Mediale und interpersonale Informationsflüsse und ihre Folgen

Political knowledge, media use and right-wing populist preferences

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1. Introduction

Ideally, voters should have some basic knowledge about their options in an election if they want to make choices signifying their political preferences (Dahl 1971). Election campaigns are times of intensified political debate and communication and constitute a particularly information-rich environment in which voters can acquire new knowledge about parties, candidates and their issue positions without too many costs. Even though it may not be too hard to learn about the political choices in times of election campaigns, voters differ sharply in their media use, their cognitive skills to process information, and their cognitive and motivational dispositions to acquire new knowledge, which will all lead to many voters not knowing very much about the positions of parties and candidates (cf. Eveland et al. 2005). In addition to these factors, political orientations of voters may constitute another dimension of explaining low levels of political knowledge. New research suggests that supporters of right-wing populist parties and candidates are often particularly less knowledgeable about politics and policies and more prone to conspiracy beliefs (e.g. Zhuravskaya et al. 2020). When right-wing leaders reject information from mainstream media, denigrate media reporting as inherently biased or even being part of a conspirative effort to mislead the public, and spread misinformation about other parties and candidates, it seems plausible that their supporters may follow their lead and de facto become less knowledgeable about politics over time.

In this study, we will examine the effects of different sets of factors – demographics, political interest, media use, and cognitive dispositions – on political knowledge of voters in Germany during the election campaigns of the last three federal elections in 2013, 2017, and 2021. In addition, we will examine whether political support of the right-wing party AfD adds to these factors in explaining different knowledge levels of the electorate. We further explore possible interactions of political orientations with the use of social media.

2. Theory and previous findings

2.1 Campaigns and political knowledge

Parties and candidates are running electoral campaigns in order to influence voters and gain as many votes as possible. They will present their positions as appealing as possible, the positions of other parties may be unfairly attacked, they will simplify some political issues, frame them in ways that they consider most useful or be purposefully ambiguous about them. Obviously, parties and candidates are not conducting electoral campaigns to provide voters with the most comprehensive and balanced information and to foster political learning and knowledge. Nevertheless, it seems by no means implausible that political competition and the sum of all parties' efforts to attract voters can lead to some political learning on the part of individual voters and an overall better-informed electorate at the end of an election campaign. From a normative standpoint of many democratic theories, citizens in representative democracies should at least know what kind of policies the various parties or candidates stand for (cf. Berelson 1952). Only then, it might be possible for citizens to "signify their preferences" (Dahl 1971: 2). Knowing what different parties or candidates stand for on the major issues of a polity therefore seems to be a prerequisite of meaningful democratic decisions (cf. Eveland et al. 2005). However, the literature on campaign effects and political knowledge paints a diverse picture of whether campaigns help voters learn about the issues at stake.

In the tradition of the early studies of the Columbia school, electoral campaigns have often been described as rather ineffective when it comes to changing voters' attitudes and attracting additional voters (Lazarsfeld et al. 1944). Instead, the major effects of election campaigns are seen in activating and strengthening political predispositions. More recent studies on the influence of campaigns largely confirm these "minimal effects" (Miller 1990; Farrell/Schmitt-Beck 2002). Moreover, studies have shown that voting models with only fundamental variables are pretty good in predicting actual voting behavior – relatively independent from the ups and downs of electoral campaigns (Finkel 1993; Campbell/Garand 1999).

Still, this does not necessarily imply that election campaigns are irrelevant for voters. In fact, the strong effects of fundamental variables may emerge because of the confrontation of political opponents and the political debate during election campaigns. Voters may need the additional information and the intensified political debate of election campaigns to relate their

own political views to the positions of parties and candidates. According to this view, quite a few citizens may not regularly follow politics. However, when elections are getting closer and citizens actually have a chance of influencing the political process, they may start thinking about various options and their political positions. Election campaigns may thus serve as "the most compelling incentive to think about government" (Riker 1986: 1). Generally, campaigns will offer a very good and partially even entertaining chance to get political information. In the most optimistic perspective, citizens will use that information to gain a better political understanding of what the various parties and candidates stand for and relate the issues of the campaign to their own political views. Campaigns may then lead to more "enlightened" voting decisions (Gelman/King 1993).

According to a more pessimistic view, campaigns are less useful and will hardly help voters to make up their minds. Some see electoral campaigns as a pure spectacle that lacks substantive political content (e.g. Perloff 1999). Then, they may offer "little, if any, information to the electorate (…) and (…) whatever information is disseminated by the campaign is distorted by the mass media and even ignored by voters" (Alvarez 1997: 7). There are indeed findings showing that parties and candidates are not always communicating their positions very clearly and deliberately choose a strategy of ambiguity (e.g. Shepsle 1972; Bartels 1988). Such a strategy of being unspecific and of leaving voters without clear signals can be potentially quite successful (e.g. Tomz/van Houweling 2009). At the same time, it is not clear whether the media will always communicate the political content of campaigns even if parties and candidates take distinct and discernible positions. Some authors argue that there is a decrease in reporting on substantive political issues and an increase in horse-race journalism concentrating on possible winners and losers (e.g. Sigelman/Bullock 1991). Others observe a stronger personalization (e.g. Poguntke/Webb 2005) and a greater focus on scandals and apolitical characteristics of candidates (e.g. Sabato et al. 2000). Finally, not all campaigns will be competitive and not all reporting on campaigns will be balanced. The less balanced and the less competitive a campaign the better the chances that one party will frame the political issues in a favorable way and possibly distort the perceptions and attitudes of voters. Instead of enlightening voters, campaigns may then rather confuse and even bias them (Zaller 1992; Lachat/Sciarini 2002).

It is therefore not obvious that election campaigns will really help voters to know more about politics and lead to better decision-making. Still, quite a few studies in the US have found evidence for an increase in polit-

ical knowledge during election campaigns (e.g. Berelson et al. 1954; Patterson/McClure 1976; Bartels 1993; Gelman/King 1993; Ansolabehere/Iyengar 1995). Some studies take a comparative perspective and examine what kind of election campaigns and institutional arrangements produce the biggest learning effects (Stevenson/Vavreck 2000; Arceneaux 2005; Fraile 2014).

