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# **Are we all Charlie? How media priming and framing affect immigration policy preferences after terrorist attacks**

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# **Are we all Charlie? How media priming and framing affect immigration policy preferences after terrorist attacks**

## **Abstract**

Terrorist attacks negatively affect support for immigration policy, and this has been linked to the extensive media coverage of terrorism. Yet, this coverage may also have a moderating effect. This paper uses the timing of the fielding of the European Social Survey, which took place during the *Charlie Hebdo* and Hyper Cacher attacks, as a natural experiment. Because the media coverage of the attacks varied between France and other European countries, it is possible to study how differences in the media framing and priming of the attacks affected attitudes. The expected negative effect on immigration policy preferences is found outside France, but not within France. This study's findings lend support to a moderating effect of the media coverage of terrorist attacks, both as a framing effect that influenced the perceived relevance of the attacks to immigration attitudes and a priming effect that primed the public with tolerant French Republican values.

Keywords: Terrorist attacks; immigration attitudes; priming; framing; Charlie Hebdo

'Today it is the Republic as a whole that has been attacked. The Republic equals freedom of expression; the Republic equals culture, creation; it equals pluralism and democracy'. (Hollande 2015a)

Research on Islamic terrorism has found that terrorism negatively affects attitudes towards out-groups (Echebarria-Echabe and Fernández-Guede 2006; Boomgaarden and de Vreese 2007). This has been interpreted as a consequence of heightened perceptions of threat after terrorist attacks (see, e.g., Huddy *et al.* 2002, 2005, 2007). However, studies of terrorism's effects on immigration policy preferences have found mixed evidence for a negative effect (Brouard *et al.* 2018; Finseraas *et al.* 2011; Lahav and Courtemanche 2012; Merolla and Zechmeister 2009). Moreover,

heightened perceptions of threat do not always lead to changes in attitudes towards out-groups (Finseraas and Listhaug 2013). For perceptions of threat to affect other attitudes, the threat must be relevant to the attitudes in question (Albertson and Gadarian 2015; Price and Tewksbury 1997). This paper asks whether the effects of terrorist attacks on immigration policy preferences are dependent on the type of media coverage.

Using a novel methodological approach to natural experiments, this paper studies the effects of the *Charlie Hebdo* and Hyper Cacher attacks in Paris in January 2015 on immigration policy preferences in France and in five other countries. A crucial question is whether the attacks' effects on immigration preferences were moderated by people's exposure to different types of media coverage. The media coverage after the Paris attacks differed from that following earlier terrorist attacks; the international media framed them as attacks on free speech (Gómez-Domínguez *et al.* 2017), and, in France, the coverage of the French president's speeches and the large Republican marches showed people championing French Republican values, including the value of tolerance (Moran 2017). This study uses the timing of the European Social Survey (ESS 2014) to examine the effects of the terrorist attacks in a regression-discontinuity (RD) design. While similar studies of terrorism have been previously conducted (Finseraas *et al.* 2011; Finseraas and Listhaug 2013), this paper goes further methodologically; it both compares respondents within smaller geographical units and the effects in France with those in other countries to establish the possible moderating effects of the media coverage of terrorist attacks.

This paper draws from research on media effects to understand how terrorist attacks impact attitudes. So far, the negative effects of terrorism on out-group attitudes have been explained as consequences of heightened perceptions of threat in the aftermath of an attack. This can be understood as a priming effect (Iyengar and Kinder

1987), in which terrorist attacks make thoughts about terrorism more salient or accessible in the public's mind. Accordingly, following an attack, terrorism receives more weight in evaluations, affecting attitudes that people perceive as connected to terrorism, such as those towards immigration policy. However, the media coverage often changes on multiple dimensions after terrorism incidents, possibly priming considerations other than solely the terrorist threat. The media, the public and the political leaders seldom understand the goals of terrorists, and terrorists are often seen as attacking 'the nation' or 'the democracy' (Abrahms 2006, 2012, 2018: chapter 4). Thus, the coverage of the attacks often highlights central, 'national' values, perceived to be at stake. This focus may lead to a priming of the emphasised values, making them both salient and accessible in post-attack considerations.

For the increased salience of terrorism and national values to affect attitudes towards immigration policy, people must see terrorism and the national values as relevant for making judgements about the policies. In other words, there must be a connection between terrorism and the policies in the public's mental schemata. This connection may already be present, but it may also be created or suppressed by the media's coverage of an attack (Price *et al.* 1997; Scheufele 2004). Hence, the media coverage may have a framing effect on the public's mental schemata, affecting the perceived applicability or relevance of terrorism to other attitudes. In sum, the effects of terrorism may be dependent on the amount of coverage about the attacks themselves (priming effect), on what other considerations (i.e., values) the coverage includes and emphasises (also priming effect) and on what connections are made between the attacks and other issues (framing effect). As the coverage inside and outside France varied according to these dimensions, comparing the effects inside and outside the country provides insights both into the effects of the attacks on immigration policy preferences

and into the mechanisms creating these effects.

### **The effects of the terrorist threat**

While terrorist attacks have detrimental consequences for the immediate victims, the terrorists' main goal is to affect the broader public through the media coverage of the attacks. Hence, the relationship between terrorists and the media has been described as 'symbiotic'. However, the media seldom works as a mere microphone for terrorists. It is usually unable to convey the terrorists' goals (Abrahms 2006, 2012, 2018), often serving instead as a microphone for the political leadership (Wilkinson 1997) and even offering its own framings of attacks (Nacos *et al.* 2011). Yet, research on terrorism's consequences for political attitudes has largely viewed the media solely as a conveyor of information; media coverage of terrorism has been taken for granted, and the media has not been assumed to have any separate role in moderating the consequences of terrorist attacks.

Research on the effects of terrorism has found that people become more negative towards out-groups and think in terms of stereotypes after terrorist attacks and when perceiving terrorism as a threat (Traugott *et al.* 2002; Huddy *et al.* 2002, 2007; Echebarria-Echabe and Fernández-Guede 2006; Legewie 2013; Schüller 2016). Terrorism has been found to increase the perceived threat to both national culture and security (Boomgaarden and de Vreese 2007; Branton *et al.* 2011; Finseraas and Listhaug 2013), which are central determinants of immigration policy attitudes (Canetti-Nisim *et al.* 2008; Bansak *et al.* 2016). However, there has been mixed support for an effect of terrorism and an effect of the perception of threat from terrorism on attitudes towards immigration policy (Merolla and Zechmeister 2009; Lahav and Courtemanche 2012; Noelle-Neumann 2002; Huddy *et al.* 2005; Finseraas *et al.* 2011). Thus, terrorist attacks and perceived threats do not seem to affect attitudes towards immigration

directly, which suggests that further study/a better understanding of the relationship between such attacks and immigration is required

### **The priming and framing effects of terrorism**

This paper relies on the model of media effects proposed by Price and Tewksbury (1997), who argue that judgements are based on the most salient considerations that are seen as applicable to the issue. Accordingly, terrorism affects judgements about immigration policy if terrorism is an accessible consideration and is perceived as applicable or relevant to immigration policy. Modifying the equation presented by Chong and Druckman (2007: 107)<sup>i</sup> leads to an equation where a judgement is the sum of considerations, where each consideration (i) has three properties: accessibility (a), relevance (r) and valence (v). This gives the formula:

$$Attitude = \sum a_i * r_i * v_i,$$

This formula shows that considerations not deemed relevant ( $r = 0$ ) will not influence an attitude. Following this equation, the news coverage of an attack may influence the accessibility (a), the relevance (r) and the valence (v) of terrorism in the public's mind.

