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Unpacking Attitudes on Immigrants and Refugees: A Focus on Household Composition and News Media Consumption

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Abstract
This study examines how household composition and news media consumption and trust are related to attitudes towards two minority groups—immigrants and refugees—in a representative sample of the adult population (n = 6000) in Belgium, Sweden, France, and the Netherlands. We find that Swedes hold the most positive attitudes towards both groups, while the French are found to be most negative. The Belgians and Dutch hold moderate attitudes. There is also evidence that attitudes on refugees are more negative than attitudes on immigrants in Sweden and France, but not in Belgium and the Netherlands. Using structural equation modeling, we find that household composition is not directly related to attitudes, but indirect effects through socio-economic status and media consumption indicate that singles hold more negative attitudes than couples. Public television consumption, popular online news consumption, and trust in media are positively related to attitudes, whereas commercial television consumption is negatively associated with them.

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1. Introduction

Research has shown that households are hubs of attitude formation, innovation, and diffusion, as household members socialize one another (Roest, Dubas, Gerris, & Engels, 2009; Woelfel & Haller, 1971). This socialization shapes attitudes on a number of ideological domains (e.g., gender, politics, religion) (Glass, Bengtson, & Dunham, 1986; Moen, Erickson, & Dempster-McClain, 1997; Sabatier & Lannegrand-Willems, 2005). Different household configurations result in different value orientations as the presence of either one or two parents, or the (possible) presence of (multiple) children in a household context modifies the way in which family members interact and transmit values to one an-

other (Albanese, De Blasio, & Sestito, 2016; Sabatier & Lannegrand-Willems, 2005). Several studies, mainly on adolescents' attitudes towards family formation, have found diverging attitudes by marital status (Axinn & Thornton, 1996; Trent & South, 1992). Dronkers (2016) investigated the effect of household composition on adolescents' attitudes on equal rights for ethnic groups in 22 European countries, noting strong differences between adolescents living in two-parent families and those living in other household types. Other literature has shown that individuals who are cohabiting with their partner tend to hold more progressive attitudes in terms of religion, gender, and family roles than partners who are married (Smock, 2000). Despite the increasing importance of the migration issue, there is no research on the

relationship between household composition and attitudes towards minority groups. There is some preliminary evidence of indirect effects, with socio-economic status (SES) playing an important role. SES relates to both household composition (Esping-Andersen, 2016) and migration attitudes (Butkus, Maciulyte-Sniukiene, & Matuzeviciute, 2016; Lancee & Sarrasin, 2015). There are also country differences in both household composition and migration issues. For household composition, we find that nearly 60% of Swedish households in 2016 were either singles or single parents, while this percentage was nearly 20% lower for Belgium, the Netherlands, and France. The share of couples with children in households is also lower for Sweden than for the other three countries (European Commission, 2017). The Swedish population will be transformed by the consequences of migration over the next decades, as a majority of the population is projected to be Muslim or of non-native descent by 2065 (Tarvainen, 2018). Comparable figures for the other countries are below 20% (Pew Research Center, 2017). These country differences highlight the need for cross-country comparison.

News media also play a major role in attitude formation, as they can contribute to or prevent the stereotyping of (sub)groups in the population (Segijn, Bartholomé, Pennekamp, & Timmers, 2014). In the case of immigrants and refugees, many people still have limited face-to-face interactions with these groups. As news media consumption is their main mode of contact with these groups, their attitudes are largely determined by news media's representation of these groups (Bleich, Bloemraad, & de Graauw, 2015; Browne Graves, 1999; Holtzman, 2004; Jacobs, Claes, & Hooghe, 2015; Jacobs, Hooghe, & de Vroome, 2017; Joyce & Harwood, 2014; Norris, 2000; Troyna, 1981). This is not a uniform relationship, as news media differ in their representational preferences. Although neither type of news media is particularly positive in their representation of minority groups (Van Gorp, 2005), coverage on public service media is found to be more positive than on commercial media (Jacobs, Meeusen, & d'Haenens, 2016). This is also reflected in the attitudes of audiences, with more negative attitudes reported by commercial media consumers than public service media consumers (Jacobs et al., 2016).

Closely related to news media consumption is the audience's trust in news media. According to uses and gratifications and media selection theories, people use media to satisfy needs and select media which (in their estimation) can do so (Blumler & Katz, 1974; Williams, 2012). When people mistrust mainstream news media, they will seek out other sources of information such as alternative media (e.g., social media) or real-life information (Jackob, 2010). For the countries in our study, we find that trust in news media is generally high. According to Eurobarometer results of 2016, 77% of Swedes, 73% of the Dutch, and 64% of Belgians believe that their national media provide trustworthy information. However, media trust in France is far lower, as only 34% of the population be-

lieve their media is trustworthy (European Commission, 2016). This while the average European trust in news media lies at 53%. Studies have shown that people who consider news media to be credible are more likely to have their personal agendas influenced by media coverage (Wanta & Hu, 1994; Wilson & Sherrell, 1993). Trust also varies by medium, as there is a large variety of conflicting evidence detailing which medium (television, radio, print, or online) is considered more trustworthy (Kiousis, 2001). Radio is considered the most reliable medium in all countries in our study, while television is considered the least reliable medium in the Netherlands and France, and newspapers the least reliable medium in Sweden and Belgium (European Commission, 2016).

