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Polarization in the Wake of the European Refugee Crisis – A Longitudinal Study of the Finnish Political Elite’s Attitudes Towards Refugees and the Environment

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Abstract

We investigated political polarization among the 28284 candidates in the Finnish municipal election who ran for municipal council in 2012, 2017, or both, and had responded to a Voting Advice Application. Our results revealed political polarization in terms of both conversion (longitudinal analysis, n = 6643) and recruitment (cross-sectional comparison of first-time candidates, n = 13054). The populist radical-right Finns Party became even more anti-refugee, and the pro-refugee Green League became even more pro-refugee. The Finns Party, in particular, has constructed the Green League as their enemies, which could explain why the Finns Party moved in an anti-environmental direction, as well as the increased issue-alignment between refugee-attitudes and environmental attitudes. We also observed increased within-party homogeneity in almost all parties. In the discussion, we focus on the nature of the association between refugee and environmental attitudes.

Keywords: political psychology, attitude change, immigration, environment, populism, elections

Considering the current concern over the polarization of society and of politics, the empirical research on polarization outside of the US could be considered surprisingly scant. That research has provided ample evidence that the US political elites have become increasingly polarized over the past five decades (Layman, Carsey, & Horowitz, 2006). The present research investigates polarization in the Finnish political elite. Finland is in many ways a typical Western European country; the party system is multi-party, and the major European party families are represented, including a radical-right party and a green party. These two parties, the Finns Party and the Green League, are the focus of the present research. We chose these parties because Finland, like the rest of Europe, experienced the so-called European refugee crisis in 2015, and the two parties were already polar opposites in terms of refugee policy before the crisis.
Polarization of the political elite occurs when party members (both elected government officials and activists within the party organization itself) grow more internally homogenous on policy positions and more divergent relative to members of other parties (Baldassarri & Gelman, 2008). Employing both longitudinal and cross-sectional data collected by the Voting Advice Application (VAA) of the Finnish National Broadcast Company (Yle), we assessed the attitudes of candidates in the Finnish municipal elections in 2012 and again in 2017. In our pre-registered hypotheses, we expected candidates of the populist radical-right Finns Party (FP) and their adversary, the pro-refugee Green League (whom we will occasionally refer to as “Greens”), to become even more polarized, both due to radicalization of old candidates and recruitment of more extreme candidates.

**Elite and Mass Polarization in the US**

The vast majority of the research on polarization has been conducted in the US. This research very clearly shows a division between elite and mass polarization. The two political parties in the US started to move further apart in the early 1970s, and there is now general consensus that parties’ leaders and coalitions, including also grass-root activists, have during the last fifty years become both increasingly likely to take extreme positions on a broad set of political issues (single issue radicalization) and more consistently liberal or consistently conservative (issue alignment; for reviews, see Layman & Carsey, 2000; Layman et al., 2006; McCarty, Poole, & Rosenthal, 2006; Webster & Abramowitz, 2017). Some researchers consider contemporary party polarization in the US an (unintended) consequence of institutional changes (Burden, 2001), whereas others consider it a response to mass polarization (for a discussion, see Layman et al., 2006).

The current debate on mass polarization in the US has itself been characterized as polarized, with one side arguing that the US is in the midst of a culture war, and the other arguing that such claims are exaggerations. Reviewing the debate and providing new empirical evidence, Lelkes (2016) argued that both sides could, in theory, be right, depending on how polarization is defined. However, he went on to show the mass public has not become more radicalized on single issues, nor has it become more consistent in terms of increased issue alignment. Polarization has increased in the sense that partisans now perceive the country as more polarized and dislike one another more. That is, despite the polarization of the US political elite, American public opinion has remained very stable, or even become more moderate on most political issues, with attitudes towards only few single issues (e.g. abortion) becoming more radicalized (for another review, see Baldassarri & Gelman, 2008). Moreover, there is no evidence of increased alignment between single issue; that is, attitude constraint has remained essentially stable and low, with no signs of higher ideological coherence (Baldassarri & Gelman, 2008; Lelkes, 2016).

**Migration and Polarization of the European Political Elite?**

In this study, we set out to investigate polarization of refugee attitudes in the wake of the so-called “refugee crisis” or “migrant crisis” of 2015 (referred to as the “refugee crisis” from here on). The Syrian exodus in 2015 created a crisis in Europe and threw the European asylum system into chaos. This event led to an increasingly polarized debate over the improvised responses (Hatton, 2017). The European press generally framed Syrian refugees’ arrival to Europe as a crisis (Georgiou & Zaborowski, 2016). Initial sympathy towards the refugees was in parts of the population quickly replaced by hostility and hate speech. Across Europe, the refugees were portrayed by the press as dangerous outsiders. The negative press coverage of immigration-related events and the rise of far-right populist parties across Europe (Golder, 2016; Mudde, 2007) could have been expected to reflect an increasingly anti-immigration public opinion.
However, European Social Survey data suggest that overall public attitudes towards refugees (Hatton, 2016) and immigrants (Heath & Richards, 2016) remained relatively stable after 2015. But focusing on average scores could mask increasing group differences. Those with the strongest attitudes on either side could be moving further away from each other. Supporting this idea, mass attitudes towards immigration in the urban vs. rural areas of the UK are increasingly polarizing (Duffy, Kaur-Ballagan, & Gottfried, 2015). More pertinent to the present research, far-right populist parties have successfully used the “refugee crisis” to build their support and win elections across Europe (Golder, 2016). Mirroring the situation in the US, it could thus be that the political elite is becoming increasingly polarized, despite the mass public remaining relatively stable in their average attitudes.

**Polarization in Finland**

Besides single issue polarization, in which possible changes in means scores and variances on a single issue indicate polarization in the sense of radicalization (Baldassarri & Gelman, 2008), we also investigated polarization across different issues. People’s ideological distance depends not only on the level of radicalization of their opinions but also on the extent to which such opinions are correlated with each other—which type of polarization has been referred to as issue alignment (Baldassarri & Gelman, 2008) or constraint (Converse, 1964). Specifically, besides focusing on the polarization of refugee attitudes (single issue radicalization), we will investigate the conjoint polarization of attitudes towards refugees and towards the environment (increased issue alignment). To explain why we focus on environmental attitudes, a brief overview of the Finnish political context is necessary.

The nationalist-populist Finns Party gained a historic victory in Finland’s parliamentary elections in spring 2011. The parliamentary group, which had consisted of 5 members after the 2007 elections, now suddenly grew to 39 members. At the same time, the party fractured the traditional configuration of three main parties and became the third-largest party in the Parliament. The success of this party continued in the 2015 elections with the Finns Party rising to become Finland’s second largest surpassing the votes of the traditional mass parties, namely the National Coalition Party (NCP) and the Social Democratic Party (SDP). As a result, the Finns Party entered government with the Centre Party Finland (CPF) and the NCP (Arter, 2015). The Finns Party belongs to the same party family as other populist radical-right parties in Nordic Europe (Jungar & Jupskås, 2014). The most important feature of these parties is their authoritarian position on sociocultural issues (Kitschelt & McGann, 1995; Mudde, 2007; Rydgren, 2005). This position includes first and foremost an exclusionist and ethnically based form of nationalism. The nation-state should remain as culturally and ethnically homogenous as possible, which means that the influx of refugees and in some occasions their rights must be limited (Hlousek & Kopecek, 2010; Kitschelt, 2007). The Chapel Hill Expert Survey, which describes policy positions of national political parties in the EU, shows that the Finns Party, as compared to other Finnish parties, is by far the toughest on immigration policy and the most hostile towards multiculturalism.