As outlined below, current research has been preoccupied with how news coverage of terrorism increases the accessibility (a) of terrorism (i.e., priming effects) but not with how this coverage may affect the perceived applicability or relevance (r) of terrorism (i.e., framing effects). However, media coverage of terrorism may have consequences for both the accessibility of terrorism and other considerations and for the applicability of terrorism to other considerations for other judgements.<sup>ii</sup> Most research has viewed the effects of terrorist attacks as a consequence of an increased perception of terrorism threats. The effects of these perceptions may be understood as a priming effect



— that is, that attacks make the known terrorist threat more salient. Thus, the terrorist threat is given more weight in related judgements (Iyengar and Kinder 1987: 64). For priming to influence attitudes towards a policy, there must be a connection in people's mental schemata between the primed terrorist threat and the respective policy (Price and Tewksbury 1997: 194; Scheufele and Tewksbury 2007: 16). A priming effect for terrorism is contingent on people judging the terrorist threat as applicable to evaluating immigration policy.<sup>iii</sup> Otherwise, the terrorist threat is not deemed relevant when people are asked about immigration policy, and its increased salience is irrelevant for this judgement.

After terrorist attacks, news reporting changes in other ways, rather than just by including stories about the attacks, which may lead to the priming of considerations other than the attacks. Often, terrorist attacks lead to broad, public, domestic backlashes, in which the media, politicians and public rally around central, 'national' values. Though the exact values differ according to the attack and country, examples abound. The 9/11 attacks in the US were described as attacks on 'freedom' and 'our way of life' (G. W. Bush in Rafoss 2019; Abrahms 2018: 65), the March 2005 attacks in Spain as attacks on the constitution and Spanish unity (Fominaya 2011; Sinkkonen 2016)<sup>iv</sup> and the July 2011 attacks in Norway as attacks on 'openness' and 'democracy' (Wollebæk *et al.* 2013; Jenssen and Bye 2013). The media usually covers central politicians extensively after terrorist attacks (at least domestically) (Kitch 2003; Schudson 2003; Zandberg and Neiger 2005; Thorbjørnsrud and Figenschou 2018), which may lead to a priming effect on particular national values.

Accordingly, in the aftermath of terrorist attacks, both the terrorist threat and national values may become more salient and accessible to the public. The media coverage after terrorism may affect judgements about issues in which the terrorist threat

or national values are perceived as relevant considerations. However, the relevance of these considerations may also be affected by the media coverage through framing effects. The media can emphasise certain connections over others, making the terrorist threat and national values more or less applicable to different policy judgements (Cacciatore *et al.* 2016; Scheufele and Tewksbury 2007); hence, the connection in people's schemata between immigration and a terrorist attack may be affected by the media's framing of the attack (Price *et al.* 1997; Scheufele 2004; Tewksbury and Scheufele 2009). As Iyengar (1987) shows, different emphasis frames of the same event, in this case a terrorist hijacking, affected people's interpretation of the event's cause (see also Brinson and Stohl 2009, 2012). Such different causal attributions may, in turn, make different policy proposals seem more or less relevant to hindering future attacks. Both the priming effects described above may be conditioned on framing — either of the terrorist attacks or of the values in question (see, e.g., Nelson *et al.* 2015).

Findings from studies concerning the effects of terrorism on immigration preferences seem to support such a combination of priming and framing effects. Finseraas and Listhaug (2013) find that perceptions of terrorism threats in Europe increased after the 2008 Mumbai attacks, but they do not find corresponding changes in attitudes towards immigration policy. Pakistani terrorists, with connections to the Pakistani Army, perpetrated these attacks, and the relationship between the attacks and European immigration policy were relatively weak. Lahav and Courtemanche (2012), on the other hand, do find that reading about the threat of terrorism affects immigration attitudes. However, in their experiment the text that the respondents read about terrorism explicitly mentions the possible immigration of terrorists (Lahav and Courtemanche 2012: 501), thus describing immigration as a possible cause of terrorism. Hence, the results could be interpreted as dependent on this framing effect, rather than

solely on the priming of terrorism. Studies of the July 22, 2011, attacks in Norway seem to support the effect of the national values also being primed. After the attacks, people became more positive and trusting of out-groups (Wollebæk *et al.* 2013; Jakobsson and Blom 2014), which may be attributed to the post-attack emphasis on tolerance (Solheim 2018).

The *Charlie Hebdo* and Hyper Cacher attacks provide an interesting test for the possible effects of terrorism priming and framing. The events in Paris were framed as attacks on free speech (Gómez-Domínguez *et al.* 2017), with immigration not part of this framing, which may have affected the connection between the attacks and immigration. In addition, French Republican values such as liberty, tolerance and the principle of *laïcité* (secularity) were central to both the massive demonstrations across France and speeches by the French political elite (Moran 2017: 318). The French media extensively covered these speeches and the ‘Republican marches’, possibly priming the French public with Republican values—including, among others, tolerance. Using data from the ESS 2014, it is possible to test whether these differences in priming and framing had consequences for attitudes towards immigration policy.

Prior research on the effects of the attacks on immigration preferences has been inconclusive, though there is some support for a more tolerant reaction in France than what has been the norm after other attacks. The people who participated in the Republican marches were mostly liberal and left-wing. In an experimental setting before and after the attacks, Mayer and Tiberj (2016) and Nugier *et al.* (2016) found that reminding French respondents of the Republican value of colour-blind equality reduced the feelings of threat. Brouard *et al.* (2018) and Castanho Silva (2018) found no effect of the attacks on immigration policy preferences (in France and in Europe respectively). Finally, Cohu *et al.* (2016) and Vasilopoulos *et al.* (2018) found more

standard reactions to the attacks, with increased prejudice and authoritarian attitudes respectively.

### **The media coverage of the attacks**

On January 7, 2015, two brothers entered the offices of the satirical newspaper *Charlie Hebdo* and killed 12 and injured 11.<sup>v</sup> The fatalities included well-known caricaturists at the newspaper. The terrorists escaped from Paris in a car, and the massive manhunt that followed ended two days later in a siege of the terrorists' hiding place and the storming of a kosher supermarket, where an accomplice of the brothers had taken several hostages. In total, 17 were killed in the two attacks, including the three attackers, and 22 were injured. *Charlie Hebdo* was targeted because it had published caricatures depicting the prophet Muhammad in several of its editions, and the terrorists thought that this was blasphemous. The supermarket was part of the Hyper Cacher chain of kosher supermarkets and was chosen deliberately to attack Jews.

The attacks were covered by news media across the world, and, based on prior research, it could be assumed that this terrorism priming would negatively affect attitudes towards immigration policy. Since this priming effect depends on people being exposed to news of the attacks, those who lived in France, or who watched television news, should be expected to become more negative towards immigration than others. This leads to the first hypothesis:

**Hypothesis 1:** (H1a) The news coverage of the *Charlie Hebdo* and Hyper Cacher attacks made people support more restrictive immigration policies, and (H1b) this effect was dependent on being exposed to news of the attacks.

As argued above, the framing of terrorist attacks may affect the extent to which they are perceived as relevant to political attitudes. The framing of the *Charlie Hebdo* and Hyper Cacher attacks soon converged on a free speech frame (Gómez-Domínguez

*et al.* 2017), and news media across the world extensively used caricatures or memes to show their support for *Charlie Hebdo*. While terrorism coverage often follows the framing set by the national government, at least at the domestic level (Kitch 2003; Schudson 2003; Entman 2004; Zandberg and Neiger 2005), the editorial teams of various media outlets clearly felt directly targeted by these attacks and took an active role as actors in the conflict (Hjarvard and Lundby 2018: 58; Eko and Hellmueller 2018: 18). Solidarity with the attacked editorial team and the defence of the right to free speech became central themes in the coverage, and news organisations repeated the slogan ‘*Je suis Charlie*’. This media framing may have suppressed the perceived applicability of the attacks to attitudes concerning immigration policy, creating other connections instead. Since framing effects are dependent on attention (Scheufele and Tewksbury 2007: 14), it could be expected that the moderating influence of framing would be strongest for people who were more exposed to the frame—in this case, people who either lived in France or were watching the news more than others. This leads to the second hypothesis:

**Hypothesis 2:** (H2) The more that people were exposed to news of the terrorist attacks, the less the attacks affected their attitudes towards immigration policy.

