schoot et al. (2014). All prior distributions were specified to be non-informative with the default N(0,∞) for factor loadings and intercepts and IG(-1,0) or IW(0,-3) for (co)variances. We assessed model convergence using the Gelman-Rubin criterion (Gelman et al. 2004) with 0.01 as the cut-off value (Hox, van de Schoot, and Matthijsse 2012). Furthermore, we requested two different chains of the Gibbs sampler and checked convergence visually by inspecting trace plots for all parameters. Since some between-level parameters displayed autocorrelation (i.e. parameter values for consecutive draws show similarity), we used a thinning factor of 50, and increased the number of effective draws to 10,000. The Kolmogorov-Smirnov test comparing the posterior distributions for the chains confirmed convergence for all parameters.

11 We use Bayesian estimation because of its good small-sample size performance, and not for a principled rejection of the practice of null-hypothesis significance testing. Therefore, we do provide p-values in the result section. These p-value represent the proportion of estimates over the iterative procedure that has a value smaller than 0 when the parameter is positive, or larger than 0 when the parameter is negative. The p-values are thus one-sided p-values.

12 Note that the Bayesian estimation procedure implemented in Mplus does not allow the inclusion of weights, so that we cannot use weights to correct for cross-national differences in sampling design (weight factor *dweight*). Re-estimating the model with the Maximum Likelihood estimator and the design weight does lead to very similar results, however.

4.1 Descriptive results: GRD and ethnic threat

Figure 2 displays the cross-national variation of GRD and threat perceptions. The figure shows quite clearly that country scores of GRD varied considerably with Sweden scoring lowest (2.56) followed by Germany, Denmark and Finland (2.69, 2.71 and 2.74, respectively). Ireland and Great Britain scored highest (3.47 and 3.48, respectively, far above the midpoint of the scale) followed by Portugal, Hungary and the Czech Republic (3.32, 3.30 and 3.27, respectively). This variation is considerable given that the GRD variable was measured on a scale with only five points.

The country averages of perceived ethnic threat (measured as the mean over the five threat items) largely followed a similar pattern. Respondents in Sweden, Germany, Finland and Norway scored lowest on perceived ethnic threat (3.94, 4.42, 4.45 and 4.57, respectively). By way of contrast, threat perceptions were highest in the Czech Republic, Hungary and Austria (6.24, 5.90 and 5.66, respectively). Figure 2 also shows clearly a positive relationship between the country scores of GRD and perceived ethnic threat ($r = 0.785$; $p < 0.0001$). In the next section we will examine whether this relation operates also on the individual level and whether it remains robust after including in the model interpersonal contact, value priorities and social and economic indicators as well as their compositional effects.

FIGURE 2 SOMEWHERE HERE

4.2 Multilevel mediation model

A more detailed insight into the relationship between GRD and ethnic threat requires disentangling individual-level and country-level effects and taking complementary explanatory variables into account. For this purpose, we estimated a MLSEM as depicted in Figure 1. This model consisted of a two-level measurement model for ethnic threat (see, e.g.,

Davidov et al 2016) and separate within- and between-level predictors. At the individual level, social and economic indicators (age, gender, education, employment status and subjective income) as well as value priorities (universalism and tradition/conformity) affect GRD and intergroup contact (contact frequency and contact quality). The latter influence ethnic threat. On the between-level, country unemployment rates (as a measure of economic conditions) affect country-level GRD scores, which in turn affect ethnic threat country scores. Below we discuss the model coefficients at both levels. A complete overview of the estimates for the structural parameters can be found in Table 2. The measurement parameters for this model are included in Appendix 1.

TABLE 2 SOMEWHERE HERE

At the within level, individuals with lower education, lower status in the labour market and those who scored lower on subjective income displayed higher scores of GRD and experienced less contact with immigrants. While these effects on contact frequency were consistent, the impact of social structural characteristics on contact quality is less stable. Surprisingly, also the self-employed scored higher on GRD compared to the reference group (white collar). One reason may be that this group was very heterogeneous comprising both professionals like lawyers or accountants on the one hand, and people with low income or various free lancers on the other hand. Overall, results suggested that individuals with a lower social and economic status tended to feel more deprived and disadvantaged compared to the immigrants in their country and experienced fewer encounters with immigrants.

GRD, in turn, was clearly associated with stronger individual threat perceptions. Citizens who considered their social group as relatively disadvantaged compared to immigrants also expressed higher levels of ethnic threat. As such, GRD figured as a hatch,

mediating the relation between socio-economic status on the one hand, and ethnic threat perceptions on the other. Whereas contact frequency was not related to ethnic threat, contact quality was with lower threat perceived among individuals who experienced positive contact with immigrants.

As expected, whereas conservative individuals displayed higher GRD, higher perceived threat and lower contact frequency and contact quality scores, universalistic individuals were lower in GRD, higher both in contact frequency and contact quality, and expressed lower ethnic threat due to immigrants. In sum, GRD exerted a sizeable association with individual ethnic threat perceptions in this large cross-national dataset, over and beyond interpersonal contact and human values. The explained variance of ethnic threat at the individual level was considerable and amounted to 45%.

