

# Public Television and Anti-immigrant Sentiments in Europe: A Multilevel Analysis of Patterns in Television Consumption

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Paper presented at the  
**‘Making the Most of Migration:  
The Economic and Social Integration of Immigrants  
in European Societies’ Conference**

Brussels, 23 May 2014

**Abstract**

Recently a consensus is rising that television effects on civic attitudes should be studied as multidimensional phenomena, disentangling the effects of specific television type and content. This study aims to expand current knowledge by systematically assessing the differential impact of television type and content on anti-immigrant sentiments. Adopting a comparative approach, we use data from the six waves of the European Social Survey (ESS) to assess the impact of individual and aggregate level patterns of television use on anti-immigrant sentiments in European societies. Overall individual television viewing time is positively associated with anti-immigrant sentiments, while frequent exposure to news and information programs seems to counterbalance this effect. At the aggregate level the results show that in societies with higher market shares for public broadcasting stations generally anti-immigrant sentiments are lower. We can conclude that strong public broadcasting stations continue to exert an important gatekeeping role in democratic societies by fostering civic attitudes.

**Key words:** Public broadcasting stations, Anti-immigrant sentiments, European Social Survey, Multilevel analysis, Television, Media effects

Since the introduction of massive television use in the second half of the 20<sup>th</sup> century, the impact of the new medium on civic attitudes and behaviors in society has been hotly debated. For a long time, the arguments in the scientific dispute centred around a pessimistic view of ‘videomalaise’ and an optimistic view of ‘media mobilization’. Whereas proponents of the videomalaise hypothesis focused upon the detrimental effects of time spent watching television on a range of civic attitudes and behaviors (Putnam, 1995a, 1995b; Robinson, 1976), supporters of the media mobilization hypothesis emphasized the mobilization force of television as a medium to inform and engage the public (Holtz-Bacha, 1990; Livingstone & Markham, 2008; Newton, 1999; Norris, 1996). Recently new voices have joined the debate, stressing that not the sheer amount spent on watching television is important, but that television effects should be studied from a multidimensional perspective: television type and content matter (Esser & de Vreese, 2007; Hooghe, 2002; Moeller & de Vreese, 2013; Newton, 1999; Norris, 2005; Prior, 2005). While it is assumed that entertainment use of television is associated with lower levels of trust and interest, the information function of the medium might have a positive effect on the development of these attitudes (Holtz-Bacha, 1990; Lee, Cappella, & Southwell, 2003; Newton, 1999; Prior, 2007; Zhang & Chia, 2006). Furthermore, studies have pointed out that frequent exposure to public broadcasting stations, that traditionally emphasize the information function, as opposed to commercial broadcasting stations, fosters political knowledge and social capital (Holtz-Bacha & Norris, 2001; Hooghe, 2002; Schmitt-beck & Wolsing, 2010). Another idea advanced by media effects theories is the importance of addressing both direct television effects and indirect ‘mediated’ effects that take place via interpersonal contact (Katz & Lazarsfeld, 1955). Not only individual patterns of television use are relevant in shaping attitudes, but also aggregate patterns of television use might influence attitudes in society, even extending to those who do not (regularly) watch television (Schmitt-beck & Wolsing, 2010).

While the effects of public television have been investigated in relation to a variety of attitudes and behaviors, few studies have systematically assessed the impact of specific television types and content on the prevalence of anti-immigrant sentiments in society. Stereotypical depictions of ethnic minorities on television are, however, a frequently reported phenomenon. These representations vary from associations of ethnic minorities with crime (Dixon & Linz, 2000; Iyengar & Gilliam, 2000), deprivation and low-prestige jobs (Eschholz, Bufkin, & Long, 2002; Gilens, 1996) and religion and/or fundamentalism (Guterman, 2013). While studies have clearly demonstrated a relationship between television portrayals of ethnic minorities and opinions on ethnic minorities, at present no study exists that systematically investigates the impact of specific television type and content on the prevalence of anti-immigrant sentiments in society.

The current study aims to fill this gap, by assessing the impact of both individual-level and aggregate level patterns of media use on anti-immigrant sentiments, while simultaneously controlling for other possible explanations. Both direct and indirect effects of television use patterns will be investigated. This approach allows us to contribute to the growing body of research indicating that television should be studied as a multidimensional phenomenon, as we not only investigate the impact of the amount of time spent watching television, but also content specific measures and the type of broadcaster. Using data from the six waves from European Social Survey (ESS, 2002-2012), permitting both a comparison over time and across countries, we conduct a multilevel analysis to explore the impact of television use on anti-immigrant sentiments in European societies. We combine these population data with information on the market share of public and commercial broadcasters, an information source that is not yet routinely included in this kind of research. The broadcasting systems in Europe offers sufficient variance to investigate our hypotheses, as some countries have a strong tradition with regard to public broadcasting, while this is not the case in other

