Real World is Not Enough: The Media as an Additional Source of Negative Attitudes Toward Immigration, Comparing Denmark and the Netherlands

Marijn van Klingerent,1,* Hajo G. Boomgaarden,2 Rens Vliegenthart1 and Claes H. de Vreese1

1Amsterdam School of Communication Research (ASCoR), University of Amsterdam, The Netherlands and
2Department of Methods, University of Vienna, Austria

*Corresponding author. Email: m.vanklingerent@uva.nl

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Abstract

Most people are unable to accurately estimate the number of immigrants in their country. Nonetheless, it has been argued that the size of the immigrant population would affect people’s immigration attitudes. Part of the effect of immigration on attitudes occurs not so much because of real immigration figures, but rather because of media reporting about immigration. In this study, negative attitudes towards immigration are explained by investigating the impact of the salience and the tone of immigration topics in the news media vis-à-vis the impact of immigration statistics. The cases of Denmark and the Netherlands are analysed for a period from 2003 to 2010, using a multilevel design. Overall, real-world immigration numbers have little impact. The tone of news coverage has an effect in the Netherlands: a positive tone reduces negativity towards immigration, while a negative tone does not increase negativity. We cautiously conclude that the longevity of the issue’s salience has a moderating effect.

Introduction

In the 1990s, many European countries experienced a large increase in immigration (Boswell, 2005). Immigrants from Western and non-Western countries entered Europe in greater numbers than before. Arguably, as much recent scholarship has noted, such increased immigration created tension between the native population and the immigrant population and triggered ethnic prejudice, xenophobia, hostile attitudes, and discrimination towards immigrants or their religious expressions (Ceobanu and Escandell, 2010; Schlüter and Davidov, 2013; Helbling, 2014). Previous studies have shown that real-world developments (RWDs), such as the size of the immigrant population or gross domestic product (GDP), have a direct impact on negative attitudes towards immigrants (Quillian, 1995; Scheepers et al., 2002; Semyonov et al., 2006).

Research also shows that the news media can play an important role in explaining anti-immigration attitudes (Esser and Brosius, 1996; Vergeer et al., 2000).
However, the amount of media coverage of immigration does not accurately represent actual immigrant inflows (Vliegenthart and Boomgaarden, 2007). Furthermore, Sides and Citrin (2007) found a systematic discrepancy between people’s estimates and the real size of the immigrant population; they argue that the discrepancy is due to the visibility of minority groups in the media, which differs from reality. Changes in the media environment (see also Jerit et al., 2006)—either alterations in the attention given to the issue or changes in the general valence of news reports—may have a substantial impact on immigration attitudes above and beyond that of RWDs. Because it is unclear how the media play a role alongside RWDs, we propose the following research question: To what extent do the size of the immigrant population, the media visibility, and the tone of news reports about immigration affect immigration attitudes?

Scholars have established effects of the media on immigration attitudes and related behaviors in various European countries (Esser and Brosius, 1996; Vergeer et al., 2000; Walgrave and De Swert, 2004; Boomgaarden and Vliegenthart, 2007, 2009; Schemer, 2012; Schlüter and Davidov, 2013). However, most of these studies are based on single case or cross-sectional data. And only occasionally do they include systematically coded data of the content of the news (for example, see Schemer, 2012). This study expands on previous studies by investigating the presence of the immigration issue in the media as well as the tone of news reports regarding this issue using manually coded content data. Here, the inclusion of tone is an important addition. Often the effects caused by the presence of media coverage (i.e., salience or exposure) are attributable to the negative nature of news messages (Persson and Musher-Eizenman, 2005; Shrum, 2009). To date, there is limited empirical evidence for this assumption, as tone is often investigated as an average measure. The inclusion of negative and positive news as separate variables allows us to study their distinct impact. Furthermore, the study contributes by considering the impact of incoming non-Western immigrants as well as the immigrant population that resides in a country. This allows us to see whether people feel more threatened by the fact that immigrants are entering their country or by the fact that more immigrants are permanently residing there.

We investigate and compare the results from two northern European countries (the Netherlands and Denmark), which were selected based on a most similar system design. Comparative research is crucial for the generalizability of effects, and the comparison between two countries allows for a more in-depth discussion of the results. These two countries are ideal as they are compatible in many respects, but they are different with regard to one crucial point: immigration history. Therefore, the salience of the immigration issue also differs, which may play a role in the general influence of the media and RWDs. Because we are interested in the effects of contextual developments, this study covers an 8-year period (from 2003 to 2010) using biannual data.

The following sections present the most prominent theories about the formation of attitudes towards immigration. The first three hypotheses largely replicate and refine the results of previous studies using a slightly different approach. It is pertinent to do this, as we aim to clarify ambiguous results found in previous studies (Manevska and Achterberg, 2013; Schlüter and Davidov, 2013). The final part of the theory section proposes a contingency effect of different immigration-related national histories and accordingly expects differential effects of the media.

