Socialised to think in terms of left and right? The acceptability of the left and the right among European voters

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Socialised to think in terms of left and right? The acceptability of the left and the right among European voters

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A B S T R A C T

The left-right dimension plays a crucial role in how political scientists think about politics. Yet we know surprisingly little about the extent to which citizens are able to position themselves on a left-right dimension. By analysing non-response on left-right self-identification question from seven waves of the European Social Survey ($N = 295{,}713$), this study demonstrates that citizens' ability to position themselves on the left-right dimension depends on the political system they live in and its history. Citizens in countries with lower levels of elite polarization place themselves on a left-right dimension less often, this difference is partiarully pronounced for citizens with high levels of political interest. Citizens in countries with a recent authoritarian history were unable to place themselves on the left-right dimension more often. These findings show the importance of political socialization for left-right self-identification.

1. Introduction

There can be no doubt that left-right orientations play a central role in political science (Mair 2007; Bauer et al., 2017; Zechmeister 2006). The left-right dimension can be an important model for citizens to understand the complex political reality they face. It is political 'Esperanto' (Laponce 1981, p.56). Like Esperanto, left and right are part of a language that people have to learn. The extent to which people are fluent in this language, which Mair (2007, pp.208-209) terms the 'acceptability' of the left-right dimension, differs: on average, 13% of respondents in the European Social Survey answers 'don't know' when asked to place themselves on the left-right dimension. This is not the same in each country in Europe: only 2% of Norwegian respondents cannot identify their own position on the left-right dimension. In contrast, 31% of Lithuanian respondents cannot do so. By analysing item non-response on left-right self-identification questions from seven waves of the European Social Survey conducted between 2002 and 2014 ($N = 295{,}713$), this paper examines what explains differences in the 'acceptability' of the left-right dimension. That is, *under what conditions are citizens able or unable to place themselves on the left-right dimension?*

The central mechanism we use to explain the extent to which citizens are able to identify their own position on the left-right dimension is

socialization. As Arian and Shamir (1983, p.142) propose, '[t]he learning of 'ideological' cues does not occur in a vacuum. Their source is political'. Political elites play an important role: they cue citizens about what left and right mean. Taking our own cue from the classical work on political socialization (Key 1961; Campbell et al., 1960; Converse 1969; Zaller 1992), we propose that the preferences of citizens result from the interaction between individuals and the polity they live in. Characteristics of the political systems such as the legacy of authoritarian rule and the polarization of party competition shape the ideological orientations of citizens. Yet, the characteristics of individuals also matter: for instance, only those voters who are interested in what politicians say are likely to be affected by the polarization of the political debate.

This article contributes to the literature on the strength of the left-right dimension. Studies in this field tend to look at the predictive power of the left-right dimension, for instance when it comes to voting (e.g. Van der Eijk et al., 2005; Lachat 2008). However, this presupposes that citizens can identify their own position on the left-right dimension. We know from the methodological literature that patterns of item non-response often reflect meaningful differences in the population (Groves 1989). Following this literature, this study goes a level deeper by examining the conditions under which respondents are able to identify their own position on this dimension. We show that 'don't

know' answers cannot simply be equated with other types of non-response, because they reveal meaningful differences in the political experiences of individuals, generations and countries.

There is a limited but growing literature that examines methodological issues with the left-right dimension. For instance, several studies have examined how the answer format in closed questions provided, leads to different answers (Kroh, 2007; Weber 2011). Other studies have looked at the meaning which individuals assign to the left-right dimension (Bauer et al., 2017; Klingemann 1972; Zechmeister, 2006) and at whether respondents answer open questions about the left and right (Scholz and Zuell 2012, Zuell and Scholz, 2015). We extend these studies in three ways. Firstly, we focus on socialization, while the existing studies have focused on psychological mechanisms. Secondly, we look at closed questions instead of open questions, and therefore remove other factors that might cause item non-response, such as difficulty to formulate a response. And thirdly, we take a comparative perspective and examine countries with different histories and different political systems which play an important role in political socialization.

2. Theory

The overarching idea of this study is that citizens learn about politics by participating in a political system and by taking cues from elites. The importance of socialization for political identities can be traced back to the classic literature on party identification. Campbell and colleagues (1960) reasoned that young voters are socialized by their parents to identify with a particular party. Converse (1969) argued that voters' party identity becomes stronger as citizens grow older and spend more time participating in the electoral process. Rico and Jennings (2016) and Rekker et al. (2017, 2019) show that a similar logic can be applied to other political identities and contexts such as left-right self-identification in European multi-party systems. This means that citizens' ability to identify with the left-right dimension may depend on individual factors such as age as well as on contextual factors such as the nature of party competition. Building further on this idea, we will introduce four hypotheses that link political socialization and left-right self-identification below.

2.1. Socialization in democratic systems

A central idea in the political socialization literature is that citizens take cues from politicians about how they should think about political issues (Campbell et al., 1960; Key, 1961). Elite cues shape where respondents place themselves on specific policy issues (Harteveld et al., 2017; Lenz 2009; Steenbergen et al., 2007; Sloothuus 2010). Elite cues are also important for which specific issues citizens link to the over-arching left-right dimension (Neundorf, 2009; De Vries et al., 2013).