countries. The assessment of the differential impact of specific types and content of television on anti-immigrant sentiments is both theoretically and socially relevant, especially in an age where increasing commercialization and cuts in public expenditure are placing a burden upon public broadcasting stations. We expect total television viewing time at both the individual and society level to be positively associated with anti-immigrant sentiments in society, while high market shares for public television and exposure to news and information programs are expected to be negatively associated with anti-immigrant sentiments. Moreover, we expect that aggregate television use patterns impact individual-level attitudes, even of individuals that do not (regularly) watch television via indirect, mediated, effects.

### **Television and Civic Attitudes: Towards a Multidimensional Approach**

In his seminal work 'Bowling Alone', Putnam (1995a, 1995b) blamed television as one of the main culprits for the decline of social capital in American societies: the replacement of outdoor and social leisure activities by watching television would contribute to the erosion of civic attitudes. Putnam's TV displacement hypothesis, suggesting a negative relationship between television viewing time and social capital, has ever since been the centre of fierce academic debate. The arguments emphasizing the negative effects of television on civic attitudes and behavior can be structured under the 'videomalaise' hypothesis, stating television cultivates feelings of insecurity, cynicism and the idea that the world is a 'mean world' (Cappella & Jamieson, 1997; Gerbner, Gross, Morgan, & Signorielli, 1986; Robinson, 1976). Other authors have, however, questioned this pessimistic view of television, and argue in favor of a 'media mobilization' hypothesis (Norris, 1996). Empirical evidence unambiguously demonstrating the negative effects of television viewing time is indeed scarce. Some studies document weak or even no negative effects of watching television on social capital (Lee, Cappella, & Southwell, 2003; Newton, 1999; Uslaner, 1998), while others

studies stress that television can have positive effects and fosters civic attitudes and mobilization. In the literature a new consensus is rising which states that television effects should not be studied as a monolithic bloc, focusing narrowly on the amount of time spent watching television. Instead, television effects should be approached as a multidimensional phenomenon, by acknowledging that different types of television and specific television content may have a differential impact on attitudes in society (Esser & de Vreese, 2007; Hooghe, 2002; Moeller & de Vreese, 2013; Newton, 1999; Norris, 2005; Prior, 2005).

With regard to the content of programs, authors have observed that frequent exposure to programs about news, politics and current affairs has a positive impact on a whole range of civic attitudes and behavior. Citizens with a preference for news media, on average, have higher levels of political knowledge (Curran, Iyengar, Brink Lund, & Salovaara-Moring, 2009; Newton, 1999; Prior, 2005; Vincent & Basil, 1997), have higher levels of social and political trust (Lee et al., 2003; Schmitt-beck & Wolsing, 2010; Shah, McLeod, & Yoon, 2001) and participate more intensively in politics (Esser & de Vreese, 2007; Holtz-Bacha, 1990; Livingstone & Markham, 2008; Zhang & Chia, 2006). Frequent exposure to entertainment content, on the other hand, is found to have the opposite effect (Besley, 2006; Hooghe, 2002). The evidence, however, is not entirely conclusive: some authors have stressed that those with higher levels of political trust become less trusting following exposure on television news (Avery, 2009). Others have found that only regularly watching the news on public stations fosters civic attitudes while commercial television news had negative effects (Aarts & Semetko, 2003). This adds to the view that, in addition to differentiating with respect to content, the type of broadcaster may play a role as well. Public broadcasting stations are generally expected to play an important gatekeeping role in democratic societies via 'entertaining, informing and educating' the audience (Holtz-Bacha & Norris, 2001), whereas commercial television is motivated by profit seeking and audience ratings

maximization. Most public broadcasting stations are at least partly funded by the government; often they have signed charters in which they commit themselves to serving the public good. Some broadcasting stations have even adopted the stimulation of program's ethnic and gender diversity as an explicit goal in their statutes. Public television has indeed been found to devote a larger proportion of its broadcasting time to information programs and news (Curran, Iyengar, Lund & Salovaara-Moring, 2009), whereas commercial television typically disseminates a larger amount of entertainment programs. Most studies that have systematically assessed the differences between public and commercial television, agree that public broadcasting stations are more effective in cultivating civic attitudes and behavior than their commercial counterparts (Aarts & Semetko, 2003; Curran et al., 2009; Holtz-Bacha & Norris, 2001; Hooghe, 2002). As Holtz-Bacha and Norris (2001, p. 124) note: 'commercialization does matter'. Only Jenssen (2009), comparing the Norwegian public broadcaster NRK with the commercial broadcaster TV2, documented no substantial differences in terms of political knowledge. Given the rapidly changing context of increasing digitalization and commercialization, combined with cuts in public spending for public broadcasters (Losifidis, 2007), it remains highly important to evaluate whether public stations continue with their tradition in broadcasting high-quality programs, aimed at fulfilling their democratic role in societies. Presenting the audience with accurate, unbiased and balanced information on the increasing diversity of Western European societies can be considered one part of those role.