**Real-World Developments**

Many studies using the ethnic threat perspective on how negative attitudes towards immigration take shape have assessed the effect of national and regional immigration inflows (Blumer, 1958; LeVine and Campbell, 1972; Scheepers et al., 2002). This approach stems from group conflict theory (LeVine and Campbell, 1972; Austin and Worchel, 1979) and social identity theory (Tajfel and Turner, 1979). The latter states the natural need felt by people to be part of a larger entity or group. Individuals strongly identify with group characteristics, and to maintain a positive perception of themselves, they apply positive labels to the in-group and negative labels to the out-group. This labelling may appear harmless but can result in real intergroup conflict. The group conflict theory states that the scarcity of goods adds to intergroup rivalry (LeVine and Campbell, 1972; Austin and Worchel, 1979). This competition may revolve around realistic resources (such as jobs and housing) or symbolic resources (such as cultural identity, values, or political power) (Meuleman and Lubbers, 2013; Helbling, 2014; Helbling and Kriesi, 2014). Intergroup competition strengthens identification with the in-group (e.g., natives) but creates negative associations with out-groups (e.g., ethnic minorities); hence, competition increases perceived threat from out-groups.

Goods become scarcer and perceived threat increases when the competing groups become larger. In relation to immigrant groups in particular, an increasing group size increases anti-immigration sentiment (Scheepers et al., 2002; Semyonov et al., 2006). In this study we build on previous studies by investigating non-Western
immigrants, the group that is considered to have the largest impact (Schlüter and Davidov, 2013). In addition, we distinguish between incoming and residential non-Western immigrants, to see whether incoming immigrants, or immigrants who take active part of society cause feelings of threat. Based on the literature, however, we expect the results to point in the same direction and therefore we propose a single hypothesis.

H1: An increasing non-Western immigrant population leads to more negative immigration attitudes.

Media Effects

Media Visibility
Mass media provide central information for people’s perceptions of others (Schlüter and Davidov, 2013), and therefore, the media are able to shape anti-minority attitudes (Allport, 1954; Blumler, 1958). We assume that the media have an influence above and beyond the influence of RWDs; after all, media content appears to show little overlap with RWDs (e.g., Vliegenthart and Boomgaarden, 2007; for the economic realm, Goidel and Langley, 1995; Smith, 1988) because of the noise introduced by journalistic selection processes (Shoemaker and Reese, 1996), and the fact that immigration inflows alone are not always newsworthy. However, this mediated version of reality forms the foundation of a nation’s collective knowledge. Even those who are not (frequently) exposed to news reports are often made aware of media reality via interpersonal conversations (Schmitt-Beck, 2003; Boomgaarden and Vliegenthart, 2009). Arguably, most people have a media-based impression of immigrants and immigration, which has the potential to shape their attitudes.

Previous literature has investigated such media influences. Boomgaarden and Vliegenthart (2009), for example, investigated the effects of news coverage about immigration in Germany. They found that frequency and tone of coverage affected anti-immigration attitudes. Vergeer et al. (2000) established that exposure to certain Dutch newspapers (i.e., those characterized by negative reporting on immigrants) significantly increased ethnic threat perceptions. Schlüter and Davidov (2013) scrutinized the role of negative immigration-related news reports on perceived ethnic threat in Spain and found that these news reports affect perceived group threat above and beyond the effect of immigrant group size. Schemer (2012) found that exposure to positive news reduces negative out-group attitudes among those who are less knowledgeable about immigrants. Media presence and tone thus play a vital role in how the public perceives ethnic minorities, dependent and independent of individual media use, or background characteristics.

In line with Boomgaarden and Vliegenthart (2009) we propose that frequent exposure to out-groups in the media acts as a reminder about people’s own identities and their distinct differences from certain out-groups (Tajfel and Turner, 1979). In accordance with conflict and social identity theory, this reminder triggers feelings of competition. Therefore, increased presence of immigrants in the media increases the odds of encountering immigrants via media, which can initiate the perception of increased threat and negative out-group associations (LeVine and Campbell, 1972; Austin and Worchel, 1979; Ward et al., 2001).

H2: Increased visibility of the immigration issue in the news increases negative immigration attitudes.

Tone of Media Messages
Previous studies have often applied an implicit ‘any news is bad news’ reasoning (i.e., an increase in media salience coincides with an increase in negative messages regarding immigration). Accordingly, an increase in media salience would provide more negative information about minority groups, which then would readily attract the attention of the majority and increase negative immigration attitudes (Persson and Mushen-Eizenman, 2005; Shrum, 2009). However, an increase in media salience does not necessarily co-occur with an increase in negative messages and so the found effects might simply be due to an increase in media attention rather than tone. It is therefore crucial to understand and distinguish between the effects of media salience and tone. Furthermore, Soroka’s asymmetrical influences thesis (2006) states that people are generally more responsive to negative than to positive information. Thus, it is likely that negative news will have a larger effect than positive news, even when there is no substantial increase in negative news. Therefore, we distinguish between positive and negative message tone and investigate whether and to what extent negative or positive media coverage affects immigration attitudes.

Previous research found that negative media environments produce negative immigrant stereotyping (Gilliam and Iyengar, 2000; Domke, 2001; Schemer, 2012), negative evaluations of immigrants, negative immigration attitudes and ethnic prejudice (Power et al., 1996; Dixon and Azocar, 2007; Boomgaarden and Vliegenthart, 2009). People’s political preferences are often
guided by information from the news media (Sniderman and Theriault, 2004). Although these studies all show that tone has an impact, they fall short in distinguishing between the impact of negative versus positive media messages, which we are able to do in this study.