This means that the structure of party competition shapes how citizens think about political issues: specifically, how party polarization affects public opinion (Druckman et al., 2013; Hetherington, 2001). We follow Dalton's (2008, p.900) approach to polarization: we understand political polarization as the degree of ideological differentiations among political parties in a given party system. That is: do parties converge on one position or are they more widely dispersed?

We know that political polarization correlates with a stronger relationship between left-right self-placement and party choice, with party identification, with the ability of voters to see differences between parties and with the link between specific issue dimensions and left-right self-placement (Lachat 2008; Lupu 2015; Hetherington 2001; Layman et al., 2006; Petersen et al., 2010; Fiorina and Abrams 2008).[1] An

assumption of these studies is, however, that voters know their own position on the left-right dimension. It seems reasonable that when parties are all concentrated on one position, they are unlikely to give voters clear cues about what left and right mean (Otjes 2016, 2018). If parties are instead divided into a clear left and a clear right camp, this gives voters a clearer image of what these terms mean. The quality of these cues will then be reflected in the levels of left-right self-identification by voters: voters are more likely to understand how their opinions fit into a left-right scheme if they see clear differences between the left and the right at the party level.

1. *Polarization hypothesis:* The stronger party-political polarization is, the less likely it becomes that citizens in that polity are *unable* to place themselves on the left-right dimension.

However, polarization can only affect citizens when they are interested in politics. Many citizens pay scant attention to political debates (Bartels, 2008). The level of polarization is not likely to influence the views of citizens who pay no heed to politics: one can only be cued by politicians if one is interested in what they say (Otjes 2018). That is: those citizens who are interested in politics are more likely to think of political issues in the same terms as politicians. Scholz and Zuell (2012) link political interest to the psychological mechanism of cognition and motivation underlying item non-response patterns: those who are more interested in politics are more likely to care about the issue. We propose that there is an interaction relationship (cf. Otjes 2018): the effects of polarization and political interest are likely to reinforce each other. When political parties are strongly polarized, citizens who pay attention to politics are very likely to learn the meaning of the terms left and right. Citizens with a similarly high level of political interest in systems where elite cues do not convey the same left-right distinction are likely to learn less about the meaning of these terms. Among citizens who are completely disinterested in politics the quality of elite cues is likely to matter less, as these cues are less likely to reach them.

2. *Political interest-polarization hypothesis:* The stronger party-political polarization is, the less likely it becomes that politically interested citizens are *unable* to place themselves on the left-right dimension.

2.2. Socialization under authoritarian rule

Research on political socialization reveals that an individual's adolescent and early adult years constitute a formative period for the development of their political attitudes and identity (Hooghe 2004; Rekker et al., 2017, 2019). After this period, the core political values of individuals are stable over time (Sears and Funk, 1999). Citizens' political orientations therefore significantly reflect the historical circumstances during these formative years (Sears and Valentino, 1997). As a result, most political orientations are characterized by substantial generational differences and political change is often driven largely by the replacement of older generations by younger cohorts (Hooghe, 2004). This pattern strongly applies to left-right self-placement (Rekker et al., 2017, 2019). For example, Rekker and colleagues (2019) showed that the share of respondents who could not place themselves on a left-right self-placement scale decreased from 37 percent at age 13 to just 6 percent at age 23. In the same period, left-right orientations also became increasingly associated with issue attitudes and more stable over time. Likewise, generational research reveals that the way in which voters interpret the left-right dimension crucially depends on what issues were politicized during their formative years (Rekker, 2016).

This socialization process, however, crucially depends on conflict within the political elite. Evidence from more recently democratized countries shows that those who are socialized under authoritarian rule, where there is no elite conflict, are less likely to think in ideological terms (Mondak and Gearing, 1998; Otjes 2016, 2018). The histories of Western, Southern and Central and Eastern European countries differ

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[1] At the same time, for citizens who have views on policy issues, elite polarization may push them away from politics if their views do not fit into the alternatives which parties offer (Galston and Nivola 2007).

strongly: Western European countries have been democracies since the Second World War. Many Southern European countries (e.g. Greece, Spain, and Portugal) democratized in the 1970s. Central and Eastern European countries (e.g. Czech Republic, Poland and East Germany), moved from authoritarian rule to democracy after the fall of the Berlin Wall. Evidence looking at the political views of those who were socialized in East Germany and those who were socialized in West Germany shows marked differences in their political opinions. Neundorf (2009) and Otjes (2016) show that the political views of former East Germans do not fit the left-right schema well. Experiencing authoritarian rule alienated citizens in these former communist countries from politics (Mondak and Gearing 1998). Therefore, they are also less likely to understand their own interests in political terms. Citizens in new democracies moreover have weaker psychological attachments to political parties, which is likely due to their lack of electoral experience (Dalton and Weldon, 2007).

There are also reasons to expect an opposite effect: i.e. *higher* levels of left-right self-identification in post-authoritarian regimes: Firstly, citizens in former authoritarian countries may use their experience with authoritarianism to position themselves on a left-right dimension. Research for example shows that citizens are less likely to identify ideologically with the side of the political spectrum that the previous regime represented (Dinas and Northmore-Ball 2020), especially when they support democracy (De Leeuw et al., 2020). Secondly, Zuell and Scholz (2015), p.29) argue that political socialization in communist states was a state-led enterprise starting from a young age. This led to higher levels of political knowledge, and those socialized in East Germany were consequently more likely to be able to define the meanings of left and right.

