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Explaining temporal trends and regional variation in attitudes towards foreign workers: group conflict theory and Finland 1990–2013

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This article explores a dynamic version of group conflict theory as an explanation for developments over time as well as regional differences in attitudes towards foreign workers in Finland in the period 1990–2013. In particular, it is argued that recent changes in potential for conflict are more likely to affect attitudes than are their levels. The results confirm this as it is both change in the rate of growth of the foreign population and possibly change in unemployment that tend to have an effect on attitudes, whereas the size of the foreign population and the level of unemployment do not. These change measures tend to have an effect at the national rather than the regional level. On the other hand, regional differences are not explained by any of the contextual variables tested. The data used at the individual level is a pooled data set (N=28,135) of 13 EVA Surveys on Finnish Values and Attitudes.
Keywords: Group conflict theory, attitudes towards foreign workers, longitudinal analysis, regional analysis, Finland

Introduction

The contextual determinants of attitudes towards immigrants and other out-groups have raised a great deal of research interest over the past two decades. Most of this research has been cross-sectional, analysing country-level determinants from a single year, with more recent research extending these analyses to the regional level. The main contribution of this article is the analysis of one country – Finland – over time, which has been done more rarely but is arguably a stronger test of the influence of contextual factors than that of several countries at one point in time because many institutional factors are implicitly controlled for. Moreover, the article also tests whether in the Finnish case the appropriate level of analysis is the country as a whole or its regions.

Much of the literature on contextual factors influencing attitudes towards foreigners or immigrants relies on group conflict theory, early proponents of which were Blumer (1958) and Blalock (1967). This theory claims that prejudice and other negative attitudes towards out-groups are heightened when in-groups perceive themselves to be economically or culturally threatened by an out-group. In particular, it has been argued that the size of an out-group (or its perceived size) is the main influencing factor behind group conflict.

More recently, a number of researchers have advanced the view that rather than being influenced by the size of the out-group, the more relevant influencer is the recent change in the out-group's size (e.g., Coenders & Scheepers 2008; Hopkins 2010). Analysing attitudes and their contextual determinants longitudinally, it seems natural to assume that individuals become accustomed to specific levels of contextual factors but that they may react to rapid changes in these factors. Contact with out-groups may also be another reason why even large out-group sizes may not provoke hostile reactions. When out-groups are large, more in-group members are likely to have (positive) contact with out-group members, thus potentially reducing their prejudices (Wagner et al. 2006).

Another relevant question to ask is whether certain segments of the population are more affected by group conflict concerns than others. In particular, it is possible that those individuals who are, or perceive themselves to be, more directly in economic competition with out-group members are also more affected by the different group conflict measures than those who are less in competition (Kunovich 2013).

The foreign population in Finland has grown rapidly over the past two decades, even though it continues to be comparatively small relative to many other Northern and Western European countries. Whereas the proportion of the population who were foreign citizens was only 0.5% in 1990, it had grown to 3.8% by 2013. Moreover, using Statistics Finland's definition of foreign origin, approximately 5.5% of the population were of foreign origin in 2013. In terms of country of birth, the largest sending countries for immigrants in 2013 were the neighbouring countries (Former USSR, Russia, Estonia and Sweden), followed by refugee-sending countries (Somalia and Iraq in particular) as well as China and Thailand (Statistics Finland 2015).

Overall, the article aims to test group conflict theory as a predictor for variations in attitudes towards foreign workers in time and space by focusing on a longitudinal analysis of Finland 1990–2013 as well as a regional analysis for the years 1998–2013. As will be shown below, the period has seen a great deal of change in these attitudes. It also coincides with periods of both increasing and decreasing unemployment as well as changes in the rate at which the foreign

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population has grown, with the size itself growing over the whole period. All in all, these characteristics make it a good test case for group conflict theory. Moreover, longitudinal analyses have the benefit that many country-level factors potentially confounding the effect of the tested contextual factors are held constant. Therefore, the research aims to complement the cross-sectional cross-national studies, which are more prevalent in the literature to-date. However, due to the fact that the survey question used focuses on foreign workers, the results are not fully comparable to studies analysing other types of immigrants, though many similarities are likely to exist, as attitudes towards different types of immigrants tend to correlate.

Theory and previous research on contextual effects

Group conflict theory (also known as competitive threat theory) has been the main basis of much of the research on the contextual determinants of attitudes towards immigrants and immigration (Ceobanu & Escandell 2010). The theory proposes that groups are in zero-sum competition among each other and that hostile reactions towards out-groups arise when the in-group's collective economic or cultural interests are threatened (Blumer 1958; Blalock 1967). In particular, a larger out-group (in this case foreigners) is assumed to threaten the in-group's economic or cultural position and lead to greater conflict between groups, making groups more hostile towards each other. Other circumstances affecting competition between groups for scarce resources, such as the economic context, may also influence attitudes towards out-groups.

Despite a great deal of research on the topic, in particular over the past decade, the theory remains much disputed. A number of cross-national studies have found out-group size (most often immigrants) to have an effect on attitudes (e.g., Quillian 1995; Scheepers et al. 2002; Schneider 2008; Semyonov et al. 2006, 2008), though several studies have not found this effect (e.g., Hjerm 2007; Sides & Citrin 2007). The same is the case for economic conditions: some cross-national studies find economic conditions to matter (e.g., Schneider 2008; Semyonov et al. 2008), whereas others do not (e.g., Hjerm 2007). Meuleman and colleagues (2009) have put group conflict theory to a slightly more rigorous test by examining change in attitudes (from 2002/03 to 2006/07) and linking this to change in group conflict measures across 16 European countries. Their measures of change in immigrant group size and the economic context were both found to correlate relatively strongly with change in attitudes towards immigration.

One extension of this cross-national research has been to regional effects. A common finding in these studies is that larger out-group sizes either have no effect (e.g., Semyonov et al. 2004; Hjerm 2009) or actually have the opposite effect to that expected from group conflict theory (e.g., Hjerm 2009; Jolly & DiGiusto 2014; Wagner et al. 2006; Weber 2015). One exception to this is the analysis of Markaki and Longhi (2013), who find the size of immigrant population and immigrants' unemployment rate to be positively associated, but natives' unemployment rate to be negatively associated with higher perceptions of general threat from immigration (model with all these variables as well as others included simultaneously). However, it should be noted that they use relatively large regions (either at the so-called NUTS 1 or NUTS 2 levels of classification), which means that 12 out of the 24 countries analysed are composed of just one or two regions. Finland is one of the countries that is analysed as one region in their analysis.