How might the tone of the media affect opinions? Zaller (1992) describes this process as follows: people receive information from the news and decide whether to accept this information. When formulating an opinion, people sample from this accepted information. This receive-accept-sample model (RAS) shows how people make use of the news. Previous research has shown that this is a dynamic process and that each individual collection of accepted information changes over time in line with the developments in the news (Schwenk, 1988). We argue that the dominant tone in the news affects the general sample of people’s accepted information because recent information is the easiest to access cognitively (Higgins, 1989). Hence, the flow of immigration news coverage, when heavily one-sided (i.e., predominantly negative or positive) can change public opinion at large (Zaller, 1992, 1996). A person that is confronted with both a positive and a negative message on the same issue will, however, not be affected by either of the two messages, as the two messages cancel each other out (De Vreese and Boomgaarden, 2006). However, in a predominantly negative media environment, the likelihood that people are confronted with negative messages increases; therefore, the information they sample from becomes more negative and immigration attitudes will become more negative as well. The same logic applies to a positive bias, but we expect this to reduce anti-immigration sentiment.

H3a: Negative news reports increase anti-immigration attitudes, whereas (H3b) positive news reports reduce anti-immigration attitudes.

Conditionality of Country Characteristics

Most Similar Systems Design

The countries were selected using a most-similar-systems design (MSSD). The use of an MSSD is ‘based on the premise that systems as identical as possible with regard to as many constitutive features as possible represent the optimal samples for comparative research’ (Przeworski and Teune, 1970, p. 32). The idea behind this comparative method is that by selecting similar cases, most of the contextual characteristics that might be of influence otherwise, are held constant. Hence, only those characteristics on which the selected cases differ may generate an effect. This considerably reduces the number of operative variables, which is ideal when one deals with a ‘small N’, which is often the case in country comparative research (Lijphart, 1971). The MSSD allows us to rule out potential country-specific confounding factors related to politics, economics, and media. For this study, it is crucial to consider countries that are similar in terms of political system (mature democracies, multiparty systems), economic situation (welfare status, in the OECD GDP top 20), media systems, and media news outlets [a combination of public and private television broadcasters and a democratic corporatist model (Hallin and Mancini, 2004)]. Additionally, the countries should be compatible with regard to the ethnic, religious, and cultural background of the immigrant population (SCP, 2009; Jensen et al., 2010; Berkhout and Sudulich, 2011). We decided to compare the Netherlands and Denmark because these countries fulfil these requirements.

Despite the clear similarities, there is one important difference. Though both countries have dealt with immigration since the 1970s and early 1980s, the immigrant population grew faster and larger in the Netherlands (Jensen et al., 2010; Berkhout and Sudulich, 2011). For decades, immigration has played a crucial role in Dutch politics, public debates, and the media news. Attention increased briefly after the assassinations of right-wing politician Pim Fortuyn (in 2002) and filmmaker Theo van Gogh (in 2004) (Vliegenthart and Roggeband, 2007). Immigration has been a politicized issue in the Netherlands since the early 1990s (i.e., a multicultural society); the issue became politicized in Denmark in the late 1990s only (i.e., with the founding of the Danish People’s party in 1995). Hence, the immigration topic has been prominent for a longer period of time in the Dutch context than in the Danish context. Ceteris paribus, we tentatively propose that these country differences have led to different effects of the media and RWDs, even in the 2000s. In the section below, we elaborate how.

Divergent Country Effects

Neuman (1990) stated that the public is especially attuned to some issues, while others receive ‘no more than a collective yawn’ (p. 162). An explanation for the difference in public attention paid to issues is provided by the classical theory of public response function by Downs (1972), which describes a five-stage issue response function (issue-attention-cycle). The pre-problem stage: a problem exists but has not been given any public attention (yet); the discovery stage: public attention to
the issue is catalysed after the issue has passed the attention threshold; the plateau stage: enthusiasm for the issue wanes and public attention stabilizes; the decline stage: an inattentive phase in which the public is frustrated by the notion that the problem has no simple solution; and the post-problem stage: the issue is old and uninteresting and receives little attention.

Arguably, the stage of an issue is crucial to the amount of received attention (e.g., media, politics, and public opinion) and the willingness of the public to pay attention to the issue, to gain information, and to (re)formulate an opinion (Behr and Iyengar, 1985; Neuman, 1990). We argue that this issue stage may moderate the effects of RWDs and the media and that a higher level of public attention for an issue tightens the relationship between RWDs, media, and public opinion, which causes the effects to be bigger. By doing so, we are among the first to bring together media effects conditioned by issue attention cycles.

The question then is, at what stage the two countries in this study are located. Reyes (2010) argues that in America immigration is one of the ‘top five recycled issues’; the issue is always present but it regains its importance around election campaigns. We think the situation in the two European countries is not too different. The issue remained important in both countries over the entire period, but gained attention around certain important events. Because we cover a time span of several years, it is likely that the issue has passed through several stages of the issue-attention cycle repeatedly.

To make a better estimate of the stage of the immigration issue in each of the two countries, we consult our data on overall media and public attention (see first part of the results section). Here we see that Denmark shows two large peaks in media and public opinion, whereas the Netherlands shows limited fluctuations in media and public attention. Based on the immigration history of both countries described in the previous section (Jensen et al., 2010; Berkhout and Sudulich, 2011 also see footnote 1) and the descriptive data, we cautiously propose that the Netherlands has been in the plateau and decline stage more than it has been in the discovery stage in the early to late 2000s, whereas Denmark has spent relatively more time in the discovery stage over the period of observation. Therefore we expect the influence of media and RWDs on the public to be stronger in Denmark than in the Netherlands.