Another important idea advanced by media effects theories (Katz & Lazarsfeld, 1955) is that not only direct television effects should be addressed, but also indirect, 'mediated' effects that take place via interpersonal interaction. Not only individual patterns of television use are relevant in shaping people's attitudes, but also aggregate patterns of television use influence attitudes in society, even extending to those who do not (regularly) watch television

(Schmitt-Beck & Wolsing, 2010). This becomes especially salient while investigating television's impact on anti-immigrant sentiments in society. Majority group members are to a large extent dependent on the mass media as a source of information about ethnic minorities (Fujioka, 1999). Citizens that are not directly exposed to television portrayals of ethnic minorities, may enter into conversation with others and in that way be indirectly influenced by their fellow citizens that have derived their information on mass media messages. In the next paragraph, we briefly elaborate on the portrayal of ethnic minorities on television and its impacts on attitudes in society.

### **Stereotypes on Television and Anti-immigrant Sentiments**

There is abundant evidence resulting from content analyses demonstrating that ethnic minorities are systematically stereotyped on television. We can discern three broad patterns of stereotyping: stereotyping with regard to crime, socio-economic status and religious and/or cultural issues. First, with regard to crime, several studies have reported overrepresentation of ethnic minorities in the role of perpetrator in television (Dixon & Linz, 2000; Iyengar & Gilliam, 2000). The racial priming of crime has been shown to be correlated to subsequent judgments on crime and justice. Perpetrators have been found to be more memorable when it concerns a black, dark-skinned male (Dixon & Maddox, 2005). Moreover, when exposed to stereotypical depictions on television, respondents are more likely to find perpetrators from the ethnic minority group guilty (Ford, 1997) and were more supportive of punitive measures such as the death penalty (Iyengar & Gilliam, 2000). Finally, respondents are more likely to misidentify perpetrators as ethnic minorities, especially in stories on violent crime (Oliver & Fonash, 2002). Second, with regard to socio-economic status, ethnic minorities are often portrayed as having an unknown occupational status or as unemployed (Signorielli & Kahlenberg, 2001). Moreover they are repeatedly shown in stereotypical occupations such as

law enforcement officers or in blue-collar jobs. Generally, they are also frequently associated with deprivation and low-prestige jobs (Eschholz et al., 2002; Gilens, 1996). These portrayals have the potential to perpetuate stereotypes in society, as a relationship has been suggested between low perceived economic status of immigrants and reduced citizen support for immigration issues (Harell, Soroka, Iyengar, & Valentino, 2012). Third, content analyses have revealed that specific ethnic minorities are regularly depicted as pre-occupied with their religious identity and practice; some minority groups are also linked with fundamentalism (Guterman, 2013; ter Wal, D'Haenens, & Koeman, 2005).

Following the evidence cited above, it is clear that frequent exposure to television may have attitudinal effects as television repeatedly disseminates stereotype-affirmative images of ethnic minorities, thereby cultivating stereotypical beliefs (Gerbner et al., 1986). Past research has shown that anti-immigrant sentiments are largely based upon economic and/or cultural grounds (O'Rourke & Sinnott, 2006), or prompted by fear of crime (Dinas & van Spanje, 2011). This makes clear why it is socially relevant to address the impact of television use patterns on anti-immigrant sentiments. Taking into account the need for a multidimensional perspective when studying media effects, we formulate the following hypotheses:

H1: individual television viewing time is positively associated with anti-immigrant sentiments.

H2: aggregate television viewing time is positively associated with anti-immigrant sentiments.

H3: Informational use of television at the individual level is negatively associated with anti-immigrant sentiments.

H4: High market shares for public broadcasting television are negatively associated with anti-immigrant sentiments.

H5: Aggregate level patterns of television watching in societies are associated with individual anti-immigrant sentiments, even controlling for individuals patterns of television use.

## **Data, Method and Measurements**

**Data.** For the measurement of anti-immigrant sentiments as well as for the individual characteristics of the respondents, we rely on data from the European Social Survey (ESS), which we have supplemented with aggregate country level data on television use and macro-economic indicators. The ESS is a representative and comparative cross-sectional repeated survey, that is carried out every two years in more than twenty European societies. The first data collection round started in 2002 and the latest data available originates from the sixth round that was conducted in 2012. In each participating country individuals aged 15 and over were questioned about their opinions, attitudes and demographics in face-to-face interviews. The ESS is chosen as a data source because its design has several important advantages in the light of the current study's purposes. First, the ESS dataset contains a reliable anti-immigrant sentiments scale, as well as several other relevant individual-level attitudinal and socio-demographic variables. Second, the data permits both comparison over time and across different European countries. Third, the ESS is widely recognized for its high quality survey design and data collection (Lynn, 2003).