Turning to the between model, Table 3 shows a significant association of GRD with ethnic threat at the group level. This finding suggests that in countries where respondents expressed stronger feelings of group relative deprivation, the average perceived ethnic threat is more elevated. The between part of the model also revealed that GRD was strongly rooted in labour market conditions at the national level. In countries that were confronted with higher levels of long-term unemployment, GRD was markedly more prevalent. Country unemployment rates were not directly associated with country scores of ethnic threat. In other words, GRD fully mediated the relation between economic conditions in a country in the form of long-term unemployment rates and ethnic threat. The completely standardised indirect relation of long-term unemployment with threat perceptions equalled 0.298 and was statistically significant (*one-sided p-value*: 0.025). This means that one standard deviation increase in long-term unemployment rate led – indirectly via strengthened feelings of relative deprivation – to an increase in the average threat perceptions of about 0.3 standard deviations. Group relative deprivation, thus, was a significant predictor of ethnic threat and explained its

variation both across individuals and between European countries. The explained variance of ethnic threat on the between level amounted to 49%. The indirect relation of unemployment rate explained 8.8% of the between-level variation in threat perceptions (i.e. about one-fifth of the total explained variance). In the next section we will summarise the findings and discuss their implications.

5. Summary and discussion

A constant increase in the number of immigrants in European countries coupled with high levels of threat due to immigration among citizens in the host societies make it particularly important to understand sources of ethnic threat. While intergroup contact has received considerable attention in studies attempting to explain ethnic threat, Group Relative Deprivation (GRD), that is, feelings that one's group is unfairly deprived of desirable goods, has been largely ignored in cross-national research. This neglect is unfortunate, because previous studies have demonstrated that it has a decisive impact on prejudice and ethnic threat. In the current study, we used data from the 7th round of the ESS in 20 countries to examine the effects of GRD on ethnic threat under control of intergroup contact and value priorities. In order to disentangle individual-level and country-level effects, we utilised a MLSEM model.

The findings demonstrated that GRD has a considerable link to ethnic threat both on the individual and country levels of analysis. This link was consistent and significant also after including in the model measures of frequency and quality of intergroup contact, socio-economic variables and value priorities as control variables. This finding implies that GRD also bears relevance for other attitudinal dimensions that are linked to threat perceptions, such as opposition to immigration (Gorodzeisky et al., this volume). In addition, economic indicators, such as socio-economic status on the individual level and country long-term

unemployment rates, had a consistent relation with GRD with vulnerable economic conditions associated with higher levels of GRD. The link of economic conditions with ethnic threat was mediated by feelings of group deprivation both on the individual and country levels of analysis. The strong mediating role of GRD is present under control for alternative factors, such as intergroup contact and basic human values.

The main contribution of this paper is that it demonstrates the importance of GRD in shaping threat perceptions in a cross-national setting. Not only do we find that the role of GRD is present in a database containing a large number of countries (thereby illustrating its cross-cultural robustness), we also demonstrate how a contextual factor like the unemployment rate can drive feelings of relative deprivation. As such, this paper fits in a trend towards the contextualization of social-psychological phenomena (Pettigrew, forthcoming).

This study is not without limitations. First, while theoretical considerations lead us to expect that GRD and contact influence the level of ethnic threat, these relations may also operate in the other direction. It could well be the case that ethnic threat may result in both avoidance of contact with immigrants, perception of such contact as negative and increased feelings of group deprivation that are activated by threat in the first place. The direction in which these relations operate cannot be assessed with the data at hand because of its cross-sectional character. Panel data and experimental designs may allow addressing the direction of causality in greater detail. Second, whereas threat was measured by multiple indicators (which allowed examining whether and to what extent its measures are comparable and adequate for a cross-national analysis), it was not possible to examine the cross-country comparability of the single-item measure for GRD. Thus, we do not know whether our measure of group deprivation was understood similarly across countries, and whether it possessed measurement equivalence characteristics across the country samples rendering its use meaningful. However,

it should be noted that while these may be considered important limitations, our analysis is innovative as it scrutinised a measure of GRD in population samples across such a large set of countries. This measure allows assessing, for the first time, the role that GRD plays in the explanation of ethnic threat in a cross-national perspective. Future studies may consider including multiple measures of GRD, which could allow assessing their cross-national comparability. Finally, due to data limitations, it was not possible to include an indicator of individual rather than group relative deprivation. Future research is needed to confirm to what extent the patterns observed in our study are unique for comparisons at the group level and not driven by considerations of individual positions.

Smith et al. (2012) suggested in their meta-analytic review that when the measure of GRD matches the level of analysis as implied by the outcome variable, its explanatory power improves sharply. Our study used a GRD measure that referred explicitly to immigrants, the object of investigation in our measures of ethnic threat. And indeed, our results demonstrated that GRD proved itself to be a major explanation of ethnic threat, providing firm support for our expectations. It operated in a robust way and explained a high share of the variation of threat due to immigration both across individuals and countries. Thus, we hope that the current study will stimulate further investigations of the role of feelings of deprivation in general and group deprivation in particular, in the explanation of negative sentiments towards immigration in Europe and elsewhere.

References

Allport, Gordon W. (1954) 1979. *The Nature of Prejudice*. Reprint, New York: Basic Books.

Beierlein, Constanze, Anabel Kuntz, and Eldad Davidov. 2016. “Universalism, Conservation and Attitudes toward Minority Groups.” *Social Science Research* 58: 68-79. doi:10.1016/j.ssresearch.2016.02.002

Blalock, Hubert M. 1967. *Toward a Theory of Minority-Group Relations*. New York: John Wiley and Sons.