In this study, we want to contribute to the growing literature and examine some individual conditions of political knowledge (see also Huber 2013). First, we will focus on the transmission of campaign information through mass media and some underlying cognitive dispositions of information processing. Secondly, we will look into voters with populist preferences in particular and investigate how such attitudes impact voters' knowledge about politics – while controlling for media use and individual cognitive differences. Finally, we will explore a possible interaction of right-wing populist attitudes and social media use.

2.2 Mass media and the transmission of political information

In mass democracies, voters won't be able to follow whole election campaigns in person. Thus, they won't receive most of the campaign information directly from parties or candidates. They will always depend on the mass media as the dominant mediator of this information (Graber 2004). Political knowledge, therefore, will not only depend on what kind of information parties and candidates provide and how competitive and balanced campaigns are on the party level. It will also depend on what is reported and how it is reported in the mass media. Different media outlets will vary on how much, how balanced, how comprehensive, and how accurate they report on campaigns and the various issues and messages. Thus, consumers of different media will encounter different information and different styles of presentation.

There are several studies showing that reading political articles in daily newspapers has a stronger effect on citizens' learning and knowledge than watching newscasts on TV (e.g. Patterson/McClure 1976; Weaver/Drew 1993; Druckman 2003; Fraile 2011). These findings of different media effects may be based on different logics of television and newspapers, with television being almost naturally more personalized and superficial (e.g. McAllister 2007; Chaffee/Kanihan 1997). However, there are also studies that found rather mixed results on the different effects exerted by television and newspapers (e.g. Brians/Wattenberg 1996). At the same time, experimental

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studies found that it is not the medium itself that is responsible for varying learning effects but the transmitted information and the quality of journalistic reporting (Norris/Sanders 2003). Using survey data and measuring the content of various media reporting, Barabas and Jerit (2009) came to similar conclusions and found that the volume, breadth, and prominence of news media coverage can increase policy-specific knowledge. Differentiating between high (public television/broadsheets) and low (commercial broadcasts/tabloids) quality reporting in both television and press, de Vreese and Boomgarden (2006) found that it is rather the quality of the reporting than the medium that drives the levels of political knowledge. For our study in Germany, we expect a similar pattern. We presume greater knowledge among people who watch newscasts on public television than those who watch fewer substantial newscasts on commercial television. The same should be true for readers of high-quality broadsheets in comparison to readers of tabloids.

Research on the effects of social media use on political knowledge is less clear (Zhuravskaya et al. 2020). Some studies find no clear relationship between social media use and political knowledge (e.g. Lee/Xenos 2019; Bode 2016), while others find that – at least over time – social media use may erode political knowledge by exposing voters to less substantial information (Cacciatore et al. 2018). The use of social media for political information is very different from traditional media, as users can actively decide which sources to follow. On the other hand, algorithms may create additional "filter bubbles" of like-minded people causing some voters to be less critical of potential misinformation (e.g. Rhodes 2022). The overall effect of social media use may therefore not be straightforward, with some voters benefitting from its easily available information and other voters being hurt by its distractions and their specific bubbles of like-minded sources (Prior 2005).

2.3 Political interest, education, demographics

Obviously, political interest will play a major role in acquiring political knowledge. Politically interested voters will almost automatically have a greater political knowledge. But it is less clear whether politically interested voters will also pick up more additional information during election campaigns or whether people less interested will show the strongest learning effects. After all, campaigns may be occasions when uninterested voters

also deal with at least some politics. According to the hypothesis of the "knowledge gap", the difference between politically informed and politically uninformed voters will get bigger the more information is available (Tichenor et al. 1970; Viswanath/Finnegan 1996). It should thus be the politically interested voters who disproportionally benefit from the information provided during election campaigns. The same argument may apply for education. It is to be expected that voters with higher education have a better knowledge of political parties and their positions at the end of an electoral campaign. According to the hypothesis of the "knowledge gap" it should be expected that better-educated voters will also learn more during campaigns.

Gender differences in political knowledge and political learning do not seem very plausible. Still, a large number of studies have found an effect of gender in multivariate analyses: women seem to have a systematically lower political knowledge (e.g. Delli Carpini/Keeter 1996; Verba et al. 1997; Frazer/Macdonald 2003; Fraile 2014). The differences are often considerable, but they may be reduced when taking into account that men tend to guess more on multiple-choice knowledge questions (e.g. Mondak/Anderson 2004), or when different types of knowledge questions are taken into account (e.g. Dolan 2011). According to these findings, a gender effect on knowledge also seems possible in our study.

Age should also matter: as for other indicators of political involvement, the effect should be curvilinear. Lower levels of knowledge and learning among the young and the very old should be observed due to high mobility levels during adolescence and physical hindrances and declining social contacts later in life (e.g. van Deth 2013: 147). There is less exposure to politically relevant information both due to a lack of available sources and motivation to follow electoral politics. People being employed are embedded in larger social networks outside their homes and more likely to get into contact with information about parties and the electoral context. They may therefore be more likely to acquire knowledge about issue positions and to learn during election campaigns.

2.4 Cognitive dispositions for information processing

Besides their interest and their resources to gather political information, voters will also differ sharply in their cognitive styles of processing this information. In psychology, three concepts have been found to be specific-

ally useful for capturing individual differences in information processing: *Need for cognition*, *need to evaluate,* and *need for cognitive closure. Need for cognition* aims at measuring the inclination of people to deal with new information. Cacioppo and Petty (1984: 306) define the concept as "an individual's tendency to engage in and enjoy effortful cognitive endeavours". More than 100 studies present a largely consistent picture: People with high levels make more sophisticated judgments, integrate more substantial information into their judgments, and are influenced by strong rather than weak arguments (for an overview, see Cacioppo et al. 1996). In contrast, people with low levels take less time to make a judgment, use simpler heuristics, and invest less thinking effort. Some recent studies also examined the particular effects of political information processing. Holbrook (2006), for instance, analyzed the US presidential election of 2000 and found a positive effect of *need for cognition* on the ability of respondents to assess the political positions of candidates. For our study on Germany, we also expect voters with a high *need for cognition* to know more about politics as they have a higher affinity to deal with new information and may also be more willing to process ambiguous and complex campaign information. Accordingly, we expect a positive effect of *need for cognition* on political knowledge.