While the freedom of speech frame dominated the international media, the coverage in France included both the speeches by president Hollande and the large Republican marches across the country (Moran 2017). President Hollande (2015a, 2015b, 2015c) described the attacks as assaults on the French Republic and spoke of ‘Republican values’ in the aftermath. On January 11, four days after the attacks began in Paris, around four million people participated in the largest public demonstrations in France since World War II. The demonstrators supported the victims and their families, and, like the president, showed their support for Republican values, such as liberty,

equality, fraternity, freedom of speech, tolerance and the principle of *laïcité* (secularity). Indeed, the organisers of the marches first said there was no room for Marine Le Pen, the leader of the anti-immigration Front National (now Rassemblement National), because her party ‘stigmatizes citizens because of their origin or their religion’ (Equy *et al.* 2015). This emphasis on Republican values in France after the attacks may have served as a priming of tolerance, motivating people to control their prejudices (Ivarsflaten *et al.* 2010; Blinder *et al.* 2013). The higher level of coverage in France, and the connection between national values and French Republicanism, probably made this priming more effective in France than in other countries (Shen and Edwards 2005). This leads to the third hypothesis:

**Hypothesis 3: (H3)** The effects of the attacks were less negative in France than in other countries, regardless of whether or not people watched the news.

## **Methods and data**

### *Data*

This paper is based on the seventh round of the ESS (2014), conducted in some of the participating countries during the period surrounding the 2015 terrorist attacks on *Charlie Hebdo* and the Hyper Cacher store in Paris.<sup>vi</sup> Accordingly, some of the respondents were interviewed before, and some after, the attacks. The timing of the interviews determined the respondents’ exposure to news about the terrorist attacks. This is leveraged as a natural experiment, as there is no reason to believe that the survey respondents were able to decide the timing of the interviews because of the attacks. This paper leverages a second causal identification strategy as well; by comparing the attitudinal changes in France with those in other European countries, it is possible to distinguish the effects of differences in media coverage of the attacks.

### *Empirical strategy*

The respondents' attitudes towards immigration policy are assumed to have the potential outcome  $y_i(r)$  (Cattaneo *et al.* 2015).  $R_i$  is the date of the interview, and the position on  $R_i$  relative to the cut-off ( $r_0$ ), i.e., the date of the attacks, determines the treatment:

$$Z_i = 1 * (R_i \geq r_0)$$

For a bandwidth of dates  $W_0 = [\underline{r}, \bar{r}]$  around the cut-off  $\underline{r} < r_0 < \bar{r}$ , the distribution of the score  $r$ , i.e., the date, is assumed to be the same for all units. Thus, inside this bandwidth, the assigned dates are assumed to be randomly assigned. In addition, the potential outcome is assumed to depend only on the treatment and not on the date ( $r$ ) itself:

$$y_i(r) = y_i(z_{w_0}) \text{ for all } r.$$

Thus, the individuals' attitudes towards immigration is assumed only to be affected by the timing of the interview in relation to whether they experienced media coverage of the attacks or not. The date has no other influence on attitudes. As long as these assumptions hold, the difference in means between the groups interviewed before and after the attacks can be used to calculate the attacks' effect.

The key issue is then to find the bandwidth where these assumptions hold. This study use balance tests following the recommendations by Cattaneo *et al.* (2015).<sup>vii</sup> Only regions where these tests hold for the smallest bandwidth are used.<sup>viii</sup> The widest balanced bandwidth, where all smaller bandwidths are balanced, is used in each region, and balance is then tested in the aggregated sample using the same tests as for the effects (Cattaneo *et al.* 2015).<sup>ix</sup> To maximise the probability that the as-if-random assumption holds, these balance tests are run at the regional level, rather than the

country level, because the selection of interview dates (i.e., the randomisation) probably happened within these smaller geographical areas.<sup>x</sup> In addition, this approach has the positive aspect of preventing comparisons of people from different areas of the countries before and after the attacks (a possible confounder) and reducing sampling variability (Gerber and Green 2012: 72–73).

The regions are used as a blocked experiment, and the effects in each region are first aggregated to the national level and then the international level (see Gerber and Green 2012).<sup>xi</sup> This approach deviates from earlier studies, which have only controlled for country differences. As shown in table 1, there are three French regions and 10 others that are balanced, amounting to a total of 204 French respondents and 658 respondents from five other countries.<sup>xii</sup> To test the statistical validity of the results, repeated sampling inference is used (Cattaneo *et al.* 2015). This sampling is run at the regional level, and then the procedure outlined above is used to calculate the mean difference for each sample.<sup>xiii</sup>

RD designs have been used in a broad range of papers on the effects of terrorism. However, prior studies have relied on parametrically modelling the time trends in the data, using types of linear or logistic regression (Finseraas *et al.* 2011; Finseraas and Listhaug 2013; Legewie 2013; Jakobsson and Blom 2014; Geys and Qari 2017) or other types of parametrically modelling (Castanho Silva 2018). However, using the timing of an interview as a forcing variable differs from other types of RD studies because there is no reason to believe that it correlates with the dependent variable (which is a central issue in RD designs; see de la Cuesta and Imai 2016; Lee and Lemieux 2010). Accordingly, the parametric modelling is less useful in this case and may have problematic consequences if the relationship is not modelled correctly. In addition, as is shown here, other aspects of the survey design may be exploited to



increase the plausibility of reaching causal inferences.

### *International comparison*

To test the difference in effects between France and the other countries, a second causal identification strategy is employed. By comparing the attitudinal changes in France with those in other European countries, it is possible to distinguish differences in effects that may be caused by differences in media coverage. The difference in effects is the variation between the differences in means from France and the other countries. However, the countries included in the analyses vary in their baseline levels of support for immigration. Low baseline support may create a ‘flooring effect’ because people who are already responding on the scale’s negative extreme regarding immigration (here ‘Allow none’) are unable to move further in a negative direction. Thus, the absolute difference in means may not be a good measure in these countries, and this is especially problematic for comparing them with the effects in France—a country with higher baseline levels of support for immigration. Hence, two types of estimates are reported. The first is the absolute difference in means. The second is the relative difference in means, which is the absolute mean difference divided by the mean of the untreated group. This measure gives relative change in attitudes, a measure that takes into account the baseline support and the differences in maximum possible amount of change for each region. All analyses were run in R (R Core Team 2018).

Table 1 around here

### *News use*

The moderating influence of media use was tested to try to determine the underlying causal mechanism of the effects of the attacks. The question of how much television (TV) news the respondent watches on a regular day is the only question

concerning news exposure in the ESS. Using the balanced dataset, an OLS regression was run—regressing immigration policy attitudes on this variable, the balance test variables and a variable denoting ‘treatment’ (see above). The TV-news use variable was log transformed to take into account that the marginal effect is expected to be reduced with more TV-news use. The TV-news variable was interacted with the treatment variable and a variable denoting a person as being from France. It was also allowed to vary between the different regions. Thus, this analysis shows whether watching TV-news was correlated with attitudes towards immigration policy, whether this correlation changed after the attacks and whether these two correlations were different in France than in other countries.

The results indicate a possible moderating effect of news consumption, but, since other factors may correlate with TV-news consumption and news consumption may have increased as a consequence of the attacks, this analysis is susceptible to both omitted variable bias and reverse causation. The results should, therefore, be treated with caution. Table 12 in the appendix includes tests of other variables, such as education, that may correlate with news consumption, and these tests do not show the same pattern as the results with TV-news consumption, supporting the results.<sup>xiv</sup>

Table 2 around here

### *Dependent variables*

The dependent variables can be divided into two types of attitude towards immigration policy: immigration policy in general and immigration policy concerning specific minority groups. The first general index includes questions on allowing ‘immigrants from poorer countries outside Europe’,<sup>xv</sup> ‘immigrants of the same race/ethnic group as the majority’ and ‘immigrants of different race/ethnic group from

the majority'. This index is also divided into two separate indexes for European (same ethnic group) and non-European (different ethnic group) immigrants.<sup>xvi</sup> Finally, three items, which are used 'as is', ask about the immigration of Muslims, Jews and Roma. All these survey questions about immigration had the following possible answers: 'Allow many to come and live here', 'Allow some', 'Allow a few' and 'Allow none'. Both the questions and the indexes are recoded from 0 to 1 so that a positive value indicates support for immigration.