Blumer, Herbert. 1958. “Race Prejudice as a Sense of Group Relation.” *Pacific Sociological Review* 1: 3–7.

Bobo, Lawrence. 1983. “Whites' Opposition to Busing: Symbolic Racism or Realistic Group Conflict?” *Journal of Personality and Social Psychology* 45 (6): 1196-1210.

Bobo, Lawrence D. 1999. “Prejudice as Group Position: Microfoundations of a Sociological Approach to Racism and Race Relations.” *Journal of Social Issues 55* (3): 445-472.

Bobo, Lawrence, and Vincent L. Hutchings. 1996. “Perceptions of Racial Group Competition: Extending Blumer's Theory of Group Position to a Multiracial Social Context.” *American Sociological Review* 61: 951-972.

Cieciuch, Jan, Eldad Davidov, René Algesheimer, and Peter Schmidt. 2017. “Testing for Approximate Measurement Invariance of Human Values in the European Social Survey.” *Sociological Methods & Research.* Advance online publication. doi:10.1177/0049124117701478.

Cook, Thomas D., Faye. J. Crosby, and Karen. M. Hennigan. 1977. “The Construct Validity of Relative Deprivation.” In *Social Comparison Processes: Theoretical and Empirical Perspectives*, edited by Jerry M. Suls and Richard L. Miller, 307-333. Washington: Hemisphere.

Davidov, Eldad, Jan Cieciuch, and Peter Schmidt. 2018. “The Cross-Country Comparability of the Immigration Module in the European Social Survey 2014-15.” *Survey Research Methods 12* (1): 15-27

Davidov, Eldad, Bart Meuleman, Jaak Billiet, and Peter Schmidt. 2008. “Values and Support for Immigration: A Cross-Country Comparison.” *European Sociological Review* 24 (5): 583-599.

Davidov, Eldad, and Bart Meuleman. 2012. “Explaining Attitudes towards Immigration Policies in European countries: The Role of Human Values.” *Journal of Ethnic and Migration Studies* 38 (5): 757-775.

Davidov, Eldad, Bart Meuleman, Shalom H. Schwartz, and Peter Schmidt. 2014. “Individual Values, Cultural Embeddedness, and Anti-Immigration Sentiments: Explaining Differences in the Effect of Values on Attitudes toward Immigration across Europe.” *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 66 (1): 263-285.

Davidov, Eldad, Hermann Dülmer, Jan Cieciuch, Anabel Kuntz, Daniel Seddig, and Peter Schmidt. 2016. “Explaining Measurement Nonequivalence Using Multilevel Structural Equation Modeling: The Case of Attitudes toward Citizenship Rights.” *Sociological Methods & Research.* Advance online publication. doi:10.1177/0049124116672678

Funke, Manuel, Mortiz Schularick, and Christoph Trebesch. 2016. “Going to Extremes: Politics after Financial Crises, 1870–2014.” *European Economic Review* 88: 227-260.

Ganzeboom, Harry B., Paul De Graaf, and Donald J. Treiman. 1992. “A Standard International Socio-Economic Index of Occupational Status.” *Social Science Research* 21 (1): 1-56.

Gelman, Andrew, John B. Carlin, Hal S. Stern, and Donald B. Rubin. 2004. *Bayesian Data Analysis. Second Edition*. Boca Raton: Chapman & Hall.

Gorodzeisky, Anastasia. 2011. “Who are the Europeans that Europeans prefer? Economic Conditions and Exclusionary Views toward European Immigrants.” *International Journal of Comparative Sociology* 52 (1-2): 100-113.

Gorodzeisky, Anastasia, and Moshe Semyonov. 2016. “Not Only Competitive Threat but also Racial Prejudice: Sources of Anti-Immigrant Attitudes in European Societies.” *International Journal of Public Opinion Research* 28: 331-354. doi:10.1093/ijpor/edv024

Green, Eva G. T., Emilio Paolo Visintin, Oriane Sarrasin, and Miles Hewstone. 2018. “When Integration Policies Shape the Impact of Intergroup Contact on Threat Perceptions: A Multilevel Study across 20 European Countries.” *Journal of Ethnic and Migration Studies*, this issue.

Gurr, Ted R. *1970. Why men rebel.* New Jersey: Princeton University Press.

Heath, Anthony, Eldad Davidov, Robert Ford, Eva G. T. Green, Alice Ramos, and Peter Schmidt. 2018. "Explaining Attitudes toward Immigration: Findings from the Immigration Module in the European Social Survey 2014-15." *Journal of Ethnic and Migration Studies*, this issue.

Hemerijck, Anton, Ben Knapen, and Ellen van Doorne. 2010. *Aftershocks: Economic Crisis and Institutional Choice.* Amsterdam University Press: Amsterdam.

Hercowitz-Amir, Adi, Rebeca Raijman, and Eldad Davidov. 2017. “Host or Hostile? Attitudes towards Asylum Seekers in Israel and in Denmark.” *International Journal of Comparative Sociology*. Advance online publication. doi:10.1177/0020715217722039.

Hjerm, Mikael, and Kikuko Nagayoshi. 2011. “The Composition of the Minority Population as a Threat: Can Real Economic and Cultural Threats Explain Xenophobia?” *International Sociology* 26 (6): 815-843.

