

OK Boomer! Descriptive voting behaviour along age lines in times of generational conflict

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Abstract

Young people are under-represented in parliaments around the world. Descriptive under-representation itself is not a problem as long as the interests and perspectives of the younger and older generations overlap. Yet, intergenerational conflicts can transform this descriptive into substantial under-representation of young people's interests. Fridays for Future, a movement which is not only mainly composed of young people, but also explicitly emphasizes the intergenerational dimension of climate change, attracted public attention towards the issue of intergenerational conflict. The ongoing Covid-19 pandemic further intensified the salience of an intergenerational conflict. Young people were asked to sacrifice social contacts, educational opportunities and personal freedom in order to protect the elderly. This co-occurred with widespread neglect of the perspectives, struggles and interests of students and young people in general in political discourse. This results in the expectation that age and generation as a group characteristic become more relevant for voting. In our study, we investigate to what extent people vote for candidates who are closer to their own age. Our main argument feeds from the fact that individuals are more likely to vote for candidates that resemble themselves more closely. Yet, which characteristics evolve to be most relevant is shaped by the saliency of certain intergroup conflicts. Building on the social identity approach, we suggest that especially young citizens' generational group membership became more salient in recent years, resulting in increased group voting. We research these expectations on GLES cross-section data combined with data on all district candidates collected by the Bundeswahlleiter running in the German federal elections of 2013, 2017 and 2021.

Introduction

There are few variables as consistently directly and indirectly correlated to political attitudes and behaviour like age. For example, middle-aged people are most likely to vote, or formally participate in general (e.g. Dassonneville 2017; Pomante and Schraufnagel 2015; Hooghe and Dassonneville 2013). Young people are furthermore less likely to identify with a party (Dassonneville 2017) and consider different attitudes for their voting decisions than older people (van der Brug and Rekker 2021). From research on political attitudes

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across a life-time span and between generations, we further know that citizens prefer different policies during different ages (life-time periods) and independent of age there are preference differences across generations [Goerres (2008); Goerres2009; Inglehart1990; Busemeyer2009]. To avoid a democratic deficit, people from different age groups and generations should therefore be represented fairly in democratic institutions. However, this is not reflected by reality. Most parliaments and governments across the globe under-represent younger people [Sundström and Stockemer (2020); Freire2021]. Mainly, scholars claimed that there was a lack of institutional permeability for young people to run for office and win seats [Joshi (2013); Stockemer2018a]. Recently the question within this branch of literature was raised to what extent young people actually vote for younger candidates (Sundström and Stockemer 2020). We want to ask this question more generally, and focus on voting based on age similarities not only for young voters, but the general electorate.

From extensive research on electoral behaviour, the role of cues is known (e.g. Campbell et al. 1960; McDermott 2009; Margolis 2018; Valenzuela and Michelson 2016; Magni and Reynolds 2021; Thau 2021), yet insights on the role of age as a cue for voting decisions in Germany has found little attention so far (for a rare exception see Roßteutscher et al. 2017). We want to contribute to this lack of research by analysing to which extent the salience of intergenerational conflict along with a lack of representation for some age groups might influence voters to use age as a voting cue. Two questions arise in this context: Does age similarity actually influence people’s vote choice? And if so, under what conditions does it make a difference?

We concentrate on candidate voting in the the latest three federal elections of Germany (2013, 2017, and 2021). Beyond a descriptive representation dilemma¹, in particular the latest Bundestagswahl was surrounded by claims of intergenerational cleavages and therefore poses an optimal case to research the question of descriptive candidate voting along age lines in Germany. We use cross-sectional survey data from the German Longitudinal Election Panel (GLES) alongside information on all candidates competing in electoral districts obtained from the federal returning officer (Bundeswahlleiter). Using multinomial logistic regressions, we do not find age differences to have a clear effect on candidate voting in any of the three elections. While we do find trends for age differences playing a greater role for younger voters, these results narrowly miss standard requirements of statistical significance.

Descriptive representation of young people

Descriptive representation is defined as “the extent to which a [...] legislative body resembles a given constituent and their social or demographic identities” (Hayes and Hibbing 2017, 33). While scholarly attention has focused heavily on minority and women’s representation in the past, there has been an increasing emphasis on the under-representation of young people in recent times (e.g. Joshi 2013; Kissau, Lutz, and Rosset 2012; Stockemer and Sundström 2018; Melo and Stockemer 2014). Young people are descriptively under-represented in parliaments all around the globe.

¹On the descriptive dimension, German voters from 18 to 35 are only represented by 37.5% in 2012 (Sundström and Stockemer 2020).

At first glance, the descriptive under-representation of young people does not seem to be a critical democratic issue. People gain their voting rights in most countries at a young age, therefore they have the opportunity to vote and run for office. This would mean that they have equal opportunities to older citizens to be parliamentary represented. Yet, there are several reasons why descriptive under-representation of young people is suggested to be a threat to democratic systems. First and foremost, there is likely to be some kind of backlash on political participation and trust in democratic systems. Young people are less likely to participate politically, in particular in formal types of engagement (Melo and Stockemer 2014; Bhatti and Hansen 2012), and they are less knowledgeable and interested in politics (Maggini 2017). The combination of these findings proposes a “vicious cycle between declining political sophistication of the young, their lack of (conventional) political participation and their lack of representation” (Stockemer and Sundström 2018, 470). Increasing descriptive representation helps to break this cycle and resolves democratic deficits (Dassonneville and McAllister 2018; Rosenthal, Zubida, and Nachmias 2018)²).

Even though descriptive representation is per definition not a measure of the representation of policy interests, it is still linked to political agenda-setting as well as actual policy outcomes. Haider-Markel (2007) for example provided evidence that the number of introduced and adopted policies regarding LGBTQ+ rights did significantly increase with a more openly LGBTQ+ identifying members of the US Congress between 1992 and 2002. Other authors supported positive outcomes of descriptive on substantive representation for other minority groups as well (e.g. Ellis and Wilson 2013; Davis, Livermore, and Lim 2011).