## **Results**

The results from the analyses of the mean differences in the countries outside France are printed in table 2, and they show a clear effect of the attacks on attitudes towards immigration. Beginning with effects on the general immigration policy index (left-most column), the attacks caused a negative reaction (significant at the .05 level). The effect is at around -0.07 on a scale from 0 to 1. To determine if the results are dependent on the types of immigration and groups considered, the second and third columns display the results from analyses of attitudes towards immigration from within and outside the EU. The attacks reduced support for immigration from both groups outside France, and both effects are statistically significant. The last three columns in the table show the effects on attitudes towards the immigration of more specific ethnic and religious groups. These columns do not show the expected pattern; while there is a negative effect on support for Muslim immigration, there is also a negative effect on support for Jewish immigration. There are, however, no effects on attitudes towards Roma immigration.

Table 3 around here

The effect estimates for France are displayed in table 3, and the estimated

difference is negative for all groups, except for Jewish immigration. However, none of the results are statistically significant, and the effects are smaller than those for the other countries—consistently at around -0.02. For Jewish immigration, the estimate is positive at .02, but it is not statistically significant. The table's last row displays one-sided significance tests for the effect to be significantly more negative outside France. These tests illustrate that the change in attitudes towards Jewish immigration is significantly less negative in France than in the other countries. (The estimate for EU countries is also significant at .1.) Thus, so far, the results indicate that the attacks negatively affected attitudes towards different types of immigration outside France, but that there was no such effect within France.

Table 4 around here

However, comparing the absolute differences in means may underestimate the differences in effects because the non-French respondents were relatively more negative towards immigration from the outset. Tables 4 and 5 present the relative difference in means. These estimates can be interpreted as the percentage change in attitudes. The effect sizes outside France are now around -10 %, with the exception of Muslim immigration, which is -17 %. There are also some changes in the estimated significances, and, while the change in support for immigration from EU countries is significant at .05, the changes in support for immigration policy in general, and towards Muslim immigration in particular, are significant at .1. The other estimates are not statistically significant. Thus, the change from absolute to relative difference modifies the picture. Attitudes towards Muslim immigration are affected the most by the attacks—between one and a half times to two times the size of the effect on attitudes towards other types of immigration outside France. The differences between France and the other European countries are now significant for both Muslim and Jewish

immigration (at 0.1 and 0.05 respectively). They continue to be significant for immigration from EU countries (at .1), but not for other attitudes. Thus, France seems to have had a significantly less negative reaction towards both Jewish and Muslim immigration than the other countries after the *Charlie Hebdo* and Hyper Cacher attacks.

Table 5 around here

To test how this effect is correlated with TV-news use, attitudes towards the immigration of Muslims are regressed on all the control variables described above and a variable for watching TV-news. The main interest here is a three-way interaction between TV-news watching, being interviewed before or after the attacks and living in France. The marginal effects of the attacks are shown in figure 1 for different levels of TV-news use and for both France and the other countries.<sup>xvii</sup> Respondents who do not watch TV-news seem to change in a more negative way than others outside France, though people who watch TV-news do not become less negative towards immigration than others; the interaction with being from France is not significantly different from the results in the other countries. However, the interaction estimates are in the opposite direction, cancelling out the estimated correlation between news use and attitudes. Running the regression with only the French respondents does not reveal a change in the correlation between news use and immigration attitudes after the attacks. This correlation also holds for Jewish immigration but not for immigration policy in general (see table 11).

Figure 1 around here

## **Discussion**

This paper presented three hypotheses concerning the effects of the *Charlie Hebdo* and Hyper Cacher attacks on immigration policy preferences. Drawing on the

findings of earlier literature, the attacks were expected to negatively affect attitudes towards immigration policy (H1a), and this effect was expected to be stronger for people exposed to more news of the attacks (H1b). However, because of the lack of connection between the attacks and immigration policy in the media framing, the second hypothesis was the exact opposite of the first. People were expected to become less negative the more they were exposed to the coverage of the attacks (H2). Finally, it was expected that the emphasis on Republican values in France might prime people to be more tolerant and lead to a less negative reaction to the attacks (H3).

To some extent, the results here support H1a and earlier findings of a negative reaction towards immigration after terrorist attacks. The respondents outside France did become more negative towards immigration following the attacks, a negative effect present across different types of immigration and stronger but not confined to Muslim immigration. While this could be attributed to higher degrees of out-group derogation after terrorist attacks (see, e.g., Echebarria-Echabe and Fernández-Guede 2006), it seems probable that the attacks reduced support for immigration in general, affecting more specific subtypes as well.

However, this negative finding is not the only effect present in the data, moderating the expected relationship between terrorism and attitudes. It is possible to interpret the lack of effect in France and the reduced effect among people who watched TV-news outside of France as caused by the media's free speech frame (H2) and coverage of the tolerant reaction from the French public and politicians (H3). Since there was less media coverage of the French politicians and demonstrations outside France and the French Republican values may not have resonated outside the country (Shen and Edwards 2005), a simple solution would be to reduce this finding to an effect of the media's free speech frame (H2). Accordingly, the media framing of the attacks

led people, both in France and other countries, to see the attacks as of little relevance to immigration policy; therefore, the attacks did not change their immigration preferences.

Such framing effects depend on people's exposure and attention to the frame (Scheufele and Tewksbury 2007: 14). Thus, media exposure is central, and a correlation between media use and the effects of the attacks was found for respondents outside France, supporting a framing effect. However, the lack of such a correlation in France may point to a simpler mechanism behind the French reaction. As argued in the introduction, the French media's coverage of politicians and demonstrators espousing tolerance as the correct reaction to the attacks may have had a priming effect on the French public. Priming effects are thought to be less dependent on attention than framing effects, and they are less dependent on the amount of media exposure. Being in France in the aftermath of the attacks may have, in itself, been enough for this kind of effect. While the two effects, priming and framing, cannot be separated in the analyses presented here, the results seem to support both of these mechanisms simultaneously.

Further studies should consider frame setting after terrorism (Scheufele 2004), examining why certain values are chosen and emphasised over others and why terrorism is made relevant for certain political issues and not others. Studying what, and who, determines framing choices after acts of terrorism could give important insights into the mechanisms behind the effects of terrorism. In the case of the attacks studied here, the media seems to have played a distinct role in setting the dominant framing (see Nacos *et al.* 2011 for examples of how the American media contributed to the framing of 9/11). Reactions to terrorism often highlight values that are perceived as characteristic of the national community (Sinkkonen 2016; Abrahms 2018); the French Republican nationalism, with its emphasis on citizenship rather than lineage and ethnicity, may have facilitated France's relatively tolerant reaction. However, the choice of values is

not given in advance, and there are usually different values of national relevance that may be evoked by political entrepreneurs. Indeed, in France, the former leader of the Front National, Jean-Marie Le Pen, tweeted that he was not ‘*Charlie Hebdo*’ but rather ‘Charlie Martel’, the Frankish king known for beating back the Muslim invasion in the Battle of Tours in 738 (Provost 2015). Thus, even in France, other values and frames were available after the attacks, and both the specific values that are chosen and how they are, in turn, framed (Nelson *et al.* 2015), may depend on actions by the elite and media following attacks.