Hox, Joop, Rens van de Schoot, and Suzette Matthijsse. 2012. “How Few Countries Will Do? Comparative Survey Analysis from a Bayesian Perspective.” *Survey Research Methods* 6 (2): 87-93.

Islam, Mir Rabiul, and Miles Hewstone. 1993. “Dimensions of Contact as Predictors of Intergroup Anxiety, Perceived Out-Group Variability, and Out-Group Attitude: An Integrative Model.” *Personality and Social Psychology Bulletin* 19 (6): 700-710. doi: 10.1177/0146167293196005

Jones, Adrew M., and John Wildman. 2008. “Health, income and relative deprivation: Evidence from the BHPS.” *Journal of Health Economics* 27: 308–324. doi:10.1016/j.jhealeco.2007.05.007

Kriesi, Hanspeter., Edgar Grande, Romain Lachat, Martin Dolezal, Simon Bornschier and Timotheos Frey. 2006. “Globalization and the transformation of the national political space: Six European countries compared.” *European Journal of Political Research* 45 (6): 921-956. doi: 10.1111/j.1475-6765.2006.00644.x

Kunovich, Robert M. 2004. “Social Structural Position and Prejudice: An Exploration of Cross-National Differences in Regression Slopes.” *Social Science Research* 33: 20-44.

Kuntz, Anabel, Eldad Davidov, and Moshe Semyonov. 2017. “The Dynamic Relations between Economic Conditions and Anti-Immigrant Sentiment: A Natural Experiment in Times of the European Economic Crisis.” *International Journal of Comparative Sociology* Advance online publication. doi:10.1177/0020715217690434.

Lahav, Gallya. 2004. *Immigration and Politics in the New Europe: Reinventing Borders.* Cambridge: Cambridge University Press.

Merton, Robert K. 1957. *Social Theory and Social Structure*. New York: The Free Press.

Mehta, Paras D., and Michael C. Neale. 2005. “People are Variables Too: Multilevel Structural Equations Modeling.” *Psychological Methods* 10 (3): 259-284. doi:10.1037/1082-989X.10.3.259.

Meuleman, Bart, and Jaak Billiet. 2009. “A Monte Carlo Sample Size Study: How Many Countries are Needed for Accurate Multilevel SEM?” *Survey Research Methods* 3 (1): 45-58.

Meuleman, Bart, Koen Abts, Koen Slootmaeckers, and Cecil Meeusen. 2018. “Differentiated Threat and the Genesis of Prejudice. Group-Specific Antecedents of Homonegativity, Islamophobia, Anti-Semitism and Anti-Immigrant Attitudes.” *Social Problems*. Accepted for publication.

Meuleman, Bart, Eldad Davidov, and Jaak Billiet. 2009. “Changing Attitudes toward Immigration in Europe, 2002-2007: A Dynamic Group Conflict Theory Approach.” *Social Science Research* 38: 352-365.

Muthén, Bengt O. 1994. “Multilevel Covariance Structure Analysis.” *Sociological Methods & Research* 22 (3): 376-398.

Muthén, Linda K., and Bengt O. Muthén. 1998-2012. *Mplus User’s Guide. Seventh Edition*. Los Angeles, CA: Muthén & Muthén.

O'Rourke, Kevin H., and Richard Sinnott. 2006. “The Determinants of Individual Attitudes towards Immigration.” *European Journal of Political Economy* 22: 838-861.

Olzak, Susan. 1992. *Dynamics of Ethnic Competition and Conflict*. Stanford: Stanford University Libraries.

Paxton, Pamela, John R. Hipp, and Sandra Marquart-Pyatt. 2011. *Nonrecursive Models: Endogeneity, Reciprocal Relationships, and Feedback Loops.* Thousand Oaks, California: Sage.

Pettigrew, Thomas F. 2015. “Samuel Stouffer and Relative Deprivation.” *Social Psychology Quarterly* 30: 1-18.

Pettigrew, Thomas F. 2016. “In Pursuit of Three Theories: Authoritarianism, Relative Deprivation, and Intergroup Contact.” *Annual Review of Psychology* 67: 1-21.

Pettigrew, Thomas F., Ulrich Wagner, and Oliver Christ. 2007. “Who Opposes Immigration? Comparing German Results with Those of North America.” *Du Bois Review* 4 (1): 19-39.

Pettigrew, Thomas F., and Roel W. Meertens. 1995. “Subtle and Blatant Prejudice in Western Europe.” *European Journal of Social Psychology* 25 (1): 57-75.

Pettigrew, Thomas F., and Linda R. Tropp. 2006. “A Meta-Analytic Test of Intergroup Contact Theory.” *Journal of Personality and Social Psychology* 90 (5): 751-783.

Pettigrew, Thomas F., Oliver Christ, Ulrich Wagner, Roel W. Meertens, Rolf Van Dick, and Andreas Zick. 2008. “Relative Deprivation and Intergroup Prejudice.” *Journal of Social Issues* 64 (2): 385-401.

Pettigrew, Thomas F. 1998. “Intergroup Contact Theory.” *Annual Review of Psychology* 4: 65-85. doi:10.1146/annurev.psych.49.1.65.

Pettigrew, Thomas. 1967. “Social Evaluation Theory: Convergences and Applications.” *Nebraska Symposium on Motivation* 15: 241-311.