The Green League, with its roots in a social movement, gained parliamentary representation in the late 1980s. They were determined not to become a single-issue party, but adopted a range of liberal positions on social issues such as refugee, women’s rights and lifestyle choices, supported pacifist foreign policies, and took leftist positions on many core economic issues. The Chapel Hill Expert Survey shows that, as compared to other Finnish parties, the Greens have from 2006 onward to 2014 been the most welcoming in terms of immigration policy and the strongest proponent of multiculturalism. Moreover, the immigration topic has been very salient to the Greens, with only the Finns Party giving more weight to immigration issues in their policy program.
Populist parties tend to define their opponents more precisely than their own group. They employ black-and-white rhetoric along with vague expressions and stereotypes, with the aim of creating the (imaginary) ‘other’ that is set against (the likewise imaginary) ‘us’ (Mudde, 2007; Wiberg, 2011). The Finns Party referred to the SDP, the CPF and the NCP as ‘old cartel parties’ that are all alike in a culture of ‘Finnish-style consensus politics’, and one of their key talking points was smashing the domination of these parties, which together had dominated politics for over 30 years (Arter, 2011). We will refer to these three parties as the ‘three large parties’.

However, the ideal adversary and scapegoat (an essential element of populist othering; Wodak, 2015) of the Finns Party were the similarly sized Greens. A lot of the initial popularity of the Finns Party rested on the verbally talented chairman Timo Soini, and the party has been described as typical entrepreneurial party tied around a long-time charismatic leader (Arter & Kestilä-Kekkonen, 2014). In Soini’s writings, the Greens represented everything that the Finns Party was not, and vice versa. The Greens were described as arrogant elitists who lived in ivory towers and believed themselves to be superior to others (Niemi, 2013). By contrast, the Finns Party sought to represent the ‘ordinary’ Finnish man on the street, and his (or her) interests and rights, such as motoring, traveling abroad, and eating meat (Niemi, 2013). Also, other key politicians in the Finns Party came to describe the Greens as the unpatriotic and hateful enemy within (Sakki & Pettersson, 2016). In the wake of the “refugee crisis”, the Finns Party policy positions became more extreme. They went into the 2015 parliamentary elections with a policy program that was by many legal experts considered racist and anti-constitutional in that it portrayed migrants as being less valuable and more problematic than the native population (Kuisma & Nygård, 2017).

Regarding both refugee attitudes and attitudes towards the environment, the Finns Party and the Greens are polar opposites (Koivula, Koiranen, Saarinen, & Keipi, 2019). Almost 90% of the members of the Finns Party view refugees as an important societal risk, whereas above 60% of Green League members do not view refugees as an important risk. Regarding attitudes towards the environment, almost 100% of the Greens view environmental problems as a societal risk, whereas the corresponding number among Finns Party members is around 60%. On both attitude items, members of the ‘three large parties’ are in between the FP and the Greens.

The Finnish electoral system provides a unique, or at least rare, context in which to study the actual attitudes of electoral candidates (for an overview of the Finnish electoral system, see von Schoultz, 2018). Open-list proportional representation with mandatory preferential voting has generated a multi-party system which involves a high degree of both interparty competition (due to proportional representation) and intraparty competition (due to wholly open lists and mandatory preferential voting). Although VAAs are an important part of the electoral campaigns also in other Western European countries, such as the Netherlands, Germany, and Switzerland, the role of VAAs is accentuated in the Finnish contexts by the fully open lists. The VAAs not only recommends a party, but also recommends individual candidates based on the fit between the candidate’s responses and the person’s responses to the voting application. The fully open lists make it important for candidates to attract personal votes, and the VAAs should be ideally suited for this purpose. Testifying to the importance of VAAs, in the previous national elections (Finnish parliamentary elections 2015), around half of those who voted had used VAAs and around half of them said that the results had influenced their decision on whom to vote (Borg, 2015). I.e., VAAs matter a lot in the Finnish electoral context.
The Present Research

Conversion (Hypothesis 1)

The increased inflow of refugees and the subsequent increased tension between political parties was expected to increase between-party opinion differences. Comparing the same candidates’ scores in 2012 and in 2017, we expected the average change scores in the Finns Party to indicate increasingly negative attitudes towards refugees, and the opposite pattern to emerge in the Green League (pre-registered as H1).

Increased Issue Alignment (Hypothesis 2)

We expected an increased polarization in terms of issue alignment. More specifically, we expected the correlation between being pro-refugee and being pro-environment to increase. That is, in wake of the “refugee crisis” and the headline-grabbing rivalry between the Finns Party and the Green League, we expected candidates to learn “what goes with what” and apply this to their own political attitudes (e.g., Carmines & Stimson, 1981; Zaller, 1992). However, we expected this type of polarization in terms of issue alignment to occur only in the ‘three large parties’ (this was pre-registered as H2). Our reasoning was that the alignment between refugee and environmental attitudes would, when looking at Finns Party and Green League candidates, already be very high in 2012, with little room for the correlation to increase and with little within-party variance on either refugee or environmental issues (note that we also did not expect environmental attitudes to change in either the Finns Party or the Green League).

However, we expected the Finns Party’s ownership of the public policy debates on immigration and refugee intake, and their general domination of the media landscape (Horsti, 2015; Kuisma & Nygård, 2017) to influence candidates from the catch-all ‘three large parties’. I.e., we expected them to take cues regarding “what goes with what” and come to associate certain refugee attitudes with certain environmental attitudes - those that adopted more pro-refugee attitudes were expected to also adopt more pro-environmental attitudes, and vice versa.

Replacement (Hypothesis 3)

Fleisher and Bond (2004) argued that polarization was caused not only by conversion (as tested by H1) but also by replacement. To investigate replacement, we compared first-time candidates in 2017 with first-time candidates in 2012. We expected first-time candidates for the Finns Party and the Green League to be more extreme in their refugee attitudes at the latter elections (pre-registered as H3).

Method

Pre-Registration

The hypotheses and the analysis plan of this study were pre-registered by the authors before conducting the study. The pre-registration can be found at https://osf.io/2zkcf/. Pre-registered analysis plan included decisions regarding the data preparations, variable transformations, data-analytical choices, and statistical inference, and these decisions were all made before any analyses involving the attitude variables were run.

Note that the preregistered hypotheses H1 and H3 concerned the Finns Party and the Green League, and H2 concerned the three catch-all parties, the SDP, the CPF, and the NCP. Nevertheless, we ran all analyses for all parties that had representatives in the Finnish parliament in 2017, thus including also the more marginal Left Alliance (around 10% of the vote), Christian Democrats (3%), and Swedish People’s Party of Finland (5%). We excluded
fringe candidates running as independent or running for marginal parties (less than 5% of all candidates). Initial inspection of the results led to exploratory analyses on gender differences, between-party differences in the strength of polarization, and possible increases in within-group homogeneity.