With the recent refugee crisis into Europe, scholarly interest in European attitudes regarding minority groups has increased. Studies find that Swedes, along with inhabitants of other Scandinavian countries, hold the most positive attitudes towards minority groups. Other European countries, including Belgium, France, and the Netherlands, occupy a moderate position (Ford & Lymperopoulou, 2017; Jacobs, Wuyts, & Loosveldt, 2017). However, attitudes are not the same for all types of newcomers. Europeans are found to be more tolerant of immigrants with the same ethnicity as the majority of the population in the host country and coming from another European country, than they are of immigrants with a different ethnic background and originating from countries outside Europe. Comparative research on refugee and immigrant attitudes is very limited. When it comes to immigrants, the French hold more negative attitudes than the Belgians and the Dutch. However, the French are more positive towards refugees than either the Belgians or the Dutch (Heath & Richards, 2016; Jacobs et al., 2017). For a majority of Swedes, immigrants from non-EU countries provoke fairly to very positive feelings. Belgian and Dutch people hold more negative attitudes concerning refugees than the European average, whereas Swedish and French citizens clearly have more positive attitudes (Jacobs et al., 2017). Therefore, when researching the attitudes on migrant groups, it is important to make a distinction between refugees and immigrants.

In the current study, we will focus on the relationship between household composition, news media consumption and trust on the one hand, and attitudes on immigrants and refugees on the other, in a sample (representative for gender and age) of Belgian, Swedish, French, and Dutch adults, aged 18–65 years old. With the increasing presence of minority groups in Europe, studies have shown that attitudes on these groups are increasingly polarized (Leeper, 2014). Despite this trend, there is no research on the direct relationship between household composition and towards on immigrants and refugees. Following Prokic and Dronkers's (2009) study of the effect of parental divorce on adolescents' attitudes, we argue that different household compositions will impact household members' attitudes on societal aspects such

as migration. We also want to look at variation between countries. As the literature indicates Belgium, Sweden, France, and the Netherlands differ in attitudes on immigrants (Ford & Lymperopoulou, 2017) and refugees (Jacobs et al., 2017), we want to know if this is the case for our sample as well. Thus, we address the following research questions:

RQ1. To what extent does household composition impact attitudes with regard to immigrants and refugees?

RQ2. To what extent do news media consumption and trust in news media influence attitudes with regard to immigrants and refugees?

RQ3. In what way are Belgium, Sweden, France, and the Netherlands similar or different with regard to attitudes on immigrants and refugees?

2. Data and Methodology

We distributed an online questionnaire to adults aged 18 to 65 in Belgium, Sweden, France, and the Netherlands, in September and October of 2017. The countries in our study were chosen for a number of reasons. Sweden was selected for its reputation of holding the most positive attitudes on newcomers in all of Europe. France and the Netherlands were selected based on their recent history (or lack thereof) with terror attacks, which (in combination with news media coverage on these events) may affect attitudes. France has experienced several terror events in the past few years, whilst the Netherlands has been spared any major attack. Belgium is included because its central location in Europe made it the main country through which refugees attempted to enter the United Kingdom following the closing of the Calais refugee camp. It has also suffered a major terror event, although not on the same scale as France. We conducted online polling as our method because of its (cost) efficiency in cross-country research. Fieldwork lasted for three weeks, at which point we had a sample size of 6,000 respondents—1,500 per country. We cooperated

with a Belgian polling agency and its international partners, which drew the sample out of their panels. Respondents were contacted through e-mail with the request to cooperate in a study. To avoid priming, the specific subject of investigation was not specified beforehand. Responses were weighted by gender and age. The questionnaire was distributed in Dutch, French, and Swedish. In Belgium, respondents were given the option to complete the questionnaire in Dutch (n = 905) or French (n = 595), depending on their language proficiency (De Coninck et al., 2018).

Respondents were queried on their gender, birth year, total net household income, educational attainment or current educational enrolment, and country of birth of parents and grandparents. The mean age of respondents was 43.3 years. SES was measured with responses on the total net household income per month (totaling all labor, property and/or replacement income). 11.5% of the sample did not wish to reveal this information, and an additional 4.6% did not know this information. Educational attainment is based on two indicators: the respondents' highest educational attainment or (if they are still enrolled) their current educational programme. Migration background was constructed from data on the (grand)parents' countries of birth. If both parents, one parent and at least two grandparents, or no parents and more than two grandparents of a respondent were born outside of the country the respondent currently resides in, they were considered to have a migration background. A descriptive overview of our sample can be found in Table 1.