But do age groups have different substantive political interests? If people do not differ in their policy preferences, their representation across demographics, in this case age, won’t matter. Yet, classic theories like Inglehart’s (1997) generational replacement or Mannheim (1928) problem of generations, nonetheless, draws a different picture. According to these theories, there are major differences between age group’s attitudes and values based on their different socialization and experiences (Hooghe 2004). Generational differences in political values and attitudes, and in their effect on political behaviour, were supported in varying contexts (van der Brug and Rekker 2021; Furlong and Cartmel 2012; van der Brug 2010). Beyond differences between so-called generations, ageing itself brings a complex variation of intraindividual changes with it. During a lifespan, people likely experience psychological and physiological changes, social change and economic changes (Peterson, Smith, and Hibbing 2020). Because people themselves change so much during their life course, researchers reasoned that their attitudes and values change as well. Most empirical findings on changes in political attitudes shows that they’re relatively stable (Alwin and Krosnick 1991), yet recently the conventional wisdom that people become more conservative during their life-time was supported for those individuals who do change their political attitudes (Peterson, Smith, and Hibbing 2020). Moreover, there

²The authors moreover show that the relationship between descriptive representation & voter turnout of minority groups is conditional on substantive representation. These findings support the idea that there is a correlation between political engagement and descriptive representation, while highlighting that substantive representation should not be left out from considerations on political behaviour. They assume that groups who became represented in numbers, yet substantively not acknowledged become frustrated about this status, and turn their back on formal participation like voting.

are political issues which affect individuals more strongly in a particular life phase, for example, pensions or education. This implies that there are conflicts between age groups in their preference for some politics compared to others (Furlong and Cartmel 2012; Jennings and Niemi 1981; Dumas and Turner 2009). It is reasonable to assume that people rather prefer policies they directly benefit from compared to other policies. Overall, the scientific literature shows that policy interests are different between age groups and voters hence may think of candidate's age as a cue for similarities. Intergenerational cleavages in policy interests and young voters under-representation in democratic institutions inhibits the potential for a societal and political conflict, as well as a decline in democratic stability. Eventually, public awareness of (potential) conflicts between ages groups plays a major role in the likelihood that voters use age as a voting cue.

Age as cue for group membership

Assuming that voters are aware of their personal membership in social categories, they are more likely to apply group voting if social cues are visible to them (Thau 2021). Cues about the political positioning of candidates and parties can take a variety of shapes and forms. All of them have in common that they accumulate policy positions based on their attachment to a social group or category. A candidate's party for example is a strongly visible cue about policy positions (Rahn 1993). A candidate's age can hence be regarded as a social cue to voters inasmuch as it makes her or him more or less similar to voter's age (Webster and Pierce 2019; Sevi in press; Dobbs 2020). Extensive research on the voting behaviour by minority groups and females provided evidence that voters use candidate appearance as voting cues. Characteristics such as shared gender or ethnicity are converted by voters into the belief of shared political preferences (Brians 2005; Sigelman et al. 1995). One might criticize that age differences cannot be compared to issues of minority groups because we cannot assume do not perceive age as a cue, and there is no need to protect their group status.

The visibility of social cues is sometimes conditional on a candidate's or parties emphasis of them (e.g., social class or occupations), sometimes they are undeniable, like ethnicity or gender. Dependent on the degree of visibility, group voting simplifies vote choices. The more visible a group attribute to voters, the less resources are needed to figure out who is an in-group member and thus closest in issue positions. The more information and thus resources are needed to place a candidate as an in-group or out-group member, the less likely people apply group voting (Thau 2021). The age of candidates is unlikely to be exactly known by voters, yet it can be said to be rather easily to infer from someone's appearance. People face others about whom they have little information, but easily interact with and categorize them on a daily basis. This habit is further used to judge political candidates. Candidates, as a public figure, "passively display visual information about themselves to voters. [...] Thus, voters find information about candidates, even without any active effort by candidates." (Webster and Pierce 2019, 637). This implies that voters are mostly aware of a candidates' closeness in age if they recognize the candidate. Previous research found that the degree of recognizing constituency candidates

by name and party vary substantively (Gschwend and Zittel 2015; Giebler and Weßels 2017). Up to 47% of voters recognized candidate names and parties by voters in the German federal election in 2013 (Giebler and Weßels 2017). People’s awareness towards them is higher than one might assume because of the minor role of candidate votes in a mixed electoral system according to such results. Not all visual information is passively displayed by candidates, German parties typically print pictures of candidates on their campaign posters. As such, parties and candidates actively distribute visual information among the electorate. As a consequence, it is reasonable to assume that voters consciously or unconsciously derive age distances from their visual information about candidates (and perceive it as a cue of group belonging).

Voting along age lines

Group voting in general is grounded in social identity & social categorization theory. The theoretical approach suggests that people perceive the world in social groups or categories which they are either members or non-members of. A group membership can develop into an identification which involves an individuals’ “knowledge of his membership in a social group (or groups) together with the value and emotional significance attached to the membership” (Tajfel 1981, 255). Psychological and cognitive needs like feeling included, distinguish positively from others, and reduce uncertainty motivate people to identify with groups or categories and adopt their behaviour in order to protect a groups’ status (Tajfel and Turner 1986; Turner et al. 1994; Hogg and Abrams 1988; Hogg 2007). Citizens are more likely to vote for candidates within their social groups than from other groups, individuals prefer to be represented by people “just like them.”

Why should citizens vote for a candidate based on group characteristics instead of issue positions? The authors of “the American voter” (Campbell et al. 1960) already showed that voters rely on simplifying cues for their vote choice. Cues about candidate or party policy positions are much harder to retrieve, and require an unusual level of political knowledge and interest (Campbell et al. 1960). An issue-based voting decision takes a lot of resources because of the complexity of politics and the perception of its irrelevance for many people. Groups and social relations on the other hand are usually intuitive and meaningful to people (Thau 2021). Group-based cues from candidates or parties use stereotypes, which allow voters to classify them into social categories. A stereotype helps groups to constitute who is an in-group or out-group member based on symbolic means. Stereotypes are associated with beliefs and comparable to a norm which imposes what group members ideally believe (Hogg and Reid 2006; Turner 1991). Applying group-based cues to their vote choice requires less resources, because a group stereotype bundles beliefs and attitudes. Individuals do not need to be informed about actual policy positions. Comparing voting decisions across social group similarities of voters and candidates supports that people apply group voting to electoral decisions (e.g. McDermott 2009; Goodyear-Grant and Tolley 2017; Ben-Bassat and Dahan 2012; Valenzuela and Michelson 2016; Tilley 2015; Thau 2021).

Group voting is not equally emphasized in all elections. The degree to which it’s applied and most importantly

which groups are shaping voting decisions depends largely on the context of an election. The public debate and concurrent media attention for political and social conflicts, and the mobilization of groups via cues by political actors (Thau 2021; Deckman and McDonald 2022) moderate the emphasis and structure of political cleavages during an election. We would thus not assume age to be predictive for voting decisions in every kind of election. Besides general assumptions and empirical findings on group voting, previous results on differences between age groups in voting behaviour have found mixed results, which endorses between distinction of cases. Nicola Maggini (2017) for example provides evidence that there is no substantive effect of being young to the understanding of Europeans voting behaviour. Yet, she supports cohort effects, meaning that the historical period in which you have been socialized to politics does influence your voting behaviour. Webster & Pierce (2019) on the other hand support the effect of age as a cue on vote choice when there is more information spread about an election. The presentation of our theoretical argument that age is a determinant of group voting can therefore not be made without addressing the electoral context.