Need to evaluate is another concept for describing cognitive dispositions and aims at measuring how opinionated people are and how likely they judge or evaluate various aspects of their lives and their environment – independent of the cognitive effort they take to form these judgments. The concept is based on the assumption that "individuals differ in the extent to which they chronically engage in evaluative responding" (Jarvis/Petty 1996: 172). People with a high *need to evaluate* form opinions on various objects in their environments more willingly and easily, they also express more assessing thoughts about relevant and irrelevant attitude objects (Jarvis/Petty 1996). Analyzing political decision-making, Bizer et al. (2004) found that voters with a high *need to evaluate* showed more projection effects when assessing political positions and relied more often on their party identification and emotional reactions when evaluating candidates. Holbrook (2006), however, found that voters with a high *need to evaluate* were a bit better able to categorize candidates ideologically. The evidence is thus mixed. For Germany, we still expect a rather negative effect of *need to evaluate*. As the German multi-party system is considerably more complex than the American two-party system, a simple projection of own political

judgments on the positions of positively evaluated parties should more often be misleading.

The measure of *need for cognitive closure* that was developed by Kruglanski et al. (1993) tries to capture a general aversion to ambiguity and uncertainty and a tendency towards firm and definitive answers to social circumstances. It is defined as an unspecific desire to get clear answers to a given problem as well as a tendency to think in simple and rigid cognitive structures and to reach unambiguous judgments on complex issues. Accordingly, voters with a high *need for cognitive closure* should be more likely to seal themselves off from new political information during election campaigns and stick to their already defined view of the world – even if the media or the election campaign provides contradictory information. Voters with a high *need for cognitive closure* try to maintain their perceptions of parties and candidates. Overall, a high *need for cognitive closure* clearly should have negative effects on political knowledge: voters being predominately motivated to maintain their worldview will probably be less knowledgeable about politics.

2.5 Right-wing populist support and political knowledge

Recent research suggests that political orientations may constitute another dimension that affects the political knowledge of citizens. If an important part of populist right-wing rhetoric and ideology consists of stating that "elites" systematically do not tell the truth, that they mislead the public, that "mainstream" media cannot be trusted, that only right-wing leaders tell the truth, supporters of populist right-wing parties and leaders may well become less knowledgeable about politics over time. Voters with right-wing preferences, for instance, believe more often in fake news (Baptista/Gradim 2022). Populist attitudes in general have been found to be strongly associated with beliefs in conspiracy theories (Castanho et al. 2017). For the US, there have been several studies investigating Trump supporters. It has been shown that voters with low political knowledge had significantly more sympathy for Trump, relied more heavily on their emotions, and were thus more trustful about statements made by Trump (Fording/Schram 2017). Trump supporters were also less aware of being misinformed and generally knew less about policies and politics (Milner 2020).

There is also some evidence for European countries.. For Denmark, Jordan (2022) investigated supporters of the Danish People's party and

found that they are less politically knowledgeable – even when controlling for demographics and other political attitudes. Interestingly, some of these effects are attributed to a strategic issue blurring of the radical right with its voters engaging in more projection. Stanley and Czesnik (2021) studied voters in Poland and found a strong association between populist attitudes and low political knowledge. Examining populist party support in the 2019 Belgian election, Gallina et al. (2020) used the concept of political sophistication – consisting of political knowledge, participation, and interest – and found supporters of Vlaams Belang to be generally less sophisticated. Controlling for other factors, however, there was no direct effect of sophistication on populist vote choices. Van Kessel et al. (2021) differentiated political knowledge into three categories – informed, uninformed, and misinformed. In their comparative study of nine European countries, they found that voters of right-wing populist parties belonged more often to the category of being misinformed – that is they answered knowledge questions not with "don't know" but with a wrong answer. This finding indicates that supporters of right-wing parties may indeed not only disregard "mainstream" information sources with a certain level of quality control, but turn to other less valid sources that tend to be available in a differentiated information environment and become misinformed. Westle (2020) studied German voters using the ALLBUS and found that political knowledge – measured on a rather comprehensive scale consisting of questions about institutions, policies, and politicians – was negatively associated with populist attitudes.

While most of these recent studies found substantial associations between political knowledge, conspiracy beliefs, and susceptibility to misinformation on the one hand and populist attitudes or support for right-wing populist parties and leaders on the other hand, the causality and direction of the relationship is far from being clear. It may be that voters who are generally more knowledgeable in the first place do not develop populist attitudes, see through the misinformation attempts of populist leaders, and hence do not support right-wing populist parties. Political knowledge may be a safeguard against populist support (e.g. Milner 2020; Westle 2020). Or, the direction may be the other way round: voters may be appealed by the rhetoric and ideology of right-wing populist parties and their leaders and hence disregard "mainstream" information as statements of perceived "elites", turn to less qualitative information sources within their filter bubbles and therefore become misinformed and less knowledgeable about politics (e.g. Fording/Schram 2017; Baptista/Gradim 2022). Both directions seem theoretically plausible and may occur empirically. There is,

however, also the possibility that the association is just spurious and the result of omitted variables like demographics, political interest, media use or cognitive dispositions that may be related to both political knowledge and right-wing populist support. In our study, we are able to control rigorously for these factors and will examine whether political orientations independently contribute to the explanations of political knowledge. By studying not only cross-sectional knowledge but also *learning* during an election campaign, our analysis may also shed some light on the direction of the association.

2.6 Possible moderation of political orientations by media use and cognitive closure

In an explorative way, we are also looking into how political orientations are moderated by media use. We are focusing on one particularly interesting factor: social media use. One plausible mechanism of how support for the populist right is related to political knowledge could be that different social media use has different effects on voters with right-wing preferences. Given their potential skepticism about mainstream media and elites, supporters of the populist right might rely more heavily on social media to inform themselves about politics. Assuming that their social media filter bubble of like-minded peers and sources often provides less qualitative information (e.g. Alcott et al. 2019; Zhuravskaya et al. 2020), social media use could have a particularly strong negative effect on the political knowledge of right-wing supporters.