2.1. Description of the Structural Equation Model and Variable Summary

Our statistical model is a non-normal structural equation measurement model that estimates which elements of household composition, media consumption and trust, or socio-demographic indicators impact attitudes on immigrants or on refugees. Respondents were asked to provide a detailed outline of all individuals in their house-

Table 1. Descriptive results of socio-demographic variables.

	%		%
Gender	n = 6000	**Migration background**	n = 5803
Male	49.6	No migration background	84.5
Female	50.4	Migration background	15.5
Income	n = 5035	**Educational attainment**	n = 5969
Less than €1500	20.2	No degree	1.2
€1500–€2499	27.9	Primary education	3.7
€2500–€3499	21.5	Lower secondary education	17.0
€3500–€4499	15.2	Higher secondary education	34.6
€4500–€5499	8.2	Higher non-university education	25.1
Over €5499	7.0	University education	18.4

Note: Respondents who did not want to reveal or did not know their household income were coded as missing. In Sweden, household income was asked in Swedish krona, with categories corresponding with the other countries in our sample.

hold: no one, a partner with whom the respondent is married, a partner with whom the respondent is not married, children that the respondent has with their current partner, children that the respondent has with a previous partner, children of the current partner from a previous relationship, parents, parents-in-law, grandchild(ren), other family members, or other non-family members. This information was recoded to three dummy variables: living with children, living with a partner, and living with parents(-in-law). We anticipate household composition will be directly related to immigrant and refugee attitudes because literature indicates that numerous attitudes are formed and adapted through socialization by individuals in the household (Sabatier & Lannegrand-Willems, 2005). As household composition is related to SES (Esping-Andersen, 2016), this relationship will also be estimated along with the relationship between household composition and news media consumption.

We also suspect media consumption to directly influence attitudes, since the public's limited real-life contact with these minority groups means that news media is their main mode of contact (Jacobs et al., 2015; Joyce & Harwood, 2014). Our expectation is that the representational preferences of news media also play a role in this regard (Jacobs et al., 2016), which is why we treat news media consumption in a detailed manner. Respondents were asked about their news media consumption pattern during the past month, with answer categories ranging from "0 = Never" to "7 = Every day". Both television and radio news consumption were split into two groups: public service and commercial. Based on this division, we adopted four manifest variables on television and radio news media consumption. Newspaper and online news consumption were presented on the same scale, with several outlets (adapted for the region in question) of each print medium presented to respondents. They could then indicate how much they consumed of each brand of written (online) media. From this information, we calculated a mean score of quality and popular (online) news media consumption. This typology is based on Belgian literature that distinguishes quality newspapers from popular ones (De Bens & Raeymaeckers, 2010), and our interpretation of this division in other countries. We relate trust in news media directly to attitudes in our model, as Wanta and Hu (1994) have found that attitude adaptation is related to the degree of trust that individuals have in their news media. We measured trust in news media by means of a five-point scale with answer categories ranging from "1 = No trust at all" to "5 = A lot of trust". Each item measured trust for the different news media outlets we adopted as manifest variables. This latent construct is reliably measured (alpha = 0.93).

All socio-demographic indicators presented in Table 1 will also be directly related to attitudes, as these indicators have been found to relate to immigrant and/or refugee attitudes in previous literature (Chandler & Tsai, 2001; Eschholz, Chiricos, & Gertz, 2003; Lancee &

Sarrasin, 2015). We also suspect that some of these indicators differ by media consumption, and therefore, estimate the relationship between these indicators and media consumption in our model. Age, SES (as measured through income), and educational attainment were included as metric variables. In order to ensure a valid estimation of our structural model, we applied mean imputation to missing cases for SES, educational attainment, and migration background.

The two main latent constructs we will use as dependent variables are attitudes towards immigrants and attitudes towards refugees. These are measured with a scale adapted from a rotating module of the European Social Survey in round 1 (2002) and round 7 (2014). The scale consists of seven items asking which groups of immigrants should be allowed to come and live in Belgium. Answer categories range from "1 = Allow none" to "4 = Allow many". For our study, we presented the scale in its original form and added an extra item concerning immigrants from Muslim countries because a majority of immigrants and refugees entering Europe in the current refugee crisis originate from Syria, Iraq or Afghanistan—predominantly Muslim countries (Pew Research Center, 2017). The parallel version of this scale simply substituted "refugee" for "immigrant". Prior to completing each block of items, cases were presented with a definition of immigrants and refugees from the United Nations with the request they keep this definition in mind during completion of the questionnaire. The definition of immigrants was as follows:

> An immigrant should be understood as covering all cases where the decision to migrate is taken freely by the individual concerned, for reasons of 'personal convenience' and without intervention of an external compelling reason (e.g., war, natural disaster). (UNESCO, 2017, para. 3)

The definition of refugees was:

> A refugee is someone who has been forced to flee his or her country because of persecution, war, or violence. A refugee has a well-founded fear of persecution for reasons of race, religion, nationality, political opinion or membership in a particular social group. (United Nations, 1951, p. 14)

Following exploratory factor analysis, we find high alpha values for both scales (respectively .94 and .96), which indicates strong internal consistency.