Salience of intergenerational conflict across electoral contexts

Individuals have many group memberships, which does not mean that each of them influences political behaviour. Group voting depends on voters' salience of a group membership. In certain contexts, age group membership (or generational identities) become politicized and thus become relevant for vote choice. Salience and political cohesion of group belonging is increased if identification with a group is strong, it converges with other (political) identities, becomes a political meaning itself, or common interests are threatened or harmed. Subjective meaning of a group in that context is most decisive for its effect on political behaviour (Huddy 2013). Groups or social categories, nevertheless, only exist in a social network based on intergroup relations. Thus, societal or contextual characteristics are significant to understand group dynamics. These characteristics are most often related to conflicts of power. Related to individual's urge to protect their group status and distinct positively from others, they either want to defend, achieve or change their group's power structures within society. According to Simon and Klandermans (2001) group identities thus become politicized if they experience a shared grievance and find an opponent whom to blame. Threat or grievance to group interests can be material or symbolic interests (Huddy 2013).

A threat to an age group for example could result from a pension reform where older people lose financial support, in such a scenario a group of citizens loses part of their privileges. On the other hand, young people could feel grievance over their unrecognized attitudes towards liberal symbolic policies. The strength of group identification for example is influenced by a group's social status. Research on ethnic group voting shows that people rely more strongly on group cues for their voting decision if there is more economic inequality across ethnic groups (Houle, Kenny, and Park 2018). The unequal representation of citizens across age, is likely to symbolize a similar kind of experienced inequality that strengthens identification. This lack of representation for some age groups furthermore poses a general threat to their positioning within society. Period effects like

a shock or crisis are found to be important drivers of perceived threats because they are accompanied by wide media coverage commonly [McLaren, Boomgaarden, and Vliegenthart (2018); Schlueter2011].

We research group voting along age lines on candidate voting in the latest three federal elections in Germany. All three elections suffered from a pre-existing crisis, the economic crisis from 2008, the refugee crisis from 2015, and the climate crisis simultaneously to the Covid-19 pandemic. When public discourse addresses issues that threaten or harm different age groups in distinct degrees, they might have an increased likelihood to use age as a cue. In the following, we will outline how each of these contexts posed threats to age groups and how they affected the salience of intergenerational conflicts.

The federal election in 2013 was the second election after the global financial crisis breakdown in 2008. While the financial crisis of 2008 did not hit Germany as badly as many other European countries, the economy was still the driving issue during the electoral campaign five years later. Main issues during the electoral campaign were the financial crisis, unemployment, education, and labour policy (Jungherr, Schoen, and Jürgens 2016). All of these political issues are unequally linked to age groups. Unemployment risk for example has differing effects on young people who are about to enter the workforce than older people who are already employed or pensioned (Ford and Jennings 2020). In sum, people of different ages are very differently affected by shocks which impose future costs on them, like economic recessions or climate change (Ford and Jennings 2020). With the economic crisis young people had to worry about unemployment, less income and the uncertainty about generating wealth, middle-aged people had been mostly impacted by their risk of unemployment and loss of already generated wealth, while older people likely considered their risk of losses in pensions or pre-existing capital.

According to research from Franzmann, Giebler and Poguntke (2020) the economy was no decisive issue for the federal election in 2017 anymore. While the public expressed concern about the labour market and education, migration was undoubtedly at the centre of the election and public debate (Dostal 2017; Franzmann, Giebler, and Poguntke 2020; Mader and Schoen 2019). Even though younger people are reported to be more supportive towards immigration policies than older people (Heath et al. 2020; Calahorrano 2013; Schotte and Winkler 2018), there is little reason to assume this would have been linked to the politicisation of age or generation. Research of immigration attitudes in 2015 even found age difference to lose significance (Schmidt 2021). If group voting is expectable at all, the immigration and refugee crisis is rather linked to national, religious, or ethical group membership than age. Several studies found empirical support for different out-group threats in that categories influencing attitudes towards different groups of asylum seekers and immigrants, which are related mostly to such groups (Hager and Veit 2019; Schmidt 2021). Besides this interpretation, other authors described the refugee crisis as an event which lead to issue-driven voting behaviour, because of its unusual characteristics (Mader and Schoen 2019).

Early examination of the election campaigns of 2021 suggest that “regionalism, social class and age cohorts were [...] highly significant” (Dostal 2021, 650) cleavages. Whereas Covid-19 measures were a minor concern,

climate change is said to still have been a salient campaign issue. Furthermore, the pension system was brought back into the spotlight, at least by the candidate of the SPD, Olaf Scholz (Dostal 2021). Environmental protection as policy issues which inhibit age group conflicts, and pensions as an issue in which older people are on average most interested (Ford and Jennings 2020) imply an intergenerational interest conflict during this election. Adding to this, the election in 2021 is characterised by another development. The Fridays for Future youth movement with its globally known leader, Greta Thauberg, did not only mobilise citizens who were interested in fighting climate change, but it underlined the existence of a generational conflict between generations (von Zabern and Tulloch 2021; Sommer et al. 2019). Youth studies from recent years further underline that at least climate change and environmental protections as a future driven policy issue itself is highly prominent and favoured by young people (Albert et al. 2019; Stiftung 2020, 2021). Moreover, the self-reported political interest of young people in Germany is consistently increasing (Albert et al. 2019). Eventually, Fridays for Future did not stop their protests when the pandemic emerged but adapted to this new crisis (Hunger and Hutter 2021), from this can be conducted that this political protest and interest in climate protection was still salient previously to the election in 2021.

While there are differences in how much we expect age to have played a role in the three elections at hand, we can conclude that age differences did play into political conflicts salient in at least two of the three elections. Accordingly, we do expect age differences to have been salient in candidate voting for these elections. Our first hypothesis therefore states: *The lower the difference in age between a voter and a candidate, the higher is the probability of voting for this candidate.*

Intergroup conflicts may not be equally salient for all voters. As young people are frequently underrepresented politically, age as a characteristic should be more salient and prominent to them. This reflects well in findings from studies on the Covid-19 pandemic. While the Covid-19 pandemic left everyone independent of age or other demographics with some disadvantages, young people found themselves isolated from their peers and stuck at home early on. Schools, quickly followed by universities, have been the first institutions in Germany which shut down in the beginning of the Covid-19 pandemic. A study on young Germans well-being during the first year of the pandemic showed that up to 60% felt unrepresented by politicians and media (Andresen, Lips, et al. 2020; Andresen, Heyer, et al. 2020). Since studies like these include respondents which are under-aged and thus not allowed to participate in the electorate yet, these effects are likely to be less strongly found in the young electorate. However, it shows the perception of a lack of substantive representation.