3. Data

For our analysis of political knowledge and political learning during election campaigns, we use three datasets collected around the three most recent German elections in 2013, 2017, and 2021. All three have been conducted as CATI rolling cross-section studies and included a post-election panel wave.[1] To measure our main dependent variable, political knowledge

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1 GLES (2019). Rolling Cross-Section-Wahlkampfstudie mit Nachwahl-Panelwelle (GLES 2013). *GESIS Datenarchiv, Köln. ZA5703 Datenfile Version 2.0.2,* https://doi.org/10.4232/1.13214.

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(and as derivative political learning), we employ questions asking respondents to place the German parties (in 2013 and 2017) or candidates for the position of chancellor (in 2021) on different issue scales. We thus focus on citizens' perception of the supply side of politics. In 2013, the GLES (German Longitudinal Election Study) asked about the issue stances of the parties on a continuum between lowering taxes and decreasing social spending on the one end, and more social spending and tax increases on the other. We record whether respondents are able to correctly identify parties' relative issue positions as a dichotomous variable. Our measure focuses on whether respondents were able to correctly reproduce an overarching picture of the political space on relevant issues in order to help orient themselves in the world of politics and thus inform their choice on election day. We believe that such a general understanding of the relative locations of all major political contestants – a realistic map of the political – is an important prerequisite of well-informed electoral choices[2]. At the same time, we are not too demanding on voters' ability to reproduce the German issue spaces, when even experts placed parties very close to each other on certain issues (Jolly et al. 2022). Regarding the tax issue in 2013, the economically liberal FDP has to be located to the right of the Christian Democrats (CDU) which should be placed to the right of both the Social Democrats (SPD) and the Greens. For the relative position of the Social Democrats and the Greens, the coding was generous: as both parties have rather similar positions (Jolly et al. 2022), voters were not expected to know the positions of these parties relative to each other. It was only important that both parties were placed to the left of the Christian Democrats. The German Left Party should then also be placed left to the Social Democrats and the Greens.[3]

For the 2017 election, the GLES did not ask about the taxes/spending positions but about issue stances on migration. We code respondents to be

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GLES (2022). Rolling Cross-Section-Wahlkampfstudie mit Nachwahl-Panelwelle (GLES 2017). *GESIS, Köln. ZA6803 Datenfile Version 4.1.0,* https://doi.org/10.4232/1.13948;

GLES (2022). GLES Rolling Cross-Section 2021. *GESIS, Köln. ZA7703 Datenfile Version 2.0.0,* https://doi.org/10.4232/1.13876.

2 In our view, recording the proportion of correctly classified pairs of political contestants would not adequately capture this idea; e.g., "knowing a third" of how parties are located to each other on an issue space would still not provide useful orientation to signify one's preferences in an election.

3 The position of the AfD was not asked as the AfD was a new party and not yet very popular.

knowledgeable on that question if they place the AfD on the right to the CDU and the CDU to the right of the FDP and the SPD. On this issue dimension, we were generous about the relative positions of the FDP and the SPD, as both have similar centrist positions on this issue (Jolly et al. 2022). To be counted as knowledgeable about the migration issue, we accepted both: that the FDP was seen as being left of the SPD and that the FDP was seen as being right of the SPD – as long as both parties were placed left of the CDU. Finally, our last requirement was that the Greens were placed left of the SPD. The Left party was sending rather ambiguous signals about migration, and we found a particularly high variance of perceptions for our respondents. We therefore did not include the position of the comparatively small Left Party in our measurement.

For the 2021 election study, party positions were not asked but the positions of the three candidates for chancellor – Laschet for the CDU/CSU, Scholz for the SPD, and Baerbock for the Greens. As in 2013, respondents were asked about the candidates' positions on the taxes/spending issue. Respondents were classified as placing the three candidates correctly if they placed Laschet to the right of Scholz and Laschet to the right of Baerbock. As the positions of Scholz and Baerbock differed not too much, we were again generous about the placements of Scholz and Baerbock relatively to each other – as long as respondents placed Laschet to the right of both candidates, it did not matter whether they placed Baerbock to the left of Scholz or vice versa. These requirements for only three candidates were thus much easier than for the earlier elections.

In 2013, the GLES-RCS also asked respondents about their perceptions of party positions in the post-election panel wave. This allows us to also study political learning during the election campaign. It is also operationalized as a dichotomous variable: Changes from misperceived positions during the pre-election wave to correct positioning of parties in the post-election survey are assigned the value one (success). Those with an incorrect placement in both the pre-and post-election survey and those with a correct answer in the pre-election wave but misperceiving the positions after the election[4] constitute the reference category. Respondents being able to correctly position the parties in both the pre- and post-election wave

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4 In line with a more pessimistic view on election campaigns, these respondents did apparently not benefit from the intensified information environment of campaigns but were rather getting more confused. Obviously, another reason for voters' "unlearning" can be measurement error.

are excluded from the analyses – as there was no possibility of learning. Unfortunately, in 2017 and 2021 perceptions of issue positions were not asked in the post-election panel wave, leaving us with the 2013 study as the only data point to study learning during the campaign.

Following the theoretical discussion above, we included several predictors of political learning as independent variables. On the media side, we separate between print and audio-visual formats. Differences in the quality of journalistic reporting are taken into account by differentiating between public and commercial TV stations and high-quality and low-quality newspapers. Additionally, we included social media use for political information purposes in our analysis. For 2013 and 2017, our media variables record whether a respondent indicated to use the respective medium in the week prior to her interview. As the measurement of media consumption changed in the 2021 GLES, our media variables for that year record whether a respondent indicated to use the respective medium "most frequently". The cognitive dispositions for information processing *need to evaluate*, *need for cognition,* and *need for cognitive closure* are single-item measures using five-point scales.[5] For populist right-wing support, we simply used the rating of the AfD on an 11-point evaluation scale.