Weber (2015) argues that the relative size of the out-group has a different effect at the national as compared to the regional level. At the national level, media exposure of immigrants and immigration is often negative. If high immigrant population sizes (or high rates of immigration) increase the presence of immigration-related topics in the media, then this may have a negative influence on attitudes towards migrants. However, at the regional level, it is more likely that personal contacts with immigrants are more influential and thus larger immigrant population sizes lead to more contact and more positive attitudes towards immigrants (see also Wagner et al. 2006; for a broader review of contact theory, see Pettigrew & Tropp 2006). Along similar lines, Schneider (2008) argues that the size of the immigrant-origin population at the national level has a non-linear effect on attitudes so that larger group sizes first increase and then decrease anti-immigrant attitudes. This is because after a certain threshold the positive effect of contact takes over from the negative effect of threat and conflict (see also Savelkoul et al. 2011, for regional support of the curvilinear effect).

In contrast to the research reported above, this article argues that the group conflict measures that matter are not the absolute size of the immigrant or foreign population (relative to the whole population) or the absolute level of the economic context but rather recent changes in these contexts. The reason for this is that people are likely to become habituated to new contexts but when these contexts change rapidly attitudes are also likely to reflect these changes, until the new situation has become accustomed to. Although some of the research reported above has analysed change in the proportion of immigrants as a predictor of attitudes without finding an effect (e.g., Hjerm 2009; Weber 2015), the argument advanced here is that these changes need to be more rapid than those tested previously. For example, Hjerm (2009) and Weber (2015) both use change over a ten-year period, whereas here the change over a one-year period is used.

Hypothesis 1: Recent changes in group conflict measures (size of the foreign population and unemployment) matter more than their absolute level for attitudes towards foreign workers.

The argument that recent changes matter more than absolute levels has also been advanced previously by Coenders and Scheepers (2008), who find recent increases in group conflict (immigration rates and unemployment) to be associated with stronger resistance to the social integration of immigrants, whereas their absolute level is not. Their analysis concerned West Germany over the period 1980–2000. To a large extent these results echo the authors' previous re-

sults concerning the Netherlands over the period 1979–1993, where they find higher immigration rates, larger increases in immigration rates and larger increases in unemployment rates to all increase support for ethnic discrimination (Coenders & Scheepers 1998; for an extension of this research until 2002 confirming the effect of immigration rates and changes in unemployment rates, see Coenders et al. 2008).

As shown by the research of Coenders and Scheepers, an appropriate test for the argument related to changes versus levels relies on longitudinal rather than cross-sectional data. Studying countries longitudinally has the advantage of implicitly controlling for many country-level fixed effects. Particularly in longitudinal studies it makes more sense to regard the rate of change in the size of the minority population as a significant factor in triggering a sense of group-interests. Previous research in Denmark (Togeby 1998) and the UK (Rothon & Heath 2003) has found falling levels of ethnocentrism and racial prejudice respectively, despite increasing minority populations. People seem to be willing to accept growing minority group sizes and possibly even rising rates of immigration. However, adverse reactions may come when the rate of change increases suddenly.

One relatively recent extension of the literature on attitudes towards immigrants has been the examination of the role of the media in influencing these attitudes. Hopkins (2010) argues that at times when there is a strong media salience of immigration in the national media, individuals living in places that have seen greater demographic changes (in terms of an increased proportion of immigrants) are more likely to react negatively and to increase their opposition towards immigration. Interestingly, somewhat contrary results are found in Spain (as compared to the US), as there national media reporting of immigration seems to have a greater effect for individuals living in regions with fewer immigrants (Schlueter & Davidov 2013). However, how immigrant group size and change in group size are related to each other in Spanish regions is not discussed by Schlueter and Davidov. Other research looking at media coverage at the national level has also found evidence that this may account for some of the yearly fluctuations in attitudes in Britain (Rothon & Heath 2003), Finland (Kilpi 2008), the Netherlands and possibly Denmark (van Klingeren et al. 2015), as well as during times of high immigration in Germany (Boomgaarden & Vliegenthart 2009).

In the context of this article, where media coverage is not included as a predictor of attitudes, it may be noted that the media is likely to act as an important source through which individuals obtain their information about the number of immigrants or foreigners in the country and changes therein. In a country such as Finland, where the proportion of immigrants remains quite small, most people will not have much contact with immigrants themselves and thus the media will be their main source of information. Despite the relatively large geographical size of Finland, its small population means that much of the media is national, and consequently much of the information about immigration will be based on the national rather than the regional level. Therefore, it may be expected that if group size (or changes therein) has an effect on attitudes then it is more likely to be group size as measured at the national level.

Hypothesis 2: Group conflict measures, particularly the size of the foreign population, matter more at the national rather than the regional level for attitudes towards foreign workers.

Two caveats for the testing of this hypothesis should be noted. The first is that the number of yearly observations is only nine. The second is that there may be a local context that has an effect on attitudes but it is not the regional one measured here.

Differences in attitudes across social groups

The main aim of this article is to test the role of contextual factors in explaining changes over time in attitudes towards foreign workers. This means that it is also necessary to control for those individual-level factors that lead to changes over time due to changes in the population composition. Compositional changes tend to be relatively slow and alone they are not expected to explain fluctuations over time to any great extent. However, differences between regions may be expected to be more strongly related to differences in population composition.

Researchers testing group conflict theory have also often drawn their hypotheses of individual-level differences from this theory, arguing that individuals who are more directly in competition with immigrants also tend to hold more negative attitudes towards them. This applies most directly to individuals with lower levels of education, those in the (manual) working class, and the unemployed. It may also be hypothesised that residents in urban areas are more in competition with foreign workers, given that immigrants tend to be concentrated in these areas, even after controlling for the regional proportion of foreigners. However, following on from the discussion in the previous section, a relatively larger size of the foreign population may not in itself increase negative attitudes, and more specifically, the greater contact with immigrants that urban residence is likely to imply may actually work to reduce negative attitudes.

It is also possible that the individual and contextual levels of group conflict work together so that in addition to holding more negative attitudes towards foreign workers, individuals who are personally more affected by competition with foreign workers are also more sensitive to the contextual measures of conflict or competition. Kunovich (2013) argues that occupations are the relevant context for competition "because this is where labour market competition between groups of workers with similar skill sets occurs" (p. 648, emphasis in original). He finds in the US context the percentage of Mexican immigrants and the projected employment growth in an occupation to influence threat perceptions. For the purpose of this research, the primary determinant of being in competition with foreign workers was judged to be the level of education. Because immigrants in Finland tend to mostly compete for jobs that require a low level of education, it is mainly individuals with lower levels of education who face this competition.

Table 1
Descriptive overview of contextual variables.