If age as a characteristic is not equally salient for all age groups, we also should not expect age differences to yield the same effect on voters of all ages. As we expect age as a characteristic to be especially salient to young people, due to their political under-representation, we expect young people to have a higher probability to vote along age lines compared to older voters. Our second hypothesis states: *The younger the voter, the stronger is the effect of age difference on candidate voting.*

Research Design

As outlined before, we analyse our expectations on candidate voting in the German Bundestag elections of 2013, 2017 and 2021. Due to the electoral system of German, in which the composition of parliament is decided by the share of party votes each party gets, yet voters can also directly vote for district candidates, candidate voting to the German Bundestag poses an optimal context to test our expectations. As the candidate vote ultimately is not decisive for the composition of parliament, German voters have high incentives to use their candidate vote strategically – e.g., to express coalition preferences or push or hinder candidates they like or dislike. It is, therefore, likely that voters will take descriptive characteristics as gender or age even more into consideration when voting for a candidate, than expected under circumstances with higher stakes of the vote. Accordingly, researching expectations on descriptive voting by age on candidate voting in the German Bundestag elections serves as a most likely case scenario.

We use cross-sectional survey data from the German Longitudinal Election Study (GLES) of 2013, 2017 and 2021 alongside information on all candidates for the German Bundestag elections provided by the Federal Returning Officer (Bundeswahlleiter) and the Federal Statistical Office (Statistisches Bundesamt). Each respondent in the survey data is matched to all district candidates competing in her district. In order to increase comparability, we reduced the dataset to candidates from parties competing in all or almost all electoral districts. These parties are CDU/CSU, SPD, FDP, Bündnis 90 Die Grünen, Die Linke and AfD, with AfD candidates being excluded from the analysis of the 2013 election.

Our main dependent variable is individuals' voting decision for a candidate. As a second dependent variable, we use individuals' evaluation of district candidates to test the assumption that voters prefer candidates closer to their own age, irrespective of their voting decision³. Our main independent variable is the absolute age difference between voters and candidates. Since we assume voters to act on age difference rather than affiliation towards a specific generation, a continuous measure is better able to capture our theoretical expectations. Further, generational lines are fuzzy, which further complicates a decisive categorization of voters and candidates in predefined generations. While it is highly unlikely that voters are aware of the exact age of candidates, we assume a general awareness of candidates approximate age through the exposure to campaign posters and other campaigning materials involving pictures of the candidates. In order to test for different effects of age difference for younger and older voters, we use an interaction between the age difference and voter's age (measured by birth year).

In order to test for whether age differences capture general preferences for older or younger candidates and possible influences of candidates gender on individuals' voting behaviour, Model 3 adds these two variables (cf. Roßteutscher et al. 2017). Model 4, finally, includes information on candidates incumbency status, the left-right differences between the voter and the candidates' party and individuals' evaluation of the candidates' party. While incumbency status represents electoral experience and prominence of a candidate, left-right

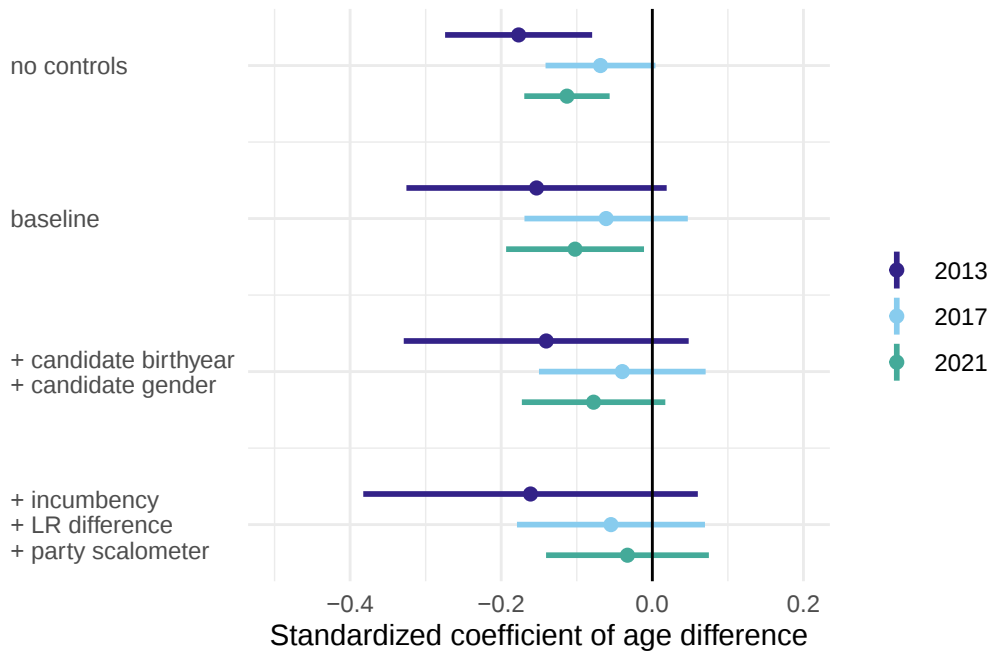
³These models are not yet included in this version of the article.

difference and party scalometer are introduced to control for ideological closeness to a party and candidate. To further test the hypothesis, that the effects of age difference are affected by voters' age, Model 5 and 6 replicate the Models 3 and 4, additionally controlling for an interaction between the age difference between voters and candidates and voters' birth year. To facilitate the interpretation of regression results, we further calculate predicted probabilities and first differences of Model 3 and 5 using simulations and an observed value approach (Hanmer and Ozan Kalkan 2013).

Results

Figure 1 shows the standardized regression coefficients for age difference for the Models 1, 2, 3 and 4⁴. All the observed effects are negative, indicating that a higher age difference leads to a lower voting probability. Yet, whereas we do observe significant effects for 2021 in the baseline model, we do not observe significant effects for 2013 and 2017. And once, we control for candidates age and gender, the coefficient for 2021 turns insignificant too.