This paper has tested a novel approach to the RD method, using the as-if-random assumption. This method relies on explicit tests of balance rather than on parametrical modelling. This is especially useful in the context of natural experiments that use survey timing, as there is little reason to believe that time has a direct influence on the dependent variable. Thus, balance becomes a more central concern, and parametrical modelling may cause more problems than it solves. This paper has also shown how geographical information can be further exploited to increase balance. By using smaller geographical units, it was possible to achieve higher levels of balance and more plausible identification of the randomisation of the interview timing. The resulting balanced dataset used here is much more limited than those used in similar studies. Since balance is essential, it is not possible to use as much information as can be used in other approaches to RD. However, the imbalances in the unused data also make the applicability of other approaches questionable, especially regarding the extent to which researchers using these approaches were able to parametrically redress those imbalances.

This paper has followed Kinder’s (2007) call for more studies of media effects in real-world settings. As is evident from the analyses, studying a real-world setting is



more complex than studying an experimental one. While the different country contexts offer a certain amount of control over exposure to media coverage, the media effects and the mechanisms behind them soon become both complex and intertwined. The question of whether the free speech frame or the tolerance prime was decisive for the Paris attacks' lack of effect on immigration attitudes in France remains an open one. In addition, while the emphasis on Republican values in France may be seen as a framing of the attacks, it has been argued here that this may have had a priming effect on the French public. In their criticism of the framing concept's vagueness, Cacciatore *et al.* (2016) could be interpreted as arguing for only studies of equivalence frames (i.e., frames where all the information is kept the same), but developing research on other media effects is necessary for the real-world application of this literature's insights. As this paper has shown, researching different types of media effect in one study is possible and may yield interesting results.

While not everyone 'became *Charlie*' after the attacks, the free speech frame and the Republican values focused on in the media coverage seem to have affected a considerable group both in France and other European countries. Thus, the consequences of terrorist attacks are not independent of the media's coverage of them. The framing and priming of terrorist attacks by the media may either attenuate the consequences of an attack, as in the case of the Charlie Hebdo and Hyper Cacher attacks, or possibly, in other situations, further strengthen its negative effects. Further studies should investigate both these dynamics in other contexts and the preconditions for different types of media coverage of terrorism.

## **Appendix**

Tables 6 - 11 here

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## **Disclosure statement**

No potential conflict of interest was reported by the author.

## **Notes on contributor**

Øyvind Bugge Solheim is currently an adviser in the secretariat of the Norwegian Government Commission on Electoral Law. His research examines the effects of terrorism on political attitudes. He is primarily studying the effects on attitudes towards immigrants and minorities and how such effects are contingent on other factors, such as the societal and political reactions to terrorist attacks.

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- <sup>i</sup> The model of framing presented here differs somewhat from the one Chong and Druckman (2007) present. In their model, an attitude is the sum of the products of the weights ( $w$ ) and the valence ( $v$ ) of other considerations. Thus, terrorist attacks increase the weight of terrorism and affect attitudes. Their model does not explicitly discuss which issues are included in the consideration itself. In the model used here, the weight ( $w$ ) is seen as consisting of two dimensions, accessibility ( $a$ ) and relevance ( $r$ ) (i.e., applicability).
- <sup>ii</sup> This study differs somewhat from most studies of framing effects in that it is not the issue at stake (immigration policy) but, rather, a separate consideration (the terrorist attacks) that is being framed. Accordingly, some parts of the media coverage that could lead to framing effects of terrorism (i.e., the connection to French Republican values) are assumed to have priming effects in the context of attitudes towards immigration policy. Immigration policy may be framed as connected to terrorism (e.g., the study by Lahav and Courtemanche (2012)) or to Republican values (e.g., the study by Nugier *et al.* (2016)), but that is not the case here.
- <sup>iii</sup> This argument mirrors the findings by Albertson and Gadarian (2015) on the effects of anxiety. They find that anxiety caused by perceptions of threat increases policy support for safety measures, but only if these measures are perceived as relevant to the threat.
- <sup>iv</sup> This became a problem for Prime Minister Aznar as it soon became evident that Islamic terrorists connected to Al Qaeda perpetrated the attacks and not Basque separatist terrorists connected to Euskadi Ta Askatasuna (ETA).
- <sup>v</sup> The brothers were not immigrants themselves, but their parents were born in Algeria. In coverage from the English-speaking France 24 during the first two weeks after the attacks, the attackers' French citizenship was downplayed, and they were described as foreign or Algerian (Połńska-Kimunguyi and Gillespie 2016).
- <sup>vi</sup> This study uses the seventh round of the European Social Survey (ESS). The data that support the findings are available without restrictions for not-for-profit purposes from Norwegian Centre for Research Data (NSD) for European Social Survey European Research Infrastructure (ESS ERIC) at <http://www.europeansocialsurvey.org> Replication R-code is available from the author's website: <http://www.oyvindsolheim.com>.
- <sup>vii</sup> The code from the `rdlocrand` R-package (Cattaneo *et al.* 2016) is used and modified to allow for blocked sampling and blocked measurement of the means. Replication R-code is available online.
- <sup>viii</sup> The tests are run for gender, age, national income decile, dummy for parents born in country, dummy for being in paid work and five education dummy variables. None of these

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variables could be affected by the attacks (Montgomery *et al.* 2018). Recent papers have controlled for ideology (Castanho Silva 2018) or used ideology (left or right self-placement) as an independent variable (Brouard *et al.* 2018). This may be problematic here as placement on this scale could be affected by the attacks (for example, because of increased conservatism under threat (Nail *et al.* 2009)); Castanho Silva (2018: table 1) does seem to find a right-wing shift after the attacks.

<sup>ix</sup> All the samples are balanced in the aggregate as well; see the results of the balance tests in table 9 in the appendix.

<sup>x</sup> The interviews were not conducted in one region at a time, but most individual interviewers only interviewed in one region. Thus, there is reason to believe that the random selection of respondents answering before and after the attacks happened at the regional level. This study uses the highest regional level where there is more than one region (i.e., The Nomenclature of Territorial Units for Statistics (NUTS) 1 or NUTS 2). NUTS is a standard for geographical areas in the European Union.

<sup>xi</sup> This gives a weighted mean difference, in which each country weighs the same, and each region's weight in each country is based on its number of respondents. Pooling all respondents (no weights) and weighting by region so that each region weighs the same inside the countries does not give very different results; see tables 6-8.

<sup>xii</sup> This varies a bit between the different analyses as the balance tests are run for each of the dependent variables separately, and there are differences in the amount missing for each dependent variable.

<sup>xiii</sup> The date of the attacks, '1715', is set as a seed to facilitate the replication of the results.

<sup>xiv</sup> Controlling for political interest by including a similar interaction as the one with TV news does not affect the results either (not printed).

<sup>xv</sup> The similarly phrased question on allowing immigrants from poorer countries inside Europe was not asked in the Czech Republic, and, therefore, it is not included in the analysis.

<sup>xvi</sup> The indexes have a high degree of internal consistency, with a Cronbach's alpha of 0.88 for the general index, 0.86 for the non-European index and 0.76 for the European index.

<sup>xvii</sup> See table 10 in the appendix for the regression results.