While the direction of the effect is debated, research suggests that experiences of political socialization differ between those who grew up under a democratic system and those who grew up under authoritarian rule. Here, we follow the cue of Neundorf (2009), Otjes (2016) and Mondak and Gearing (1998) and argue that citizens who were socialized under authoritarian regimes where elite conflict is absent are less likely to be able to position themselves on the left-right dimension. But the analysis may indicate the opposite, in line with Zuell and Scholz (2015), Dinas and Northmore-Ball (2020) and De Leeuw et al. (2020).

3. *Post-authoritarian rule hypothesis:* Citizens living in former authoritarian systems are more likely to be *unable* to place themselves on the left-right dimension than citizens not living in other countries.

The legacy of authoritarianism may also divide generations within the post-authoritarian countries. Given what we know about the formative period of individuals, we theorize that citizens who came of age under authoritarian rule (before the democratic transitions in these countries) may have never fully caught up in terms of their left-right self-identification, even after having lived in a democracy for several decades. Individuals who were socialized after the end of authoritarian rule may contrarily be better able to place themselves on a left-right scale compared to citizens from the same country who were socialized earlier:

4. *Generations hypothesis:* Citizens in post-authoritarian countries who grew up with democracy are more likely to be *unable* place themselves on a left-right dimension than those who grew before the end of authoritarian rule.

3. Methods

This paper combines seven waves of the European Social Survey to examine the extent to which individuals are able to place themselves on the left-right dimension (ESS 2002, 2004, 2006, 2008, 2010, 2012, 2014).[2] The ESS is held in nearly all countries on the European continent and a few proximate countries around the Mediterranean.[3]

3.1. Dependent variable

Our dependent variable is whether citizens can (0) or cannot (1) place themselves on the left-right dimension.[4] There are different 'missing' answers in the survey. In this paper we focus on 'don't know' answers. We exclude the response categories 'refusal' and 'no answer'. 'Don't know' answers are the bulk of the item non-responses: 13% of respondents (44,519) indicated no answer, 1% of respondents refused to answer (4,157) and 0.002% of them had 'no answer' (806). Because 'refusal' was available as a separate response category, respondents who indicated 'don't know' likely did so because they genuinely did not know where to place themselves on a left-right dimension. It is conceivable that some respondents who provided a 'don't know' answer were actually concealing their ideological preference, but such instances probably constitute only a minority of all 'don't know' answers.

3.2. Independent variables

We include a number of country-level dependent variables to test the hypotheses. For polarization, we use Dalton (2008)'s measure:

$$PI = \sqrt[2]{\sum_{i=1}^{n} S_i * \left(\frac{(LR_i - \sum_{i=1}^{n} S_i \cdot LR_i)}{5}\right)^2} \qquad (1)$$

S_i is the seat share of a party in the previous election. These are drawn from Döring and Manow (2019), which have data on all European democracies. LR_i is a party's position. We draw party-level left-right positions from the CHES (Hooghe et al., 2010; Bakker et al., 2015), supplemented with the Benoit and Laver (2006) study where the CHES was not available. We use the general left-right position, ranging between zero and ten, from the survey that was closest to the previous election year. These surveys were given a durability of ten years, going backward and forward. If the closest survey was held ten years before or after the election, a missing value was assigned. Alongside concurrent levels at the time of the survey, it would have been interesting to also examine the long-term impact of polarization during citizens' formative years. Unfortunately, the polarization data did not go back in time far enough for this purpose, particularly for former authoritarian countries. The second country-level variable is the history of authoritarian rule. We differentiate between two legacies of authoritarian rule: Central and Eastern European post-communist systems and Southern European post-right-authoritarian systems. The country assignments are listed in Table 1. At the individual level, we measure political interest for the *Political interest hypothesis*. The ESS has a question where respondents

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[2] We exclude the eighth wave of the ESS because it does not have Spain, Portugal, Turkey or Greece in it, leading to estimation problems for the post-authoritarian countries variable.

[3] Given that the inability to identify themselves as left or right might be part of a larger inability to participate in survey research due to physical and psychological limitations, it is notable that the ESS has a response rate above 62%, with 28% the respondents refusing to cooperate (Beullens et al., 2018). Beullens et al. (2018) do find that he response rate has declined by on average seven points since the inception of the survey but that there are no strong regional patterns in this decline.

[4] The question was: 'In politics people sometimes talk of "left" and "right". Using this card, where would you place yourself on this scale, where 0 means the left and 10 means the right?').

Table 1
Share of respondents indicating 'don't know' per country.

Country	'Don't Know'
Post-communist countries	*21%*
Albania	10%[a]
Bulgaria	26%
Croatia	23%
Czech Republic	11%
Estonia	19%
Former East Germany	3%
Hungary	11%
Lithuania	31%
Latvia	16%
Poland	17%
Romania	30%
Russia	34%[a]
Slovenia	24%
Slovakia	14%
Ukraine	40%[a]
Kosovo	37%[a]
Post Right-authoritarian countries	*16%*
Greece	20%
Portugal	18%
Spain	9%
Turkey	17%
Continuously democratic since Second World War	*8%*
Austria	11%
Belgium	5%
Cyprus	20%
Denmark	4%
Finland	4%
France	4%
Former West Germany	6%
Iceland	5%
Ireland	14%
Israel	7%
Italy	16%
Luxembourg	20%
Netherlands	4%
Norway	2%
Sweden	4%
Switzerland	7%
United Kingdom	12%