The multivariate models also include controls for political interest (1-5), education (1=A-level or higher), respondent's age and age squared, gender (1=female), and the distinction between West and East Germany. All independent variables, except for the cognitive dispositions, which have only been asked in the post-election waves, are measured in the pre-election wave; models including cognitive dispositions thus have fewer respondents – only those having participated in both the pre- and post- election wave.

4. Results

Before we turn to examine the various factors explaining political knowledge in multivariate models, we take a brief look at the levels of knowledge and learning of AfD supporters and all other voters. Figure 1 shows the levels of knowledge and learning across the three elections that we study in this chapter. As we need to operationalize positional knowledge differently for each election, it is not surprising that the overall level of knowledge var-

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5 In the 2021 GLES study, the wording of the item used for *need for cognitive closure* slightly changed.

ies quite substantially across the different studies. While about 25 percent of respondents met our criteria of placing the German parties correctly on a taxes-versus-welfare-spending dimension in 2013, the number of respondents who were able to do that on the migration issue which was asked in 2017 was only about 18 percent. In 2021, the GLES rolling cross-section did not ask about party positions but about the perceived positions of the three candidates for the position of chancellor of the CDU/CSU (Laschet), the SPD (Scholz) and the Greens (Baerbock). Obviously, it is easier to place only three candidates, which explains the relatively high numbers for political knowledge measured in 2021, again on the taxes-versus-welfare-spending dimension.

Figure 1: Knowledge, learning and support for the AfD
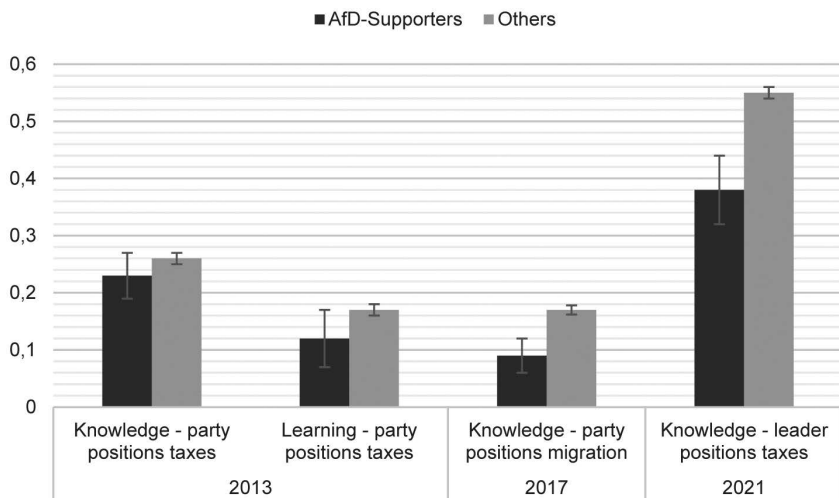
GLES Rolling Cross Sections. Share of respondents with and without knowledge about the issue space of party positions.

Table 1: Political knowledge and learning in 2013

	(1)	(2)	(3)	(4)	(5)	(6)
	Political knowledge 2013			Learning during campaign 2013		
Rating AfD	-0.04**	-0.03*	-0.03+	-0.04*	-0.04*	-0.04*
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
Sociodemographics						
Education (high)	1.10**	0.92**	0.87**	0.61**	0.54**	0.52**
	(0.07)	(0.07)	(0.08)	(0.10)	(0.10)	(0.11)
Political interest	0.60**	0.55**	0.56**	0.33**	0.31**	0.31**
	(0.04)	(0.04)	(0.05)	(0.06)	(0.06)	(0.06)
Age	0.06**	0.06**	0.07**	0.06**	0.06**	0.06**
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.02)
Age^2	-0.001**	-0.001**	-0.001**	-0.001**	-0.001**	-0.001**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (female)	-0.67**	-0.72**	-0.70**	-0.45**	-0.46**	-0.48**
	(0.07)	(0.07)	(0.08)	(0.10)	(0.10)	(0.10)
West Germany	0.08	-0.00	-0.03	0.34**	0.31**	0.29**
	(0.08)	(0.08)	(0.09)	(0.12)	(0.12)	(0.12)
Media						
Tabloid (BILD)		-0.43**	-0.36*		-0.14	-0.08
		(0.12)	(0.14)		(0.17)	(0.17)
Quality newspaper		0.36**	0.38**		0.11	0.11
		(0.09)	(0.11)		(0.15)	(0.14)
TV news: public		0.30**	0.17		0.12	0.13
		(0.09)	(0.11)		(0.14)	(0.14)
TV news: commercial		-0.74**	-0.65**		-0.36**	-0.34**
		(0.09)	(0.11)		(0.12)	(0.13)
Social media use		0.02	0.12		-0.05	-0.01
		(0.12)	(0.15)		(0.20)	(0.20)
Cognitive dispositions						
Need to evaluate			-0.12**			-0.11*
			(0.04)			(0.05)
Need for cognition			0.10**			0.08*
			(0.03)			(0.04)
Need for cognitive closure			-0.16**			-0.13**
			(0.04)			(0.05)
Constant	-4.54**	-4.29**	-3.474**	-4.37**	-4.20**	-3.71**
	(0.33)	(0.35)	(0.466)	(0.53)	(0.55)	(0.60)
Observations	5639	5639	3884	3246	3246	3156
McFadden Pseudo R^2	0.14	0.16	0.16	0.05	0.06	0.06

GLES Rolling Cross Section. Displayed are coefficients of logistic regressions.
All variables are transformed to an interval from 0 to 1. Standard errors in parentheses;
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$

The difference between AfD-supporters[6] and others was not very big in 2013, but increased substantially over the course of the three elections. In 2017, only about nine percent of AfD-supporters could correctly place the parties on the migration issue, while 17 percent of the other respondents were able to do that. In 2021, about 38 percent of AfD-supporters and 55 percent of the other respondents could place the candidates on the spending vs taxes dimension. Even though the measures were differently for the various elections, these numbers suggest that the perceptions of voters of the populist right and other voters diverged over time and the knowledge about important policy positions of political actors were very unevenly distributed in 2017 and 2021. The measure of political learning during the campaign, which we could only obtain in 2013, indicates that AfD-supporters not only knew less about the political positions of parties but also that they were less likely to learn about these positions during the election campaign: about 17 percent of the other respondents who were not able to place the parties correctly in the pre-election survey were able to place them correctly in the post-election survey. Among the AfD-support-ers, this was true for only about eleven percent.