H4: RWDs and the media have a larger influence on anti-immigration sentiment in Denmark than in the Netherlands.

Data and Method

The data were collected between 2003 and 2010 in Denmark and between 2003 and 2009 in the Netherlands. We selected this period due to its stability with regard to immigration policies, presence of immigration parties (Bommes and Sciortino, 2011; Brochmann et al., 2012), and economic prosperity. By doing so, these structural developments do not impact our results. We draw on three types of longitudinal data: real world data, which were collected from the Eurostat website; media data, including the total number of articles about immigration and a random selection of newspaper articles about immigration that were manually coded by a group of trained coders (native speakers); and survey data, for which several waves of the Eurobarometer were used (i.e., from wave 59.1 to wave 74.2).

To analyse these longitudinal data, we use a multilevel model with individuals nested within biyearly periods (16 in Denmark and 14 in the Netherlands). Because the dependent variable is dichotomous, a logistic version of this modelling technique is applied. The intra-class correlations (ICC) indicate that attitudes (Level 1) are correlated within each 6-month period (Level 2). This means that country-level characteristics are relevant and that a multilevel approach is required.

Dependent Variable

The dependent variable stems from the Eurobarometer, which required the respondent to select the problem they find most important from a list of 12 political issues ranging from international economic competition, crime, and unemployment to immigration (see Supplementary Table A1, for the descriptive statistics for this variable in each country). As Boomgaard and Vliegenthart (2009) argue, ‘The most important problem (MIP) question provides an utilizable proxy measure for anti-immigration attitudes. By asking about the most important problem, the question prescribes a negative evaluative component. If people consider immigration the prime problem the nation is facing, it is reasonable to interpret this immigration problem perception as a measure of anti-immigration attitudes.’ (p. 522). The authors elaborate on their statement by comparing the MIP responses to the responses to more explicit anti-immigration sentiment measures. We ran similar checks on our data by comparing the results of the MIP question to immigrant attitude questions that were asked in one of the waves of the Eurobarometer. Our results confirmed the assumption by Boomgaard and
Vliegenthart and indicate that this MIP question measures attitudes towards the issue (Wlezien, 2005).  

Media Variables
The current study uses coded newspaper articles to represent the news media environment. To capture a wide news spectrum, newspapers with a wide range of political views were selected: De Telegraaf and De Volkskrant in the Netherlands and Jyllands Posten and Politiken in Denmark. De Telegraaf is the only tabloid-like newspaper in the Netherlands and one of the oldest and largest Dutch dailies to date. It is known for its relatively right-wing perspective. De Volkskrant is a large, central-leftist newspaper; it is also one of the largest newspapers in the Netherlands and has been in existence since the early 1900s. Jyllands Posten, one of the largest newspapers in Denmark, became internationally infamous for its portrait of Mohammed in 2005. It is a liberal, central-right broadsheet newspaper. One of its main competitors is Politiken, the leading Danish newspaper, which was originally connected to the Danish Social Liberal Party but declared its independence in the 1970s.

The search terms used to collect the data from these newspapers, on immigration and closely related topics, were created in Dutch and translated into Danish. A sample of monthly articles per country was randomly selected from the collected data and manually coded by nine native speakers. Media salience is defined as the percentage of change compared with the previous 6-month period for each country, the total number of newspaper articles about immigration are used to create this variable (see Figure 1 for absolute frequencies and Supplementary Table A1 in Appendix 4 for descriptive statistics).

To code tone we organized intensive coding sessions. Coders were instructed to read English language material, which enabled us to check the inter-coder reliability for all of the coders at once. To code tone, coders read the articles and answered the following question: ‘How would you say the main topic is discussed?’ The responses were ‘in a negative way’, ‘in a balanced way’, ‘in a positive way’, or ‘in a neutral way’. For instance, if an article talked about immigrants in a derogatory manner, saying that their level of integration is too low, this would clearly be negative from an immigrant’s point of view. However, if an article discussed the issue, for instance, in terms of stimulating employment for immigrants, the tone would be positive from this perspective. Eventually all the coders were asked to code English newspaper articles, and once the inter-coder reliability of this English material was up to standard, the coders were given the coding material in their native language (i.e., Dutch and Danish). The percent agreement was 63 per cent among the five Dutch coders and 65 per cent among the four Danish coders. These reliability scores are reasonable but not perfect; therefore, the results of the tone analysis are interpreted with caution.

As we are interested in the difference between the effects of positive and negative news, we defined two tone variables. These were created by calculating the

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Figure 1. Salience in news media in the two countries across time (absolute number of articles on immigration)
percentage of negative and positive messages out of the total number of coded news messages during the 6-month period.

Real-World Developments
From Eurostat, we obtained the immigrant population size and inflow figures; the first includes the number of non-Western immigrants residing in each country per year, and the second captures the long-term immigrants who move into the country each year. From these data, two variables were created by estimating the number of non-Western immigrants relative to the entire population of the country (i.e., in line with Semyonov et al., 2006 and Schütz and Davidov, 2013 and, non-Western countries are defined as those in Africa, Asia, Eastern Europe, or Latin America) and the percent change compared with the previous year. The two variables enable us to compare the results with previous studies that have used similar measures, but rarely together, and to find out how their change over time affects anti-immigration sentiment.