[a] Not included in the analysis below due to missing country-level data.

indicate their level of political interest on a four-point scale.[5]

3.3. Age-period-cohort identification strategy

For the *Generations hypotheses,* we need a modelling strategy that can distinguish cohort differences from age effects and period effects. We need to differentiate cohort effect (specifically here, the effect of growing up under authoritarian rule) from age effects (specifically here, the youngest citizens may not yet have learned to identify as left or right) and period effect (in this case that the strength of the left-right dimensions may change over time). This poses a statistical challenge, because by definition the three effects have a perfect multicollinearity in repeated cross-sectional data like the ESS (i.e., Age = Period – Year of Birth). Age-period-cohort (APC) models can therefore not be identified unless certain constraints are imposed. This study will identify the APC models by imposing a theoretically plausible functional form on the effects (Kritzer, 1983). For cohort, we distinguish three generations based on the year in which respondents reached the age of 18, which can be considered the most formative age for political learning (Bartels and Jackman 2014; Rekker et al., 2019; Schuman and Rodgers 2004). The

first cohort had reached the age of 18 before 1974 (the year the first, Greece, of the Southern European countries democratized), the second cohort reached the age of 18 between 1974 and 1989 and the third cohort reached the age of 18 after the fall of the Berlin Wall. Likewise, we modelled age along the lines of four distinguishable life phases: adolescence (age 21 or younger), early adulthood (age 22 through 29), middle adulthood, (age 30 through 64) and late adulthood (age 65 or older).[6] Period could finally be modelled without imposing any constraints (i.e., with survey dummies). We modelled these APC effects in a multilevel structure in which respondents are nested in country * survey clusters.

3.4. Control variables

We also include a number of control variables. The first set looks at societal institutions that play socialising roles: schools, churches and unions. Formal education as V.O. Key argued (1961, p.304) may 'serve to indoctrinate people into the more-or-less official political values of the culture'. This means that *those who have received more education are less likely to be unable to identify their own left-right position than citizens who have received less education.* The effect of education also fits in the cognitive approach in the psychology of item non-response: higher-educated respondents are more likely to understand the question (Scholz and Zuell 2012, p.1417; Bauer et al., 2017). Therefore, we include a binary variable of whether the respondents have completed a Bachelor's or Master's at an institute for higher education. Trade unions and churches may also play a formative role in how citizens understand their own political position (Freire 2008). We expect that *voters who do regularly attend church are less likely to be unable to identify their own left-right position in than citizen who do not* and that *voters who are members of trade unions are less likely to be unable to identify their own left-right position in than citizen who are not.* We include is a variable for measuring respondent's church attendance[7] and an individual's current union membership.

We also control for gender. We expect that *women are less likely to be unable to identify their own left-right position compared to men.* In line with our socialization framework, women may be more likely to indicate that they do not know an answer because their political socialization made them less confident about their own political knowledge and skills. As Sapiro (1983: 99) put it, many young girls may be socialized into a perception that "politics is man's business" and that "women are simply not capable of understanding it." Men are also more likely than women to guess when answering a closed question than refuse to answer (Scholz and Zuell 2012; Kenski and Jamieson 2000; Mondak and Anderson 2004). Therefore, we include a binary gender self-identification variable.

Scholz and Zuell (2012) also include voting and partisanship. Their underlying idea is that those who vote and identify with a party are more motivated to answer a question about the left and right. We know that partisanship affects the extent to which citizens accept party cueing (Druckman et al., 2013; Sloothuus 2010; Layman et al., 2006). At the same time, the inclusion of these variables may lead to endogeneity problems (Blais et al., 2001): voters are likely to vote for a party and identify with a party if they are ideologically close to the party. That is: citizens develop their left-right self-placement first and form their party

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[5] The question was 'How interested would you say you are in politics – are you: very interested (1), quite interested (2), hardly interested (3) or not at all interested (4).'

[6] We use simple dummies to differentiate between age groups for two reasons. Firstly, because of theoretical reasons, we expect that there are significant effects for those cut-offs. Secondly, because by employing a number of dichotomies instead of ratio interval variables (like year of birth, age and age-squared), we keep the inter-collinearity manageable.

[7] The question was: 'Apart from special occasions such as weddings and funerals, about how often do you attend religious services nowadays? Every day (1), More than once a week (2), Once a week (3), At least once a month (4), Only on special holy days (5), Less often (6) or Never (7).'

attachments on the basis of that. A similar argument applies to participation in elections: those who have a left-right position are more likely to have a party preference and therefore are more likely to vote. Therefore, we treat these variables with some caution. We include these variables only in Model 5 in the Appendix. The ESS offers two questions to construct a five-point party identification scale and a binary variable of whether respondents turned out to vote in the last election.

3.5. Analytical strategy

We run logistic multilevel regressions explaining under what conditions respondents answer 'don't know' to the question of left-right self-identification with wave * country clusters. As our dependent variable is a dichotomy, we run a logistic regression. As we have data from multiple surveys in the same country, we run a multilevel regression with country * survey-level random intercepts. We chose a wave * county cluster because the polarization variable varies at this level.[8] Table A.1 in the Appendix provides the descriptives of these variables. All variables are recalculated to fall between zero and one to make interpretation easier. The correlations between all variables employed in the analyses are listed in Table A.2. The full list of countries available in the ESS as well as the selection of countries is listed in Table 1.