Sample and Procedure

The total sample consisted of those 28284 (43.78% women) candidates in the Finnish municipal election who ran for municipal council in 2012, 2017, or both, and had completed the VAA hosted by the Finnish National Broadcasting company (Yle) on at least one of these two occasions. The municipal council is the highest decision-making body at the municipal level. It decides on the municipal budget, including municipal income tax rate, as well as deciding on city-planning and organizing municipal services and administration. Municipalities are the lowest level of government in Finland but they are more important than in most countries, being responsible for the provision of services such as health care and education. Municipal elections take place every four years.

The longitudinal sample, which is used to test H1 and H2, is different from the sample of first-time candidates used to test H3. The longitudinal sample included those who had run in the 2012 elections, but excluded those had run only in 2017 (newcomers). Thus, for the longitudinal examination, participants were those 16699 candidates in the Finnish 2012 municipal elections who had completed the Yle VAA. Of these participants, 6643 (35.53%) were also candidates in 2017 and had completed the Yle VAA on both occasions. In the comparisons of first-time candidates, those running for the first time in 2012 (n = 7738) were compared with those who were running for the first time in 2017 (n = 5316).

Measures

Attitudes

Acceptance of refugees was assessed by the item "My municipality must accommodate refugees who have been granted asylum in Finland." [Oman kuntani tulee ottaa vastaan suomesta turvapaikan saaneita pakolaisia] in 2012 and with the item "My municipality must accommodate people who have been granted asylum in Finland." [Oman kuntani tulee ottaa vastaan suomesta turvapaikan saaneita] in 2017. That is, the items differed in that the 2012 VAA item referred to those who had been granted asylum as “refugees”, whereas this term was not included in 2017. However, the meaning of the items is exactly equivalent (the possible implications of this change are discussed below). For the descriptive statistics of all items, both within and across parties, see Tables S01-S11 in the SOM.

Attitude towards the environment was assessed with the item "To allow for the creation of jobs, my municipality can take a more relaxed stance towards the importance of nature environmental values" [Ympäristö- ja luontoarvoista voidaan kunnassani joustaa, jos sitten voidaan lisätä työpaikkoja] both in 2012 and 2017. The item was reverse scored, so that higher scores indicated a more pro-environmental view.

The items were originally responded to on a 5-point scale (0 = completely agree, 1 = somewhat agree, 2 = don’t know / dismiss the item, 3 = somewhat disagree, 4 = completely disagree). (In the pre-registration, there is a typing error that implies that the scales did not include the disagree options, but this mistake is corrected here.) The middle option (2 = don’t know / dismiss the item) was coded as missing (participants were not excluded from the analysis due to missing responses), 1 was coded 2, and 0 was coded 1. Thus, the transformed items were on a 4-point scale ranging from 1 (completely agree) to 4 (completely disagree).
The attitude measures were all single-item measures, making it impossible to directly estimate their reliability. However, a subset of those participants for whom we had 2017 data \((n = 3721)\), had also provided answers to the VAA hosted by the largest Finnish newspaper Helsingin Sanomat (HS). Some of the items in the HS VAA conceptually overlapped with the Yle items that we employed and the high correlations between these items suggested that our measures, although only single items, could be trusted (see SOM for reliability analyses).

Covariates and Attrition

As outlined in the pre-registration, when testing our hypotheses we wanted to control for a set of important demographic covariates. These were gender, age, education (binary coded, 0 = lower than Bachelor’s degree, 1 = at least Bachelor’s degree,), political experience (binary coded, 0 = first-time candidate in 2012, 1 = not a first-time candidate in 2012), and income (binary coded, below average = 0, above average = 1). For the longitudinal analyses, all covariates except income (which was only available in the 2017 data) were taken from the 2012 dataset. To test differences between first-time candidates in 2012 and 2017, gender, age, and education, obtained from the respective datasets, were used as covariates. Regarding attrition, there were no general differences between those who had only 2012 data available and those that had both 2012 and 2017 data available (see SOM for attrition analyses).

Data Analytic Strategy

For confirmatory hypothesis testing of H1 and H2, a bivariate multigroup latent change score model was constructed within the structural equation modeling framework (see Figure 1). Specifically, for each of the eight parties, we constructed a two-wave latent change score model in which the observed attitude variables (2012 and 2017) loaded on the baseline latent variable and the 2017 attitude item loaded on the latent change score variable (Little, Bovaird, & Slegers, 2006). The covariation between the latent baseline and change variables was included in the model.

Mean-level change in the attitude of an average candidate of each party (H1) was investigated with the party-specific means of the latent change score variables \((\alpha_2)\) in Figure 1. The model was bivariate, meaning that an identical change score model was run simultaneously for refugee and environmental attitudes within the same structural equation model. This allowed for the estimation of the party-specific correlation between changes of the two attitudes \((\psi_2)\) in Figure 1, indicating within-party issue alignment (H2). The correlation between the baseline values on both attitudes was also estimated \((\psi_1)\). No between-party constraints were imposed, but for testing Hypothesis 2, aggregate parameter estimates were investigated instead of party-specific estimates. Gender, age, education, income, and political experience were entered as covariates (this was done by regressions the observed attitude scores on them). Covariates were time invariant and centered around the party means. As pointed out to us in the review phase of this manuscript, our pre-registered method for testing Hypothesis 2 presupposes that there is a correlation between refugee and environmental attitudes in 2017, and significant variance in change scores. These requirements were met (for all descriptive statistics, including Pearson and Spearman correlations at both stages of data collection, within and across parties, and correlated change scores, see Tables S01 to S12 in the SOM).1
For Hypothesis 3, a bivariate model was constructed within the framework of structural equation modeling. In this model, year (coded −0.5 for 2012 and 0.5 for 2017) predicted observed scores on refugee and environmental attitudes, whilst controlling for gender, age, education, and income. The covariance between the two attitude items was also modeled.

Structural equation modeling was done with the lavaan –package (Rosseel, 2012) of R (R Core Team, 2017). The estimation procedure for all structural equation models was full information maximum likelihood, which allows for missing data. The analysis script used for obtaining the results and the analysis output including all the results and all data are made freely available (see the Supplementary Materials section). Local and national ethics guidelines exempt this type of open access public data from ethics approval.

For each hypothesis, the type-I error rate (alpha) was set at .05. For possible exploratory examinations, of which some were mentioned in the preregistration, we used family-wise adjustment of the type-I error rate, so that alpha remained at .05 for the entire family of $m$ significance tests (Holm, 1979). The family size $m$ of each exploratory analysis is mentioned in the results.

**Statistical Power**

The power analysis script and output can be freely accessed online (see the Supplementary Materials section). For Hypothesis 1, the power to detect change of the magnitude of $d = .10$ for a single party was above .88 with
type-I error rate (alpha) set at .05 with the expected sample sizes for the relevant parties (around n = 600 for longitudinal data without missing values). In addition, power to detect differences in change between two parties ($d = .20$) in conjunction with single party changes ($d = .10$ each, opposite direction) was above .80 with alpha set at .05.