Meanwhile, in each model we control for potentially influential key events that were not only prominent nationally but also spilled over into international broadcasting and public debate. These key events were identified from the extant literature (Sides and Citrin, 2007; Vliegenthart and Boomgaard, 2007) and verified in interviews with country experts. These include the London bombing (July 2005) and the Madrid bombing (March 2004), the Van Gogh homicide in the Netherlands (November 2004), and the Mohammed cartoon in Denmark (September 2005). However, because the country-specific events will have had a bigger impact in the given country than in others, key events were considered a country-specific dichotomous variable (key events, 0 = no event; 1 = event).

Control Variables
In the models, we controlled for a variety of individual characteristics: gender, because women are generally more tolerant than men (Kuran and McCaffery, 2008); age, because younger people are generally more tolerant than the elderly (Firebaugh and Davis, 1988; Quillian, 1995); and education, because educated people are generally more accepting (Hainmueller and Hiscox, 2007). Hainmueller and Hiscox argue that education, not labour market competition, affects xenophobic feelings. Our exploratory analyses show similar results; therefore, we only include education. Finally, left-right identification (1 = left-wing to 10 = right-wing) is included because the immigration issue is crudely divided along this dimension, as people who are more right-wing are generally more negative about immigration (Money, 1999).

Results
Country Differences
The developments with regard to immigration in the two countries are briefly described on the basis of our data. Subsequently, we continue with the results of the analyses.

Figure 1 shows the absolute number of articles about immigration in both countries. Note that the total number of articles in each newspaper may differ. Hence, we can only look at the differences in fluctuations across time. In Denmark, media salience reaches a high peak but it also fluctuates substantially. The presence of the immigration issue in the Netherlands shows no large peaks or dips. Figure 2 shows the percentages of negative and positive immigration news reports. Negative reports trump positive reports in the Netherlands, but the tone is more moderate. The percentage of negative news reports remains well under 50 per cent until the second half of 2009. In the first half of 2009, there is an obvious peak in positive news coverage.

Negative news dominates the Danish media landscape, but there are many fluctuations; there is a positive news peak in 2007 (49.1 per cent) and a negative peak in 2008 (50 per cent). The former peak might have been a counter-reaction to the period of negative news following the Mohammed cartoon in 2005. The latter occurred immediately after the Danish People’s Party had won the elections. Figure 3 presents the percentage of people indicating that immigration is the MIP in their country. The Netherlands shows a peak in the first half of 2004 (15.5 per cent) and another peak in the first half of 2008 (16.9 per cent). Denmark showed the highest peak in the second half of 2005 (30.3 per cent); after 2006, immigration as the MIP steadily declined from 22.7 per cent in 2007 to 6.5 per cent in 2010.

It is likely that media characteristics have an effect above and beyond RWDs on anti-immigration sentiment because media do not necessarily follow RWDs. Figure 4 shows that this assumption is largely correct. In both countries, there is no strong positive correlation between immigrant inflows and media attention towards the issue.

In the Netherlands, however, there is a negative correlation between RWDs and media salience. A decline in one variable coincides with an increase in the other,
which may cause suppression effects in the overall model. Because the correlation is not very high, we do not foresee that this negative correlation will have a large impact, but it is something that needs to be investigated.

Table 1 shows the results (log odds) of the logistic multilevel analyses in each country. The limited number of periods per country calls for parsimonious modelling. Therefore, a stepwise approach is applied (see superscript a, b, and c in Table 1).18
The first hypothesis states that increased immigration leads to more negative immigration attitudes. This hypothesis was tested on the immigrant residents (see Models 1.1 and 2.1), and the immigration inflow variable (see the results in Models 1.2 and 2.2). The results, using the first variable were insignificant in both countries, i.e., not supporting the hypothesis. With regard to the second immigration variable, the results show that the odds of developing anti-immigration attitudes increase significantly with increased immigration inflows in the Netherlands \((\text{logit} = 0.02; P = 0.00)\). Thus, when the immigrant inflow increases 1 per cent compared with the previous period, the odds of considering immigration a problem increase 2.02 per cent. The effect in Model 2.3 in Denmark shows similar but insignificant results \((\text{logit} = 0.01; P = 0.27)\). This means that there is limited support for the first hypothesis.

Second, we expected the increased media visibility of immigration to significantly increase anti-immigration attitudes (H2). This media effect is significant in Denmark (see Model 2.3; \(\text{logit} = 0.011; P = 0.02\)) when we do not control for immigration inflows. However, if we add this variable the overall effect in Denmark becomes insignificant \((\text{logit} = 0.01; P = 0.07)\), which means Hypothesis 2 is not confirmed in Denmark.

In the Netherlands, the effect in Model 1.3 shows no support for the hypothesis; however, when controlling for immigrant inflows, the effect of media salience becomes significant \((\text{logit} = 0.22; P = 0.00)\). Thus, because immigrant inflows decrease at the same time that media salience increases (negative correlation), the effect of media salience is suppressed by immigrant inflows. Media salience does increase anti-immigration attitudes in the Netherlands, but this effect is invisible because immigration inflows reduce anti-immigrant attitudes at the same time. Adding immigrant inflows to the model with media salience significantly improves the model fit.\(^{20}\) These findings lend support for the media salience hypothesis (H2), but only in the Netherlands.