In the Appendix, we run a number of additional models. Model 2 shows a model with only country * wave level variables. Model 3 includes only the theoretically motivated variables and not their controls. Model 4 includes the interactions between the higher and lower level variables. Model 5 includes the non-endogenous controls.

A set of alternative models (Model 6, 7 and 8) looks at different operationalizations of the dependent variables, adding other missing answers than 'don't know.' Models 9 and 10 look at the effect of moving the 'turned 18 in 1989/1974' dummies three years backward and forward (making them 'turned 15' and 'turned 21' dummies): the former picks up the argument that socialization might start earlier than 18, and the latter lines the socialization period up with the use of 21 as the age variable.

The next set of analyses looks at the multilevel structure. Model 11 does not treat the former German Democratic Republic as a separate country in the multilevel model. Model 12 drops Germany in its entirety from the analysis. Model 13 looks at country level instead of wave * country-level clusters.

As a benchmark it may also be useful to look at patterns of 'don't know' answers on another item. This allows us to see whether the 'don't know' responses are driven by the specific question we study or by general patterns that drive item non-response. In Model 14 in the Appendix, we examine whether respondents are unable to identify the level of urbanization of their residence.

Finally, Heisig and Schaeffer (2019) argue that one should always include a random slope for the lower-level variable in a model with cross-level interactions. This proved computationally impossible for the logistic models. Model 15 and 16 in the Appendix are linear regression with and without random slopes for the cross-level interactions.[9]

4. Results

4.1. Country-level results

Before we look at the results of the regression, we will look at the country-level differences in the share of respondents who cannot place themselves on the left-right dimension (Table 1). We will differentiate between three regions: the post-communist countries (in Central and Eastern Europe), the post-right-authoritarian countries (military junta or right-wing nationalist regimes in the Mediterranean) and countries that have been continuously democratic since the Second World War (in Western Europe).[10] We start in the post-communist countries, as the literature has the strongest expectations about the share of respondents not being able to place themselves here. Out of all respondents, 13% cannot place themselves on the left-right dimension. The average for the post-communist countries is 21%. Three out of four of these countries have a share of 'don't know' responses that exceeds the average. This preliminary evidence supports the hypothesis that experience with communism makes respondents less likely to think in political terms. The results from the former right-authoritarian countries show the same pattern. 16% of respondents from this region that cannot place themselves on the left-right dimension. In the remaining countries, the share of respondents who cannot place themselves is much lower (only 8%). The share of respondents who cannot place themselves is above the European average only in one of the four of these countries.

4.2. Regression results

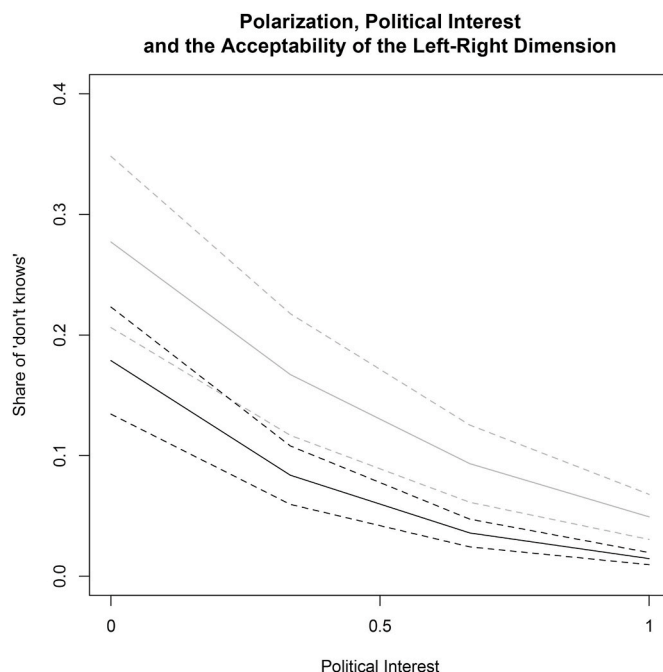In order to test our hypotheses, we ran a number of multilevel re-

Fig. 1. Polarization, Political Interest and Acceptability of the Left-Right Dimension: Based on Model 1; Predicted share of 'don't know' answers for different levels of political interest and elite polarization with other variables held at their average. Black line: high polarization; grey line: low polarization. With 95% confidence interval.

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[8] Given their different histories, we treat former East and West Germany as different countries.

[9] We do want to note that substantially a linear regression model is not appropriate because in some intersections (in particularly high interest respondents from highly polarized countries) the share of 'don't know' answers is close to zero. Therefore, we are not in area where linear regression is appropriate: we are not always in the almost linear, middle part of the sigmoid curve but some cases are in the exponential, early part of the sigmoid curve. The predictions for these cases also is lower than zero. Therefore, in particular we do not think that this method is appropriate to test the Political interest-polarization hypothesis.

[10] Under some definitions, France and Italy are in Southern Europe and Turkey, Israel and Cyprus in Asia.

gressions. We present the predicted plots of all variables in Figs. 1–4. The regression model is Model 1 in the Appendix. The Appendix also shows the robustness tests that are discussed in section 4.3.