These differences between AfD-supporters and other voters may be caused by several factors: different demographics, different political in-terest, varying media use or different cognitive dispositions for information processing, all of which have been shown to correlate with political know-ledge. In a next step, we will therefore examine these factors in combination with AfD preferences. Table 1 shows the results of logistic regression models for political knowledge and political learning in 2013.

Model 1 of table 1 shows the expected strong effects of education and gender. Additionally, we find a curvilinear association of age: political knowledge generally increases the older voters are getting, but decreases again for very old voters. We find no significant effect for East and West Germany. Model 2 adds media usage of voters. Again, we find many of the expected effects: knowledge increases for respondents reading quality newspapers and watching TV news on public broadcasts and it decreases for respondents reading a tabloid and watching news on commercial TV stations. For social media use, we find no effect. Looking at the indicators

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6 Our indicator for AfD-support here is based on party ratings for the AfD. To illustrate the descriptive results, we dichotomized support into two groups, those supporting the AfD (by giving the AfD a strong positive rating: +3, +4, +5 on the eleven-point scale ranging from -5 to +5) and all others not supporting the AfD.

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for cognitive dispositions in model 3, all three have the expected effects. A high need to evaluate and a high need for cognitive closure both lead to less knowledge, whereas a high need for cognition leads to more political knowledge. Interestingly, the effect of the AfD rating is very similar in all three models. Although rather small, the effect does not seem to be substantially mediated by the additional factors in models 2 and 3. We are thus confident that populist attitudes do indeed have an independent effect on political knowledge. Turning to the models of campaign learning, we find that learning in the 2013 election campaign is positively associated with education, political interest, age, being male, and being a resident of West Germany. Interestingly, media usage is less important for learning effects than for pre-election knowledge. Cognitive dispositions also had the expected effects on learning: voters with a need for closure are less likely to learn new information, voters who like to think learn more, and voters with strong opinions on many issues learn less. On top of all these factors, we still find significant negative effects for the rating of the AfD in all three models: the more positive respondents view the AfD, the less likely they learn about the positions of the parties in the campaign.

Table 2 displays the results for political knowledge in 2017 and 2021. In 2017, political knowledge is again associated with education, political interest, being older (but not very old), being male, reading a quality newspaper, and watching the news on public broadcasts and not on commercial TV. For reading a tabloid and social media use, the East/West distinction, and cognitive dispositions we find no significant effects. The rating for the AfD had a rather strong negative effect in 2017. Again, we find no indication that this effect should be ascribed to demographics, interest, media use, or cognitive dispositions as we are controlling for these factors.

Results are very similar in 2021. In addition to the effects of education, interest, age, gender, quality newspapers, and public TV news, there is also a significant effect of the need for cognitive closure: voters with a higher need for closure are less knowledgeable about the positions of the three candidates for chancellor. Controlling for all these factors, we still find a significant effect of the AfD rating: the more positive the respondents view the AfD, the less knowledgeable they are about the candidate positions on the taxes vs. spending dimension.

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Table 2: Political knowledge in 2017 and 2021

	(1)	(2)	(3)	(4)	(5)	(6)
	Political knowledge 2017			Political knowledge 2021		
Rating AfD	-0.08**	-0.07**	-0.08**	-0.10**	-0.08**	-0.06**
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Sociodemographics						
Education (high)	0.47**	0.40**	0.39**	0.62**	0.58**	0.52**
	(0.07)	(0.07)	(0.09)	(0.05)	(0.05)	(0.07)
Political interest	0.36**	0.32**	0.27**	0.52**	0.49**	0.44**
	(0.04)	(0.04)	(0.05)	(0.0302)	(0.03)	(0.04)
Age	0.05**	0.06**	0.07**	0.04**	0.04**	0.03*
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Age^2	-0.001**	-0.001**	-0.001**	-0.001**	-0.001**	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Gender (female)	-0.52**	-0.50**	-0.57**	-0.50**	-0.50**	-0.47**
	(0.07)	(0.07)	(0.09)	(0.05)	(0.05)	(0.07)
West Germany	-0.03	-0.06	-0.068	0.23**	0.19**	0.10
	(0.08)	(0.08)	(0.09)	(0.06)	(0.06)	(0.08)
Media						
Tabloid (BILD)		-0.11	0.05		0.11	0.23
		(0.11)	(0.14)		(0.21)	(0.29)
Quality newspaper		0.33**	0.35**		0.32**	0.32**
		(0.08)	(0.10)		(0.08)	(0.10)
TV news: public		0.18*	0.06		0.36**	0.27**
		(0.09)	(0.11)		(0.06)	(0.08)
TV news: commercial		-0.29**	-0.25*		-0.17	-0.17
		(0.09)	(0.11)		(0.14)	(0.19)
Social media use		0.10	0.14		0.03	0.11
		(0.10)	(0.12)		(0.06)	(0.08)
Cognitive dispositions						
Need to evaluate			0.02			-0.04
			(0.04)			(0.03)
Need for cognition			0.04			0.00
			(0.03)			(0.03)
Need for cognitive closure			-0.06			-0.14**
			(0.04)			(0.03)
Constant	-3.61**	-3.71**	-3.69**	-2.63**	-2.70**	-1.49**
	(0.32)	(0.34)	(0.51)	(0.25)	(0.26)	(0.39)
Observations	7354	7354	4081	6895	6895	4268
McFadden Pseudo R^2	0.06	0.06	0.06	0.10	0.10	0.09

GLES Rolling Cross Sections. Displayed are coefficients of logistic regressions.
All variables are transformed to an interval from 0 to 1. Standard errors in parentheses;
$^+ p < 0.10$, $^* p < 0.05$, $^{**} p < 0.01$

To get a better indication of the magnitude of the effects of right-wing preferences, figures 2 and 3 show the marginal effects of the AfD rating

on political knowledge and political learning across the three elections.[7] Figure 2 indicates that for 2013 voters rating the AfD most negatively have a predicted probability of knowing about the relative party positions of about 0.23 and voters rating the AfD most positively have a predicted probability of about 0.18. The effect is similar in size for campaign learning: For those respondents rating the AfD lowest, the prediction of learning is 0.17 and for those rating the AfD highest, it is 0.12.