In the multivariate analysis we predict anti-immigrant sentiments from 2002 until 2012 based on individual-level socio-demographic variables, indicators for individual and aggregate television use, and macro-economic indicators which might also affect anti-immigrant sentiments in society. We employ the ESS data from all six waves in order to assess the robustness of the findings over time. Only citizens whose nationalities correspond to the ESS country in which they reside are included in the analysis, so that we can indeed assess anti-immigrant sentiments among the native majority. The analysis entails the following 23 countries: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

However, since both Belgium and Switzerland can be considered culturally segmented countries in which media use patterns and television markets diverge between the language communities (Meier, 2004; Sinardet, 2013), our analysis differentiates between the language regions in these countries. This means that the analysis contains information from 25 European societies<sup>1</sup>. Not every society was included in each ESS wave, although 15 out of 25 societies are represented in all six ESS waves. However, since the analyzing technique we have opted for, i.e. multilevel analysis, can handle missing data (Hox, 2010), the non-recurrence of some societies in all six waves does not influence the validity of the analysis. Every society is included in at least two of the six waves. The appendix contains more detailed information on which societies are included in the specific ESS waves, as well as information on the total number of societies included in each wave. Eventually 181,223 respondents nested in 25 societies were included in the analysis. A design weight was applied in order to correct for differences in the selection probability of individuals in the population.

**Method.** The data structure is hierarchical containing two levels: we have access to information on individuals (level one) that are nested within countries (level two). This type of two-level data structure requires multilevel modelling, which was developed to correctly analyze dependent data (Snijders & Bosker, 1999; Steenbergen & Jones, 2002). Multilevel modelling thus permits us at the same time to adjust the standard errors for the clusters in the data and to assess effects of society-level variables while controlling for individual respondents' characteristics.

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<sup>1</sup> For Belgium we differentiate between the French-speaking language community and the Dutch-speaking language community, while for Switzerland we differentiate between the German and French-speaking language communities. Switzerland also has an Italian language broadcasting system but given the limited sample size for the Italian-speaking segment of Switzerland, this language group could not be included in the analysis. The differentiation between the language regions was made by considering the language respondents indicated they speak most frequently at home.

**Measurements.**

**Dependent Variable.** *Anti-immigrant sentiments:* The dependent variable in this article, i.e. anti-immigrant sentiments, is measured as a scale composed of respondents' assessments on a ten-point scale of the following three items on immigration: 'Immigration is bad or good for a country's economy'; 'Country's cultural life is undermined or enriched by immigrants'; 'Immigrants make a country a worse or a better place to live'. The unidimensionality of these items a principal component analysis (Cronbach's  $\alpha$ : 0.85, Eigenvalue: 2.295, explained variance: 76.5), confirming the scale's internal consistency and reliability. The anti-immigrant sentiments scale ranges from zero to ten ( $M = 4.93$ ,  $SD = 2.05$ ), where a score closer to zero indicates lower levels of anti-immigrant sentiments and a score closer to ten indicates higher levels of anti-immigrant sentiments.

**Independent Variables.** *Television Variables:* For the measurement of individual patterns of television use, the ESS data provides two questions. In order to assess the total amount of time respondents devote to watching television, we included the following question: 'On an average weekday, how much time, in total, do you spend watching television?' This item was measured on an eight-point scale ranging, in half-hour intervals, from zero ('no time at all') to seven ('more than three hours') ( $M = 4.39$ ,  $SD = 1.89$ ). In addition to measuring the total amount of time spent watching television, we need a measure that gives an indication about the amount of time spent watching specific television content. The ESS includes a variable that measures, in half-hour intervals, the amount of time respondents devote to watching news, politics and current affairs. In order to control for the possibility that heavy television viewers are more likely to be exposed to news and information programs simply because of their general television use habits, the amount of time spent watching the news, politics and current affairs is expressed as a proportion of the