Variable	Mean yearly value	Standard deviation	Mean region-year value	Standard deviation
Foreign citizens (%)	1.88	0.86	1.62	0.96
Change in foreign citizens (percentage points)	0.15	0.07	0.11	0.09
Unemployment (%)	12.60	4.76	13.53	4.12
Change in unemployment (percentage points)	0.48	2.50	-0.37	1.43

Yearly variables 1989–2011 (N=13); region-year variables 1997–2011 (N=162).

Hypothesis 3: Group conflict measures matter more for attitudes towards foreign workers of individuals who are more directly in competition with them, in other words those with lower levels of education.

Data and methods

The data comes from surveys commissioned approximately biennially by the Centre for Finnish Business and Policy Studies (EVA) and conducted by Yhdyskuntatutkimus and more recently also Taloustutkimus (EVA 2013). The survey series, known as the EVA Survey on Finnish Values and Attitudes, has been run since 1984 and consists of around 200 questions at a time. Some of the questions are repeated more or less every time whereas others only feature once or twice. The survey usually has a themed set of questions as well as the more general ones. The repeated questions keep to the same wording every time they are asked and their order and placement in the survey are also kept as constant as possible.

The survey used to be conducted as a self-completed postal questionnaire and for the most recent (2013) survey an internet panel was used. In addition, in 2010 the sample was split between these two data collection methods. The population from which the sample is drawn is the whole registered population between the ages of 18 and 70, excluding the Åland islands. The respondents have been reported to represent the population well in terms of demographic, regional, socio-economic, and political indicators, though with some over-representation of highly educated individuals (Haikonen & Kiljunen 2003).[1]

Dependent variable

The question measuring attitudes towards foreign workers used here is the statement "If more foreigners worked in Finland, our country would benefit from the useful international influences they bring".[2] The five response categories are strongly agree, agree, difficult to say, disagree, and strongly disagree. For the analyses, these categories were collapsed into two in order to contrast those who view foreign workers negatively (disagree and strongly disagree with the statement) with those who are indifferent or view them positively (the other three response categories). The primary advantage of the statement is that it has been used in the survey since 1986 with exactly the same wording each year.

The statement seems to measure a broad range of attitudes towards foreign workers in Finland. On the one hand, foreign workers may represent an economic threat to the native population in terms of competition for jobs. On the other hand, the reference to "useful international influences" may also tap feelings of cultural threat. Indeed, it seems to correlate well both with statements that ask specifically about cultural influences ("Foreigners are a source of enrichment to Finland's culture and spiritual climate") and those that ask more specifically about economic threats ("Finland's working life needs more and more immigrants"). These statements are from the 2000 survey, which included a battery of immigration-related statements. The appendix table shows polychoric correlations (five response categories for all statements) between the statement used here and some of the statements from the 2000 survey.

Contextual variables

The two contextual levels analysed in this research are the national and regional, using yearly measures at both levels. Finnish regions have seen many changes over the years, and the most recent major change was implemented from the beginning of 1994, but in the surveys only from 1998 onwards. In this most recent change, Finland was divided into 20 regions (maakunta), which are Finland's NUTS 3 areas in the European Union's geographical classification. From the beginning of 2011, Eastern Uusimaa was merged with Uusimaa. The regional analyses are therefore based on 18 regions (as the Åland islands have been excluded from the EVA surveys) and for the time period 1998–2013.

The contextual independent variables are based on official statistics published by Statistics Finland (2015). To measure the size of the foreign population, the percentage of the population with a foreign citizenship was used, and for change therein, the percentage point change over a one-year period. Likewise, to measure the economic context, the percentage unemployed in the age group 18–64 was used as well as the percentage point change over a one-year period. Descriptive statistics for these variables are shown in Table 1.

In general the measurement of these contextual variables refers to the year prior to the survey and the change from two years prior to the year prior. The previous year was assumed to be the nearest time point that people would have information from and all contextual measures provided by Statistics Finland refer to the last week of the year. From 2009 onwards the timing of the survey changed from the end of the year (and spanning the beginning of the following year) to

Table 2
Descriptive overview of individual-level control variables.

Variable	Mean 1990–2013	Mean 1998–2013
Education		
Up to vocational secondary	44.6	40.6
Tertiary education without matriculation	14.3	14.7
Matriculation (with and without tertiary)	24.1	26.1
University degree	17.0	18.6
Socioeconomic group		
Non-manual workers, self-employed and farmers	39.8	39.1
Manual workers	25.0	26.1
Unemployed	6.1	5.4
Student	9.0	8.9
Other	20.2	20.6
Cohort		
Born approx. 1916–40	14.7	9.0
Born approx. 1941–65	48.4	48.6
Born approx. 1966–95	36.9	42.4
Municipality has over 80,000 residents	34.7	37.1
Female	51.2	51.9
Internet respondent	14.5	21.5
Individuals	28,135	18,946

the beginning of the year. In order to keep the length of time between the survey and the measurement of the context as constant as possible, the measurement of the context is also shifted to two years prior to the survey from 2009 onwards. As an example, whereas the unemployment rate measure for the 2006 survey refers to the situation at the end of 2005, the same measure for the 2009 survey refers to the situation at the end of 2007.[3] Because yearly information for these measures is only available from 1987 onwards, 1989 is the first year for which the change measures can be calculate, and thus the surveys of 1986 and 1988 have been left out of the analyses.

With regard to the measure used for the size of the foreign population, previous research has tended to advocate a number of different approaches, with many arguing for the use of the size of the non-Western (or non-EU) population. For the purposes of this research, the number of foreign citizens is the one with the longest available time series. Foreign citizens are also the most straightforward reference group to the statement used as the dependent variable. Nevertheless, other variables, including measures such as non-EU citizens and immigrants with origins outside the EU, were tested and the results are in line with those presented here.

An alternative measure for the unemployment rate was based on the unemployment rate for those with the same educational level as the respondent. As the results were substantively the same regardless of the indicator used, the overall unemployment rate for the population aged 18–64 was favoured due to a slightly greater explained variance.

Individual-level independent variables

Education is measured in four categories: (1) primary and secondary education up to vocational secondary education; (2) lowest-level tertiary education (ISCED 5A) without a matriculation examination (i.e. no general upper secondary education); (3) matriculation examination (general upper secondary), whether or not followed by lowest-level tertiary education; and (4) university degree. The proportions in each category for this variable as well as the other five control variables are shown in Table 2. Preliminary results suggested that there is a great divide within the lowest-level tertiary educated based on whether they have also completed general upper secondary education or not. This may be due to differences in the types of courses accessed and thus the occupations worked in or the so-called 'liberalising effects of education', which means that individuals with longer educational careers are assumed to have been better socialized into being more accepting towards out-groups.