For Hypothesis 2, the sensitivity to detect difference in the magnitudes of change score correlations between two groups of parties was calculated with G*Power. The sample sizes for these aggregated groups were assumed to be 1201 (Finns Party and GL) and 4089 (CPF, NCP, SDP). With these sample sizes, we had sensitivity to detect small (Cohen’s $q = .118$) differences in the correlations with .95 power and alpha set at .05.

For Hypothesis 3, the number of Finns Party first-time candidates in 2012 ($n = 663$) and 2017 ($n = 404$), and the number of Green League first-time candidates in 2012 ($n = 825$) and 2017 ($n = 1159$), gave us .80 power to detect differences of the magnitude $d = .15-.16$, with type-I error set at .05.

**Results**

**Model Fit**

Multigroup bivariate latent change score model without (CFI = 1.00, RMSEA = .02, SRMR = .02) and with covariates (CFI = 1.00, RMSEA = .00, SRMR = .01) showed good fit to the data. Hypothesis 1 and 2 are tested from the model with covariates.

**Hypothesis 1: Mean-Level Polarization**

**Confirmatory Results**

For refugee attitude, descriptive statistics for the longitudinal sample and the standardized mean differences between 2012 and 2017 are presented in Table 1. Supporting the predicted polarization (H1) Finns Party candidates were less accepting of refugees in 2017 ($M = 1.60, SD = 0.78$) than they were in 2012 ($M = 1.96, SD = 0.88$), $\alpha_2 = -0.36, z = -11.54, p < .001$, Hedges’ $g$ (calculated with pooled $SD$ across all parties and measurements) = −0.48. Also consistent with our first hypothesis, Green League candidates were more accepting of refugees in 2017 ($M = 3.75, SD = 0.49$) than they were in 2012 ($M = 3.61, SD = 0.58$), $\alpha_2 = 0.15, z = 7.06, p < .001, g = 0.19$. The difference between the change scores was also statistically significant, $\alpha_{2GL} - \alpha_{2FP} = 0.51, z = 13.51, p < .001$, confirming the expected mean-level polarization between the Finns Party and the Green League. This polarization was stronger in the Finns Party, $\alpha_{2GL} + \alpha_{2FP} = -0.22, z = -5.74, p < .001$. Change scores in refugee attitudes for all parties are depicted in Figure 2.
Exploratory Results

All other parties, except the Finns (m = 6) showed increased acceptance of refugees (see Table 1). The effect sizes ranged from $g = 0.14$ (Christian Democrats) to $g = 0.49$ (Swedish People’s Party).

The multigroup bivariate latent change score model was also used to test whether environmental attitudes changed from 2012 to 2017 (m = 8). Descriptive statistics and standardized mean-level changes in environmental attitudes are presented in Table 2. Change scores for all parties in environmental attitudes are also shown in Figure 2. Candidates from three parties revealed a decrease in pro-environmental attitudes from 2012 to 2017, the Finns Party ($M = 2.61, SD = 0.87$ vs. $M = 2.43, SD = 0.81; \alpha_2 = -0.20, z = -6.09, p < .001, g = -0.25$), the Center Party ($M = 2.89, SD = 0.73$ vs. $M = 2.80, SD = 0.72; \alpha_2 = -0.08, z = -4.28, p < .001, g = -0.12$), and the National Coalition Party ($M = 2.84, SD = 0.77$ vs. $M = 2.77, SD = 0.73; \alpha_2 = -0.08, z = -4.28, p < .001, g = -0.10$).

After adjusting for family-wise error rate for the associations between covariates and the latent baseline and change scores (five covariates × eight parties gave family size m = 40), for each latent variable in the multigroup bivariate latent change score model (covariates in this version of the model predicted the latent variable, not observed variables, as in the previous model), none of the covariates were, in any party, statistically significantly associated with latent changes scores for either refugee (for all estimates, $p > .090$) or environmental attitudes ($p > .294$). However, demographic variables did predict some baseline mean-levels. Education was positively associated with mean-level pro-refugee attitudes (baseline latent factor) in the Centre Party Finland (standardized regression coefficient $\beta = .15$), Finns Party ($\beta = .10$), Green League ($\beta = .17$), Left Alliance ($\beta = .27$), National
Coalition Party ($\beta = .14$), and Social Democratic Party ($\beta = .23$). Age was positively associated with pro-refugee attitudes in the Centre Party Finland ($\beta = .06$) and the Finns Party ($\beta = .20$). In addition, political experience was negatively associated with a pro-refugee attitude in the National Coalition Party ($\beta = - .06$).

Table 1

<table>
<thead>
<tr>
<th>Party</th>
<th>2012</th>
<th>2017</th>
<th>$\Delta g$</th>
<th>$p$</th>
<th>adj. $p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre Party</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>n</td>
<td>1577</td>
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<td>0.79</td>
<td>2.93</td>
<td>0.78</td>
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<td>0.72</td>
<td>3.19</td>
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<td>1.96</td>
<td>0.88</td>
<td>1.60</td>
<td>0.78</td>
</tr>
<tr>
<td>Green League</td>
<td></td>
<td>3.61</td>
<td>0.58</td>
<td>3.75</td>
<td>0.49</td>
</tr>
<tr>
<td>Left Alliance</td>
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<td>0.77</td>
<td>3.57</td>
<td>0.66</td>
</tr>
<tr>
<td>National Coalition Party</td>
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<td>2.75</td>
<td>0.78</td>
<td>3.01</td>
<td>0.75</td>
</tr>
<tr>
<td>Social Democratic Party</td>
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<td>3.05</td>
<td>0.78</td>
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<td>0.70</td>
</tr>
<tr>
<td>Swedish People’s Party</td>
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<td>3.34</td>
<td>0.72</td>
<td>3.70</td>
<td>0.57</td>
</tr>
</tbody>
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Note. $n$ = sample size for stayers in each party (data available from 2012 and 2017) for which the descriptive statistics and standardized mean difference $\Delta g$ were calculated. For $\Delta g$, pooled standard deviation across all parties and measurement waves was used. Statistical tests for the mean difference were obtained from the multi-group latent change score models. adj. $p$ = Holm adjusted $p$-values.

Table 2

<table>
<thead>
<tr>
<th>Party</th>
<th>2012</th>
<th>2017</th>
<th>$\Delta g$</th>
<th>$p$</th>
<th>adj. $p$</th>
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<td>Centre Party</td>
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<tr>
<td>n</td>
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<td>0.73</td>
<td>2.80</td>
<td>0.72</td>
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<tr>
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<td>0.77</td>
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<td>2.43</td>
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<tr>
<td>Green League</td>
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<td>0.48</td>
</tr>
<tr>
<td>Left Alliance</td>
<td></td>
<td>3.38</td>
<td>0.74</td>
<td>3.39</td>
<td>0.67</td>
</tr>
<tr>
<td>National Coalition Party</td>
<td></td>
<td>2.84</td>
<td>0.77</td>
<td>2.77</td>
<td>0.73</td>
</tr>
<tr>
<td>Social Democratic Party</td>
<td></td>
<td>3.08</td>
<td>0.76</td>
<td>3.07</td>
<td>0.69</td>
</tr>
<tr>
<td>Swedish People’s Party</td>
<td></td>
<td>3.16</td>
<td>0.79</td>
<td>3.11</td>
<td>0.77</td>
</tr>
</tbody>
</table>

Note. $n$ = sample size for stayers in each party (data available from 2012 and 2017) for which the descriptive statistics and standardized mean difference $\Delta g$ were calculated. For $\Delta g$, pooled standard deviation across all parties and measurement waves was used. Statistical tests for the mean difference were obtained from the multi-group latent change score models. adj. $p$ = Holm adjusted $p$-values.