Figure 1: Coefficient Plot

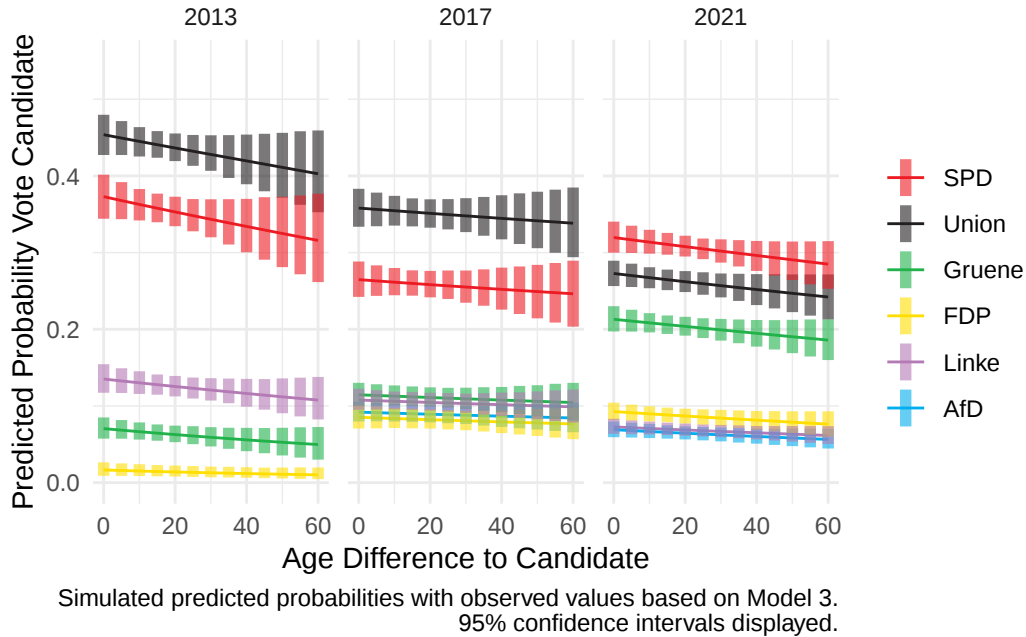


In order to evaluate the size of the effects of age difference, Figure 2 presents predicted probabilities to vote for the candidate of a party dependent on age difference for the three elections. Confirming the regression coefficients, the effects are clearly not significant, and even increasing the age difference to the extreme value of 60 years only leads to a slight drop in the estimated probability to vote for a candidate. In 2021 we on average estimate the probability to vote for the SPD candidate to lie between 30 and 34 percent with our best guess at 32 percent if there is no age difference between voter and candidate, and to lie between 25 and

⁴The full regression models can be found in Table 1, Table 2 and Table 3 in the Appendix.

32 percent with our best guess at 28 percent if we observe an extreme age difference of 60 years. While there are general differences in the likelihood to vote for the SPD candidate, the patterns for 2013 and 2017 are very similar.

Figure 2: Predicted Probabilities along Age Difference



Do these results imply that, indeed, the slight effects we do observe for age difference in the base models can be traced back to general preferences of candidates' age among the voters? Figure 3 displays predicted probabilities to vote for a candidate dependent on candidates' year of birth. What we can see is that there is only a very slight negative trend for younger candidates, which again is not statistically significant. Neither do voters reject candidates further from their own age, nor do they have clear preferences for younger or older candidates in general.

Turning to a possible interaction between voters' age and the age difference between voters and candidates, Figure 4 displays first differences between the probability to vote for a candidate of the same age and a candidate with an age difference of 30 years across voters' birth years. In line with our expectations, we see a clear positive trend for the elections 2021, the younger the voter, the more positive is the effect of age difference. Similar, is found for 2013. For the youngest groups of voters, the first difference of age difference is only very slightly failing to reach statistical significance in both these election years. For the election 2021 we estimate voters born in 1993 to have a higher probability to vote for a candidate their age compared to a candidate with a 30 year age difference of between 0 and 8 percent, with our best guess being 4 percent.

On an interesting side note, we do not observe any significant effects of shared gender or candidates' gender in general in any of our regression models. While we do observe gender differences in the likelihood to vote

Figure 3: Predicted Probabilities along Candidate Age

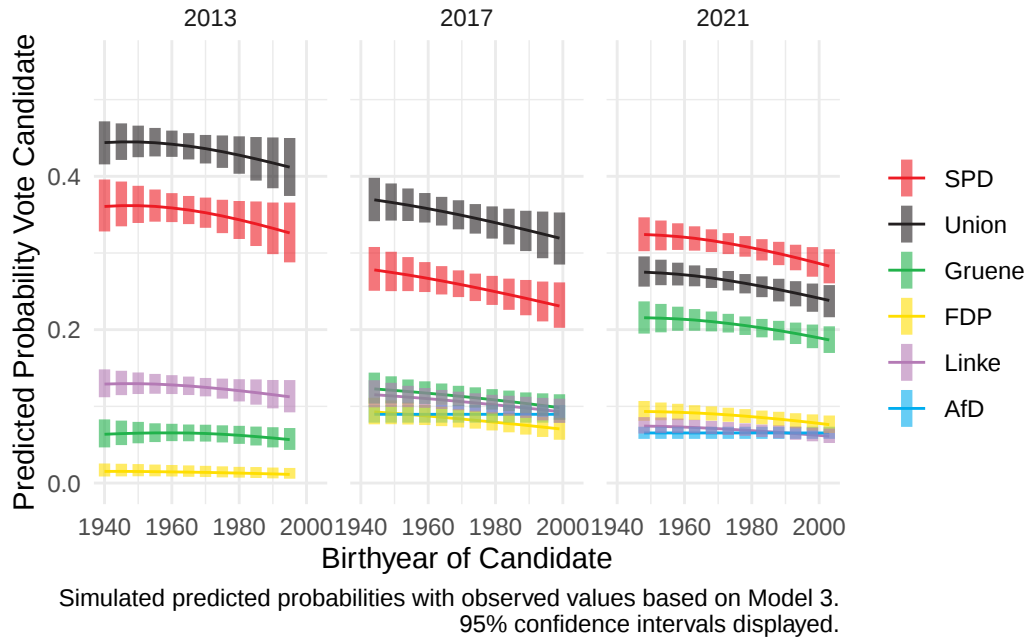
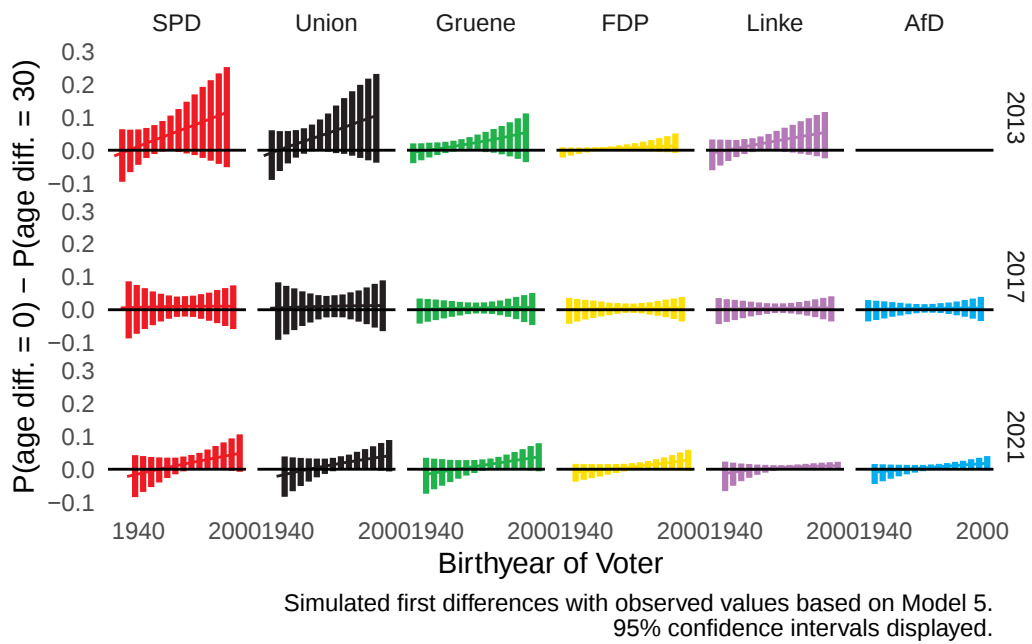