Our first expectation was that party polarization would increase the likelihood that voters are able to identify their own position in terms of left and right and that this effect is stronger for more politically interested voters. Fig. 1 shows this pattern. As political interest increases, voters are less likely to be unable to identify their own left-right position. In the most polarized countries, the decrease ranges from 16% (those who have the least interest in politics) to 1% (those who have the most political interest). This is a 90% decrease. If we look at the least polarized countries, the share of respondents not knowing their left-right position falls from 25% (those have the least political interest) to 5% (those who have the most political interest). This is an 80% decrease. The figure supports the *Polarization hypothesis* with a significant difference between polarized and unpolarized systems: the share of respondents that do not know their left-right position is always higher in systems with low polarization compared to systems with high polarization. The pattern also supports the *Political interest-polarization hypothesis*. If we look at respondents with low political interest, respondents in unpolarized systems are about 50% more likely to be *unable* to identify their own left-right position compared to respondents in polarized systems. For citizens with high political interest, the respondents in unpolarized systems are three times more likely to be unable to identify their left-right position compared to respondents in polarized systems. The effect of polarization on being able to identify your left-right position is much stronger among interested voters compared to uninterested voters.

Our second set of hypotheses looks at differences between countries and generations. Fig. 2 shows the results. We split our countries into three regions: Post-right-authoritarian regimes, which saw a wave of democratization in the 1970s–1980s; post-communist regimes, which saw a wave of democratization after 1989; and the rest of the countries, which have been democratic since the Second World War. Our expectation was that those people socialized under authoritarian rule were more likely to be unable to place themselves on the left-right dimension, while those who were socialized afterwards should not differ from respondents from other regions. We find that those born in post-communist countries, both before and after the fall of the Berlin Wall, have the same share of 'don't know' answers (around 15%), which is higher than in the countries that have been democratic since the Second World War. There is no significant generational difference here. In the
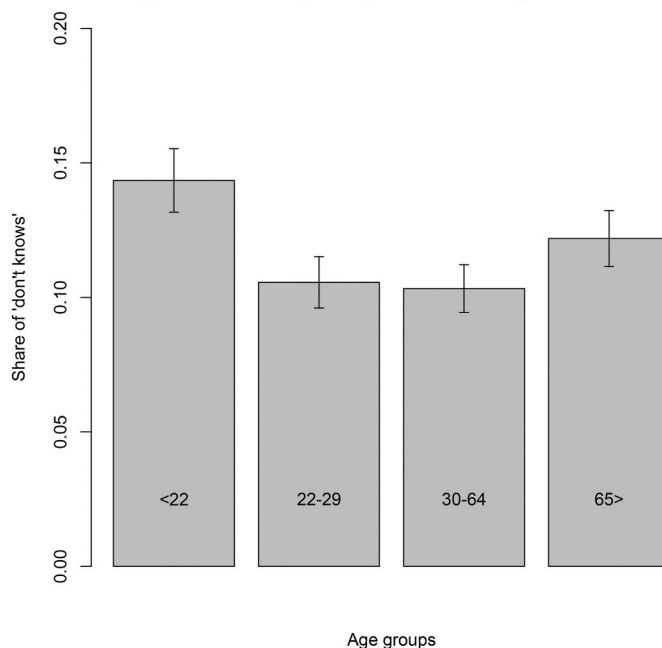

Fig. 3. Age and Acceptability of the Left-Right Dimension: Based on Model 1; Predicted share of 'don't know' answers for age groups with other variables held at their average. With 95% confidence interval.

post-right-authoritarian countries, the share of 'don't know' answers is also higher than in the 'continuously democratic' category, both for respondents socialized under and after authoritarian rule. This means that the *Post-authoritarian rule hypothesis*, which proposed a difference between regions, is supported; the *Generations* hypothesis, which predicted an intra-regional generational difference, is not.

Next, we will briefly look at the control variables (shown in Figs. 3 and 4). As part of the APC-framework, we also look at the effect of age (Fig. 3). We have divided the electorate into four groups based on theoretically defined life phases: adolescents (under age 21), early adults (between age 21 and 29), middle adults (between age 30 and 64; our reference category), and late adults (age 65 and older). We find that adolescents are 50% more likely to be unable to place themselves
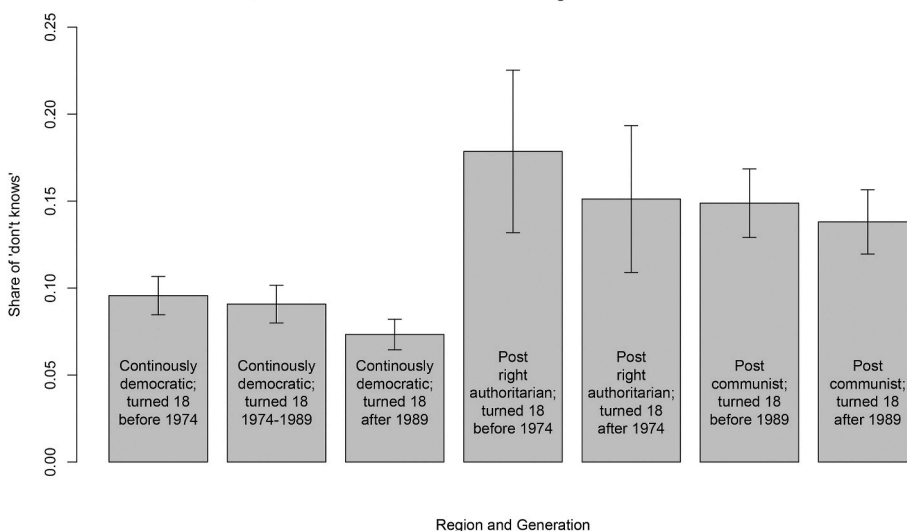

Fig. 2. Region, Generation and Acceptability of the Left-Right Dimension: Based on Model 1; Predicted share of 'don't know' answers for different regions and generations with other variables held at their average. With 95% confidence interval.