total time spent watching television (Schmitt-beck & Wolsing, 2010). The resulting variable, which we have called 'informational television use' ranges from zero, referring to respondents that never watch information and news content, to 100, referring to respondents that devote all their time spent watching television on information programs and news. ( $M = 49.63$ ,  $SD = 28.69$ ). In order to assess whether aggregate patterns of television use affect levels of anti-immigrant sentiments, we supplemented these individual-level patterns of television use by two measures of television use at the society level. First, we included a variable that measures the daily audience shares of the public broadcasting in each society as an average score for the years in which the specific society was included in the ESS dataset. This information is derived from the Yearbooks from the European Audiovisual Observatory, which, in cooperation with the Council of Europe, covers the situation of the European audiovisual markets and industry in more than 35 European states. The data concerns the average daily television audience for public broadcasting stations. The audience shares are collected by Eurodata-TV Worldwide, and are based on figures compiled by national audience measurement organisations. This information is collected using traditional sampling techniques and the 'people meter' system, and can thus be considered highly reliable (European Audiovisual Observatory, 2014). The average audience share for public broadcasting stations in European societies ranges from 16.35% (Greece) to 69.73% (Denmark) ( $M = 38.11$ ;  $SD = 11.74$ ). In addition to information on audience shares for public stations, we included a variable that assesses the average total television viewing time on a daily basis at the society level (in minutes per day, as an average score of the years the society was included in the ESS dataset). This information is also derived from the Yearbooks of the European Audiovisual Observatory. The aggregate average total daily viewing time ranges from 136 minutes (German language group in Switzerland) to 260 minutes (Hungary) ( $M = 196.10$ ;  $SD = 30.64$ ).

*Control Variables:* Our analysis takes into account different control variables at the individual-level and aggregate level that might affect levels of anti-immigrant sentiments in societies. The first set of individual-level control variables concerns socio-demographic variables like gender (male respondents  $M = 0.47$ ,  $SD = 0.50$ ), age in years ( $M = 47.64$ ,  $SD = 18.14$ ) and socio-economic status. For respondents' socio-economic status, we included two ESS variables. First, we take up the years of education respondents have completed ( $M = 12.37$ ,  $SD = 3.99$ ). Second, we take into account the level of satisfaction with the household income. This variable is measured on a four-point scale ranging from a score of one ('very difficult on present income') to four ('living comfortable on present income') ( $M = 2.02$ ,  $SD = 0.86$ ). Other individual-level control variables concern victimization, church attendance and life satisfaction. Victimization was operationalized as a dichotomous variable referring to 'whether the respondent or the household members ha(ve)s been a victim of burglary or assault in the last five years' ( $M = 0.19$ ,  $SD = 0.39$ ). Religious attendance was assessed on a seven-point scale of the following question: 'How often do you attend religious services apart from special occasions'. The scale ranges from a score of one ('everyday') to seven ('never') ( $M = 5.47$ ;  $SD = 1.52$ ). Self-reported life satisfaction, then, is measured on a ten-point scale ranging from one ('extremely dissatisfied') to ten ('extremely satisfied') ( $M = 7.07$ ,  $SD = 2.17$ ). Finally, we also included time variables, i.e. dummies with the years of the ESS rounds, to evaluate whether there is a time trend in the level of anti-immigrant sentiments over the observation period. At the aggregate level, we also included macro-economic control variables that have been shown to be related to anti-immigrant sentiments: economic performance, democratic stability and ethnic diversity. In order to have an indication on countries' economic performance and redistribution policies we opted to include GDP per capita. This variable was operationalized as the average GDP per capita in US dollars for a country for the years it was included in the ESS data, and is based on information from the

Organization for Economic Co-operation and Development (OECD) ( $M = 32,829.49$ ,  $SD = 15,668.07$ ). It can be assumed that support for democracy and democratic ideas may be inversely related with anti-immigrant sentiments. The democratic stability of a country was operationalized as the number of years the country in question has had a stable democracy since 1919, as an average score for the ESS rounds in which the country was included (Polity IV, 2011) ( $M = 61.55$ ,  $SD = 43.32$ ). Finally, since the ethnic composition of societies might impact levels of anti-immigrant sentiments, we also control for the inflow of foreigners<sup>2</sup>. This data is also derived from the OECD and is operationalized as a percentage relative to the country's population as an average score for the years the country was included in the ESS ( $M = 0.66$ ,  $SD = 0.41$ ).

## Analysis and Results

The impact of individual and aggregate-level patterns of television use on anti-immigrant sentiments is analyzed via a multilevel model (Table 1). The null model represents the intercept-only model in which the variance is split into two components: the variance between observations within societies ('within group variance'), and the variance between societies ('between group variance'). The size of the variances makes clear that individual-level characteristics are more important in explaining the prevalence of anti-immigrant sentiments in European societies than society-level characteristics. The intra-class correlation (ICC) of the intercept-only model shows 12.6% of the variance in levels of anti-immigrant sentiments can be explained by society-level variables, which is quite substantial. In Model I, we add the independent variables, i.e. both the television and control variables at the individual and society-level to the model.