Figure 4: First Differences along Voter Age



for different parties, descriptive voting along gender, appears not to be taking place in the candidate voting for the German Bundestag of 2013, 2017 and 2021. While we do not test for descriptive voting along other characteristics such as ethnic minority status or social class, our results suggest that descriptive characteristics only play a minor role in German candidate voting. However, while descriptive characteristics may not decide candidate vote after controlling for party preferences and vote, they may very well play a role in informing voters' party preferences. Yet, an answer to this question would go beyond the scope of this article and analysis.

Conclusion

In the past couple of years, there was an increasing public debate on the political representation of younger people's interests. Scholars underlined this democratic deficit by providing evidence of a lack of descriptive representation of young people (Sundström and Stockemer 2020; Stockemer and Sundström 2019; Joshi 2015; Kissau, Lutz, and Rosset 2012) and the relation between age and political participation (Dassonneville 2017; Goerres 2008; Gallego 2009). In this context, the question emerges, to what extent age as a characteristic matters electorally. We approach this question by researching how age differences inform candidate voting in the German federal elections of 2013, 2017 and 2021. We argue, that age has been a salient political characteristic, relevant for group voting especially among young voters. Yet, our results indicate that age differences between candidates and voters only played a minor role - if any - for citizens' candidate vote. While we do find age differences to play a greater role for younger voters, our results are far from conclusive.

While a great amount of findings suggests that political interests between age groups (and generations) differ (Busemeyer, Goerres, and Weschle 2009; Peterson, Smith, and Hibbing 2020; van der Brug and Rekker 2021), we likely cannot conclude that these differences mean a direct translation of descriptive under-representation to substantive representation. Evidence from research on voters in Switzerland and Austria indicate no link between descriptive under-representation and substantive under-representation along age lines (Kissau, Lutz, and Rosset 2012; Wagner and Kritzinger 2012). This could be one reason for the loss of significant age difference effects. Age does measure some variation of political preferences, but as soon as we control for other candidate specific information in this regard, we see that age itself does not influence vote choice.

Our results so far do not support the expectation that age similarity itself decides about vote choices, but rather that effects result from its correlation with other voting cues. Following the results of Roßteutscher et al. (2017) the lack of evidence could result from the fact that people use demographic cues only if they do not rely on party cues in the first place. As soon as people identify with a party to any extent, they don't have the urge to look for other cues. However, we can reject the idea that effects of socio-demographic cues result from the supply side changes (see Roßteutscher et al. 2017, 207) itself due to our control of party vote. On the other hand, we could lose effects due to the assumption of intergenerational conflict being salient. If this assumption is not met, there is little reason to believe why voters should try to increase or defend their

age group political and social position against other age groups. Our current analyses lack the necessary data to investigate which of these explanations are more likely. Further investigations will be needed to respond to the questions asked in this article.

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Appendix

Table 1: Standardized Regression Results 2013

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age Difference	−0.18*** (0.05)	−0.15* (0.09)	−0.14 (0.10)	−0.16 (0.11)	16.17 (14.61)	17.62 (18.05)
Age Diff. * Birthyear					−16.14 (14.45)	−17.58 (17.85)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Same Gender		0.04 (0.06)	0.04 (0.06)	0.07 (0.07)	0.04 (0.06)	0.07 (0.07)
Voted Party		0.99*** (0.04)	0.99*** (0.04)	0.38*** (0.05)	1.00*** (0.04)	0.38*** (0.05)
Candidate Birthyear			-0.03 (0.07)	-0.02 (0.09)	-0.13 (0.11)	-0.12 (0.13)
Candidate Female			-0.05 (0.06)	-0.09 (0.07)	-0.05 (0.06)	-0.09 (0.07)
LR Difference				0.13 (0.15)		0.13 (0.15)
Scalometer Party				2.78*** (0.21)		2.77*** (0.21)
SPD						
Intercept	-0.25*** (0.06)	0.02 (0.12)	0.04 (0.12)	0.27* (0.16)	0.04 (0.12)	0.28* (0.16)
Birthyear		0.30** (0.13)	0.30** (0.13)	0.42*** (0.16)	0.31** (0.13)	0.43*** (0.16)
Female		-0.10 (0.12)	-0.10 (0.12)	-0.25* (0.14)	-0.10 (0.12)	-0.25* (0.14)
Education		-0.03 (0.13)	-0.03 (0.13)	-0.14 (0.16)	-0.03 (0.13)	-0.14 (0.16)
Income		-0.24* (0.13)	-0.24* (0.13)	-0.34** (0.17)	-0.24* (0.13)	-0.34** (0.17)
Left-Right		-0.89*** (0.14)	-0.90*** (0.14)	-0.70*** (0.19)	-0.90*** (0.14)	-0.70*** (0.19)
FDP						
Intercept	-3.36*** (0.22)	-3.19*** (0.43)	-3.19*** (0.43)	-2.09*** (0.53)	-3.19*** (0.43)	-2.09*** (0.53)
Birthyear		0.31 (0.32)	0.32 (0.32)	0.03 (0.36)	0.32 (0.32)	0.02 (0.36)
Female		-1.03*** (0.37)	-1.02*** (0.38)	-1.44*** (0.46)	-1.03*** (0.37)	-1.44*** (0.46)
Education		0.46	0.46	0.30	0.47	0.32