Regarding the associations between demographic variables and environmental attitudes, women candidates scored higher in environmental attitudes in the Centre Party Finland ($\beta = .17$), Christian Democrats ($\beta = .12$), Finns Party ($\beta = .15$), National Coalition Party ($\beta = .13$), Social Democratic Party ($\beta = .10$), and Swedish People’s Party ($\beta = .19$). Education was also positively associated with environmental attitudes in the Centre Party Finland ($\beta = .08$), Left Alliance ($\beta = .18$), National Coalition Party ($\beta = .09$), and Social Democratic Party ($\beta = .08$). In addition, age was negatively associated with environmental attitudes in the Left Alliance ($\beta = - .15$), and political experience was negatively associated with environmental attitudes in the Finns Party ($\beta = - .08$) and the National Coalition.
Party ($\beta = -0.06$). The total amount of variance explained by the covariates ranged, across parties, from $R^2 = 0.024$ to $R^2 = 0.088$ for refugee attitudes, and from $R^2 = 0.016$ to $R^2 = 0.062$ for environmental attitudes.

Inspection of Tables 1 and 2 suggested to us that the party-specific variances of refugee attitudes could be indicative of within-party homogenization (in Tables 1 and 2, the observed scores in 2017 tend to have lower standard deviations than the observed scores in 2012). To explore this, an additional structural equation model without latent baseline and change variables was constructed for refugee and environmental attitudes. In this model, the observed variables at both 2012 and 2017 were regressed on the covariates and were also allowed to covary with each other. The variance estimates (residualized for the covariates) for these variables were then compared over time for each party, and these comparisons were adjusted to set the family-wise error rate at 0.05 ($m = 8$ for both attitudes).

All parties but the Centre Party Finland and the Christian Democrats had lower variance in refugee attitudes in 2017 than in 2012 (for all comparisons, adjusted $p < 0.002$). Similarly, all but Centre Party, Christian Democrats, and Swedish People’s Party had lower variance in environmental attitudes in 2017 than in 2012 (for all comparisons, adjusted $p < 0.035$). These results indicate that most parties have polarized in terms of within-party homogenization regarding both refugee and environmental attitudes.

**Hypothesis 2: Issue Alignment Polarization**

**Confirmatory Results**

Contrary to expectations (Hypothesis 2), change in refugee attitudes was not, in the three ‘large parties’, the Centre Party, National Coalition Party, and Social Democratic Party, aligned with changes in environmental attitudes (standardized aggregate estimate of correlated change $\psi^2 = -0.02$, $z = -1.79$, $p = 0.073$). However, these changes were aligned in the Finns Party and the Green League ($\psi^2 = 0.05$, $z = 2.17$, $p = 0.030$). The difference in issue alignment was also statistically significant between the two groups of compared parties ($\psi^2_{Centre+Coalition+Social Democrats} - \psi^2_{Finns+Green League} = -0.04$, $z = 2.77$, $p = 0.006$). Among Finns Party and Green League candidates, those who from 2012 to 2017 became more anti-refugee also became more anti-environment, and vice versa.

The means and SDs for each attitude are included in Tables S01-S11 of the Supplementary Online Material (SOM), as well as the distributions of the response frequencies for each item across and within parties (these reveal both skew and kurtosis, which is to be expected as the party line will influence individual candidates). We also report both Pearson and Spearman correlations for all items across and within parties and the longitudinal correlations between the two attitudes. To demonstrate the superiority of tests of change scores using SEM compared to examining correlations, we also run a simulation study (SOM). Test from change scores had more statistical power to detect the simulated change because the change score model controls for longitudinal stability. Also, SEM can better deal with missing values, as well as with the possibility that attrition could be correlated with covariates.

**Exploratory Results**

Correlated change between refugee and environmental attitudes was also estimated separately for each of the eight parties ($m = 8$). None of the correlated change parameters showed issue alignment within single parties (the correlation estimates ranged from $\psi^2 = -0.09$ to $\psi^2 = 0.06$, for all parties, $ps > 0.269$).
Within-party correlations between refugee and environmental attitudes were examined from the correlations between the latent baseline factors. In all parties \((m = 8)\), these attitudes were correlated with each other (for each party, adjusted \(p < .007\)). Correlations ranged from \(\psi_1 = .08\) (Christian Democrats) to \(\psi_1 = .25\) (Left Alliance).

We also explored the possibility that the interpretation of the results would be different if the correlated changes were estimated from combined data instead of aggregating the estimates across party-specific models. We ran an additional model wherein there were only two groups, consisting of Centre Party, National Coalition and Social Democratic party, and Green League and Finns Party, respectively. Only correlations between the attitudes (adjusted for the covariates) were of interest in this model that showed good fit to the data (CFI = 1.00, RMSEA = .02, SRMR = .01). Regarding our hypothesis (H2), we were correct in expecting that in the "old-parties", refugee and environmental attitudes would be only weakly correlated at the baseline \((\psi_1 = .15, z = 17.75, p < .001)\). Nevertheless, changes in these attitudes were not significantly correlated \((\psi_2 = -.02, z = -1.41, p = .158)\) - increased issue alignment did not occur despite their being ample room for it. We were also correct in expecting that among the Finns Party and Green League, refugee and environmental attitudes would already be highly correlated in 2012 \((\psi_1 = .52, z = 25.51, p < .001)\). However, contrary to expectations, there was still room for the correlation to grow even stronger, with correlated change scores indicative of even higher correlations in 2017 \((\psi_2 = .21, z = 7.91, p < .001)\).

**Hypothesis 3: First-Time Candidate Polarization**

**Confirmatory Results**

First-time candidates refugee attitudes are presented in Table 3. As predicted, first-time Finns Party candidates were more anti-refugee in 2017 \((M = 1.65, SD = 0.81)\) than in 2012 \((M = 1.97, SD = 0.85)\); \(b_{\text{year}} = -0.31, z = -6.19, p < .001, g = -0.41\). Green League candidates revealed the opposite pattern, with first-time candidates being more pro-refugee in 2017 \((M = 3.66, SD = 0.59)\) than in 2012 \((M = 3.60, SD = 0.56)\); \(b_{\text{year}} = 0.06, z = 1.99, p = .046, g = 0.08\).