Pettigrew, Thomas F. Forthcoming. “The emergence of contextual social psychology.” *Personality and Social Psychology Bulletin.* doi:10.1177/0146167218756033

Preacher, Kristopher J., Michael J. Zyphur, and Zhen Zhang. 2010. “A General Multilevel SEM Framework for Assessing Multilevel Mediation.” *Psychological Methods* 15 (3): 209-233.

Quillian, Lincoln. 1995. “Prejudice as a Response to Perceived Group Threat: Population Composition and Anti-immigrant and Racial Prejudice in Europe.” *American Sociological Review* 60: 586–611.

Raijman, Rebeca, Moshe Semyonov, and Peter Schmidt. 2003. “Do Foreigners Deserve Rights? Determinants of Public Opinion Views toward Foreigners in Germany and Israel.” *European Sociological Review* 19: 379–392.

Riek, Blake M., Eric W. Mania, and Samuel L. Gaertner. 2006. “Intergroup Threat and Outgroup Attitudes: A Meta-Analytic Review.” *Personality and Social Psychology Review* 10 (4): 336-353.

Ruelens, Anna, Bart Meuleman, and Nicaise Ides. 2018. “Examining Measurement Isomorphism of Multilevel Constructs: The Case of Political Trust. *Social Indicators Research.* Accepted for publication.

Runciman, Walter G. 1966. *Relative Deprivation and Social Justice: A Study of Attitudes to Social Inequality in Twentieth-Century England*. Berkeley: University of California Press.

Sagiv, Lilach, and Shalom H. Schwartz. 1995. “Value Priorities and Readiness for Out-Group Social Contact.” *Journal of Personality and Social Psychology* 69 (3): 437-448.

Sarrasin, Oriane, Eva. G. T. Green, Nicole Fasel, and Eldad Davidov. 2015. “Does Survey Respondents’ Immigration Background Affect the Measurement and Prediction of Immigration Attitudes? An Illustration in Two Steps.” *International Journal of Public Opinion Research* 27 (2): 264-276. doi:10.1093/ijpor/edu015.

Schafer, Joseph L., and John W. Graham. 2002. “Missing Data: Our View of the State of the Art.” *Psychological Methods* 7:147–177.

Scheepers, Peer, Merové Gijsberts, and Marcel Coenders. 2002. “Ethnic Exclusionism in European Countries. Public Opposition to Grant Civil Rights to Legal Migrants as a Response to Perceived Ethnic Threat.” *European Sociological Review* 18: 1-18.

Scheve, Kenneth F., and Matthew J. Slaughter. 2001. “Labor market competition and individual preferences over immigration policy.” *Review of Economics and Statistics 83* (1): 133-145.

Schmidt, Peter, and Stefan Weick. 2017. Kontakte und die Wahrnehmung von Bedrohungen besonders wichtig für die Einschätzung von Migranten: Einstellungen der deutschen Bevölkerung zu Zuwanderern von 1980 bis 2016. (Contacts and the Perception of Threat especially important for the Attitudes toward Migrants: Attitudes of the German Population toward Migrants from 1980 till 2016) *Informationsdienst Soziale Indikatoren* 57: 1-7.

Schmidt, Peter, Phillip Winkelnkemper, Elmar Schlüter, and Carina Wolf. 2006. “Welche Erklärung für Fremdenfeindlichkeit: relative Deprivation oder Autoritarismus [Which Explanation for Hostility toward Foreigners: Relative Deprivation or Authoritarianism?].” In *Soziale Gerechtigkeit*, edited by Alexander Grasse, Carmen Ludwig, and Bertold Dietz, 215-224. Wiesbaden: VS Verlag für Sozialwissenschaften.

Schmidt, Peter, Lucyna Darowska, and Daniel Georg Fischer. (in press). “What Drives Threat, Attitudes toward Migrants and Identification with Populist Parties? Deprivation, Values or Racism? A Comparative Analysis of Poland and Germany.” In *Hopes and Anxieties. Six Waves of the European Social Survey*, edited by P. B. Sztabinski, H. Domanski, and F. Sztabinski. Frankfurt am Main: Peter Lang.

Schneider, Silke L. 2008. “Anti-Immigrant Attitudes in Europe: Outgroup Size and Perceived Ethnic Threat.” *European Sociological Review* 24 (1): 53-67.

Schwartz, Shalom H. 1994. “Are There Universal Aspects in the Structure and Contents of Human Values?” *Journal of Social Issues* 50 (4): 19-45.

Schwartz, Shalom H. 1992. “Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries.” In *Advances in Experimental Social Psychology*, *Vol. 25*, edited by Mark Zanna, 1-65. New York: Academic Press.

Schwartz, Shalom H. 2007. “Value Orientations: Measurement, Antecedents and Consequences across Nations.” In *Measuring Attitudes Cross-Nationally: Lessons from the European Social Survey*, edited by Roger Jowell, Rory Fitzgerald, Caroline Roberts, and Gillian Eva, 161-193. London: Sage.

Sears, David O., John J. Hetts, Jim Sidanius, and Lawrence Bobo. 2000. “Race in American Politics: Framing the Debates.” In *Racialized Politics: The Debate about Racism in America*, edited by David O. Sears, Jim Sidanius, and Lawrence Bobo, 1-43. Chicago: University of Chicago Press.