Five socioeconomic groups are distinguished: (1) non-manual workers, self-employed and farmers; (2) manual workers; (3) unemployed; (4) students; and (5) others, including retired and stay-at-home parents. These categories are based on self-evaluations of the respondents, and the first category has been collapsed from many separate categories based on preliminary analyses and for reasons of model parsimony.

To control for compositional change, cohorts are used rather than age. The three cohorts identified are 1916–40, 1941–65, and 1966–95. It should, however, be noted that the survey asks for age in categories, which means that cohorts are not fully identified and include some overlap.

Urbanicity is based on a binary variable asking the respondents whether their municipality has more than 80,000 residents.

The models also control for gender.

Due to the changes in data collection procedure, a dummy variable was included to control for whether the respondent was from the internet panel or the postal questionnaire. Only in 2010 were both data collection methods used; in 2013 only the internet panel was used and in all other years only a postal questionnaire was used. The data for 2013 also comes with individual-level weights. Therefore, in the pooled analyses estimating individual-level effects (as well as the descriptive analysis of yearly fluctuations), these weights were applied. In addition all years were weighted equally in these analyses. In the multilevel analyses, described in more detail below, no weights were applied.

Respondents with missing data on any of the variables used were excluded from the analysis. In total 1,539 respondents were excluded due to missing data, which left 28,135 respondents for the years 1990–2013. For the analyses using regions as another contextual level, which span the years 1998–2013, the number of respondents excluded was 1,131 and the number analysed was 18,946.

Methods

In the first stage of analysis, the data from these repeated cross-sectional surveys was pooled and the individual-level variables introduced into the models. Logistic regression is used and the results for the individual-level variables (as well as controls for year and region) are presented as average marginal effects. When multiplied by 100, these coefficients refer to average percentage point differences across the whole population. Despite the multilevel nature of the data, the results for the individual-level variables are very similar regardless of whether a one-level or a multilevel model is used.

In the second stage, multilevel logistic regression models are used to assess the effect of the contextual variables. First, two-level models are used to analyse temporal fluctuations over the period 1990–2013. National-level contextual variables are introduced into these models to test Hypothesis 1 (levels versus change).

In order to take the regional context into consideration, either three-level models or crossed effects models are necessary. Two different three-level model set-ups are used here so that temporal fluctuations and regional differences are analysed separately. The results were also tested with crossed effects models, and the main conclusions drawn from the models remained the same (not shown).

Therefore, to model temporal fluctuations (1998–2013) a three-level model with region-years at level 2, years at level 3 and fixed effects for regions is used. In this set-up regions are nested within years, and the fixed effects for regions mean that the analysis focuses on change within regions. In these models national and regional variables are introduced simultaneously in order to test Hypothesis 2 (national versus regional context). As the regional measures contribute to the national ones, the regional variables are redefined in these models as being deviations from the national ones. The models also serve as an additional test of Hypothesis 1 (levels versus change).

In order to assess regional differences and provide a different test for both Hypotheses 1 and 2, a three-level model with year-regions at level 2, regions at level 3 and fixed effects for years is run. Years are thus nested within regions, and the fixed effects for years mean that the analysis focuses on differences between regions (i.e. within years). In these models only regional-level contextual variables are used.

Due to the small number of observations at the higher levels, in particular for years, the contextual variables are tested separately or with at most two introduced into the model simultaneously.[4]

In the final stage, a cross-level interaction term between the contextual-level measure found to be significant and the respondent's education level is introduced into the multilevel models in order to test Hypothesis 3. The results for this interaction are shown as predicted proportions.

Results

The yearly average levels of negative attitudes towards foreign workers can be seen in Figure 1. The two peaks in this figure are for the years 1992 and 2011, when slightly over 40 % of the population are estimated to have held these negative attitudes. These two periods also correspond to economic downturns. It is also interesting to note that 2011 is the year when the anti-immigration True Finns party (now officially the Finns Party) rose to be the third largest party in the parliamentary elections with just over 19 % of the vote. The period 1992–2006 seems to have been one of relatively steady decline, with the lowest level of negative attitudes corresponding to approximately 27 % of the population being against more foreign workers.

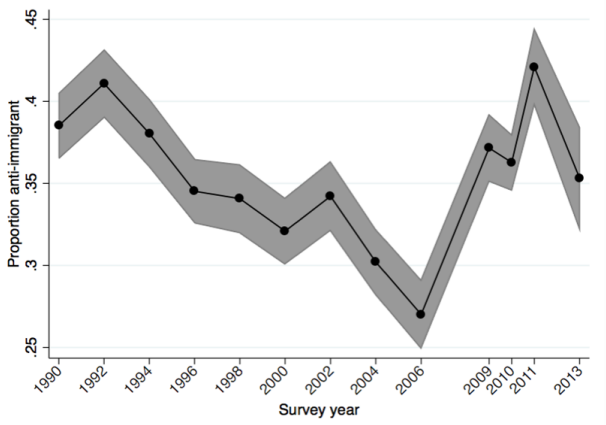

Figure 1. Proportion of the Finnish population with negative attitudes towards foreign workers 1990–2013 (95 % confidence intervals around estimates).

Table 3
Individual-level predictors of negative attitudes towards foreign workers.