<table>
<thead>
<tr>
<th>Party</th>
<th>2012</th>
<th>2017</th>
<th>g</th>
<th>p</th>
<th>adj. p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre Party</td>
<td>1400</td>
<td>2.67</td>
<td>0.83</td>
<td>1118</td>
<td>2.79</td>
</tr>
<tr>
<td>Christian Democrats</td>
<td>416</td>
<td>3.08</td>
<td>0.72</td>
<td>371</td>
<td>3.25</td>
</tr>
<tr>
<td>Finns Party</td>
<td>1247</td>
<td>1.97</td>
<td>0.85</td>
<td>412</td>
<td>1.65</td>
</tr>
<tr>
<td>Green League</td>
<td>832</td>
<td>3.60</td>
<td>0.56</td>
<td>669</td>
<td>3.66</td>
</tr>
<tr>
<td>Left Alliance</td>
<td>566</td>
<td>3.42</td>
<td>0.75</td>
<td>512</td>
<td>3.48</td>
</tr>
<tr>
<td>National Coalition Party</td>
<td>1619</td>
<td>2.82</td>
<td>0.79</td>
<td>937</td>
<td>2.96</td>
</tr>
<tr>
<td>Social Democratic Party</td>
<td>1041</td>
<td>3.06</td>
<td>0.80</td>
<td>731</td>
<td>3.12</td>
</tr>
<tr>
<td>Swedish People's Party</td>
<td>320</td>
<td>3.32</td>
<td>0.73</td>
<td>268</td>
<td>3.60</td>
</tr>
</tbody>
</table>

*Note. n = sample sizes of newcomers. For standardized mean difference g, pooled standard deviation across all newcomer groups was used. Statistical tests for the mean difference were obtained from the multi-group structural equation model where gender, age, education, and income were controlled. adj. p = Holm adjusted p-values.*
Exploratory Results

Comparison of the above estimates further revealed that polarization in terms of the extremity of refugee attitudes among first-time candidates was stronger in the Finns Party than in the Green League ($b_{\text{year,Green League}} - b_{\text{year,Finns Party}} = -0.25, z = -4.25, p < .001$). Concerning the parties ($m = 6$) not included in hypothesis 3, first-time candidates for the Christian Democrats ($g = 0.21$), National Coalition Party ($g = 0.17$), and Swedish People’s Party ($g = 0.36$) were more pro-refugee in 2017 than in 2012. Regarding environmental attitude, there were no differences between 2012 and 2017 first-time candidates (for all parties, $p$-values adjusted with $m = 8$ were > .130, see Table 4).

Table 4

<table>
<thead>
<tr>
<th>Party</th>
<th>2012</th>
<th>2017</th>
<th>g</th>
<th>p</th>
<th>adj. p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n$</td>
<td>$M$</td>
<td>$SD$</td>
<td>$n$</td>
<td>$M$</td>
</tr>
<tr>
<td>Centre Party</td>
<td>1400</td>
<td>2.95</td>
<td>0.77</td>
<td>1118</td>
<td>2.92</td>
</tr>
<tr>
<td>Christian Democrats</td>
<td>416</td>
<td>3.04</td>
<td>0.77</td>
<td>371</td>
<td>3.07</td>
</tr>
<tr>
<td>Finns Party</td>
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<td>0.86</td>
<td>412</td>
<td>2.60</td>
</tr>
<tr>
<td>Green League</td>
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<td>0.55</td>
<td>669</td>
<td>3.66</td>
</tr>
<tr>
<td>Left Alliance</td>
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<td>3.36</td>
<td>0.78</td>
<td>512</td>
<td>3.45</td>
</tr>
<tr>
<td>National Coalition Party</td>
<td>1619</td>
<td>2.93</td>
<td>0.80</td>
<td>937</td>
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<tr>
<td>Social Democratic Party</td>
<td>1041</td>
<td>3.06</td>
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<td>Swedish People’s Party</td>
<td>320</td>
<td>3.11</td>
<td>0.80</td>
<td>268</td>
<td>3.25</td>
</tr>
</tbody>
</table>

Note. $n$ = sample sizes of newcomers. For standardized mean difference $g$, pooled standard deviation across all newcomer groups was used. Statistical tests for the mean difference were obtained from the multi-group structural equation model where gender, age, education, and income were controlled. adj. $p$ = Holm adjusted $p$-values.

Discussion

We pre-registered three hypotheses for the present research. Two of them were confirmed. As expected (Hypothesis 1), our longitudinal results showed that candidates of the Finns Party (initially the most anti-refugee party) and the Green League (initially the most pro-refugee party) had, from 2012 to 2017, become even more extreme in their attitudes towards refugees. Also as expected (Hypothesis 3), first-time candidates of both parties were, in terms of refugee attitudes, also more extreme in 2017 than in 2012. Both of our hypothesis concerning single issues polarization were thus confirmed.

Regarding polarization in terms of issue alignment, we expected the Finns Party’s ownership of the public policy debates on immigration and refugee intake, and their general domination of the media landscape (Horsti, 2015; Kuisma & Nygård, 2017), in which they defined themselves as everything that the Greens were not, to cause a stronger correlation between refugee and environmental attitudes. More specifically, candidates from the ‘three large parties’ were expected to take cues from this discourse and learn what refugee attitudes go with what environmental attitudes. However, we did not expect increased issue alignment among Finns Party and Green League candidates, as these attitudes were in these parties expected to be strongly correlated already in 2012. Contrary to these expectations (Hypothesis 2), we found increased issue alignment among the Finns Party and Green
League candidates. In retrospect, this does not seem surprising. Both parties did polarize from 2012 to 2017, both through conversion and replacement, and there was enough variance among candidates for issue alignment to increase. I.e., those candidates who became more extreme in their refugee attitudes also became more extreme in their environmental attitudes. By contrast, candidates from the ‘three large parties’ were not affected. In the terminology employed by Lelkes (2016), we observed both increased ideological divergence (between parties) and increased ideological consistency (within parties) in the two parties that already prior to the 2015 “refugee crisis” had the most extreme attitudes on refugees.

Regarding the exploratory results that emerged in the process of data analysis, the most important was the increase in within-party homogeneity, both for refugee attitudes (seven parties out of eight) and for environmental attitudes (five parties out of eight). Candidates thus became more internally homogenous, a form of polarization that has been referred to as increased group consensus (for an analysis of many different forms of polarization, many of which are not touched upon in the present paper, see Bramson et al., 2017). Another interesting result was that candidates from not only the Finns Party, but also two of the ‘three large parties’; that is, the National Coalition Party and the Center Party Finland, who formed the government in 2015 together with the Finns Party, attributed less importance to the environment in 2017 as compared to 2012. Due to the increased public awareness of climate change, we would not have expected any party to move, on average, in a more anti-environmental direction. Finally, it should be noted that in the longitudinal data all parties except the Finns Party showed increased acceptance of refugees, and that also first-time candidates tended to be more pro-refugee in 2017 than in 2012.