Gender

Education
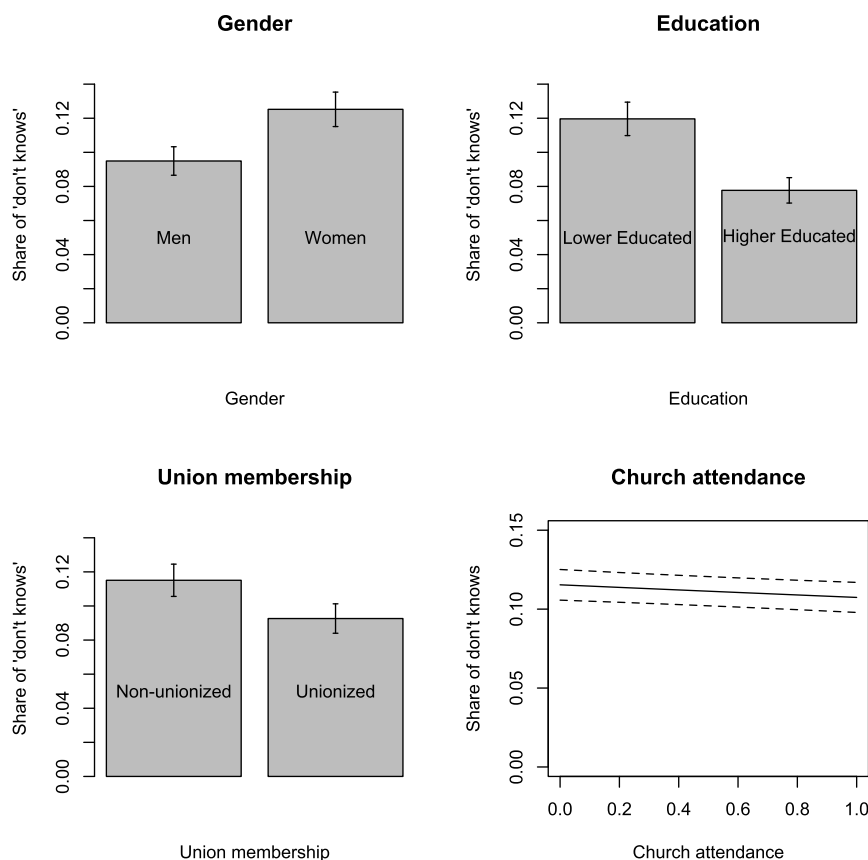
Union membership

Church attendance

Fig. 4. Control Variables and the Acceptability of the Left-Right Dimension: Based on Model 1; Predicted share of 'don't know' answers for variables with other variables held at their average. With 95% confidence interval.

compared to middle adults. The oldest group (late adults) is also more likely to be unable to place themselves ideologically (by 15% compared to the middle adults category). In every model, higher educated respondents are about 40% less likely to indicate that they do not know their position on the left-right dimension than those without a degree of higher education. Respondents who are members of trade unions are 20% less likely to indicate that they cannot place themselves on the left-right dimension than respondents who are not members of trade unions. Those who attend church most often are 8% less likely to be unable to place themselves on the left-right dimension than those who never attend church. Finally, women are 40% more likely to indicate 'don't know' than men.

4.3. Robustness tests

We ran a number of robustness tests. The first batch look at different set-ups of the model: Model 2 looks at only the country-level variables and finds that the share of respondents who cannot place themselves on the left-right dimension is higher in former communist and former right-authoritarian regimes. This finding is in line with the *Post-authoritarian rule hypothesis*. In line with the *Polarization hypothesis*, the higher the polarization, the lower the share of respondents who do not know. Model 3 does not include interactions between the theoretically motivated variables. It shows that the greater the political interest of respondents, the more likely it is that they know their position. Model 4 omits the control variables. Those results are substantially in line with the results presented above. Model 5 adds two non-exogenous controls. The inclusion of these variables does not lead to a different interpretation for the theoretically motivated variables.

The next batch look at different operationalizations of dependent and independent variables. Models 6 to 9 add 'refused' and 'no answer' to the dependent variable. Changing the dependent variable in this way does not lead to substantively different conclusions. Models 9 and 10 look at the effect of moving the 'turned 18 in 1989/1974' dummies three years backward and forward (making them 'turned 15' and 'turned 21' dummies): the former picks up the argument that socialization might start earlier than 18, and the latter lines the socialization period up with the use of 21 as the age variable. In those models, the same basic pattern remains: younger and older respondents from both the post-communist countries and post-right-authoritarian countries in Southern Europe answer 'don't know' at similarly high levels.