	Model 1		Model 2		Model 3		Model 4	
1990	0.044**	(0.015)	0.028*	(0.014)				
1992	0.070***	(0.015)	0.058***	(0.014)				
1994	0.040**	(0.015)	0.031*	(0.014)				
1996	0.005	(0.014)	0.001	(0.014)				
1998	*ref.*		*ref.*		*ref.*		*ref.*	
2000	-0.020	(0.015)	-0.022	(0.014)	-0.022	(0.015)	-0.024+	(0.014)
2002	0.001	(0.015)	-0.002	(0.015)	-0.002	(0.015)	-0.004	(0.015)
2004	-0.039**	(0.015)	-0.041**	(0.014)	-0.038**	(0.015)	-0.042**	(0.014)
2006	-0.071***	(0.015)	-0.066***	(0.015)	-0.071***	(0.015)	-0.068***	(0.015)
2009	0.031*	(0.015)	0.042**	(0.015)	0.033*	(0.015)	0.038**	(0.015)
2010	0.022	(0.014)	0.041*	(0.018)	0.024+	(0.014)	0.035*	(0.018)
2011	0.080***	(0.016)	0.089***	(0.016)	0.081***	(0.016)	0.084***	(0.016)
2013	0.013	(0.019)	0.048+	(0.026)	0.015	(0.019)	0.043+	(0.026)
Uusimaa	*ref.*		*ref.*		*ref.*		*ref.*	
Finland Proper					0.068***	(0.014)	0.043**	(0.014)
Satakunta					0.105***	(0.019)	0.055**	(0.019)
Tavastia Proper					0.078***	(0.020)	0.033+	(0.020)
Pirkanmaa					0.062***	(0.014)	0.035*	(0.014)
Päijät-Häme					0.065**	(0.022)	0.024	(0.021)
Kymenlaakso					0.096***	(0.021)	0.040+	(0.021)
South Karelia					0.076**	(0.026)	0.022	(0.026)
Southern Savonia					0.020	(0.023)	-0.028	(0.022)
Northern Savonia					0.055**	(0.019)	0.019	(0.019)
North Karelia					0.034+	(0.021)	-0.013	(0.021)
Central Finland					0.051**	(0.017)	0.013	(0.017)
Souhern Ostrobothnia					0.088***	(0.021)	0.035+	(0.021)
Ostrobothnia					0.062*	(0.029)	0.017	(0.028)
Central Ostrobothnia					0.113***	(0.032)	0.058+	(0.032)
Northern Ostrobothnia					0.021	(0.016)	-0.010	(0.017)
Kainuu					0.089**	(0.032)	0.034	(0.032)
Lappland					0.040+	(0.022)	-0.006	(0.021)
Up to vocational secondary			*ref.*				*ref.*	
Tertiary education without matriculation			-0.052***	(0.009)			-0.040***	(0.012)
Matriculation (with and without tertiary)			-0.094***	(0.009)			-0.074***	(0.010)
University degree			-0.195***	(0.009)			-0.178***	(0.011)
Non-manual workers, self-employed and farmers			*ref.*				*ref.*	
Manual workers			0.032***	(0.008)			0.037***	(0.010)
Unemployed			0.054***	(0.013)			0.061***	(0.017)
Student			-0.073***	(0.012)			-0.072***	(0.014)
Other			-0.012	(0.009)			-0.019+	(0.011)
Born approx. 1916–40			0.008	(0.010)			0.002	(0.014)
Born approx. 1941–65			*ref.*				*ref.*	
Born approx. 1966–95			0.040***	(0.007)			0.034***	(0.009)
Municipality has over 80,000 residents vs. under			-0.044***	(0.007)			-0.029***	(0.009)
Female vs. male			-0.051***	(0.006)			-0.051***	(0.007)
Internet respondent			-0.025	(0.017)			-0.022	(0.017)
Individuals	28,135		28,135		18,946		18,946	

Pooled cross-sectional analyses using logistic models. Results as average marginal effects. Individual weights for 2013 used, all years weighted equally.
**** p<0.001, ** p<0.01, * p<0.05, + p<0.10*

Table 4
National determinants of the temporal variation in negative attitudes towards foreign workers 1990–2013.

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Foreign citizens			0.016				
			(0.064)				
Change in foreign citizens				1.971***			1.674**
				(0.550)			(0.620)
Unemployment					-0.006		
					(0.011)		
Change in unemployment						0.039*	0.016
						(0.018)	(0.017)
Individuals	28,135	28,135	28,135	28,135	28,135	28,135	28,135
Years	13	13	13	13	13	13	13
Rho	0.009	0.010	0.009	0.004	0.009	0.007	0.004
Var. at level 2 (years)	0.031	0.032	0.032	0.015	0.031	0.023	0.014
% var. explained	–	-1.0	-0.6	53.4	1.0	28.1	56.5

Multilevel logistic regressions with years at level 2, all independent variables at national (yearly) level. Results as log odds ratios. All models starting from Model 1 control for all individual-level variables except regions (see Table 2).
**** p<0.001, ** p<0.01, * p<0.05, + p<0.10*

To the extent that they can be compared, these trends also accord with those measured in surveys conducted by Jaakkola (2009). She reports the following percentages for individuals wanting to reduce the number of foreign job seekers that Finland should accept: 44 % in 1987, 61 % in 1993, 42 % in 1998, 38 % in 2003, and 26 % in 2007.

Individual-level regressions

Table 3 presents the results from pooled cross-sectional analyses with the first two models spanning the years 1990–2013 and the second two models only spanning the years with the regional identifiers, in other words 1998–2013. The first model of each pair includes the contextual variables (years and in the second set also regions), whereas the second model introduces the individual-level controls.

The individual-level effects in both models show consistent results, although the size of some of the covariates is slightly different in the two. Most of the results are also consistent with previous research. The higher the education level, the lower the likelihood of holding negative attitudes towards foreign workers, with a maximum difference of almost 20 percentage points. The unemployed tend to be more likely to hold negative attitudes (5–6 percentage points difference compared to non-manual workers), whereas students are the least likely (7 percentage points difference). The youngest cohort has slightly higher levels of negative attitudes compared to the two older ones (3–4 percentage points difference). This may be seen as somewhat surprising but possibly relates to the fact that the youngest cohort tended to enter the labour market during a period of unprecedentedly high unemployment (most of the 1990s), which in previous research has been shown to affect out-group attitudes (Coenders & Scheepers 1998, 2008). Residents of large towns have less negative attitudes than similar individuals in smaller municipalities (3–4 percentage points difference) as are women compared to men (5 percentage points difference).

Models 1 and 3 essentially reproduce the yearly differences that were shown in Figure 1. Models 2 and 4 then illustrate how much these change when individual-level factors are controlled for, with the overall conclusion being that they change relatively little, as expected. However, some of the decline from the relatively high levels of the early 1990s can be attributed to changes in population composition but not much of the change since the mid- to late 1990s. Even after controlling for population composition, 2011 continues to stand out as the year with the highest level of negative attitudes towards foreign workers and 2006 as that with the lowest.

With regard to regional differences, slightly more of the differences can be explained by population composition. In particular, whereas the first model (Model 3) shows the Uusimaa region (around Helsinki) to be the least hostile to foreign workers – with some non-significant differences – in the second model only a handful of regions continue to have significantly higher levels of hostility. The maximum difference between regions is reduced from over 11 percentage points (between Uusimaa and Central Ostrobothnia) to approximately 8.5 percentage points (between Southern Savonia and Central Ostrobothnia).

Multilevel regressions

Table 4 shows the results of multilevel models that analyse the years 1990–2013 and include years at level 2 of the model. The first model (Model 0) is the so-called empty model and does not include any covariates. This model suggests that rather little of the variance is actually between years (very small rho); despite the relatively substantial yearly fluctuations seen in Figure 1, almost all of the variance is between individuals (within years). In other words,

Table 5
National and regional determinants of the temporal variation in negative attitudes towards foreign workers 1998–2013.