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<sup>2</sup> We also tested a variable taking into account the stocks of foreign population in each country, but as this measure correlates strongly with the variable on the inflow of foreign population and has more missing data drastically reducing the number of clusters in our data, we excluded this variable and only take up the measure for the inflow of foreigners. The same model, but with the stock of foreigners included, leads to the same results.

With regard to the individual-level television variables, the results of Model I make clear that both H1 and H3 are supported by the analysis. Spending more time watching television is positively associated with anti-immigrant sentiments. Heavy television viewers indeed hold more negative opinions about immigrants. This effect of overall individual television watching time is, however, counterbalanced by the specific content television viewers tune in to: frequent exposure to news, and programs on politics and current affairs is negatively associated with anti-immigrant sentiments. If we consider the television variables at the aggregate level, we also find support for H4, but not for H2. Higher market shares for public broadcasting television are indeed associated with lower levels of anti-immigrant sentiments, confirming H4. The type of broadcaster thus matters as well while explaining anti-immigrant sentiments. H2 stated that also the amount of television viewing time at the society-level would be positively associated with anti-immigrant sentiments, but we do not find a significant effect of the aggregate level measurement of television time. H2 can therefore not be supported. Hypothesis 5, finally, posited that aggregate level patterns of television watching in societies would be associated with anti-immigrant sentiments, even controlling for individual patterns of television use. The multilevel model provides partly support for this hypothesis. The analysis shows that anti-immigrant sentiments are counterbalanced if the society as a whole relies more heavily on public broadcasting television. However, it does not seem to be the case that people tend to have more anti-immigrant sentiments if they live in a society with inhabitants that frequently watch television. Model I also displays the standardized B coefficients, allowing us to compare which predictors have the strongest influence in explaining anti-immigrant sentiments. It is clear that individual-level television variables have a stronger impact than aggregate level variables, and especially frequently watching information programs makes a difference.

Model I also contains control variables at the individual and aggregate level. Older respondents have higher levels of anti-immigrant sentiments, and so have respondents that have recently been victimized. But especially respondents' educational level, income satisfaction and life satisfaction are strong buffers that protect respondents from falling prey to anti-immigrant sentiments. Considering the control variables at the aggregate level, we note that in societies with a higher GDP per capita respondents have more negative attitudes towards immigrants, whereas countries with higher percentages of inflow of foreigners immigrants respondents tend to be more positive towards immigrants. Democratic stability does not make a significant contribution in the multilevel model. It is clear, generally, that individual-level predictors are decisive in explaining anti-immigrant sentiments. However, this does not alter the fact that, even under control for these individual characteristics, patterns of television use continue to make a significant contribution. The time dummies, finally, make clear that there does not seem to be a clear or significant evolution over time towards more anti-immigrants sentiments in European societies.

In conclusion, we can say that patterns of television use, both at the individual and partly at aggregate level, are associated with anti-immigrant sentiments in the way we expected, even while controlling for individual-level characteristics and macro-economic indicators.

**Table 1. A Two-Level Model of Patterns of Television Use and Anti-immigrant Sentiments in European Societies**

	Null Model		Model I	
	B Coefficients	Standardized B Coefficients	B Coefficients	Standardized B Coefficients
Level 1: Individual level				
<i>Television variables</i>				
Total television viewing time			0.025 (0.008)**	3.25**
Informational television use			- 0.005 (0.001)***	- 11.81***
<i>Control Variables</i>				
Female			- 0.046 (0.034)	- 1.33
Age (in years)			0.005 (0.001)***	4.02***
Years of education			- 0.101 (0.008)***	- 13.07***
Income satisfaction			- 0.181 (0.014)***	- 12.93***
Victimization			0.037 (0.017)*	2.17*
Religious attendance			0.022 (0.017)	1.27
Life satisfaction			- 0.102 (0.008)***	- 13.11***
Year (ref. category: 2012)				
2002			0.073 (0.085)	0.87
2004			0.145 (0.105)	1.38
2006			0.086 (0.109)	0.79
2008			0.003 (0.068)	0.04
2010			0.129 (0.068)	1.88

**Level 2: Society level**

*Television variables*

Average market share public stations		- 0.017 (0.008)*	- 1.98*
Average television viewing time		0.001 (0.004)	0.23

*Control Variables*

GDP per capita		0.006 (0.004)*	2.49*
Democratic stability		- 0.002 (0.004)	- 0.44
Inflow of foreign population		- 0.656 (0.169)***	- 3.87***

Intercept	5.010 (0.149)***	33.51***	7.033 (1.286)***	5.47***
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Variance Country-level	0.536 (0.173)	0.307 (0.081)
Variance Individual level	3.730 (0.150)	3.391 (0.137)
ICC	12.6%	8.3%
Deviance	- 376,924.26	- 368,280.11

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Note: Entries are the result of a two-level OLS Regression using Maximum Likelihood estimations in Stata. Data are weighted using the ESS design weight. Dependent variable: anti-immigrant sentiments. \* p<.05; \*\* p<.01; \*\*\* p<.001. N = 181,223. Source: ESS 2002-2012.