Another batch looks at different ways to develop the multilevel structure: Model 11 does not treat the former German Democratic Republic as a separate country in the multilevel model. In this model, the post-communist variable does not pick up on the inter-country difference but on the intra-country difference within Germany. Therefore, it shows that citizens from Eastern Germany have lower shares of 'don't knows'. The multilevel structure appears to have picked up on the actual regional differences between Central and Eastern and Western European countries. This goes against our hypotheses. However, if we remove Germany from the analysis (model 12), the results line up with our previous results. Model 13 looks at country levels instead of country-round levels. These results sustain the same substantive conclusions as above.

The final set of models look at completely different variables or have completely different set-ups. Model 14 provides a benchmark: it examines 'don't know' answers on a different question (regarding the level of urbanization of one's residence). These 'don't know'-answers do not

reflect the interaction between political interest and political polarization nor do they reflect country differences with the legacy of authoritarianism. This shows that the results presented here reflect not the political nature of 'don't know' answers and do not pick up on general difficulties in answering surveys. Moreover, model 15 and 16 in the Appendix show that the coefficients are not substantially different in a linear regression model if we compare a model with and without random slopes for the cross-level interactions.

5. Conclusion

The analysis above showed that as Arian and Shamir (1983) proposed, learning the left-right dimension indeed does not occur in a vacuum but instead depends on the respective political systems. When comparing countries with different levels of elite polarization and with different political histories, we found stark differences in the extent to which people are able to place themselves on the left-right dimension. We find that politically interested, higher educated, unionized, church-going, middle-aged male voters in polarized, continuously democratic political systems are very likely to be place themselves on this dimension, but voters from other countries and with other backgrounds are less likely identify their own left-right position. Given these patterns, one cannot equate 'don't know' answers to the left-right dimension with other types of non-response. These 'don't know' answers reflect meaningful differences in political socialization between individuals, generations and regions. Future researchers who remove respondents with 'don't know' answers from their analyses should be cautioned that by doing so they remove specific segments from their studies.

We found that citizens who pay attention to the political debate are more likely to develop a left-right position if in that debate the left and right are clearly defined. We found support for this mechanism: indeed, in countries where political polarization is stronger, voters are more likely to be able identify their own position on the left and right dimension. Political interest also affects the extent to which voters can place themselves on the left-right dimension. But these factors reinforce each other: the effect of political interest is stronger in countries with more polarization compared to countries with less polarization. In our current age, party polarization is seen as something negative. This research shows that party polarization also has a positive role in society (cf. Stiers and Dassonneville 2020). In particular, polarization appears to be an important condition for having a citizenry that can identify their own position in left-right terms. This study however assumed a one-sided relationship. Party polarization increases left-right self-identification, but it may be that this relationship is reciprocal: as people are better able to identify their own position on the left-right dimension, they are more likely to vote for parties with well-defined left-right identities, which in turn leads to greater party polarization, which contributes to more voters identifying as left-wing or right-wing. Future research may want to disentangle the causal relationship.

Our final set of expectations concerned differences in the legacies of authoritarian rule. When comparing countries, we found a more persistent effect than expected. As expected, there are regional differences between countries in Western Europe which have been continuous democratic since the Second World War and post-communist and post-right-authoritarian countries. However, we did not find the expected generational differences within the post-authoritarian countries. Younger generations in post-authoritarian countries are as (if not more) likely to be unable to place themselves on the left-right dimension as their older compatriots.

In general, the consistent differences between continuously democratic countries, post-communist and post-right-authoritarian countries imply that the legacy of authoritarian rule does not just end with those that were socialized during the democratic period. There are a number of explanations for this. Firstly, the unstable political systems in many post-communist countries may not have been able to play a socialising

role because parties with ideological profiles often came and went. Secondly, the legacy of authoritarian rule may persist for younger generations. Most people learn their left-right position from their parents (Rico and Jennings 2016; Rekker et al., 2019). Because their parents grew up under authoritarian rule, even young generations in post-authoritarian countries may therefore have had fewer opportunities to learn their left-right position at home. Thirdly, the specific events of the Great Recession (which strongly affected younger generations in Southern Europe for a large part of the research period) may have alienated them from politics, or the strong role of the European institutions which constraints political debate may have led people not to think of politics in terms of left and right.

East Germany provides a puzzle in and of itself. Previous research has found contradicting evidence here, indicating that citizens that were socialized in the former German Democratic Republic thinking both more and less in ideological terms (Neundorf, 2009; Otjes 2016; Zuell and Scholz, 2015). In line with Zuell and Scholz (2015), we found that East German respondents were more likely to identify their own left-right position, but this is not representative for other citizens from post-communist countries.

Future research may want to delve deeper into the persistence of left-right 'illiteracy' in these countries by examining more precisely the role of party system institutionalization (Casal Bértoa 2014), intergenerational political socialization (Rekker et al., 2019) and the Great Recession (Otjes and Katsanidou 2017). Certainly, these results indicate that not just the structure of the political competition is different between regions in Europe (Rovny and Edwards 2012), but also that the extent to which voters identify with left and right differs between regions. The role of the left-right dimension in linking voters and parties appears to be much larger in continuously democratic countries than in post-communist countries.

Finally, future research may also want to examine the effect of socialization under democratic systems in greater detail. In particular, it may be useful to study to what extent voters are affected by the level of political polarization in the party system in their formative period. Socialization theory suggests that a respondent who was socialized during a period of high party-political polarization is more likely to identify with the left-right dimension than a respondent who was socialized during a period of low party polarization.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.electstud.2021.102365.

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