Semyonov, Moshe, Rebeca Raijman, and Anastasia Gorodzeisky. 2006. “The Rise of Anti-Foreigner Sentiment in European Societies, 1988-2000.” *American Sociological Review* 71: 426-449.

Sherif, Muzafer and Carolyn W. Sherif. 1969. *Social Psychology*. New York: Harper & Row.

Sides, John and Jack Citrin. 2007. “European Opinion about Immigration: The Role of Identities, Interests and Information.” *British Journal of Political Science* 37 (3): 477-504.

Smith, Heather J., Thomas F. Pettigrew, Gina M. Pippin, and Silvana Bialosiewicz. 2012. “Relative Deprivation: A Theoretical and Meta-Analytic Review.” *Personality and Social Psychology Review* 16 (3): 203-232.

Stegmueller, Daniel. 2013. “How Many Countries for Multilevel Modeling? A Comparison of Frequentist and Bayesian Approaches.” *American Journal of Political Science* 57 (3): 748-761.

Stephan, Walter G., and Stephan, Cookie W. (1993). Cognition and Affect in Stereotyping: Parallel Interactive Networks. In *Affect, Cognition, and Stereotyping: Interactive Processes in Group Perception*, edited by Diane M. Mackie and David L. Hamilton, 111-136. Orlando, FL: Academic Press.

Stephan, Walter G., and Cookie W. Stephan. 1996. “Predicting Prejudice.” *International Journal of Intercultural Relations* 20 (3-4): 409-426.

Stephan, Walter G., Oscar Ybarra, Carmen M. Martinez, Joseph Schwarzwald, and Michal Tur-Kaspa. 1998. “Prejudice toward Immigrants to Spain and Israel: An Integrated Threat Theory Analysis.” *Journal of Cross-Cultural Psychology* 29 (4): 559-576.

Stouffer, Samuel A., Edward A. Suchman, Levine C. DeVinney, Shirley A. Star, and Robin M. Williams Jr. 1949. *The American Soldier: Adjustment During Army Life. (Studies in Social Psychology in World War II, Vol. 1*). Oxford, England: Princeton University Press.

Vanneman, Reeve D., and Thomas F. Pettigrew. 1972. “Race and Relative Deprivation in the Urban United States.” *Race* 13 (4): 461-486.

van de Schoot, Rens, David Kaplan, Jaap Denissen, Jens B. Asendorpf, Franz J. Neyer, and Marcel A. Aken. 2014. “A Gentle Introduction to Bayesian Analysis: Applications to Developmental Research.” *Child Development* 85 (3): 842-860.

Van Hootegem, Arno, Koen Abts, and Bart Meuleman. 2018. “De verzorgingsstaatkritiek van de verliezers: de invloed van maatschappelijk onbehagen. (The welfare criticism of the losers: The influence of societal discontent)” *Sociologie*.

Walker, Iain, and Leon Mann. 1987. “Unemployment, Relative Deprivation, and Social Protest.” *Personality and Social Psychology Bulletin* 13 (2): 275-283.

Walker, Iain, and Thomas F. Pettigrew. 1984. “Relative Deprivation Theory: An Overview and Conceptual Critique.” *British Journal of Social Psychology* 23 (4): 301-310.

Walker, Iain, and Heather Smith, eds. 2002. *Relative Deprivation: Specification, Development, and Integration.* New York: Cambridge University Press.

Wilkinson, Richard G., and Pickett, Kate E. (2007). “The problems of relative deprivation: Why some societies do better than others.” *Social Science and Medicine* 65: 1965-1978. doi:10.1016/j.socscimed.2007.05.041

Figure 1. Country average scores of group relative deprivation (GRD) and perceived ethnic threat