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
		(0.31)	(0.31)	(0.36)	(0.31)	(0.36)
Income		−0.44	−0.44	−0.24	−0.44	−0.24
		(0.33)	(0.34)	(0.40)	(0.33)	(0.39)
Left-Right		−0.09	−0.09	−0.54	−0.09	−0.53
		(0.35)	(0.35)	(0.47)	(0.35)	(0.47)
GREEN						
Intercept	−1.95***	−1.92***	−1.89***	−1.51***	−1.88***	−1.50***
	(0.11)	(0.21)	(0.21)	(0.27)	(0.21)	(0.27)
Birthyear		0.68***	0.69***	0.72***	0.68***	0.73***
		(0.19)	(0.19)	(0.23)	(0.19)	(0.24)
Female		−0.20	−0.20	−0.14	−0.20	−0.14
		(0.17)	(0.17)	(0.21)	(0.17)	(0.21)
Education		0.15	0.15	−0.11	0.15	−0.11
		(0.18)	(0.18)	(0.22)	(0.18)	(0.22)
Income		−0.50***	−0.50***	−0.32	−0.50***	−0.32
		(0.19)	(0.19)	(0.23)	(0.19)	(0.23)
Left-Right		−1.05***	−1.05***	−1.07***	−1.06***	−1.07***
		(0.22)	(0.22)	(0.35)	(0.22)	(0.35)
LEFT						
Intercept	−1.34***	−1.52***	−1.51***	−1.36***	−1.50***	−1.35***
	(0.09)	(0.20)	(0.20)	(0.28)	(0.20)	(0.28)
Birthyear		0.35**	0.34*	0.69***	0.35**	0.72***
		(0.17)	(0.17)	(0.24)	(0.17)	(0.24)
Female		−0.39**	−0.39**	−0.60***	−0.39**	−0.61***
		(0.16)	(0.16)	(0.22)	(0.16)	(0.22)
Education		−0.09	−0.09	−0.35	−0.10	−0.36
		(0.18)	(0.18)	(0.24)	(0.18)	(0.24)
Income		−0.72***	−0.73***	−0.57**	−0.73***	−0.58**
		(0.18)	(0.18)	(0.25)	(0.18)	(0.25)
Left-Right		−1.38***	−1.39***	−1.15***	−1.39***	−1.15***
		(0.19)	(0.19)	(0.27)	(0.19)	(0.27)
AIC	3495.07	1300.88	1304.12	844.75	1304.87	845.77
Log Likelihood	−1742.54	−623.44	−623.06	−391.38	−622.44	−390.89

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Num. obs.	1440	1161	1161	1061	1161	1061
K	5	5	5	5	5	5

Standardized Regression Coefficients displayed.

Table 2: Standardized Regression Results 2017

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age Difference	−0.07*	−0.06	−0.04	−0.05	0.72	6.39
	(0.04)	(0.06)	(0.06)	(0.06)	(8.42)	(9.53)
Age Diff. * Birthyear					−0.75	−6.40
					(8.36)	(9.47)
Same Gender		0.05	0.06	0.06	0.06	0.06
		(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Voted Party		0.85***	0.85***	0.43***	0.85***	0.43***
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Candidate Birthyear			−0.09**	−0.03	−0.09	−0.07
			(0.04)	(0.05)	(0.07)	(0.08)
Candidate Female			0.03	−0.02	0.03	−0.02
			(0.04)	(0.05)	(0.04)	(0.05)
Incumbant				0.07		0.07
				(0.06)		(0.06)
LR Difference				−0.38***		−0.38***
				(0.10)		(0.10)
Scalometer Party				2.21***		2.21***
				(0.13)		(0.13)
SPD						
Intercept	−0.35***	−0.17*	−0.16	−0.03	−0.16	−0.03
	(0.06)	(0.10)	(0.10)	(0.13)	(0.10)	(0.13)
Birthyear		−0.09	−0.09	−0.11	−0.09	−0.10
		(0.11)	(0.11)	(0.12)	(0.11)	(0.12)
Female		−0.17*	−0.17*	−0.18	−0.17*	−0.18
		(0.10)	(0.10)	(0.11)	(0.10)	(0.11)
Education		0.15	0.15	−0.02	0.15	−0.02

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
		(0.11)	(0.11)	(0.13)	(0.11)	(0.13)
Income		−0.09	−0.09	−0.09	−0.09	−0.09
		(0.11)	(0.11)	(0.12)	(0.11)	(0.12)
Left-Right		−0.79***	−0.80***	−0.30**	−0.80***	−0.30**
		(0.12)	(0.12)	(0.14)	(0.12)	(0.14)
FDP						
Intercept	−1.48***	−1.46***	−1.42***	−0.96***	−1.42***	−0.96***
	(0.10)	(0.14)	(0.14)	(0.19)	(0.14)	(0.19)
Birthyear		0.13	0.14	0.00	0.14	0.00
		(0.14)	(0.14)	(0.15)	(0.14)	(0.15)
Female		0.12	0.12	0.04	0.12	0.04
		(0.13)	(0.13)	(0.14)	(0.13)	(0.14)
Education		0.04	0.05	−0.11	0.05	−0.11
		(0.14)	(0.14)	(0.15)	(0.14)	(0.15)
Income		−0.15	−0.16	−0.14	−0.16	−0.14
		(0.13)	(0.13)	(0.14)	(0.13)	(0.14)
Left-Right		0.02	0.02	−0.06	0.02	−0.07
		(0.16)	(0.16)	(0.18)	(0.16)	(0.18)
GREEN						
Intercept	−1.24***	−1.36***	−1.34***	−1.07***	−1.34***	−1.07***
	(0.09)	(0.15)	(0.15)	(0.18)	(0.15)	(0.18)
Birthyear		0.34**	0.34**	0.25	0.34**	0.25
		(0.15)	(0.15)	(0.16)	(0.15)	(0.16)
Female		0.23*	0.24*	0.19	0.24*	0.19
		(0.13)	(0.13)	(0.14)	(0.13)	(0.14)
Education		0.15	0.16	−0.22	0.16	−0.22
		(0.15)	(0.15)	(0.17)	(0.15)	(0.17)
Income		−0.19	−0.19	−0.23	−0.19	−0.23
		(0.13)	(0.13)	(0.15)	(0.13)	(0.15)
Left-Right		−0.76***	−0.77***	−0.16	−0.77***	−0.16
		(0.16)	(0.16)	(0.19)	(0.16)	(0.19)
LEFT						

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	−1.25*** (0.09)	−1.51*** (0.17)	−1.50*** (0.17)	−0.68*** (0.21)	−1.50*** (0.17)	−0.68*** (0.21)
Birthyear		0.17 (0.15)	0.18 (0.15)	0.03 (0.17)	0.18 (0.15)	0.03 (0.17)
Female		−0.14 (0.14)	−0.14 (0.14)	−0.20 (0.16)	−0.14 (0.14)	−0.20 (0.16)
Education		−0.07 (0.15)	−0.07 (0.15)	−0.39** (0.18)	−0.07 (0.15)	−0.40** (0.18)
Income		−0.43*** (0.14)	−0.44*** (0.14)	−0.32* (0.16)	−0.44*** (0.14)	−0.32* (0.16)
Left-Right		−1.19*** (0.17)	−1.19*** (0.17)	−0.12 (0.21)	−1.19*** (0.17)	−0.11 (0.21)
AFD						
Intercept	−1.40*** (0.09)	−1.60*** (0.17)	−1.60*** (0.18)	0.20 (0.33)	−1.60*** (0.18)	0.21 (0.33)
Birthyear		0.24 (0.15)	0.23 (0.15)	0.04 (0.23)	0.23 (0.15)	0.04 (0.23)
Female		−0.24* (0.14)	−0.24* (0.14)	−0.55** (0.23)	−0.24* (0.14)	−0.55** (0.23)
Education		−0.49*** (0.16)	−0.49*** (0.16)	−0.58** (0.24)	−0.48*** (0.16)	−0.57** (0.24)
Income		−0.33** (0.15)	−0.33** (0.15)	−0.35 (0.25)	−0.34** (0.15)	−0.35 (0.25)
Left-Right		0.31** (0.15)	0.32** (0.15)	0.05 (0.28)	0.31** (0.15)	0.05 (0.28)
AIC	5346.82	2556.07	2555.49	1855.62	2557.48	1857.16
Log Likelihood	−2667.41	−1245.03	−1242.75	−889.81	−1242.74	−889.58
Num. obs.	1659	1377	1377	1277	1377	1277
K	6	6	6	6	6	6

Standardized Regression Coefficients displayed.