## **Discussion**

In this article we investigated the relationship between specific television types and content, and the prevalence of anti-immigrant sentiments in society. We observed that both individual and aggregate patterns of television use are associated with attitudes towards immigrants. On the individual level heavy television viewers are more likely to hold negative attitudes towards immigrants, although frequent exposure to information programs counterbalances these attitudes. At the society level, it seems that in societies with stronger public broadcasting stations, i.e. where audiences shares for public broadcasting stations are high, respondents tend to hold more positive attitudes towards immigrants. Contrary to what we expected, however, there does not seem to be a significant impact of overall aggregate television viewing time in societies, although the direction of the effect points towards more negative anti-immigrant attitudes. The hypothesis about indirect, mediated effects of aggregate pattern in television use is therefore partly confirmed: in societies with high market shares for commercial stations, generally, anti-immigrant sentiments are stronger. Especially individual preference for the consumption of information and news is a powerful predictor of more positive attitudes towards immigrants.

This study thus provides support for the view that television should be approached from a multidimensional perspective, disentangling the effects from specific television types and content. In this way, our study corroborates previous findings that news viewing and exposure to public broadcasting stations foster civic attitudes. While this effect was already demonstrated for political knowledge, social and political trust and political participation, our study is the first to systematically address the impact of differential television use habits on anti-immigrant attitudes in society. The results add to the view of Holtz-Bacha and Norris (2001) stating that the increasing commercialization of the television market matters, as public broadcasting stations seem to form a buffer against anti-immigrant attitudes. This, at

least indirectly, seems to be an argument in favor of strong public broadcasters that take their gatekeeping role in democratic societies seriously. We can therefore assume that especially public broadcasting stations are well-equipped to increase mutual understanding between immigrants and the host society, and to offer balanced and accurate information on the growing immigrant populations in Europe. It is of course highly likely preference for informational television use and preference for public broadcasters are related, given past studies have already shown that public broadcasters typically disseminate more news and information programs (Curran et al., 2009). If strong public broadcasting stations matter for a whole range of civic attitudes, the current era of increasing commercialization, digitalization and diversification of the media landscape may pose some threats. Many public broadcasting stations today are struggling financially and need to rely more heavily on commercial revenues as government funding is being cut off. In the light of our study's results, this is a trend that requires careful monitoring. We need to add here, of course, that our analysis only provides strong support of a correlation between television exposure and anti-immigrant sentiments as strict causality cannot be proven via the use of cross-sectional data. We can therefore not be fully conclusive about the causal direction of the correlation: self-selection mechanisms may be at play, leading people with positive attitudes towards immigrants to display a preference for public broadcasting stations and information and news programs. It remains to be investigated furthermore what could explain these different effect of public and commercial broadcasting. From previous research, we know that public broadcasters tend to devote more attention to news and information than commercial stations do, but in our models the information use of television is already controlled for. Content analysis, therefore, should demonstrate whether even in the content of news and entertainment programs, there is a difference between both types of broadcasters with regard to the way they depict ethnic and cultural diversity in society.

The realistic threat hypothesis states that people enter into competition over scarce goods with immigrants, and feel immigration places a burden upon the state's economy via financial support for immigration and related social policies. Our results, however, do not seem to confirm this view at the aggregate level since a higher average GDP per capita is related with more negative attitudes towards immigrants. It is interesting to note, however, that at the individual level respondents' socio-economic status does have the expected effect on attitudes towards immigrants. Less-educated citizens and those that are worried about their individual financial situation, evaluate immigrants significantly more negatively. These findings thus seem to suggest that the realistic threat option seems to be more persistent at the individual level than at the aggregate level. Another interesting finding is that societies that have higher immigration rates seem to have more positive attitudes towards immigrants, although the effect is quite modest; this, at least indirectly, backs the idea advanced by scholars that intergroup contact, under certain conditions, fosters positive attitudes towards immigration (Allport, 1954; Pettigrew & Tropp, 2008). Also other individual-level characteristics are strong predictors of anti-immigrants sentiments: age and being recently victimized are positively associated with anti-immigrant attitudes. People that are satisfied with their lives are less likely to fall prey to anti-immigrant sentiments. This confirms Uslander's claim that optimism is an important factor that needs to be considered when assessing civic attitudes (1998). The current study, however, still finds that individual and aggregate patterns of television continue to make significant contributions, even while controlling for life satisfaction and other relevant control variables at both the individual and aggregate level.