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5
National: foreign citizens			0.212*			
			(0.103)			
Regional: foreign citizens			0.007			
			(0.060)			
National: change in foreign citizens				2.376***		
				(0.634)		
Regional: change in foreign citizens				0.074		
				(0.328)		
National: unemployment					-0.025	
					(0.027)	
Regional: unemployment					0.025	
					(0.022)	
National: change in unemployment						0.071+
						(0.043)
Regional: change in unemployment						0.023
						(0.038)
Individuals	18,946	18,946	18,946	18,946	18,946	18,946
Region-years	162	162	162	162	162	162
Years	9	9	9	9	9	9
Var. at level 2 (region-years)	0.028	0.003	0.003	0.002	0.001	0.002
% var. explained	–	88.7	90.5	91.4	95.3	88.9
Var. at level 3 (years)	0.029	0.037	0.024	0.012	0.034	0.028
% var. explained	–	-27.9	15.9	56.9	-17.9	4.5

Multilevel logistic regressions with region-years at level 2, years at level 3. Results as log odds ratios. All models starting from Model 1 control for all individual-level variables (see Table 2).
**** p<0.001, ** p<0.01, * p<0.05, + p<0.10*

with regard to the influence of individual-level measures, the fact that the data come from a number of years does not make a difference. Model 1 includes the same individual-level controls as Table 3 (not year or region) and confirms the results from Model 2 in Table 3 in that individual-level factors explain very little (or none) of the variance between years. The remaining models in the table then include each of the national-level yearly predictors either on their own (Models 2–5) or as a pair (Model 6). The results suggest that neither the size of the foreign population (Model 2) nor the level of unemployment (Model 4) have an effect on the level of anti-foreign-worker sentiment. However, on their own, changes in both of these measures do have an effect (Models 3 and 5). Moreover, it seems that it is particularly change in the foreign population that explains much of the observed yearly fluctuations in attitudes, as the explained variance at level 2 is approximately 53 % in the model including only this measure (Model 3) and does not increase much when change in unemployment is included in the model (Model 6).

Table 5 presents the results of three-level models modelling temporal fluctuations, taking into account regions as fixed effects. In this case the analysis is limited to the years 1998–2013 and the level 2 observations are no longer just years but region-years; years are now modelled at level 3. The results are relatively similar to those above. In this case, individual-level variables substantially increase yearly variation at the national level, meaning that compositional changes at the national level have attenuated some of the temporal fluctuations that would otherwise have been expected. The size of the foreign population at the national level has a slight effect on attitudes but not at the regional level (Model 2), and the level of unemployment does not have an effect on either level (Model 4). As in the two-level models, change in the size of the foreign population has an effect at the national level, but not at the regional level (Model 3). Moreover, change in the unemployment rate at the national level potentially has an effect, but not that at the regional level (Model 5). The main contrast to the two-level models is therefore the significance of the size of the foreign population. However, in a model together with change in foreign citizens (not shown), it loses its significance whereas the result for change remains unchanged. It should also be noted that if the two change measures are modelled together (not shown), the results are much the same as for the two-level models: change in foreign citizens remains unchanged whereas the estimate for change in unemployment becomes non-significant. Overall, the regional-level does not seem to explain temporal trends whereas national-level change in foreign citizens explains a substantial part of this (explained variance at the yearly level in Model 3 is 57 % and this is almost solely due to the national-level variable rather than the regional-level one).

Table 6
Determinants of the regional variation in negative attitudes towards foreign workers (1998–2013).

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5
Foreign citizens			-0.011			
			(0.021)			
Change in foreign citizens				-0.029		
				(0.253)		
Unemployment					-0.003	
					(0.007)	
Change in unemployment						0.038
						(0.037)
Individuals	18,946	18,946	18,946	18,946	18,946	18,946
Year-regions	162	162	162	162	162	162
Regions	18	18	18	18	18	18
Var. at level 2 (year-regions)	0.042	0.004	0.004	0.004	0.004	0.004
% var. explained	–	90.3	89.4	90.0	89.9	91.0
Var. at level 3 (regions)	0.007	0.003	0.003	0.003	0.003	0.003
% var. explained	–	55.4	61.4	56.7	55.9	60.2

Multilevel logistic regressions with year-regions at level 2 and regions at level 3, all independent variables at regional (yearly) level. Results as log odds ratios. All models starting from Model 1 control for all individual-level variables (see Table 2).
**** p<0.001, ** p<0.01, * p<0.05, + p<0.10*

With regard to differences between regions, shown in Table 6, the modelling strategy is reversed from the previous one, with regions now at level 3 and years as fixed effects. These results suggest that over half of the variance between regions is due to compositional differences (Model 1, explained variance at level 3 55 %) and that none of the contextual measures tested here have a significant effect (Models 2–5). The only contextual variable that seems to improve explained variance is the size of the foreign population (Model 2, explained variance 61 %). The non-significant estimate for this variable is negative, suggesting that regions with a greater proportion of foreign citizens may be less likely to view foreign workers negatively.

In the final step, a cross-level interaction between education (at the individual level) and the change in foreigners (at the national level) is tested to see whether individuals more directly in competition with foreign workers are more likely to react to this group conflict measure. Because change in foreigners was found to have an effect at the national rather than the regional level, we go back to the modelling strategy used in Table 4 and use all years 1990–2013, modelling years at level 2. However, the results remain similar if a three-level model and data for 1998–2013 are used. The results suggest that there is indeed a strong negative interaction so that change in foreigners has less of an effect for individuals with higher levels of education, in particular those who have a university degree. This is illustrated in Figure 2, which shows the slope for individuals with up to vocational secondary education to be the steepest and that for university-educated individuals to be almost non-existent, indicating that the change in foreign citizens does not have an effect on the attitudes of this group.[5] The two other groups lie somewhere in-between and the difference in slopes compared to the lowest educated group is not statistically significant for individuals with a completed matriculation examination (with or without tertiary education) and it is significant only at the 0.10 level for the group with tertiary education without a matriculation examination. For individuals with the lowest level of education, a change in the yearly increase in foreign citizens of 0.1 percentage points corresponds to an estimated average increase of 6 percentage points in the proportion with negative attitudes towards foreign workers.

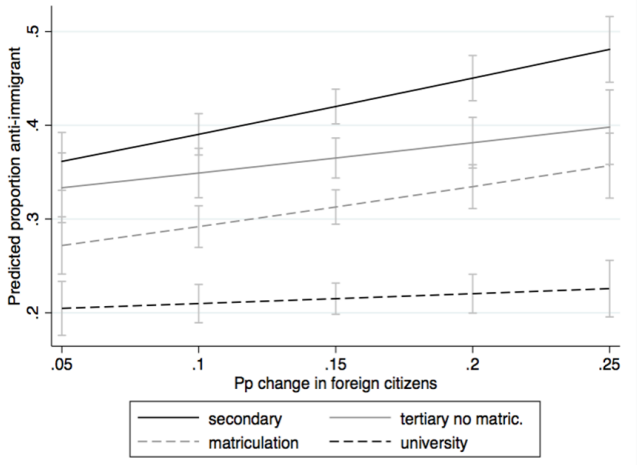

Figure 2. Predicted proportion with negative attitudes towards foreign workers by education level and yearly percentage point change in the size of the foreign population (95 % confidence intervals around estimates).