Table 3: Standardized Regression Results 2021

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age Difference	-0.11*** (0.03)	-0.10** (0.05)	-0.08 (0.05)	-0.03 (0.05)	8.09 (7.45)	7.81 (8.69)
Age Diff. * Birthyear					-8.09 (7.39)	-7.77 (8.62)
Same Gender		0.04 (0.04)	0.03 (0.04)	0.04 (0.04)	0.03 (0.04)	0.04 (0.04)
Voted Party		0.91*** (0.02)	0.91*** (0.02)	0.41*** (0.03)	0.91*** (0.02)	0.42*** (0.03)
Candidate Birthyear			-0.08* (0.04)	-0.03 (0.05)	-0.12** (0.06)	-0.08 (0.07)
Candidate Female			-0.04 (0.04)	-0.03 (0.04)	-0.04 (0.04)	-0.03 (0.04)
Incumbant				0.15*** (0.04)		0.15*** (0.04)
LR Difference				-0.25*** (0.09)		-0.25*** (0.09)
Scalometer Party				2.27*** (0.12)		2.28*** (0.12)
SPD						
Intercept	0.13** (0.05)	0.04 (0.09)	0.07 (0.09)	0.01 (0.11)	0.07 (0.09)	0.01 (0.11)
Birthyear		0.04 (0.09)	0.04 (0.09)	0.03 (0.11)	0.04 (0.09)	0.04 (0.11)
Female		0.19** (0.09)	0.18** (0.09)	0.16 (0.10)	0.18** (0.09)	0.16 (0.10)
Education		-0.07 (0.17)	-0.07 (0.17)	-0.01 (0.18)	-0.08 (0.17)	-0.01 (0.18)
Income		0.19 (0.18)	0.18 (0.19)	0.17 (0.18)	0.19 (0.19)	0.17 (0.19)
Left-Right		-0.69*** (0.10)	-0.70*** (0.10)	-0.24* (0.13)	-0.70*** (0.10)	-0.24* (0.13)
FDP						

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	-1.08*** (0.07)	-1.25*** (0.13)	-1.24*** (0.13)	-1.29*** (0.16)	-1.24*** (0.13)	-1.29*** (0.16)
Birthyear		0.37*** (0.11)	0.37*** (0.11)	0.28** (0.13)	0.37*** (0.11)	0.28** (0.13)
Female		0.48*** (0.11)	0.49*** (0.11)	0.51*** (0.13)	0.49*** (0.11)	0.52*** (0.13)
Education		0.06 (0.18)	0.06 (0.18)	0.08 (0.19)	0.06 (0.18)	0.08 (0.19)
Income		0.01 (0.21)	-0.00 (0.21)	0.03 (0.21)	0.00 (0.21)	0.04 (0.20)
Left-Right		-0.11 (0.13)	-0.12 (0.13)	-0.17 (0.16)	-0.12 (0.13)	-0.17 (0.17)
GREEN						
Intercept	-0.34*** (0.06)	-0.50*** (0.10)	-0.46*** (0.11)	-0.64*** (0.13)	-0.46*** (0.11)	-0.64*** (0.13)
Birthyear		0.09 (0.10)	0.10 (0.10)	0.16 (0.12)	0.10 (0.10)	0.16 (0.12)
Female		0.12 (0.10)	0.12 (0.10)	0.23** (0.11)	0.12 (0.10)	0.23** (0.11)
Education		0.26* (0.15)	0.26* (0.15)	0.28 (0.17)	0.25* (0.15)	0.27 (0.17)
Income		-0.22 (0.16)	-0.23 (0.16)	-0.22 (0.16)	-0.22 (0.16)	-0.22 (0.16)
Left-Right		-0.91*** (0.12)	-0.92*** (0.12)	-0.28* (0.15)	-0.92*** (0.12)	-0.28* (0.15)
LEFT						
Intercept	-1.42*** (0.08)	-2.23*** (0.30)	-2.20*** (0.30)	-0.99*** (0.34)	-2.19*** (0.30)	-0.98*** (0.34)
Birthyear		-0.38*** (0.15)	-0.37** (0.15)	-0.35** (0.16)	-0.37** (0.15)	-0.34** (0.16)
Female		0.19 (0.14)	0.19 (0.14)	0.26* (0.16)	0.19 (0.14)	0.25 (0.16)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Education		4.10*** (1.49)	4.00*** (1.49)	2.15 (1.67)	3.99*** (1.49)	2.10 (1.67)
Income		0.02 (0.29)	0.02 (0.29)	-0.12 (0.32)	0.03 (0.29)	-0.12 (0.32)
Left-Right		-1.50*** (0.17)	-1.51*** (0.17)	-0.25 (0.23)	-1.50*** (0.17)	-0.25 (0.23)
AFD						
Intercept	-1.40*** (0.08)	-1.33*** (0.15)	-1.37*** (0.15)	-0.07 (0.27)	-1.38*** (0.15)	-0.08 (0.28)
Birthyear		0.15 (0.13)	0.14 (0.13)	0.07 (0.21)	0.14 (0.13)	0.07 (0.21)
Female		-0.07 (0.13)	-0.08 (0.13)	-0.41* (0.21)	-0.08 (0.13)	-0.42** (0.21)
Education		0.11 (0.19)	0.10 (0.20)	0.35 (0.39)	0.10 (0.20)	0.35 (0.39)
Income		-0.10 (0.21)	-0.10 (0.22)	-0.23 (0.44)	-0.09 (0.22)	-0.22 (0.45)
Left-Right		0.27* (0.14)	0.27* (0.14)	-0.18 (0.25)	0.27* (0.14)	-0.17 (0.25)
AIC	8505.21	3675.90	3674.75	2545.02	3675.55	2546.21
Log Likelihood	-4246.61	-1804.95	-1802.37	-1234.51	-1801.77	-1234.10
Num. obs.	2635	2153	2153	1898	2153	1898
K	6	6	6	6	6	6

Standardized Regression Coefficients displayed.