Furthermore, we expected negative reports on immigration to increase anti-immigration attitudes (H3a) and positive news to decrease them (H3b). The effect of negative news in the Netherlands is insignificant and only borders on significance when immigrant inflows are controlled for \((\text{logit} = 0.013; P = 0.054)\). This finding, however, should not be given too much weight given the effect size and the reliability scores. Positive news (see Models 1.4 and 2.4 in Table 1), however, clearly reduces anti-immigration attitudes in the Netherlands \((\text{logit} = -0.04; P = 0.00)\), but not in Denmark \((\text{logit} = 0.01; P = 0.13)\). Thus, H3a is not supported by the results, and H3b is supported by the results in the Netherlands. The fact that negative news has no effect counters Soroka’s (2006) findings that predominantly negative media coverage negatively affects attitudes, a point we will return to in the discussion.

The model fits are presented in the bottom row. We can see here that the models significantly improve with the additional control variable (key events), but that each of the variables of interest does not lead to a significantly improved model fit. In the Netherlands we do see that immigrant inflows and positive news lead to a substantial reduction of the unexplained second-level variance \((u0j)\), but the addition of negative news, does not improve the model fit (see Models 1.6 and 2.6).

Our findings show that RWDs and media have different impacts depending on the country of observation. Based on the issue-attention cycle, we expected to find the biggest influences in Denmark (H4), but the opposite effect emerged. The Danish are affected less by these...
### Table 1. Logistic multilevel models, real world factors and media influences on anti-immigration attitudes

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<th>The Netherlands</th>
<th>Denmark</th>
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<td>Immigrant inflows(^a)</td>
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<td>Media salience(^b)</td>
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<td>9,059.7</td>
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</tbody>
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**Notes:** Each model shows the log odds first and the standard error between parentheses; each model also includes age, education, gender, and left right position, which showed the expected results; significant one-tailed results

\* Alpha < 0.10, ** alpha < 0.05, *** alpha < 0.01. The Netherlands: \(n_1: 13,236, n_2: 14\); Denmark: \(n_1: 15,123, n_2: 16\).

\(^a\) This result remains significant \((P < 0.05)\) with the inclusion of media salience, and tone variables.

\(^b\) This result becomes significant \((P < 0.05)\) with the inclusion of immigrant inflows.
factors than the Dutch, although some of the effects in the Netherlands are suppressed by RWDs.

To determine whether the effects differ significantly between the Netherlands and Denmark, interaction models were created in a pooled logistic regression model with country dummies. The results in Table 2 show that there are significant differences in the impact of RWDs. Although the effects of immigrant population are insignificant in both countries, a significant difference was found in Model 1 because of the negative effect in Denmark and the positive effect in the Netherlands (logit = −0.89; \( P = 0.00 \)). Immigrant inflows (see Model 2) are significant in the Netherlands and differ significantly from the effects in Denmark (logit = −0.02; \( P = 0.00 \)). There is also a significant difference in the effect of media salience (logit = −0.01; \( P = 0.00 \)), which indicates that the effect of media salience is slightly but significantly smaller in Denmark than in the Netherlands. The effect of positive news in the Netherlands differs slightly but significantly from the effect in Denmark (logit = 0.02; \( P = 0.009 \)), but we found no systematic difference with respect to negative news (logit = 0.00; \( P = 0.41 \)). Overall, the results do not comply with the fourth hypothesis; the results are significantly more pronounced in the Netherlands than in Denmark.

**Discussion**

Scholars have frequently demonstrated the influence of context on people’s attitudes towards immigrants (Scheepers et al., 2002; Semyonov et al., 2006; Boomgaarden and Vliegenthart, 2009; Schlüter and Davidov, 2013). The aim was to replicate and refine some of these findings, as well as to investigate the influence of media salience and tone. This study provides new insights regarding the generalizability of the effects, the effects of change rather than the mere presence of an immigrant population, and the effects of the media over time using a comparative perspective. The main goal of this study was to tackle the following research question: To what extent do the size of the immigrant population, the media visibility, and the tone of news reports about immigration affect immigration attitudes? Below, each element of this question is discussed.

Based on realistic group conflict theory (LeVine and Campbell, 1972; Austin and Worchel, 1979) and social identity theory (Tajfel and Turner, 1979), we hypothesized that immigration causes feelings of competition and threat and increases anti-immigration attitudes (Scheepers et al., 2002; Semyonov et al., 2006). The findings support this assumption for the Netherlands, with regard to the relative immigrant inflows. This indicates that incoming immigrants have a bigger impact than the relative number of residential immigrants in this country. In Denmark, no support for this hypothesis was found, in contrast to the findings of Schlüter and Davidov (2013) but in line with the study by Manevska and Achterberg (2013), who found a very limited influence of actual immigration on immigration attitudes. One reason for this seeming paradox might be found on

<table>
<thead>
<tr>
<th>Table 2. Pooled logistic regression models of RWDs and media on anti-immigration attitudes in Denmark and the Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictors</strong></td>
</tr>
<tr>
<td>Intercept</td>
</tr>
<tr>
<td>Country ( nl ) (ref)</td>
</tr>
<tr>
<td>Immigrant population (1)</td>
</tr>
<tr>
<td>Immigrant inflows (2)</td>
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<tr>
<td>Media salience (3)</td>
</tr>
<tr>
<td>Positive news (4)</td>
</tr>
<tr>
<td>Negative news (5)</td>
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<tr>
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<td>Country × 4</td>
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<td>Pseudo R(^2)</td>
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</table>

*Notes. Each model shows the log odds first and the standard error between parentheses; each model also includes period dummies, age, education, gender, and left right position and key events.