Table 2 shows the reliability, standardized loadings, and mean item scores of the exploratory and confirmatory factor analyses for the three latent constructs.

Prior to estimating the structural equation model, we will carry out a comparison of means between Belgium, Sweden, France, and the Netherlands for items on immigrant attitudes and refugee attitudes. Belgium, the country with moderate attitudes towards both groups, serves

Table 2. Latent construct measurement overview: confirmatory factor analysis and reliability.

Item description	Standardized loading	Mean item score
F1. Attitudes on immigrants ($\alpha = .94$)		
Immigrants of same race or ethnicity as most of [*country*]'s population.	.92	2.8
Immigrants of a different race or ethnicity than most of [*country*]'s population.	.97	2.5
Immigrants of the richer countries in Europe.	.94	2.7
Immigrants of the poorer countries in Europe.	.97	2.5
Immigrants of the richer countries outside Europe.	.97	2.5
Immigrants of the poorer countries outside Europe.	.99	2.4
Immigrants coming from Muslim countries who wish to work in [*country*].	.96	2.3
F2. Attitudes on refugees ($\alpha = .96$)		
Refugees of the same race or ethnicity as most of [country]'s population.	.96	2.7
Refugees of a different race or ethnicity than most of [country]'s population.	.98	2.5
Refugees of the richer countries in Europe.	.97	2.6
Refugees of the poorer countries in Europe.	.98	2.6
Refugees of the richer countries outside Europe.	.98	2.5
Refugees of the poorer countries outside Europe.	.98	2.5
Refugees coming from Muslim countries who wish to work in [*country*].	.97	2.4
F3. Trust in news media ($\alpha = .93$)		
Trust in public service media—television	.93	3.4
Trust in commercial media—television	.88	3.2
Trust in public service media—radio	.93	3.4
Trust in commercial media—radio	.84	3.0
Trust in popular newspapers	.84	3.0
Trust in quality newspapers	.92	3.3
Trust in online newspapers/apps	.88	3.1

as the benchmark. Then we estimate the intra-class correlation coefficient to gauge if there is sufficient variance at the country level to perform multigroup structural equation modelling (Hox, Moerbeek, & van de Schoot, 2010). Depending on intra-class correlation coefficient, we then perform structural equation modeling for all countries combined or for each country separately.

3. Results

The results in Table 3 indicate that there are significant attitude differences between countries. With Belgium as the benchmark, we note that Sweden has significantly higher means on all items for both immigrants and refugees—indicating more positive attitudes. France is more negative, with significantly lower scores on all but one item. Differences between Belgium and the Netherlands seem limited, with fewer significant and smaller mean differences. Despite these descriptive differences, multilevel analysis showed that the intra-class correlation coefficient was below 5% for both immigrant and refugee attitudes, indicating insufficient variance at the country level to warrant multi-level modeling. Contact the authors for more information on the individual country analyses.

Using the Calis procedure in SAS, we estimated a structural equation model—see Figure 1. Our model shows an acceptable fit with a RMSEA of .0491, a Chi-square ratio of 1.46, a goodness-of-fit-index (GFI) of .99, a comparative fit index (CFI) of .98, a parsimony normed fit index (NFI) of .98, and a non-normed fit index (NNFI) of .97.

We now report on the estimated causal paths in our model. We find that SES is significantly related to household composition: living with a partner has the strongest positive impact on SES but living with children and living with parents(-in-law) are also found to relate positively. In terms of media consumption, the presence of children in the household has a significant negative association with public television consumption and a small yet positive association with public radio news consumption. The presence of parents relates positively to all television and radio news consumption, with the strongest association found for public service television consumption. As for living with a partner, we find that this relates positively to both types of television consumption and is negatively associated with newspaper consumption. Household composition does not relate to online news media consumption. Men in our sample consume more news media of all types than women. This pattern is especially pronounced for online news media consumption. Effect sizes also indicate the gender difference is larger for public service and quality news than for commercial and popular news. SES is positively related to all news media consumption (higher SES corresponds to higher media consumption in our sample). This is especially so for public

Table 3. Belgian mean of items on immigrant attitudes and refugee attitudes and other countries' deviation from Belgian mean.