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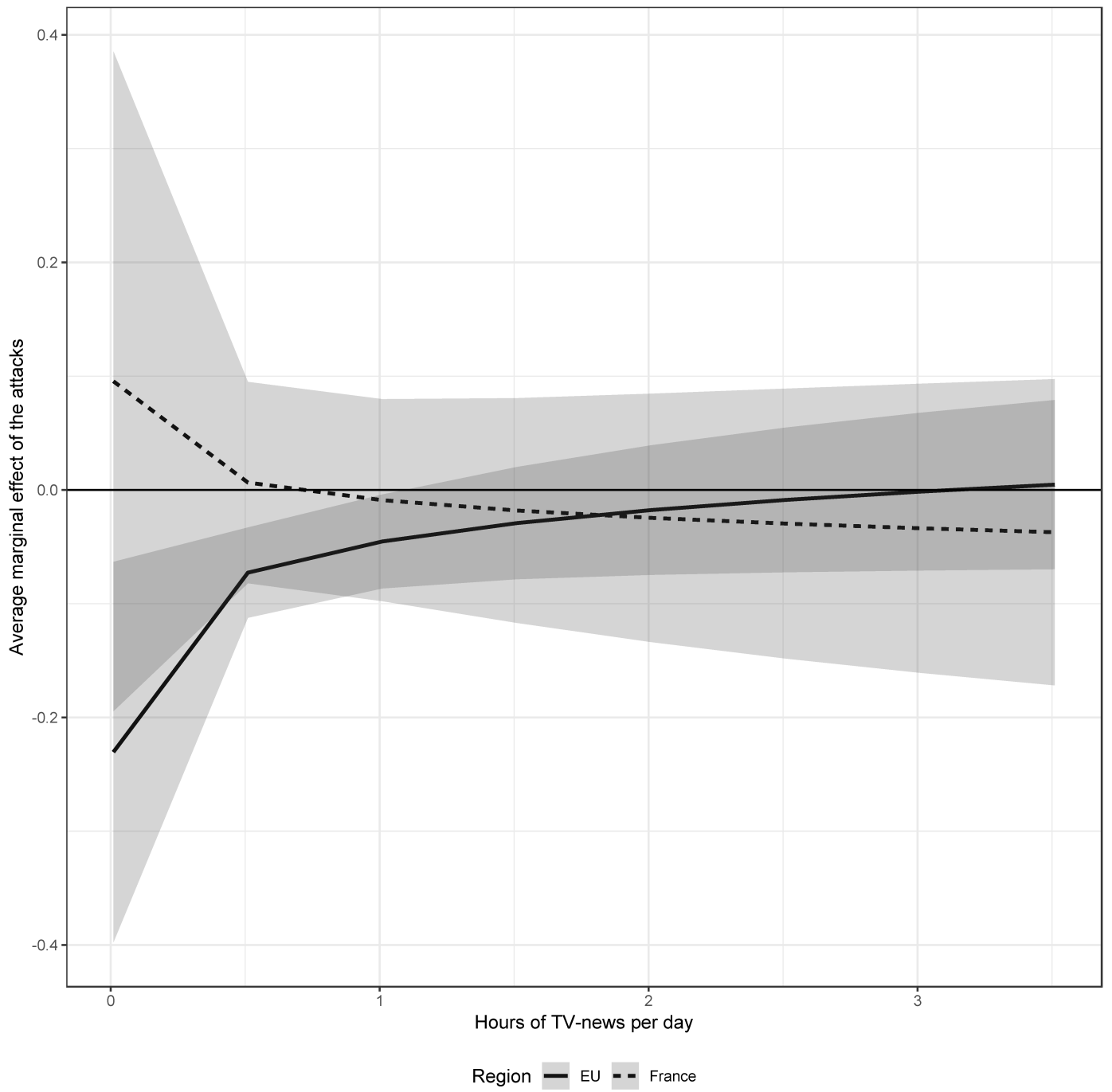


Table 1. Descriptive statistics of the bandwidths for the different regions<sup>1</sup>

Country	Region	Minimal bandwidth	Bandwidth	N before	N after	N total
Belgium	BE1	30	30	17	17	34
Czech Republic	CZ01	4	6	19	24	43
Czech Republic	CZ03	5	27	59	106	165
Czech Republic	CZ04	10	10	12	31	43
Czech Republic	CZ07	8	8	11	12	23
Germany	DE7	22	27	12	32	44
Germany	DE3	27	28	12	39	51
Germany	DE9	23	24	11	23	34
Finland	FI1	16	22	43	117	160
The Netherlands	NL2	14	25	49	12	61
<b>Total EU</b>	<b>10 regions</b>	<b>30</b>	<b>30</b>	<b>245</b>	<b>413</b>	<b>658</b>
France	FR1	19	19	16	28	44
France	FR4	22	30	25	23	48
France	FR6	19	30	75	37	112
<b>Total France</b>	<b>3 regions</b>	<b>22</b>	<b>30</b>	<b>116</b>	<b>88</b>	<b>204</b>

Table 2. Effects of the attacks on immigration attitudes in five European countries

	Immigration policy	EU countries	Poor countries	Muslim	Jewish	Romani
Estimate	-0.069	-0.092	-0.068	-0.072	-0.073	-0.040
P-value	0.012	0.009	0.015	0.006	0.02	0.212
N	594	343	596	648	612	649
Regions	11	7	11	10	11	10
Countries	5	4	5	5	5	5

<sup>1</sup> This is the sample used for the analyses of immigration of Muslims. The samples vary somewhat because the selection of bandwidths are run for each of the dependent variables and there are differences in the amount of missing.

Table 3. Effects of the attacks on immigration attitudes in France

	<b>Immigration policy</b>	<b>EU countries</b>	<b>Poor countries</b>	<b>Muslim</b>	<b>Jewish</b>	<b>Romani</b>
Estimate	-0.017	-0.029	-0.010	-0.021	0.022	-0.021
P-value	0.598	0.366	0.77	0.603	0.524	0.64
N	197	197	198	198	196	197
Regions	3	3	3	3	3	3
Countries	1	1	1	1	1	1
P-value (diff)	0.115	0.095	0.102	0.141	0.017	0.359

Table 4. Relative effects of the attacks on immigration attitudes in five European countries

	<b>Immigration policy</b>	<b>EU countries</b>	<b>Poor countries</b>	<b>Muslim</b>	<b>Jewish</b>	<b>Romani</b>
Estimate	-0.098	-0.143	-0.100	-0.170	-0.103	-0.137
P-value	0.078	0.035	0.116	0.051	0.103	0.198
N	594	343	596	648	612	649
Regions	11	7	11	10	11	10
Countries	5	4	5	5	5	5

Table 5. Relative effects of the attacks on immigration attitudes in France

	<b>Immigration policy</b>	<b>EU countries</b>	<b>Poor countries</b>	<b>Muslim</b>	<b>Jewish</b>	<b>Romani</b>
Estimate	-0.023	-0.040	-0.014	-0.037	0.032	-0.033
P-value	0.664	0.427	0.831	0.62	0.525	0.731
N	197	197	198	198	196	197
Regions	3	3	3	3	3	3
Countries	1	1	1	1	1	1
P-value (diff)	0.153	0.099	0.145	0.065	0.027	0.175

Table 6. Effects of the attacks on immigration attitudes in five European countries (regions weight 1)

	<b>Immigration policy</b>	<b>EU countries</b>	<b>Poor countries</b>	<b>Muslim</b>	<b>Jewish</b>	<b>Romani</b>
Estimate	-0.065	-0.092	-0.064	-0.055	-0.055	-0.031
P-value	0.023	0.012	0.023	0.06	0.085	0.348
N	594	343	596	648	612	649
Regions	11	7	11	10	11	10
Countries	5	4	5	5	5	5

Table 7. Effects of the attacks on immigration attitudes in France (regions weight 1)

	<b>Immigration policy</b>	<b>EU countries</b>	<b>Poor countries</b>	<b>Muslim</b>	<b>Jewish</b>	<b>Romani</b>
Estimate	-0.03162	-0.04569	-0.02195	0.00882	0.023511	0.03106
P-value	0.36	0.159	0.553	0.838	0.46	0.55
N	197	197	198	198	196	197
Regions	3	3	3	3	3	3
P-value (diff)	0.223	0.175	0.2	0.169	0.041	0.486

Table 8. Effects of the attacks on immigration attitudes in five European countries (no weights)

	<b>Immigration policy</b>	<b>EU countries</b>	<b>Poor countries</b>	<b>Muslim</b>	<b>Jewish</b>	<b>Romani</b>
Estimate	-0.047	-0.073	-0.052	-0.072	-0.032	-0.057
P-value	0.031	0.021	0.02	0.002	0.171	0.019
N	594	343	596	648	612	649
Regions	11	7	11	10	11	10
Countries	5	4	5	5	5	5