*\( \alpha < 0.10 \), **\( \alpha < 0.05 \), ***\( \alpha < 0.01 \).

The Netherlands: \( n = 13,236 \); Denmark: \( n = 15,123 \).
the contextual level of analysis. Immigrants mostly settle in bigger cities and urban areas. Natives who live in these areas will notice change and be affected more than those in rural areas. However, in big cities, people are also more likely to come into contact with people from different ethnic backgrounds, which can reduce ethnic prejudice according to Allport’s (1954) contact theory.

We expected media salience to increase anti-immigration sentiment; this indeed was the case in the Netherlands. We found that immigrant inflows suppress the effect of media salience. Both variables produced the same result; however, because a decrease in media salience often coincided with an increase in immigrant inflows, the effect of media salience was not visible until immigrant inflows were added to the model. This means that the presence of immigration in the media in the Netherlands had an impact.

Hence, this supports the idea that a greater assortment of received messages with a particular tone, through the acceptancem of these toned messages, leads to a change in the sample that affects people’s attitudes (RAS model; Zaller, 1992). Tone had an effect on the public discourse in the Netherlands such that a positive tone in news reports reduced anti-immigration attitudes (also see Boomgaarden, 2007). Surprisingly, the effect of negative news was not significant. This—and the fact that negative news did not mediate the effect of media salience—counts the ‘any news is bad news’ notion, which is frequently used to explain the effect of news salience on anti-immigration attitudes when it is not possible to assess the tone of news. It also counters Soroka’s asymmetrical influences thesis that people are generally more responsive to negative information than to positive information. This is possibly due to the fact that immigration is predominantly discussed in negative terms; hence, people have gotten so used to negative messages that any divergence is more noticeable and has a bigger impact.

The limited influence of media variables in Denmark does not mean that there is no effect of media at all. One might find more fluctuations at the individual level that do not appear when averaged at the country level (Zaller, 1996). To further explore this, an experimental design, panel study or another method that relies on individual level media exposure measures would be more appropriate.

So why did we find differences between the two countries? First of all, our findings are not in line with Down’s issue-attention cycle. Whether this is due to the selection of specific cases, the inaccuracy of the theory, or inaccurate categorization on our part is not clear. However, we do know that the Netherlands has a more rapidly growing immigrant population and a longer political immigration history. Thus, Dutch citizens have had more of an opportunity to become familiar with the issue through politics, media, and personal experiences. Arguably, the relatively steady presence of this issue in the news has paved the way for news content to have an effect (i.e., tone). When the public pays no attention to an issue or related developments, contextual characteristics cannot have an effect because there is no critical mass that pays attention to the issue (Neuman, 1990).

There appears to be a critical mass in the Netherlands that is influenced by the tone in the news. In Denmark, however, although the media give plenty of attention to the issue, there are no signs in our study of a critical mass being affected by news content. The fluctuations in media salience over time were large: these patterns appeared to have attracted people’s attention and influenced their attitudes rather than the tone of the messages. Although the correlation between immigration inflows and media salience was not very large, it was large enough to mediate most of the effect of media salience.

There are some limitations to this study to which we would like to pay specific attention. First, one limitation of this study that is evident from the sometimes limited predictive power of the presented models is that, due to insufficient data, some important explanatory variables could not be included. For example, perceived ethnic threat, as well as cultural values, or intergroup friendships are not included as mediators or moderators, though they have been found to play a crucial role with regard to immigration attitudes and should be taken into consideration when possible (Hooghe et al., 2013; Manevska and Achterberg, 2013).

Second, one downside to the otherwise innovative longitudinal design is the limited availability of longitudinal dependent variables. The Eurobarometer provided the only immigration attitude question that recurred frequently over the period of interest. The ‘most-important problem’ question does not differentiate between ethnic groups. It is a tricky question to use because the answer depends on the prominence of other issues on the agenda. However, this makes the tests of the hypotheses more stringent because it reduces the chances of finding effects of RWDs. Nevertheless, it is not ideal. Furthermore, though the variable was proven to be a good proxy of immigration attitude, it still is a proxy. Because of the bipolar nature of the variable—measuring both importance as well as attitudes—it is necessary to be cautious when drawing conclusions while using this variable. Mainly because a part of the people who indicate that immigration is their country’s biggest problem sympathizes with immigrant minorities.
However, this also means that the results of this study are likely to be an underestimation of the real effect.

We were able to include two quality newspapers in Denmark, while we also included a tabloid-like newspaper in the Netherlands. Because tabloids are on average slightly more negative about immigration, there was a chance of overestimating the effects of positive news in Denmark, as we had not included such a newspaper here. In this study, however, such overestimation is unlikely, as there was no effect of positive news in Denmark whatsoever. Finally, some authors argue that the causal mechanism is reversed and media are influenced by public opinion. So far no attention was given to this idea, but it is possible that media pick up on public tendencies while the media influence the public, creating a spiral mechanism. This is an important perspective that should be given consideration in future research.