**Methodological Limitations**

Perhaps the most obvious limitation of the present research was our reliance on single item measures. This issue could, to some extent, be addressed with data from a subsample of candidates who had completed an independent VAA that included conceptually similar measures. Although the correlations with these independent measures were high, these independent measures were also single item and relatively similar in scope (e.g., the items assessing attitudes towards refugees all dealt with municipal issues). Previous research on migration attitudes has employed scales measuring, for instance, general attitude towards immigration (Karreth, Singh, & Stojek, 2015), attitudes towards immigration policy (Berg, 2009), readiness to accept immigrants (Masso, 2009), construction of symbolic boundaries towards immigrants (Bail, 2008), anti-foreigner sentiment (DeWaal, 2015), nationalist inclusion and exclusion criteria (Alexseev, 2015), racism and xenophobia (Leong & Ward, 2006), and perceived social distances towards migrant groups (Hipp & Boessen, 2012). Similarly, environmental attitudes have been argued to be multi-dimensional and hierarchical, with a popular questionnaire encompassing as many as twelve different scales, measuring constructs such as environmental threat, ecocentric concern, conservation motivated by anthropocentric concern, and human utilization of nature (Milfont & Duckitt, 2010). Given the plethora of different approaches to conceptualizing and measuring both migration and environmental attitudes, it is clear that single items measures, such as those that we employed, cannot capture the breadth of the topics or constructs. More studies using multi-dimensional scales are called for.

Arguably even more disconcerting that our reliance on single items is that the acceptance of refugees was in 2012 assessed by the item "My municipality must accommodate refugees who have been granted asylum in Finland" and in 2017 with the item "My municipality must accommodate people who have been granted asylum in Finland". That is, the word “refugee” was in 2017 replaced by the word “people”. Refugees are defined by the 1951 Refugee Convention as persons who have been displaced from their country of origin owing to a ‘well-founded fear of
persecution’. Asylum seekers are those that are in the process of applying for refugee status in another country. Everyone that has been granted asylum is thus a refugee, meaning that these expressions refer to exactly the same people. Nevertheless, they could invoke different associations in the candidate's mind. Moreover, the word "refugees" could in some candidates invoke associations of threat or public nuisance, whereas others might have associations of pity and charity. And these associations could differ between candidates and parties. We believe that the change in wording may have attenuated some of the observed results. Candidates opposing refugees would most likely have more negative associations to “refugees” than to “people”, suggesting that the change in wording from the former (2012 elections) to the latter (2017 elections) could have caused their responses to move towards a more neutral midpoint. Mirroring this, candidates for whom the word “refugees” invoked positive associations would, when “refugees” was replaced by “people”, also be expected to have become more neutral in their responses. The change in wording could thus have attenuated the increased polarization that we observed.

Another type of methodological limitation was our reliance on VAA data. Much of the previous research on the political elite relies on observable legislative behavior (e.g., parliamentary voting, proposing or backing a bill). One could argue that such behavioral measures are superior to questionnaire responses, with the latter being subject to various types of response bias (e.g., social desirability, response acquiescence) and, especially in the case of VAAs, dissemblance and social signaling. However, we argue that responses to VAAs provide unique and in many ways even superior information to that obtained by observing legislative behavior. First off, observable legislative behaviour is often subject to strong institutional constraint (e.g., party discipline, rules, routine), and may therefore often constitute poor cues as to what individual politicians actually consider important (Hall & Taylor, 1996). Individual politicians may only seldom vote according to their preferences without considering external constraints such as the government-opposition dynamic and partisanship (Hall & Taylor, 1996; Manin, 1997). This should give VAA responses the upper hand in helping us know the actual attitudes of the politicians. Although strategic consideration could to some extent inform responses to VAAs, this is more likely to be the case for career politicians running in national elections. Although municipal officeholders tend to receive a small compensation for attending municipal meetings, the municipal council may meet just a few times annually. It is a part-time position that typically does not interfere with day jobs. The private returns to being elected to a municipal council are also negligible (Kotakorpi, Poutvaara, & Terviö, 2017). This implies that municipal election candidates tend to be internally motivated by their personal convictions and values. Morally convinced policy advocates have been found to be neither capable nor willing to tailor their message in order to appeal to those who think differently (Feinberg & Willer, 2015), suggesting that they would also not want to feign their attitudes when responding to public VAAs. Finally, what candidates think that voters think will also have an effect on candidates’ actual attitudes – analyses of the exchanges between party activists and online communities show that these exchanges have strongly influenced the identity of the Finns Party (Hatakka, 2017).

However, one could also ask the more fundamental question of whether political attitudes matter. Although political attitudes may not matter much from the perspective of day-to-day activities, attitudes may have a profound role to play in shaping the party line. There are, of course, many political actors that affect party agendas, but it is the politicians, the ambitious office-seekers, and office-holders, who have “created and maintained, used and abused, reformed or ignored the political party” (Aldrich, 1995, p. 4). Similarly, although institutions are important, it is through the actions of individuals that institutions influence political outcomes (Hall & Taylor, 1996). Candidates’ attitudes are also likely to affect the attitudes of the electorate. For instance on environmental issues, it is the polarization of the US political elite that has led partisan identification to become an increasingly important determinant of environmental concern within the American mass public (Guber, 2013).
Interpretative Limitations

Increasing partisan polarization in the US political elite has been explained by institutional factors (Burden, 2001), party activists (Aldrich, 1983), strategic considerations (for a review see, Layman et al., 2006), and the increasing impact of social media (Sunstein, 2018). All of these could also help explain the results that we present. We acknowledge that although we longitudinally record the polarization of refugee and environmental attitudes from 2012 to 2017, during which the 2015 European refugee-crisis occurred, we cannot really know whether it is this crisis that caused the observed polarization. Other possible causes include the parliamentary elections in 2015, in which both the Finns Party and the Green League can be considered to have won (Lönnqvist, Mannerström, & Leikas, 2019). Election victories can radicalize both supporters of the winning party (Georgeac, Rattan, & Effron, 2019) and their opponents (Lönnqvist et al., 2019). However, the outcome of the fall 2015 elections, and in particular the victory of the Finns Party, was most likely at least in part due to the "refugee crisis", supporting our notion that the crises can, even if indirectly, explain increasing partisan polarization.

Another possible explanation of polarization is the ever-increasing spread of political misinformation and propaganda in online settings, the conventional wisdom being that "fake news" is amplified in partisan communities of like-minded individuals (Pariser, 2011). The outcome of this process has been argued to be an increasingly misinformed and polarized society (Sunstein, 2018). However, recent results challenge the conventional wisdom; exposure to political disagreement on social media is high (Bakshy, Messing, & Adamic, 2015; Pew Research Center, 2016), social media usage does not increase polarization (Boxell, Gentzkow, & Shapiro, 2017), and misinformation appears to have only limited effects on political knowledge (Allcott & Gentzkow, 2017). More generally, the current consensus is that it is the behavior of the party elites, not media communication, which is responsible for partisan polarization of the mass public (Arceneaux & Johnson, 2015).

We acknowledge that our paper is descriptive, and we cannot really be certain of what the most powerful underlying causal factors driving the polarization of the political elite are. Similarly, we do not know which social psychological mechanisms are at play. There is thus clearly need for work that would try to establish both the societal and psychological factors underlying the observed polarization of the political elite.

Is There an Intrinsic Relationship Between Environmental and Migrant Attitudes?