Table 9. Results of the balance tests

Type of immi- gration	Type	Age	Fema le	In paid work	Income (decile)	Less Than Lower Secondary	Lower Second ary	Tertiary Educati on	Advanced Vocational	TV- news	Parents born in country	Upper Second ary
EU	Estimate	-2.65	0.04	-0.10	0.00	0.05	-0.05	-0.05	0.05	-0.06	0.01	0.00
	P-Value	0.26	0.58	0.17	0.99	0.44	0.17	0.42	0.39	0.55	0.91	0.96
Jewish	Estimate	-0.91	0.04	-0.07	0.10	0.03	-0.03	-0.05	0.02	-0.05	0.00	0.02
	P-Value	0.64	0.47	0.25	0.73	0.50	0.28	0.35	0.57	0.52	0.98	0.62
Muslim	Estimate	-0.32	0.05	-0.05	-0.01	0.06	-0.03	-0.06	0.03	-0.01	0.01	0.01
	P-Value	0.85	0.38	0.38	0.96	0.23	0.22	0.23	0.54	0.81	0.88	0.85
Policy	Estimate	-0.81	0.04	-0.07	0.12	0.04	-0.03	-0.05	0.02	-0.04	0.00	0.02
	P-Value	0.66	0.48	0.22	0.67	0.46	0.30	0.35	0.57	0.54	0.95	0.73
Poor countries	Estimate	-0.81	0.04	-0.07	0.12	0.04	-0.03	-0.05	0.02	-0.04	0.00	0.02
	P-Value	0.66	0.48	0.22	0.67	0.46	0.30	0.35	0.57	0.54	0.95	0.73
Romani	Estimate	-0.32	0.05	-0.05	-0.01	0.06	-0.03	-0.06	0.03	-0.01	0.01	0.01
	P-Value	0.85	0.38	0.38	0.96	0.23	0.22	0.23	0.54	0.81	0.88	0.85



Table 10. Regression results (OLS) from regressing Muslim immigration on TV-news use, different specifications

*Dependent variable: Muslim immigration*

	TV-news:				
	Log	Dichotomous	Continuous	Log (only France)	Log (not France)
	(1)	(2)	(3)	(4)	(5)
Constant	0.433*** (0.047)	0.097 (0.100)	0.302*** (0.069)	0.769*** (0.093)	0.401*** (0.053)
TV-news	0.070*** (0.020)	0.291*** (0.091)	0.066** (0.032)	0.0003 (0.018)	0.072*** (0.021)
After attack	-0.046** (0.021)	-0.225** (0.100)	-0.080** (0.038)	-0.012 (0.038)	-0.045** (0.022)
TV-news:After attack	0.038* (0.020)	0.171* (0.102)	0.016 (0.018)	-0.007 (0.028)	0.035* (0.021)
After attack:France	0.037 (0.050)	0.320* (0.189)	0.112 (0.088)		
TV-news:After attack:France	-0.061 (0.039)	-0.274 (0.195)	-0.032 (0.036)		
France	0.083* (0.043)	0.381*** (0.130)	0.194*** (0.073)		
TV-news:France	-0.063** (0.029)	-0.261* (0.135)	-0.055 (0.037)		
TV use (log)	-0.004 (0.019)	0.003 (0.018)	-0.009 (0.020)	0.052 (0.036)	-0.015 (0.022)
Age (Centered)	-0.001** (0.001)	-0.001** (0.001)	-0.001* (0.001)	-0.001 (0.001)	-0.001 (0.001)

Female	-0.002	-0.005	-0.011	-0.034	0.007
	(0.018)	(0.018)	(0.019)	(0.038)	(0.021)
In paid work	0.013	0.020	0.004	-0.161***	0.042*
	(0.022)	(0.022)	(0.022)	(0.045)	(0.025)
Parents born in country	-0.018	-0.017	-0.012	-0.019	-0.013
	(0.024)	(0.024)	(0.025)	(0.040)	(0.030)
Income (decile)	0.004	0.004	0.003	-0.001	0.005
	(0.004)	(0.004)	(0.004)	(0.008)	(0.005)
Education(Upper Secondary as baseline)					
Less Than Lower Secondary	-0.00002	-0.002	0.008	-0.231***	0.029
	(0.030)	(0.029)	(0.030)	(0.069)	(0.033)
Lower Secondary	-0.036	-0.040	-0.027	-0.187**	-0.010
	(0.047)	(0.047)	(0.048)	(0.086)	(0.057)
Advanced Vocational	0.055	0.055	0.065*	-0.050	0.063
	(0.034)	(0.034)	(0.035)	(0.084)	(0.038)
Tertiary Education	0.150***	0.157***	0.166***	-0.0004	0.166***
	(0.032)	(0.031)	(0.032)	(0.073)	(0.036)
Region CZ0	-0.315***	0.198*	-0.165***		-0.323***
	(0.039)	(0.116)	(0.062)		(0.041)
Region DE3	0.273***	0.273***	0.261**		0.271***
	(0.056)	(0.047)	(0.103)		(0.058)
Region DE7	0.126***	0.601***	0.307***		0.126**
	(0.048)	(0.214)	(0.079)		(0.051)
Region DE9	0.281***	0.570**	0.412***		0.275***

	(0.051)	(0.278)	(0.105)		(0.054)
Region FI1	-0.066*	0.522***	0.138**		-0.070*
	(0.038)	(0.153)	(0.066)		(0.040)
Region NL2	-0.039	0.052	0.083		-0.038
	(0.037)	(0.130)	(0.065)		(0.040)
TV-news:Region CZ0	-0.100***	-0.477***	-0.065*		-0.102***
	(0.027)	(0.121)	(0.036)		(0.028)
TV-news:Region DE3	0.069		-0.001		0.072
	(0.096)		(0.058)		(0.100)
TV-news:Region DE7	-0.101**	-0.432**	-0.087**		-0.096**
	(0.043)	(0.218)	(0.043)		(0.045)
TV-news:Region DE9	-0.078	-0.245	-0.062		-0.075
	(0.056)	(0.282)	(0.061)		(0.058)
TV-news:Region FI1	-0.123***	-0.542***	-0.095**		-0.123***
	(0.032)	(0.157)	(0.038)		(0.034)
TV-news:Region NL2	-0.032	-0.041	-0.065*		-0.031
	(0.028)	(0.133)	(0.035)		(0.029)

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Observations	801	801	801	186	615
R <sup>2</sup>	0.396	0.397	0.377	0.251	0.411
Adjusted R <sup>2</sup>	0.373	0.375	0.354	0.194	0.386

Note:

$p < 0.1$ ;  $p < 0.05$ ;  $p < 0.01$

Table 11. Regression results (OLS) from regressing support for Jewish immigration and immigration policy on log transformed TV-news use

	<i>Dependent variable:</i>	
	Jewish immigration	Immigration policy
	(1)	(2)
Constant	0.525*** (0.048)	0.539*** (0.043)
TV-news (log)	0.007 (0.021)	0.042** (0.018)
After attack	-0.049** (0.021)	-0.050*** (0.019)
TV-news (log):After attack	0.060*** (0.022)	0.022 (0.019)
After attack:France	0.086* (0.050)	0.020 (0.045)
TV-news (log):After attack:France	-0.064 (0.040)	-0.019 (0.036)
France	0.124*** (0.044)	0.010 (0.039)
TV-news (log):France	0.002 (0.029)	-0.056** (0.026)
TV use (log)	-0.009 (0.019)	-0.014 (0.017)
Age (Centered)	0.001 (0.001)	-0.001** (0.001)

Female	0.008	0.034**
	(0.019)	(0.017)
In paid work	-0.022	0.011
	(0.022)	(0.020)
Parents born in country	-0.024	0.023
	(0.025)	(0.022)
Income (decile)	0.0003	0.003
	(0.004)	(0.004)
Education(Upper Secondary as baseline)		
Less Than Lower Secondary	0.024	-0.003
	(0.030)	(0.027)
Lower Secondary	-0.034	0.037
	(0.048)	(0.042)
Advanced Vocational	0.056	0.031
	(0.035)	(0.031)
Tertiary Education	0.080**	0.094***
	(0.032)	(0.029)
Region CZ0	-0.085**	-0.189***
	(0.040)	(0.035)
Region DE3	0.335***	0.198***
	(0.063)	(0.056)
Region DE7	0.275***	0.101**
	(0.054)	(0.048)
Region DE9	0.280***	0.189***
	(0.057)	(0.051)