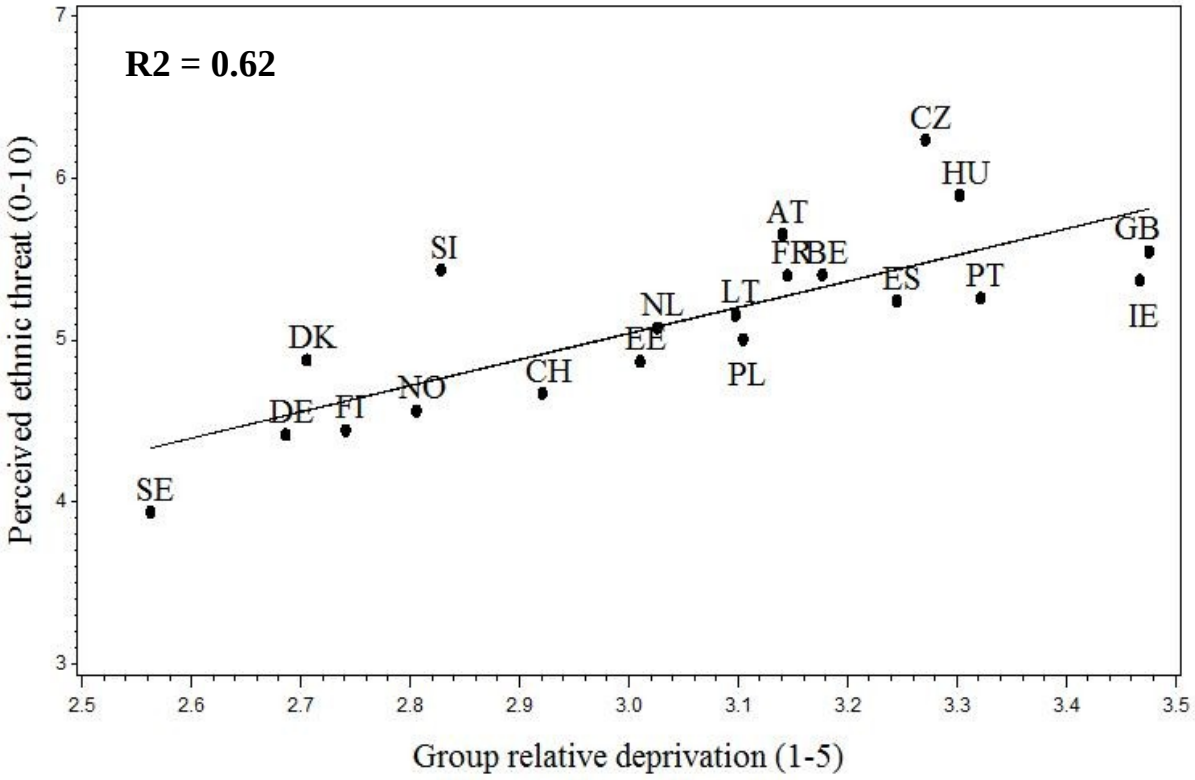
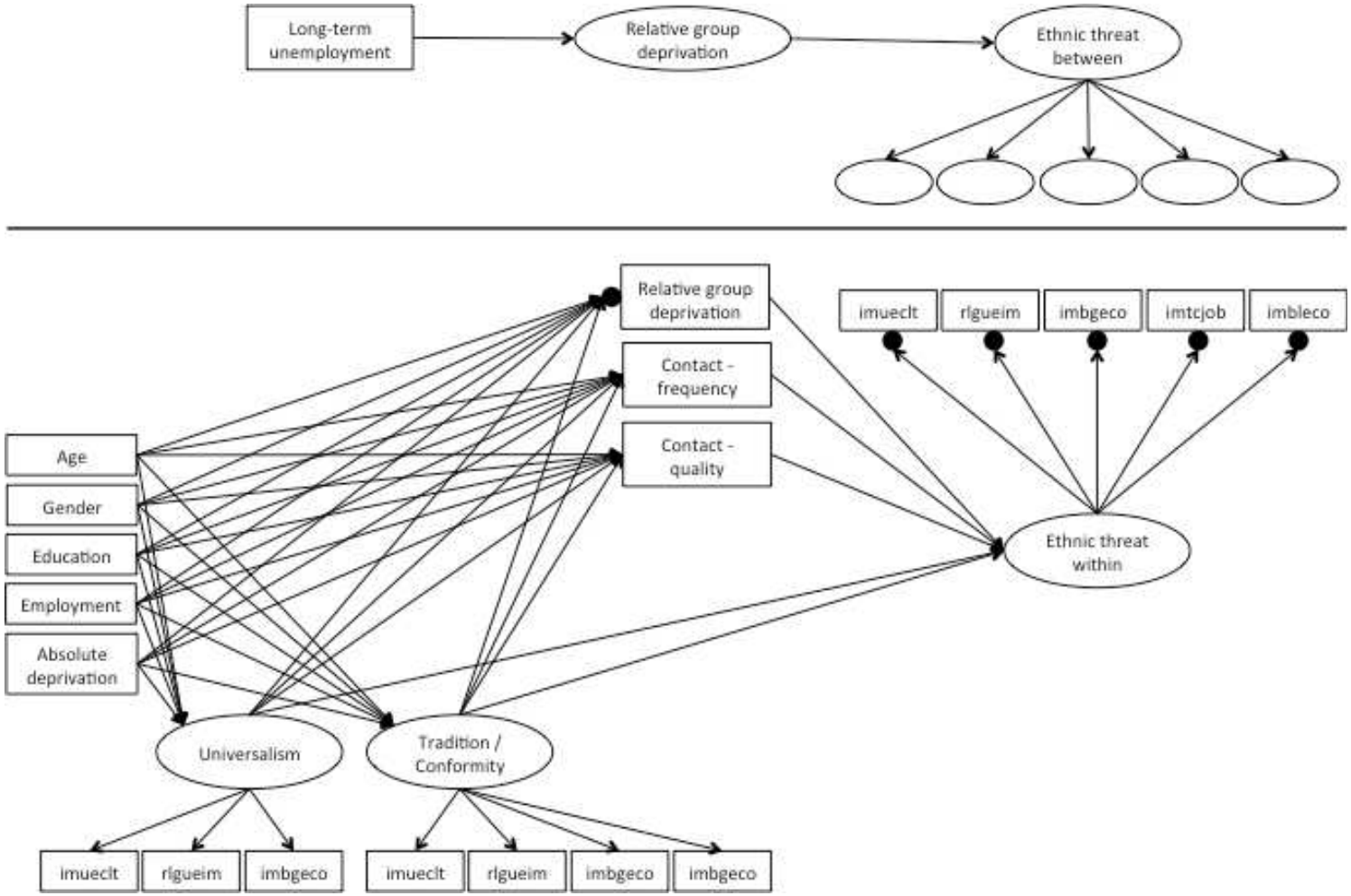

R2 = 0.62
Perceived ethnic threat (0-10)
Group relative deprivation (1-5)
CZ
HU
AT
GB
SI
FR
BE
ES
PT
NL
LT
IE
DK
EE
CH
PL
DE
FI
NO
SE
7
6
5
4
3
2.5
2.6
2.7
2.8
2.9
3.0
3.1
3.2
3.3
3.4
3.5

Figure 2. Multilevel mediation model for GRD and perceived ethnic threat



Note: rectangles represent manifest variables (observed indicators), and ellipses represent latent variables. The black dots for the indicators of ethnic threat at the within level indicate that random intercepts for these indicators are included in the model.