Figure 2: Marginal effects of right-wing support on knowledge and learning in 2013
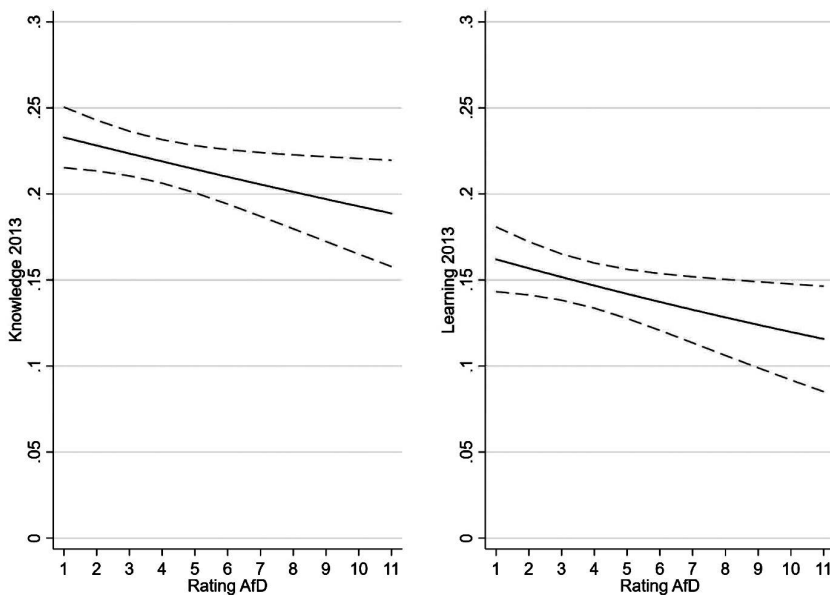
GLES Rolling Cross Section 2013. Predicted probabilities of knowledge and learning (based on models 2 and 5 of table 1).

As shown in figure 3, the magnitude of the effects was much bigger in 2017 and 2021. For 2017, the probability of knowing the relative party positions

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7 The predictions are made based on models 2 and 5 of tables 1 and 2 – with other covariates fixed at their means. We chose models 2 and 5 here because they include all respondents of the pre-election wave. Models 3 and 6 which include only those respondents participating in both the pre-election and the post-election wave, however, show an almost identical picture.

on the migration issue decreases from 0.16 to 0.08 depending on the favorability of the AfD rating. For 2021, the probability of knowing the relative candidate positions on the taxes versus spending dimension decreases from 0.58 to 0.38. While the effects of the AfD rating were thus only modest in 2013, they were quite substantial in 2017 and 2021: in total, voters strongly favoring the AfD were only about half as knowledgeable as voters strongly opposing the AfD. Populist political orientations are thus rather strongly associated with citizens' knowledge of politics and their ability to reconstruct a realistic map of the political world. This holds true even when we control for a comprehensive set of other correlates of political knowledge. Political perceptions of right-wing voters were rather distorted – and became more so over the course of the three elections. One possible reason for that trend could be the development of the AfD: Throughout the three elections, the party became more extreme both in its anti-establishment rhetoric and its policies. Mirroring this development, its supporters may have turned away from mainstream politics.

Figure 3: Marginal effects of right-wing support on knowledge in 2017 and 2021
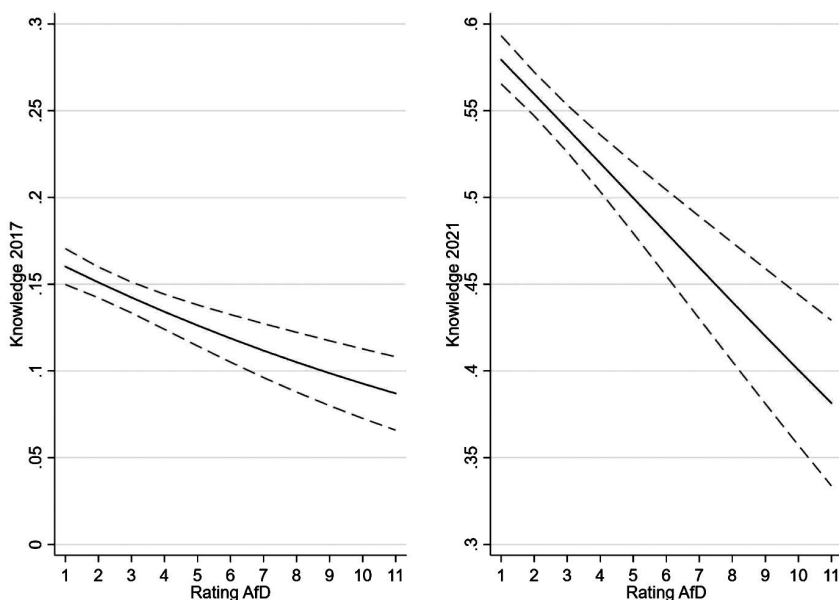
GLES Rolling Cross Section 2017 and 2021. Predicted probabilities of knowledge (based on models 2 and 5 of table 2).

Finally, we take an exploratory look at the possible moderation of right-wing populist support by social media use and cognitive dispositions for closure. Figure 4 shows the effect of the rating of the AfD on political knowledge dependent on whether one uses social media for political information (the interaction effect was calculated based on model 2 in table 2 and is only shown graphically here). For 2017, we find a substantial moderation for social media use: support for the AfD had a much stronger negative effect for those using social media than for those using no social media. In contrast to the overall null effect of social media in 2017, shown in table 2, for voters with very positive views of the AfD, figure 4 shows negative effects of social media. Apparently, social media use had only negative effects in 2017 if voters had right-wing orientations. As we calculated the same interaction for 2013 and 2021 and found much smaller effects, this finding can only be interpreted as indicative of a possible moderation.