Item description	Belgium	Sweden	France	Netherlands
F1. Attitudes on immigrants				
Immigrants of same race or ethnicity as most of [*country*]'s population.	2.8	.28***	−.08***	−.02
Immigrants of a different race or ethnicity than most of [*country*]'s population.	2.4	.27***	−.06**	.05*
Immigrants of the richer countries in Europe.	2.7	.24***	−.05*	.01
Immigrants of the poorer countries in Europe.	2.5	.27***	−.08**	.01
Immigrants of the richer countries outside Europe.	2.4	.28***	−.04	.07**
Immigrants of the poorer countries outside Europe.	2.3	.30***	−.06**	.05*
Immigrants coming from Muslim countries who wish to work in [*country*].	2.2	.31***	−.06**	.03
F2. Attitudes on refugees				
Refugees of the same race or ethnicity as most of [*country*]'s population.	2.8	.26***	−.09***	.02
Refugees of a different race or ethnicity than most of [*country*]'s population.	2.5	.25***	−.11***	.05*
Refugees of the richer countries in Europe.	2.5	.23***	−.08**	.03
Refugees of the poorer countries in Europe.	2.5	.24***	−.11***	.02
Refugees of the richer countries outside Europe.	2.4	.26***	−.11***	.05*
Refugees of the poorer countries outside Europe.	2.4	.26***	−.11***	.05*
Refugees coming from Muslim countries who wish to work in [*country*].	2.3	.29***	−.08**	.07**

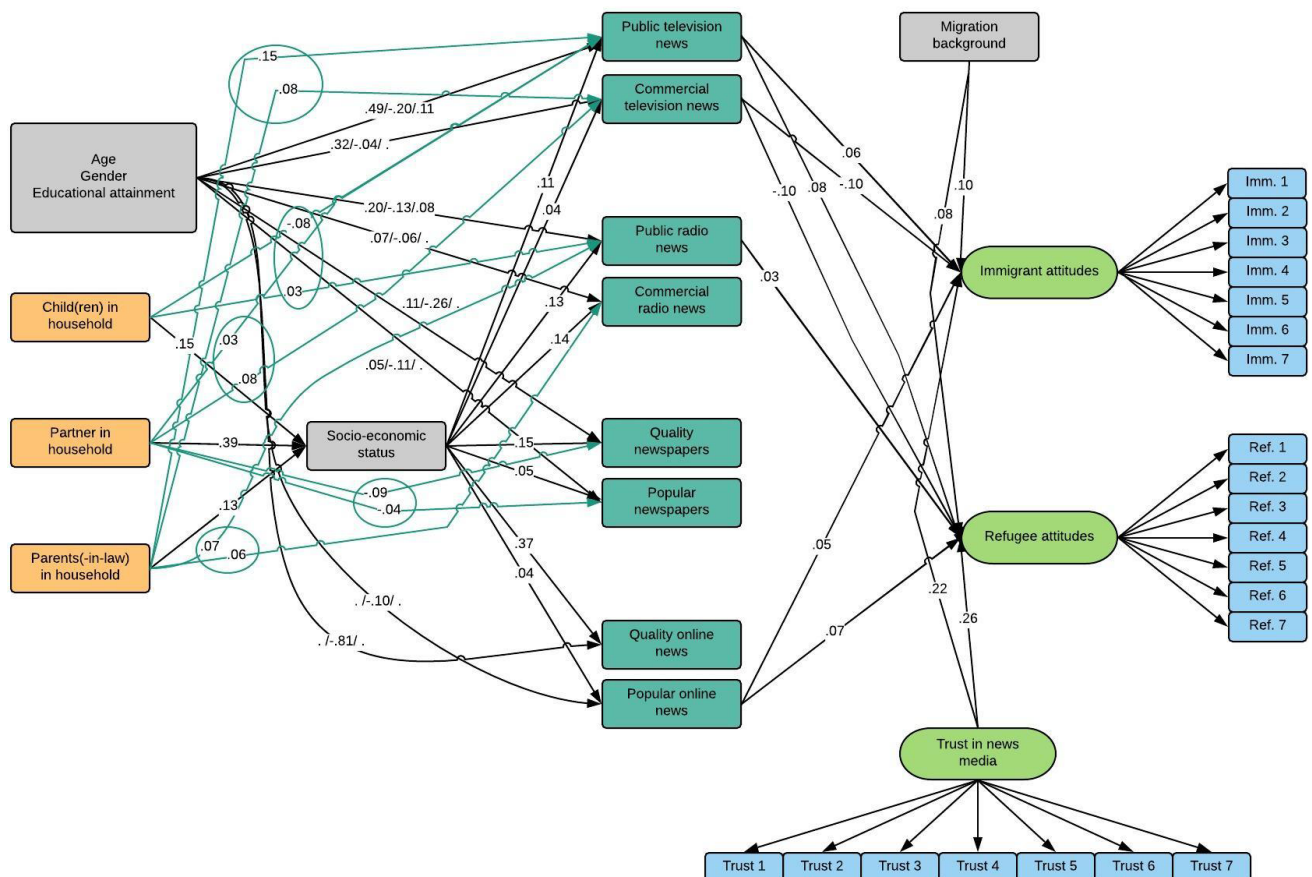Note: *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