One could easily imagine Finns Party candidates that cared more about Finnish nature. For instance, the “Maiden of Finland” used as the symbol of independence and the ‘purity’ of the nation is typically portrayed against the landscape "of the thousand lakes" also functions as a symbol of Finnish nature (Reitala, 1983). On the surface level, there seems to be no straightforward connection between being anti-refugee and being less environmentally concerned. Consistent with this, our results suggesting increased issue alignment imply that also the association between refugee and environmental attitudes is at least to some extent shaped by the political discourse. However, there was a consistent positive correlation between refugee and environmental attitudes, with the strength of the association varying between .08 and .25 across parties. This implies that besides the influence of political discourse on the structuring of attitudes (people learn what goes with what), there could also be a deeper connection between immigration attitudes and environmental attitudes.

Both positive attitudes towards immigrants and protecting the environment define Universalism values - personal values that motivate understanding, appreciation, tolerance, and protection for the welfare of all people and for nature (Davidov, Meuleman, Billiet, & Schmidt, 2008; Schwartz, Sagiv, & Boehnke, 2000).
sonal values has been suggested to be universal (Schwartz, 1994), and personal values have been argued to organize and shape political attitudes (Schwartz, Caprara, & Vecchione, 2010). If, indeed, refugee attitudes and environmental attitudes are intrinsically linked, for instance due to an underlying concern for others, whether those others be people of different origins, people yet unborn, or nature per se, then a political climate that emphasizes or denies the importance of others may either help or hurt both refugee and environmental attitudes. Values are also often thought to form a circular system; actions in pursuit of one value may contribute to the attainment of nearby values, but conflict with the pursuit of opposing values. Actions in the pursuit of Universalism are thought to oppose Security values (protecting national and personal security) and Power values (having wealth and control over people and resources) which represent self-focused values. The motivational relations between values mean that the increased importance of Power and Security values could decrease the importance of Universalism values, bringing about less favorable refugee attitudes and less environmental concern. Supporting the idea that large-scale global events, such as the "refugee crisis", could influence Security and Power values, these two values became more important across Europe after the global financial crisis in 2008 (Sortheix, Parker, Lechner, & Schwartz, 2019). The observed polarization of refugee and environmental attitudes and the dynamic relations between these attitudes could thus be explained from perspective in which both are influenced by changes in underlying values (for more research on value change, see Bardi, Lee, Hofmann-Towfigh, & Soutar, 2009; Maio, Pakizeh, Cheung, & Rees, 2009).

Not only personal values, but also other underlying psychological constructs could underlie an inherent connection between refugee and environmental attitudes. For instance, social dominance orientation (SDO) and authoritarianism, constructs referring to the preference for social hierarchy and inequality (Sidanius & Pratto, 1999), and valuing the power of perceived authority over others, respectively (Altemeyer, 1996), are predictive of immigration attitudes and of environmental attitudes (Stanley & Wilson, 2019). SDO was a stronger predictor than right-wing authoritarianism and left-right political orientation on climate change denial (Häkkinen & Akrami, 2014). The link between SDO and lower environmentalism is consistent across countries (Milfont et al., 2018). Also Openness to Experience, from the “Big Five” taxonomy of personality traits (Goldberg, 1993), predicts both immigrant attitudes (Nieuwenhuis, Hooimeijer, Van Ham, & Meeus, 2017) and environmental attitudes (Hirsh, 2010). There are thus several constructs, emerging from different theoretical frameworks, that all refer to underlying psychological individual differences dispositions that could serve to explain the connection between refugee and environmental attitudes. However, the observed polarization of these attitudes and the dynamic relations between these attitudes suggest the need for explanatory theories that can account for change, such as values theory (Bardi, Lee, Hofmann-Towfigh, & Soutar, 2009; Maio, Pakizeh, Cheung, & Rees, 2009).

Conclusions

Despite the above methodological and interpretative limitations, our results allow us to conclude that political polarization in terms of both conversion and recruitment has occurred in the Finnish political elite from 2012 to 2017. The populist radical-right Finns Party has become even more anti-refugee, and the adversary against which they defined themselves, the pro-refugee Green League, has become even more pro-refugee. Parallel to this process of attitude radicalization, refugee-attitudes have become more strongly aligned with environmental attitudes, and the Finns Party has moved in a more anti-environmental direction. To the best of our knowledge, the present research is the first to employ longitudinal data to investigate the attitude polarization of individuals belonging to the political elite. Following the same sample of people over time allowed us to observe change more accurately than what is possible with cross-sectional designs, which inevitably raise questions concerning underlying differences
between the groups that are being compared over time. There is, to the best of our knowledge, also no previous longitudinal data that would document the increased issue alignment and increased within-party homogeneity of the political elite. Finally, there is still very little research that would span over the years in which the “refugee crisis” occurred. We also know of no other research that would investigate polarization in the opponents of the radical-right. Whether similar patterns of change can be observed in other contexts should be investigated.

More generally, there is a vast amount of research documenting the polarization of the US political elite since the 1970s, but very little on polarization in other countries. We argue that the observed polarization is due to the 2015 European “refugee crisis”, but this is difficult to ascertain. Whether the epithet “crisis” is warranted can be questioned, as all parties except the Finns Party moved in a more pro-refugee direction, suggesting at least some degree of confidence in coping with the 2015 influx of refugees. One alarming aspect of this research is the observed decrease in pro-environmental attitudes, which was especially strong in the Finns Party but also found in other conservative parties. Whether increased issue alignment between refugee and environmental attitudes can be found in other contexts, and whether the populist far-right movements across the West are generally moving in an anti-environmental direction, are urgent questions to address in cross-national datasets. It seems that environmental policy could be becoming an increasingly partisan issue, which could have dire consequences for the planet.

Notes

i) An alternative, arguably more intuitive strategy for testing Hypothesis 2 would have been to test whether the correlations between refugee and environmental attitudes increase across time. Testing for differences between correlations would give results virtually identical to those we present, but our method gives more reliable results according to simulations that we ran (see SOM). We thus prefer to present the pre-registered correlated change analyses. The correlated change analyses also has more statistical power, and allows for better handling of missing data (see SOM).

ii) In the pre-registration, it was stated that “the models for each party are just identified with zero degrees of freedom. Thus, the hypotheses are tested from parameter estimates, not from model fits.”, but this is incorrect regarding Hypothesis 1 and 2. Due to not modeling bivariate correlations between baseline and change scores of refugee and environmental attitudes, nor covariate intercepts, the models were overidentified, allowing us to examine also model fit. The interpretations are nevertheless based on the parameter estimates, given at least acceptable fit of the model.

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Competing Interests

The authors have declared that no competing interests exist.

Acknowledgments

The authors have no support to report.

Data Availability

Datasets for the studies are freely available (see the Supplementary Materials section).
Supplementary Materials

The following Supplementary Materials are available (for access see Index of Supplementary Materials below):

- Via the OSF repository:
  - Pre-registration protocol (hypotheses and analysis plan of the study)
  - Analysis script used for obtaining the results and the analysis output including all the results
- Via the Yle website: Data for both Yle VAAs
- Via the Github repository: Data for HS VAA
- Via the PsychArchives repository: Further analyses and descriptive statistics

Index of Supplementary Materials


References