The main contribution of the current study is that, for the first time in a systematical manner using a comparative approach, has been demonstrated that specific consumption patterns of television, both at individual and societal level, impacts anti-immigrant attitudes in

society in a differential way. There is a negative impact of overall individual television watching time, but information programs and larger market shares for public broadcasters are correlated with more positive views of immigrants, even when other possible explanations of anti-immigrants sentiments are taken into account. A line for future research might be to investigate how cuts in government spending for public broadcasting affects the quality of the programming and its subsequent impact on the public broadcasters' success in promoting democratic ideals. Moreover, future studies may benefit from an experimental approach in assessing the causal direction of these different patterns of television use and anti-immigrant attitudes.

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**Appendix. Descriptives**

<b>ESS Wave 1</b>
Austria, Belgium (FR), Belgium (FL), Switzerland (German), Switzerland (FR), Czech Republic, Germany, Denmark, Spain, Finland, France, United Kingdom, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, and Sweden – <b>21 societies</b>
<b>ESS Wave 2</b>
Austria, Belgium (FR), Belgium (FL), Switzerland (German), Switzerland (FR), Czech Republic, Germany, Denmark, Spain, Finland, France, United Kingdom, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Sweden, and Slovakia – <b>21 societies</b>
<b>ESS Wave 3</b>
Austria, Belgium (FR), Belgium (FL), Switzerland (German), Switzerland (FR), Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Russia, Sweden, and Slovakia – <b>21 societies</b>
<b>ESS Wave 4</b>
Belgium (FR), Belgium (FL), Switzerland (German), Switzerland (FR), Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Greece, Hungary, Ireland, the Netherlands, Norway, Portugal, Russia, Sweden, Slovenia, and Slovakia – <b>22 societies</b>
<b>ESS Wave 5</b>
Belgium (FR), Belgium (FL), Switzerland (German), Switzerland (FR), Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, United Kingdom, Greece, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Russia, Sweden, Slovenia, and Slovakia - <b>23 societies</b>
<b>ESS Wave 6</b>
Belgium (FR), Belgium (FL), Switzerland (German), Switzerland (FR), Czech Republic, Germany, Denmark, Estonia, Spain, Finland, United Kingdom, Ireland, the Netherlands, Norway, Poland, Portugal, Sweden, Slovenia, and Slovakia – <b>19 societies</b>
<b>All ESS Waves</b>
Austria, Belgium (FR), Belgium (FL), the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland (FR), Switzerland (German) and the United Kingdom. – <b>25 societies.</b>

<b>Country</b>	<b>Recurrence country in six ESS waves</b>
<b>Austria</b>	3
<b>Belgium (French-speaking)</b>	6
<b>Belgium (Dutch-speaking)</b>	6
<b>Czech Republic</b>	5
<b>Denmark</b>	6
<b>Estonia</b>	4
<b>Finland</b>	6
<b>France</b>	5
<b>Germany</b>	6
<b>Greece</b>	2
<b>Hungary</b>	5
<b>Ireland</b>	6
<b>Italy</b>	2
<b>Netherlands</b>	6
<b>Norway</b>	6
<b>Poland</b>	6
<b>Portugal</b>	6
<b>Russia</b>	3
<b>Slovakia</b>	5
<b>Slovenia</b>	3
<b>Spain</b>	6
<b>Sweden</b>	6
<b>Switzerland (French-speaking)</b>	6
<b>Switzerland (German-speaking)</b>	6
<b>United Kingdom</b>	6

<b>Variable</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Max</b>
<b>Anti-immigrant sentiments</b>	4.93	2.05	0	10
<b>Average market share public stations (in percentages)</b>	37.99	12.11	12.2	72.7
<b>Average aggregate television viewing (in minutes)</b>	196.23	32.08	136	265
<b>Individual informational television use (in percentages)</b>	49.63	28.69	0	100
<b>Total individual television viewing time</b>	4.39	1.89	1	7
<b>GDP per Capita (in US dollars)</b>	32, 993.33	17,384.49	4,978.574	9,914.317
<b>Democratic stability (in years)</b>	61.66	43.51	0	175
<b>Inflow of foreigners (in percentages)</b>	0.66	0.47	.06	2.76
<b>Gender (1 = Female)</b>	0.47	.49	0	1
<b>Education (in years)</b>	12.37	3.99	0	56
<b>Life satisfaction</b>	7.07	2.17	0	10
<b>Religious attendance</b>	5.47	1.52	1	7
<b>Victimization</b>	0.19	0.39	0	1
<b>Income satisfaction</b>	2.02	0.86	1	4

N = 181,223