It would be inappropriate to draw firm conclusions from just two cases; hence, these conclusions are largely tentative and intended as a basis for future research. Even so, this study shows interesting effects: In Denmark, media salience was the only contextual effect that approached significance, whereas immigrant in-flows and most media characteristics had an influence in the Netherlands. The fact that we found such influences in the Netherlands is intriguing. Here, the immigration topic is established; therefore, we expected people to have largely stable opinions (see Saltier and Woelfel, 2015) or be bored with the issue (Downs, 1972), but our findings show evidence to the contrary. From these results we can tentatively deduce that it takes time before people turn into a critical mass, get informed, and before their attitudes regarding immigration can be affected by contextual changes in the media and in the real world.

Notes
1 The Netherlands: Between 1972 and 2010, non-Western immigration grew from 200,000 to 1.9 million (SCP, 2012), with the largest proportion from Turkey, Morocco, and Suriname (Berkhout and Sudulich, 2011). Denmark: a small group of guest workers from Turkey, Pakistan, and Yugoslavia entered in the 1960s (Jensen et al., 2010). In the 1980s and 1990s, refugees arrived mostly from Sri Lanka, the Middle East, Bosnia, Afghanistan, Somalia, and Iraq. In 2010, the immigrant population was 9.8 per cent.
2 These are the figures on which RWD and media visibility variables are based; they are merely used for indicative purposes here.
3 The effect of economy was addressed by including unemployment figures and GDP in the models. Neither had a significant effect on the dependent variable.
4 The newspaper data were collected through online databases: Lexis Nexis (the Netherlands) and Infomedia (Denmark).
5 For this, we used the xtmelogit command in Stata 12.
6 The ICC for logistic models is defined as \( \rho = \sigma^2 u / (\sigma^2 u + \sigma^2 e) \), where \( \sigma^2 e = \pi^2/3 \) and \( \sigma^2 u \) is the variance of the random intercept of an unconditional logistic multilevel model \( \logit(p_{ij}) = \gamma_0 + u_{0j} \) where \( u_{0j} \sim N(0, \sigma^2 u) \) (Guo and Zhao, 2000).
7 Consult the Eurobarometer website for the full range of topics. The analysis only includes those who were born and whose parents were born in the Netherlands or Denmark.
8 Though not an ideal measure, it is the only compatible measure available over this time span.
9 We ran the tests with four 4-point scale immigration attitude questions, and the results were as follows: for the question ‘immigrants are necessary for the economy’ people who said immigration was the biggest problem were significantly more negative than those who did not (respectively, \( M = 2.6; M = 2.4; P = 0.00 \)). For the question ‘immigrants will solve the age problem’ the results are similar (\( M = 2.8; M = 2.6; P = 0.00 \)). The question ‘immigrant contribute to society’ was also answered more positively by those who did not see immigration as the biggest problem (\( M = 3.1; M = 2.6; P = 0.00 \)), while they tended to disagree more with the statement ‘immigrants form a threat’ (\( M = 2.2; M = 2.7; P = 0.00 \)).
10 The translated search string reads: (discrim! or (hate w/5 onset) or (education! or (course! or lesson!)) w/10 (migrant! or immi! or alloch! or asylum! or foreign!)) or (class w/1 Dutch/Danish) or (language course! or language education! or family reunification! or sham marriage! or marry off! or immig! or alloch! or stranger! or migrant! or muslim! or islam! or asylum! or illegal or deported! or resident permit! or multicult! or (mass w/1 regular!)) or regularis! or import bride or (bride! w/5 foreign country) or (income requirement w/20 marriage!) or pluriform! or asylum seeker! or refugee! or (general pardon) or head scarf!.
11 A total of 459 articles (of 55,374) in the Netherlands and 835 (of 86,835) in Denmark were coded, ranging from two to seven per month.
See the Eurostat website for migr_pop3ctb and migr_pop5ctz.

These variables could not be measured in half yearly figures, which means that every year is added twice. To avoid Type I error, marginally significant results are interpreted with care.

We also looked at Western immigrants and found no effect.

Measured on a 1–10 scale (1 = up to age 14 years, 2 = up to 15 years, and so on until 9 = up to 22 years, and 10 = still studying beyond age 22 years).

It is plausible that media effects and RWDs are contingent upon individual characteristics. We ran each model including the interaction terms with that of contextual and individual variables, but found no significant results.

Further correlations between RWDs and media variables are presented in Supplementary Table A2.

Each model controls for age, education, left-right affiliation, and gender. Because our interest is mostly in the influence of contextual characteristics, these are not presented, but the results are in line with previous studies. Older people, men, less educated, and right-wing people are more negative. Furthermore, key events significantly increase anti-immigration attitudes in Denmark.

The model produced the following results: intercept: -2.80, se = 0.19, immigrant inflows: logit = 0.03, se = 0.005, u0j = 0.20, e0j = 0.00, -2-loglikelihood = 9,043.19.

Likelihood ratio of 16.47, df = 1. Prob > $\chi^2 = 0.00$

This was done through 2010 to compare the same periods in both countries.

As Figure 2 shows, media data for the Netherlands was available up to 2010. The analyses in the Netherlands therefore do not reach beyond that point in time.

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### Supplementary Data

Supplementary data are available at ESR online.

### References