Table 1. Question wording and descriptive statistics for perceived ethnic threat and GRD

	Wording	Answer categories	Mean	STD	N
Relative deprivation	*GVTRIMG.* Compared to people like yourself who were born in [country], how do you think the government treats those who have recently come to live here from other countries?	1 (Much better) - 5 (Much worse). Reversed	2.94	0.96	30784
Perceived ethnic threat	*IMBGECO.* Would you say it is generally bad or good for [country]'s economy that people come to live here from other countries?	0 (Bad for the economy) - 10 (Good for the economy)	4.87	2.39	31716
	IMUECLT. Would you say that [country]'s cultural life is generally undermined or enriched by people coming to live here from other countries?	0 (Undermind cultural life) - 10 (Enrich cultural life)	5.56	2.48	31815
	IMTCJOB. would you say that people who come to live here generally take jobs away from workers in [country], or generally help to create new jobs?	0 (Take jobs away) - 10 (Create jobs)	4.72	2.28	31768
	IMBLECO. Most people who come to live here work and pay taxes. They also use health and welfare services. On balance, do you think people who come here take out more than they put in or put in more than they take out?	0 (Generally take out more) - 10 (Generally put in more)	4.37	2.15	31114
	RLGUEIM. Do you think the religious beliefs and practices in [country] are generally undermined or enriched44 by people coming to live here from other countries?	0 (Religious beliefs and practices undermined) - 10 (Religious beliefs and practices enriched)	4.89	2.12	30681

Note: weighted for cross-national differences in sampling design (weight variable: dweight)

Table 2: Standardised parameter estimates predicting ethnic threat, GRD, contact frequency, contact quality, universalism and tradition/conformity

WITHIN MODEL	**Ethnic threat**		**Relative deprivation**		**Contact - frequency**		**Contact - quality**		**Universalism**		**Tradition/Conformity**	
Predictors listed below	*Par. Est.*	*p (one-sided)*	*Par. Est.*	*p (one-sided)*	*Par. Est.*	*p (one-sided)*	*Par. Est.*	*p (one-sided)*	*Par. Est.*	*p (one-sided)*	*Par. Est.*	*p (one-sided)*
Age (in years)			0.002	(0.383)	-0.159 *	(0.000)	-0.030 *	(0.000)	0.069 *	(0.000)	0.271 *	(0.000)
Gender												
male			0.017 *	(0.003)	0.024 *	(0.000)	-0.005	(0.219)	-0.070 *	(0.000)	-0.056 *	(0.000)
female (ref. cat.)												
Education												
Lower secondary or less			0.067 *	(0.000)	-0.006	(0.221)	0.024 *	(0.002)	-0.142 *	(0.000)	0.122 *	(0.000)
Higher secondary			0.073 *	(0.000)	-0.017 *	(0.008)	-0.030 *	(0.000)	-0.099 *	(0.000)	0.125 *	(0.000)
Tertiary (ref. cat.)												
Activity status												
Higher service class			-0.008	(0.090)	-0.021 *	(0.000)	-0.006	(0.182)	0.006	(0.225)	-0.031 *	(0.000)
White collar (ref. cat.)												
Blue collar			0.032 *	(0.000)	-0.034 *	(0.000)	-0.002	(0.386)	-0.083 *	(0.000)	0.015	(0.040)
Self-employed			0.013 *	(0.018)	-0.074 *	(0.000)	-0.009	(0.081)	-0.002	(0.396)	0.000	(0.483)
Unemployed			0.028 *	(0.000)	-0.052 *	(0.000)	-0.015 *	(0.013)	-0.003	(0.333)	-0.018 *	(0.008)
Retired / other non-active			-0.010	(0.104)	-0.139 *	(0.000)	-0.008	(0.167)	-0.013	(0.090)	-0.003	(0.388)
Subjective income			-0.086 *	(0.000)	-0.065 *	(0.000)	-0.050 *	(0.000)	-0.108 *	(0.000)	-0.043 *	(0.000)
Universalism	-0.438 *	(0.000)	-0.268 *	(0.000)	-0.305 *	(0.000)	-0.398 *	(0.000)				
Tradition-Conformity	0.388 *	(0.000)	-0.273 *	(0.000)	-0.317 *	(0.000)	-0.239 *	(0.000)				
Relative deprivation	0.291 *	(0.000)										
Contact - frequency	0.020 *	(0.004)										
Contact - quality	-0.227 *	(0.000)										
R-squared	0.457		0.116		0.200		0.134		0.055		0.109	

BETWEEN MODEL	**Ethnic threat**		**Relative deprivation**	
	Par. Est.	*p-value*	*Par. Est.*	*p-value*
Long-term unemployment			0.428 *	(0.024)
Relative deprivation	0.696 *	(0.000)		
R-squared	0.485		0.183	

* *one-sided p-value* < .025; The effects of GRD on ethnic threat are printed in bold.