Figure 1. Measurement model for household composition, socio-demographics, news media consumption and trust, and immigrant and refugee attitudes. Note: Only significant relations ($p < 0.05$) are drawn. Standardized estimates are presented. For full results, please consult the appendix. The reference category for 'Gender' = Male, and for 'Migration background' = No migration background. Green arrows and circles were drawn to illustrate associations between household composition and media consumption, with the aim of distinguishing them from other relations.

television consumption, radio consumption and quality (online) news consumption. The association of SES with commercial broadcasters and popular written media is much less pronounced. For educational attainment, we note a positive relation only with both types of public service news consumption.

Concerning the results for immigrant attitudes and refugee attitudes, we find significant differences by the respondents' migration background. People with a migration background hold more positive attitudes towards both immigrants and refugees than those without. No other socio-demographic characteristic relates directly to attitudes in this model. Furthermore, public service television news consumption is positively associated with attitudes, whereas commercial television news consumption negatively relates to both sets of attitudes. Public radio consumption has a limited positive association with refugee attitudes only. These results also suggest that television and radio news consumption have the similar effect sizes for both sets of attitudes. Popular online news consumption has a positive impact on both attitudes, with a larger effect size for refugee attitudes. Finally, trust in news media is found to have a positive impact on both sets of attitudes. Attitudes on refugees are more strongly associated with trust in news media than attitudes on immigrants are. For complete results, see Table 4 (Appendix).

In sum, we find no direct effect of household composition on attitudes. Indirect effects are present through SES, with a strong positive effect for living with partner, and media consumption, with the strongest positive effect found for living with parents(-in-law) (RQ1). Public service television consumption is positively associated with both sets of attitudes, but commercial television consumption is negatively related to both. Public service radio consumption is positively related only to refugee attitudes. In terms of written media, popular online news consumption is positively related to both sets of attitudes (RQ2). When comparing attitudes, we find that Sweden is found to be the most positive of the four countries. Belgium and the Netherlands hold moderate positions, and France is the most negative. In Sweden and France there is also some evidence that attitudes towards refugees are more negative than attitudes towards immigrants (RQ3).

4. Discussion

With the recent influx of refugees into Western Europe, scholarly and societal interest about attitudes towards refugees and other minority groups has increased. Attitude formation is influenced by a number of actors. Literature identifies the household as an important context in this regard, as household members socialize one another and influence attitudes on a number of domains (Roest et al., 2009; Sabatier & Lannegrand-Willems, 2005). News media also affect attitudes of its public. This is especially the case for attitudes on mi-

nority groups, as much of the public has rather limited real-life contact with these groups. For many people, attitudes are largely based on news media representations (Bleich et al., 2015). We focused on two minority groups, immigrants and refugees and considered the influence of household composition and media consumption and trust on public opinion on these two groups in the adult population in Belgium, Sweden, France, and the Netherlands. This research provides new insights into the relationship between household composition and attitudes on minority groups, as well as a more detailed breakdown of these attitudes (immigrant versus refugee attitudes) by media consumption pattern.

Our results indicate significant attitude differences between the four countries. Swedes hold the most positive attitudes towards both immigrants and refugees. The French have the most negative attitudes, with Belgians and the Dutch maintaining intermediate positions. This pattern echoes prior studies of attitude differences between these countries (Ford & Lymperopoulou, 2017; Heath & Richards, 2016; Jacobs et al., 2017). Some previous evidence suggests that French citizens hold more positive refugee attitudes than Belgians and the Dutch (Jacobs et al., 2017), but this does appear in our results. This may be related to recent terror attacks in France, perpetrated by individuals who posed as refugees. Belgium and Sweden were also affected by this phenomenon, but attacks occurred more frequently and were more severe in France. For both Sweden and France, we also find more negative attitudes towards refugees than towards immigrants—which may again be related to the specter of terrorism by supposed refugees. The negative attitudes may also have to do with the large numbers of refugees that citizens have been exposed to ever since the height of the 2015 European refugee crisis, especially in cities and through sustained media exposure. Nevertheless, the fact that people mentally separate refugees from terrorists may be due to exposure to a nuanced and diverse news media coverage.