Figure 4: Interaction effects AfD rating and social media use on political knowledge
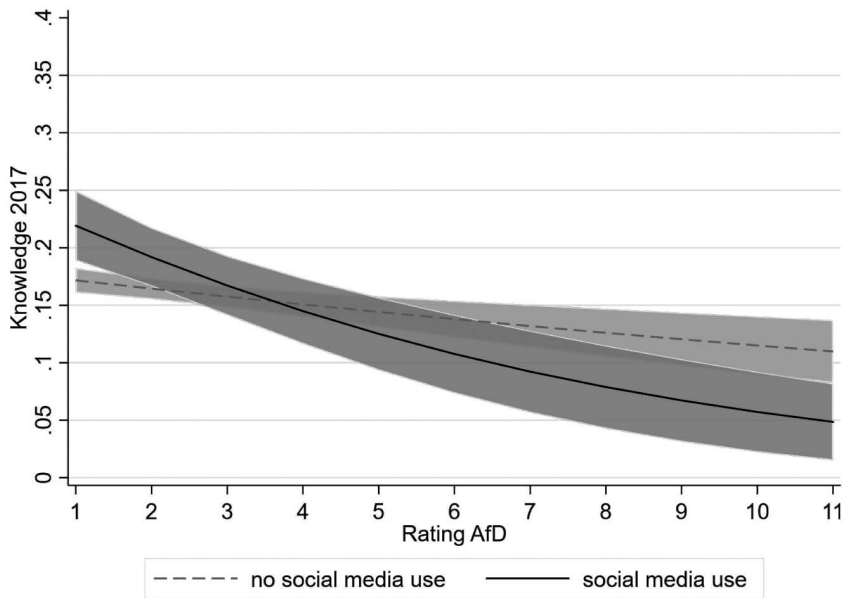
GLES Rolling Cross Section 2017. Interaction of AfD rating and social media on political knowledge.

5. Conclusion

If elections are supposed to be about the political direction of a country and about how important issues in a society are settled, it would be helpful for citizens to know about the various stances of parties and candidates in order to signify their preferences. In this study, we have examined such issue stance knowledge and its predictors for the German electorate in the last three federal elections. The analysis revealed that knowledge about the relative positions of parties on important issues like taxes and welfare or migration is very far from being a given. Many voters do not have this knowledge when they make up their minds before an election. Among the strongest factors in our analysis contributing to knowing about relative issue positions are education and political interest. Voters with more education and a stronger interest have more capacity and motivation to learn about issue positions of parties and candidates.

Information flows from mass media play another important role: reading quality newspapers and watching the news on public broadcasts increase knowledge, while watching the news on commercial TV channels decreases knowledge. These results are consistent in all three election studies. The findings on reading the German tabloid "Bild" are less consistent, a strong negative effect is only found for the 2013 federal election. Overall, our results on information flows are, however, very clear: even when controlling for demographics, interest, and education, consumption of high-quality media is quite beneficial for voters. Media content does matter. For social media use, we found no clear pattern. Given the potentially quite diverse nature of social media content, an overall measure of social media is probably too broad to capture important quality differences. Acquiring political knowledge also depends on cognitive dispositions of processing information. We found that looking at these individual differences may enhance explanations of political knowledge: voters with a high *need for cognition* tend to have more political knowledge and voters with a high *need for cognitive closure* as well as *need to evaluate* tend to know less. For the three elections, the effect of *need for cognitive closure* is most consistent: when voters mainly try to maintain a closed worldview, they are more likely to be ill-informed about the actual issue stances of parties and candidates.

It is quite remarkable that right-wing populist support adds to all these variables in explaining political knowledge. Even when we extensively control for interest, education, media use, and cognitive dispositions, right-wing preferences have a substantial negative effect on knowledge. The more

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voters are in support of the AfD, the less they know. This finding contributes to the growing international literature on associations between right-wing populist attitudes and lower political knowledge (e.g. Zhuravskaya et al. 2020, Baptista/Gradim 2022). As discussed above, the literature so far is not that clear about the direction of the relationship. Both seem plausible: voters with little political knowledge may get more attracted by right-wing populist messages and actors. Supporting these parties and actors may also lead voters to trust their messages, disregarding other political information, and get less knowledgeable about politics over time. For our cross-sectional results, we cannot discern the direction either. Our results on learning in the 2013 election, however, point to some support of the second mechanism: Voters with preferences for the AfD learned less about the issue stances of parties during the election campaign than other voters, again extensively controlling for other contributing factors for learning. Apparently, it is not only that right-wing populist parties are more appealing to less knowledgeable voters, but also that those voters are getting relatively less knowledgeable – even when there is plenty of information during an election campaign. Both mechanisms together may lead to a vicious circle of right-wing populist parties and voters reinforcing their misconceptions and (wrong) perceptions about the political world, leaving right-wing supporters less and less knowledgeable about the options they are facing at election time. Interestingly, our results also show that the effect of right-wing political orientations increased over time. In 2021, differences between AfD supporters and others were much more pronounced than in 2013. As the AfD got more extreme over time, we found that its supporters also became less knowledgeable. Finally, we looked exploratively into possible moderation effects and found some evidence that the negative effects of right-wing preferences on political knowledge may be amplified by the use of social media. These findings are only a first step to understanding the mechanisms of how political orientations translate into different levels of political knowledge. Future research needs to look more thoroughly at these mechanisms.

If voters cannot differentiate between issue stances of parties and leaders and misconceive where they stand on important political issues, it becomes harder for them to make sense of elections, government formation, and policy decisions. Consequently, they might also get more frustrated with politics. Right-wing populists may use this development strategically and reinforce the feeling that other "mainstream" parties are all the same, blurring the differences of competitors and thereby fostering political ignorance

among their supporters. Voters not knowing what they do (cf. Schmitt-Beck 1993) cannot be good for democracies. And voters' perceptions and misperceptions of the political issue space drifting further apart – depending on the political orientations of voters – is probably not good news either.

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