Region DEE	0.189*** (0.054)	0.118** (0.048)
Region FI1	0.007 (0.039)	-0.057* (0.034)
Region NL2	0.067* (0.038)	-0.069** (0.034)
TV-news (log):Region CZ0	-0.025 (0.027)	-0.044* (0.024)
TV-news (log):Region DE3	-0.055 (0.110)	-0.040 (0.099)
TV-news (log):Region DE7	-0.031 (0.049)	-0.027 (0.044)
TV-news (log):Region DE9	-0.029 (0.064)	-0.072 (0.057)
TV-news (log):Region DEE	-0.037 (0.046)	-0.055 (0.041)
TV-news (log):Region FI1	-0.085** (0.039)	-0.062* (0.035)
TV-news (log):Region NL2	0.0004 (0.029)	-0.001 (0.026)

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Observations	764	747
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R <sup>2</sup>	0.251	0.281
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Adjusted R <sup>2</sup>	0.219	0.249
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*Note:* \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

Table 12. Regression results (OLS) from regressing Muslim immigration on different control variables

<i>Muslim immigration:</i>								
	Control variable:							
	Income	Income (log)	Years of education	Years of education (log)	TV-use	TV-use (log)	TV-use (dichotomous)	Political interest
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.280*** (0.069)	0.238** (0.101)	0.381*** (0.106)	0.398 (0.258)	0.458*** (0.056)	0.436*** (0.036)	0.676*** (0.083)	0.332*** (0.043)
Control	0.029** (0.012)	0.127** (0.062)	0.005 (0.007)	0.018 (0.096)	-0.008 (0.011)	-0.038*** (0.015)	-0.268*** (0.081)	0.102*** (0.024)
After attack	-0.004 (0.049)	0.001 (0.058)	-0.037 (0.082)	-0.100 (0.200)	-0.075* (0.043)	-0.069*** (0.021)	-0.199** (0.091)	-0.021 (0.036)
Control:After attack	-0.008 (0.008)	-0.035 (0.033)	-0.002 (0.005)	0.010 (0.075)	0.003 (0.009)	0.020 (0.016)	0.144 (0.093)	-0.029 (0.021)
After attack:France	-0.032 (0.105)	0.001 (0.118)	0.097 (0.157)	-0.040 (0.299)	0.046 (0.098)	0.058 (0.048)	0.043 (0.201)	-0.011 (0.092)
Control:After attack:France	0.013 (0.016)	0.027 (0.069)	-0.003 (0.011)	0.041 (0.115)	0.003 (0.023)	-0.005 (0.036)	0.012 (0.207)	0.041 (0.050)
France	0.280*** (0.095)	0.306** (0.124)	-0.092 (0.143)	-0.105 (0.291)	0.099 (0.080)	0.117*** (0.039)	0.034 (0.168)	0.148** (0.070)
Control:France	-0.027* (0.012)	-0.108 (0.062)	0.017* (0.007)	0.092 (0.096)	0.004 (0.011)	0.019 (0.015)	0.103 (0.081)	-0.040 (0.024)



	(0.016)	(0.074)	(0.010)	(0.108)	(0.019)	(0.030)	(0.172)	(0.040)
TV use (log)	-0.016**	-0.016**	-0.022***	-0.022***				-0.019***
	(0.007)	(0.007)	(0.007)	(0.007)				(0.007)
Age (Centered)	-0.001**	-0.001**	-0.001	-0.001	-0.001**	-0.001**	-0.001**	-0.001**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Female	-0.023	-0.024	-0.010	-0.009	-0.021	-0.021	-0.023	-0.025
	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Income (decile)			0.005	0.006*	0.002	0.001	0.001	-0.002
			(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
Education(Upper Secondary as baseline)								
Less Than Lower Secondary	-0.021	-0.021			-0.006	-0.005	-0.009	-0.006
	(0.029)	(0.029)			(0.028)	(0.028)	(0.028)	(0.028)
Lower Secondary	-0.038	-0.045			-0.046	-0.040	-0.046	-0.033
	(0.048)	(0.048)			(0.047)	(0.046)	(0.046)	(0.047)
Advanced Vocational	0.024	0.022			0.038	0.041	0.040	0.034
	(0.033)	(0.033)			(0.033)	(0.032)	(0.032)	(0.032)
Tertiary Education	0.145***	0.145***			0.161***	0.156***	0.157***	0.128***
	(0.031)	(0.030)			(0.030)	(0.030)	(0.030)	(0.030)
Region CZ0	-0.076	-0.051	-0.266*	-0.341	-0.285***	-0.256***	-0.376**	-0.126***

	(0.086)	(0.118)	(0.151)	(0.386)	(0.076)	(0.037)	(0.172)	(0.048)
Region DE3	0.342***	0.400***	-0.027	-0.699	0.325***	0.277***	0.171	0.235***
	(0.107)	(0.139)	(0.190)	(0.461)	(0.078)	(0.044)	(0.106)	(0.091)
Region DE7	0.380***	0.430***	0.069	-0.122	0.274***	0.189***	0.010	0.283***
	(0.110)	(0.144)	(0.178)	(0.436)	(0.095)	(0.047)	(0.303)	(0.101)
Region DE9	0.505***	0.543***	0.134	-0.208	0.441***	0.366***	0.347***	0.322***
	(0.130)	(0.178)	(0.226)	(0.558)	(0.086)	(0.048)	(0.044)	(0.110)
Region FI1	0.111	0.165	-0.139	-0.345	-0.050	-0.008	-0.098	-0.004
	(0.087)	(0.118)	(0.122)	(0.289)	(0.064)	(0.031)	(0.119)	(0.056)
Region NL2	0.175**	0.191	-0.500***	-1.337***	-0.062	-0.022	-0.237*	0.018
	(0.085)	(0.117)	(0.150)	(0.363)	(0.069)	(0.034)	(0.144)	(0.060)
Control:Region CZ0	- 0.031**	-0.119*	0.001	0.033	0.006	0.017	0.137	-0.106***
	(0.014)	(0.070)	(0.011)	(0.147)	(0.015)	(0.028)	(0.175)	(0.036)
Control:Region DE3	-0.010	-0.068	0.022*	0.374**	-0.012	0.010	0.124	-0.004
	(0.017)	(0.082)	(0.012)	(0.168)	(0.019)	(0.021)	(0.115)	(0.046)
Control:Region DE7	- 0.036**	-0.155*	0.009	0.120	-0.030	-0.026	0.179	-0.088*
	(0.017)	(0.082)	(0.011)	(0.161)	(0.023)	(0.047)	(0.305)	(0.050)
Control:Region DE9	-0.030	-0.127	0.013	0.200	-0.035*	-0.098		-0.026
	(0.020)	(0.100)	(0.015)	(0.210)	(0.021)	(0.060)		(0.058)
Control:Region FI1	-0.021	-0.102	0.010	0.134	0.011	0.019	0.110	-0.017
	(0.014)	(0.068)	(0.008)	(0.106)	(0.015)	(0.022)	(0.123)	(0.035)

Control:Region	-							
NL2	0.031**	-0.117*	0.036***	0.509***	0.011	0.035	0.246*	-0.036
	(0.014)	(0.068)	(0.010)	(0.135)	(0.014)	(0.024)	(0.148)	(0.034)

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Observations	843	843	838	838	843	843	843	842
R <sup>2</sup>	0.390	0.388	0.382	0.377	0.385	0.389	0.388	0.413
Adjusted R <sup>2</sup>	0.371	0.368	0.365	0.360	0.366	0.369	0.369	0.393

Note:

$p < 0.1$ ;  $p < 0.05$ ;  $p < 0.01$