Our data contained insufficient variance at the country level to justify multilevel analysis. Belgium and the Netherlands in particular hold very similar attitudes, and although France proves to be consistently more negative, it does not deviate from Belgium much in terms of item means. This makes Sweden the country with the most distinct attitudes, but this differential may be insufficient to impact the intra-class correlation coefficient. The SEM-model indicates that household composition is strongly associated with SES, as indicated by literature (Esping-Andersen, 2016). The presence of a partner is found to have a stronger (positive) association with SES than living with children and living with parents(-in-law). This is no surprise, as cohabiting or married partners benefit from an economy of scale due to the pooling of their (financial) resources (e.g. wages). Living with children sometimes has the opposite effect and puts a strain on the household income, while respondents who live with their parents are mostly young people who are still

studying or have not yet been employed for a long time. In terms of media consumption, the presence of a partner positively impacts television news consumption and negatively relates to newspaper consumption. A reason for this may be that individuals become unintentional news viewers when they cohabit with a partner. If one's partner is watching the news on television, then they may follow suit, even if they initially did not intend to do so. After some time, it may become a habit or routine to watch the news with a partner. Living with parents is positively associated with traditional media consumption, with larger effect sizes for public news consumption than for commercial news consumption. A possible explanation for this may be that these (mostly young) respondents live with their parents and are therefore consuming much of the same media their parents are consuming. As noted in the results, age is positively associated with traditional media consumption, and public service news consumption in particular. These results point to a large consumption of public service media in households where young people older than age 18 are living with their parents. The presence of children is associated with decreased public television news consumption only. Previous studies have found that children consume more commercial broadcasting than public broadcasting. When parents then observe their children watching commercial television, they may be less likely to actively change the channel to a public broadcasting station, but rather leave it as is. The fact that the children's channel of many public broadcasters is not on the same channel as the main public broadcasting programming may also contribute to this relationship, as parents would have to actively change back to their main public broadcasting channel when they see the children's channel in use. We find no direct relationship between household composition and attitudes towards immigrants or refugees. We find that it is mostly through indirect effects (in this case via SES and news media consumption) that household composition relates to such attitudes.

In addition to household composition, we find that age, gender, SES, and educational attainment all relate to media consumption. Age mainly relates to traditional media consumption, with the largest (positive) associations with public service news consumption. For print media, age has a significant positive impact on (particularly quality) newspaper consumption only. Women are generally found to consume less news media than men. This is most pronounced for public service media consumption and quality (online) newspaper consumption. SES is positively related to both television news consumption, with this association more pronounced for public service consumption than commercial consumption. There is a positive association with radio consumption also, with the impact almost equally strong for both broadcasting types. Educational attainment only marginally relates to overall news media consumption, because it relates positively to public service television consumption and negatively to commercial television consumption. The rea-

son for this may lie in the fact that public service media is aimed more at delivering international and political news, whereas commercial media pays more attention to toward human-interest stories and entertainment.

The migration background of the respondents is found to be the only socio-demographic indicator to directly impact attitudes on immigrants and on refugees. People with a migration background hold more positive attitudes than respondents without one. The association is slightly more pronounced for immigrants than it is for refugees. Television news consumption is strongly related to attitudes, with public service consumption positively and commercial consumption negatively relating to immigrant and refugee attitudes. Public radio news consumption relates positively only to refugee attitudes, but the effect size is very limited. These associations provide some evidence that the consumption of positive migrant representations [on public service media (Jacobs et al., 2016)] is positively related to immigrant and refugee attitudes, and the consumption of less positive migrant representations (on commercial television) is negatively related to attitudes. The reason why television has the strongest association with attitudes may be related to the fact that television is—in the adult population—still the most frequently used medium for consuming news media. Popular online news media consumption is the only predictor of attitudes for written media, with a positive impact found on both sets of attitudes. This type of consumption is found to be more strongly associated with refugee attitudes than with immigrant attitudes. This result is somewhat surprising because as popular news media are often less positive in their representations of migrant groups. However, it is also possible that consumers of popular news media do not always perceive this medium as delivering news. In some cases, the line between news and entertainment on these popular online media is blurred. Since this medium can sometimes be perceived as entertainment by the public, it is possible that a selection effect is present due to the frequency of young people (who hold more positive attitudes than older people) consuming this type of popular media. Trust in news media is also positively related to both sets of attitudes also, with the association being more pronounced for refugee than for immigrant attitudes.

Although our research is innovative in several ways, we do note some limitations. Despite the fact that we attempted to ensure a high degree of anonymity, some respondents may still have provided socially desirable answers on sensitive items for attitudes. The large number of missing values on the income-indicator is also unfortunate. Furthermore, in the definition of refugees that we provided to our respondents there was no explicit mention of being forced to flee one's home country due to climate change. The number of people entering Europe for this reason, however, will grow in the coming decades. It is therefore important for future conceptualizations of refugee status to highlight this group and provide a def-

inition which applies to all contemporary societal challenges. We recommend that future research on attitudes collect data from more countries, particularly Southern and Eastern Europe, and the United Kingdom. The lack of country variance in attitudes in our sample may be due to the similarities of some of the countries included here. While our modeling of the relationships between attitudes, news media consumption and trust, and household composition are quite detailed, many caveats remain. Qualitative research by way of focus groups or in-depth interviews could shed additional light on the link between the home environment, including respondents' media consumption patterns and family relationships, and the development of attitudes. Experimental studies studying the influence of specific news media exposure to attitudes towards refugees and immigrants may also reveal new insights into the complex interplay between media input and public opinion formation.