Discussion and conclusion

The aim of this article has been to explain temporal and regional differences in attitudes towards foreign workers in Finland. The statement used seems to tap both cultural and economic threats potentially posed by increasing numbers of foreign workers. Two of the main questions the article has sought to answer are whether measures related to group conflict, namely the size of the foreign population and the unemployment rate, affect these attitudes at their absolute level or in terms of rates of change (Hypothesis 1), and whether these measures have an effect at the national or the regional level (Hypothesis 2).

The period 1990–2013 was one of both increasing and decreasing negative attitudes, making it an interesting one to study. At first glance it seems that the peaks in negative sentiment coincided with the two depressions that took place during this period: in the early 1990s and again from around 2008. However, the results from the models suggest that a much better predictor has been the rate of change in the relative size of the foreign population. Nevertheless, changes in the unemployment rate have also potentially had a role to play in this process.[6] A stronger role for the economic context could have been expected given that attitudes towards foreign workers were measured rather than immigrants in general. The weak results may therefore be due to the dependent variable also referencing possible cultural threats.

The contextual results provide support for a modified version of group conflict theory: the rate of change in the potential for group conflict influences attitudes, not its absolute level, supporting Hypothesis 1. Even though only attitudes towards foreign workers have been measured here, it can be assumed that attitudes towards other out-groups would also be better explained by change measures. Previous longitudinal research from other country contexts has also found that attitudes towards out-groups may become more positive over time even as the size of the out-group increases (e.g., Rothon & Heath 2003; Togeby 1998). However, as the research here has shown, the process of ameliorating attitudes may become disrupted when sudden changes happen.

The results also suggest that the regional level does not matter for attitudes towards foreign workers, supporting Hypothesis 2. This was found to be the case for differences in attitudes both over time as well as across space. On the other hand, over half of the regional variation can be explained by compositional differences. The question of why it is national-level change in foreigners rather than regional change is therefore a pertinent one. One reason behind these findings may be people's knowledge base: information about changes in the size of the foreign population are likely to come from the media, and the media is more likely to report these at the national rather than regional level, at least in the Finnish context.

As mentioned above, it remains possible that there is a local context that has an effect on attitudes but it is not the regional one measured here. However, this question is beyond the scope of this article. Moreover, the amount of temporal variation explained by the national level seems substantial enough to say that, although a local context could also play an additional role, the national context certainly plays a large one.

One of the arguments for more positive out-group attitudes despite, or even due to, increasing out-group size is based on contact theory (Allport 1954). There is no measure for contacts in the data used here but it is possible that a greater propensity of urban residents to be in contact with foreigners may be why they are less likely to hold negative attitudes about foreign workers, given the residential concentration of foreigners in urban areas. On the basis of the more traditional version of group conflict theory, we should find urban residents to hold more negative attitudes than rural ones, but this is not found to be the case in any of the models. Moreover, the slight suggestion that at the regional level, larger out-group sizes may reduce negative attitudes also supports this. These findings lend further support to the main findings of this article: relatively larger foreign population sizes do not affect attitudes negatively, and change in size has an effect at the national rather than the local level.

There also seems to be a large element of self-interest with regard to group conflict. This can be seen not only in the way that the individual-level predictors affect attitudes but also in the cross-level interaction: the lower the education level is the more sensitive are attitudes to the rate of out-group size change, supporting Hypothesis 3. Education level has been taken in this research to be the best predictor of the propensity of being in competition with foreign workers for jobs. Another test of this assumption is whether a more personal (change in) unemployment risk better predicts attitudes than the change in general unemployment levels. In this case the two could not be disentangled from each other as unemployment rates – despite varying according to education level – have tended to change at similar rates.

Overall, the results suggest an optimistic scenario with regard to the future: attitudes towards foreign workers need not become more negative even if more foreigners arrive in the country. However, it is better if immigration remains steady, in particular during times of rising unemployment levels.

Endnotes

[1]Yearly total number of respondents and response rates: 1990: 2,426, 53.9%; 1992: 2,367, 52.6%; 1994: 2,266, 50.4%; 1996: 2,409, 53.5%; 1998: 2,186, 48.6%; 2000: 2,241, 49.2%; 2002: 2,133, 47.4%; 2004: 2,264, 45.3%; 2006: 1,923, 42.7%; 2009: 2,346, response rate not reported; 2010: 1,124 through the postal questionnaire, 2,048 through the internet panel, response rate not reported for either, questionnaire was only in Finnish (normally in both Finnish and Swedish); 2011: 1,918, response rate not reported; 2013: 2,023 all through internet panel, 35%, only in Finnish.

[2]The statement in Finnish is "Ulkomaalaisten lisääntyvä työskentely Suomessa toisi maahamme hyödyllisiä kansainvälisiä vaikutteita."

[3]Using a more recent measure for the contextual measures, in other words the same year for surveys up to 2006 and the previous year for those from 2009, produces substan-

tively the same results, just slightly weaker (results available from the author on request). The results are probably weaker because these contextual measures come from a time that is after data collection for many respondents in the surveys up to 2006. In general it may be assumed that people react to the most recent information that they have available.

[4]The models with years at level 2 were run with Stata 13's xtlogit command, whereas the three-level models and crossed effects models were run with Stata 13's meqrlogit command. For further information about multilevel models, including crossed models, see Rabe-Hesketh & Skrondal (2008).

[5]These results refer to a model in which the interaction has been added to Model 3 from Table 4, where only change in foreign citizens is included at level 2. Margins run after Stata 13's meqrlogit command.

[6]Supplementary analyses (not shown) further suggest that there may be an interaction between these two group-conflict measures so that change in the size of the foreign population has a greater effect during times (and in places) where the unemployment rate rises rapidly. However, due to the small number of cases, these results are only suggestive and have thus been left out.

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References

Allport, G. W. (1954). *The nature of prejudice*. Cambridge, Mass: Addison-Wesley.

Blalock, H. M. (1967). *Toward a theory of minority-group relations*. New York: Wiley.

Blumer, H. (1958). Race prejudice as a sense of group position. *The Pacific Sociological Review*, *1*, 3–7.

Boomgaarden, H. G., & Vliegenthart, R. (2009). How news content influences anti-immigration attitudes: Germany, 1993–2005. *European Journal of Political Research*, *48*, 516–542.

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*, 309–328.