We did not uncover a direct relationship between household composition and immigrant and refugee attitudes. Indirect effects are found through SES and news media consumption, with the presence of a partner having the strongest positive impact through SES, and the presence of parents has the strongest positive impact through media consumption. Media consumption relates to attitudes in several ways. Television news consumption proves to be the most influential. Both public service news and online news are positively associated with both sets of attitudes, whereas commercial television consumption has a negative impact on attitudes. Trust in news media also relates positively to both sets of attitudes. Women and people with a migration background are also found to have more positive attitudes than respectively men and people without a migration background.

5. Conclusion

In this article, we have attempted to uncover some of the complex associations between household composition, media consumption and trust, and immigrant and refugee attitudes. The attitudes under study were chosen for their academic and societal relevance, as migration issues are increasingly prevalent in the public domain, and public opinion on this issue is polarized. Families and news media were identified as two important institutions that influence attitudes. Whilst our results may point to a larger influence of media consumption and trust than of household composition at face value, it is important to consider indirect effects. Household composition significantly relates to SES and news media consumption, which in turn affects attitudes on immigrants and refugees. We also find that television news consumption proves to be the most important news medium in terms of attitude formation. In terms of country differences, we observe limited variance, but do find that Swedes are the most positive in their attitudes towards both minority groups, whilst the French are the most negative.

Conflict of Interests

The authors declare no conflict of interests.

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Appendix

Table 4. Structural equation model of household composition, socio-demographics, media consumption and trust, and immigration and refugee attitudes with standardized beta's.

Attitudes on immigrants		Public television news		Quality newspapers	
Children	1.57	Children	−.08**	Children	.06
Partner	−1.61	Partner	.03*	Partner	−.09*
Parents(-in-law)	−1.13	Parents(-in-law)	.15***	Parents(-in-law)	.02
Gender	−6.84	Gender	−.20***	Gender	−.26***
Age	1.63	Age	.49***	Age	.11*
Socio-economic status	3.18	Socio-economic status	.11***	Socio-economic status	.15**
Educational attainment	−1.65	Educational attainment	.11***	Educational attainment	.01
Migration background	.10***	**Commercial television news**		**Popular newspapers**	
Public television news	.06***	Children	.00	Children	.03
Commercial television news	−.10***	Partner	.08**	Partner	−.04*
Public radio news	.02	Parents(-in-law)	.08***	Parents(-in-law)	.01
Commercial radio news	.01	Gender	−.04**	Gender	−.11***
Quality newspapers	.02	Age	.32***	Age	.05*
Popular newspapers	−.01	Socio-economic status	.04**	Socio-economic status	.06**
Quality online news	−8.51	Educational attainment	−.02	Educational attainment	.00
Popular online news	.05**	**Public radio news**		**Quality online news**	
Trust in news media	.22***	Children	.03*	Children	.19
Attitudes on refugees		Partner	−.01	Partner	−.19
Children	1.81	Parents(-in-law)	.07***	Parents(-in-law)	−.13
Partner	−1.86	Gender	−.13***	Gender	−.81***
Parents(-in-law)	−1.34	Age	.20***	Age	.21
Gender	−7.90	Socio-economic status	.13***	Socio-economic status	.37**
Age	1.91	Educational attainment	.08***	Educational attainment	−.20
Socio-economic status	3.68	**Commercial radio news**		**Popular online news**	
Educational attainment	−1.92	Children	.01	Children	.02
Migration background	.08***	Partner	.01	Partner	−.02
Public television news	.08***	Parents(-in-law)	.06***	Parents(-in-law)	−.02
Commercial television news	−.10***	Gender	−.06***	Gender	−.10***
Public radio news	.03*	Age	.07***	Age	.03
Commercial radio news	−.00	Socio-economic status	.14***	Socio-economic status	.04**
Quality newspapers	.01	Educational attainment	.02	Educational attainment	−.03
Popular newspapers	.01	**Socio-economic status**			
Quality online news	−9.82	Children	.15***		
Popular online news	.07**	Partner	.39***		
Trust in news media	.26***	Parents(-in-law)	.13***		

Note: Fit statistics: RMSEA = .0491, GFI = .7999, BBNFI = .9798 *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$. The reference category for 'Gender' = Male, and for 'Migration background' = No migration background.