Coenders, M., Lubbers, M., Scheepers, P., & Verkuyten, M. (2008). More than two decades of changing ethnic attitudes in the Netherlands. *Journal of Social Issues*, *64*, 269–285.

Coenders, M., & Scheepers, P. (1998). Support for ethnic discrimination in the Netherlands 1979–1993: Effects of period, cohort, and individual characteristics. *European Sociological Review*, *14*, 405–422.

Coenders, M., & Scheepers, P. (2008). Changes in resistance to the social integration of foreigners in Germany 1980–2000: Individual and contextual determinants. *Journal of Ethnic and Migration Studies*, *34*, 1–26.

EVA. (2013). Data: EVA Survey on Finnish Values and Attitudes 1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004, 2006, 2009, 2010, 2011, 2013 [computer files]. Lempäälä: Yhdyskuntatutkimus [data collection and producer for all postal questionnaire data] & Helsinki: Taloustutkimus [data collection and producer for all internet-panel data]. Helsinki: Centre for Finnish Business and Policy Studies (EVA) [producer]. Tampere: Finnish Social Science Data Archive [distributor], 2000–2013.

Haikonen, J., & Kiljunen, P. (2003). *Mitä mieltä, suomalainen? EVAn asennetutkimusten kertomaa 1984–2003 [What do you think, Finn? Findings from the EVA attitude surveys 1984–2003].* (Tech. Rep.). Helsinki: EVA & Taloustieto Oy.

Hjerm, M. (2007). Do numbers really count? Group threat theory revisited. *Journal of Ethnic and Migration Studies*, *33*, 1253–1275.

Hjerm, M. (2009). Anti-immigrant attitudes and cross-municipal variation in the proportion of immigrants. *Acta Sociologica*, *52*, 47–62.

Hopkins, D. J. (2010). Politicized places: Explaining where and when immigrants provoke local opposition. *American Political Science Review*, *104*, 40–60.

Jaakkola, M. (2009). *Maahanmuuttajat suomalaisten näkökulmasta. Asennemuutokset 1987–2007 [Immigrants from a Finnish Perspective. Attitude changes 1987–2007].* Helsinki: City of Helsinki Urban Facts.

Jolly, S. K., & DiGiusto, G. M. (2014). Xenophobia and immigrant contact: French public attitudes toward immigration. *Social Science Journal*, *51*, 464–473.

Kilpi, E. (2008). *Prejudice as a response to changes in competitive threat: Finnish attitudes towards immigrants 1986–2006*. Working paper 2008–01. Department of Sociology, University of Oxford.

Kunovich, R. M. (2013). Labor market competition and anti-immigrant sentiment: Occupations as contexts. *International Migration Review*, *47*, 643–685.

Markaki, Y., & Longhi, S. (2013). What determines attitudes to immigration in European countries? An analysis at the regional level. *Migration Studies*, *1*, 311–337.

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*, 352–365.

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*, 751–783.

Quillian, L. (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.

Rabe-Hesketh, S., & Skrondal, A. (2008). *Multilevel and longitudinal modeling using Stata* (2nd ed.). College Station: Stata press.

Rothon, C., & Heath, A. F. (2003). Trends in racial prejudice. In A. Park, J. Curtice, K. Thomson, J. Lindsey, & C. Bromley (Eds.), *British social attitudes: The 20th report – Continuity and change over two decades.* London: Sage.

Savelkoul, M., Scheepers, P., Tolsma, J., & Hagendoorn, L. (2011). Anti-Muslim attitudes in the Netherlands: Tests of contradictory hypotheses derived from ethnic competition theory and intergroup contact theory. *European Sociological Review*, *27*, 741–758.

Scheepers, P., Gijsberts, M., & Coenders, M. (2002). Ethnic exclusionism in European countries. Public opposition to civil rights for legal migrants as a response to perceived ethnic threat. *European Sociological Review*, *18*, 17–34.

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

Schneider, S. L. (2008). Anti-immigrant attitudes in Europe: Outgroup size and perceived ethnic threat. *European Sociological Review*, *24*, 53–67.

Semyonov, M., Raijman, R., & Gorodzeisky, A. (2006). The rise of anti-foreigner sentiment in European societies, 1988–2000. *American Sociological Review*, *71*, 426–449.

Semyonov, M., Raijman, R., & Gorodzeisky, A. (2008). Foreigners' impact on European societies: Public views and perceptions in a cross-national comparative perspective. *International Journal of Comparative Sociology*, *49*, 5–29.

Semyonov, M., Raijman, R., Yom-Tov, A., & Schmidt, P. (2004). Population size, perceived threat, and exclusion: A multiple-indicators analysis of attitudes toward foreigners in Germany. *Social Science Research*, *33*(4), 681–701.

Sides, J., & Citrin, J. (2007). European opinion about immigration: The role of identities, interests and information. *British Journal of Political Science*, *37*, 477–504.

Statistics Finland. (2015). Statistics Finland's PX-Web StatFin Database. Available in fin: http://pxweb2.stat.fi/database/StatFin/databasetree_fi.asp and in eng: http://pxweb2.stat.fi/database/StatFin/databasetree_en.asp.

Togeby, L. (1998). Prejudice and tolerance in a period of increasing ethnic diversity and growing unemployment: Denmark since 1970. *Ethnic and Racial Studies*, *21*, 1137–1154.

van Klingeren, M., Boomgaarden, H. G., Vliegenthart, R., & de Vreese, C. H. (2015). Real world is not enough: The media as an additional source of negative attitudes toward immigration, comparing Denmark and the Netherlands. *European Sociological Review*, *31*, 268–283.

Wagner, U., Christ, O., Pettigrew, T. F., Stellmacher, J., & Wolf, C. (2006). Prejudice and minority proportion: Contact instead of threat effects. *Social Psychology Quarterly*, *69*, 380–390.

Weber, H. (2015). National and regional proportion of immigrants and perceived threat of immigration: A three-level analysis in Western Europe. *International Journal of Comparative Sociology, advance access online*. doi: 10.1177/0020715215571950

APPENDIX

Table A1: Polychoric correlations of the dependent variable with other statements (2000 survey).

"Foreigners take too many jobs from Finns"	-0.48
"Foreigners are a source of enrichment to Finland's culture and spiritual climate"	0.68
"Immigrants are beneficial to Finlands economy"	0.49
"Newcomers only want to benefit from our high living standards and social security"	-0.55
"Finland's working life needs more and more immigrants"	0.64
"Foreigners always bring trouble, however much one would like to avoid it"	-0.48
"Crime and unrest will increase along with foreigners"	-0.50
"Immigration rules should be more strict than they are now"	-0.60
"All foreigners should be made to leave Finland"	-0.52
"Foreigners have a lot of good to give to our country"	0.63

N dependent on statement, approximately 2,200.