Appendix to 'Coming of Voting Age. Evidence from a Natural Experiment on the Effects of Electoral Eligibility on Citizens' Information-Seeking Behavior'

21 February 2024

1 State-of-the-art

Table A.1: Overview over relevant empirical findings summarized in section 'The state of the debate and empirical findings' of the main text.

Article	Approach	Data	Research design	Results
Chan and Clayton (2006)	Comparison of different age groups	1991 and 2001 waves of the British Household Panel Survey (BHPS) covering respondents 16 years and older and the Young People module of the 1998 British Social Attitudes Survey (YBSA) covering respondents aged 12–19	Cross-sectional comparison of age groups	Adolescent in the BHPS have lower political interest and less identify with a party than adults. Teenagers and adolescents in the YBSA give less correct answers to political knowledge questions than adults.
Wagner, Johann and Kritzinger (2012)	Comparison of different age groups	Survey of the Austrian population before the 2009 European Parliament elections, oversampling 16-25 year olds	Cross-sectional comparison of 16-17, 18-21, 22-25, 25-30 year old and older respondents	No significant differences in political knowledge or interest between age groups were found.
Stiers, Hooghe and Goubin (2020)	Comparison of different age groups	Survey of 15-20 year olds and their parents in Ghent, Belgium, conducted after the 2018 municipal elections	Cross-sectional comparison of young respondents with their parents	Young adults turned out to be as likely as their parents to cast a congruent vote. Congruence is measured as the difference between respondents' issue positions and their preferred party's position on the same issues.
Lang (2023)	Comparison of different age groups	Survey of the German population before the 2021 German national parliamentary elections, oversampling 16-17 year olds	Cross-sectional comparison of 16-17, 18-29, 30-49, 50-64, 65-75 year olds	No significant differences in the congruence of vote choices between the age groups. Congruence is measured as the difference between respondents' issue positions and their preferred party's position on the same issues.

Bergh (2013)	Comparison of underage citizens across different contexts	Survey of Norwegian high school students aged 16 to 18 conducted after local elections in 2021.	Cross-sectional comparison of 16-17 and 18 year olds in trial municipalities and no-trial municipalities	Political interest was higher among all age groups in trial municipalities than in no-trial municipalities and interest was slightly lower among underage citizens in both municipalities.
Zeglovits and Zandonella (2013)	Comparison of underage citizens across different contexts	EUYOUPART survey of 15-25 year old Austrians in 2004 and 'Votes at 16' survey of 16-18 year old Austrians conducted after the 2018 national elections.	Comparison of ineligible 16-17 year olds in 2004 to eligible 16-17 year olds in 2008	Political interest was higher among eligible 16-17 year olds in 2008 compared to ineligible 16-17 year olds in 2004.
Eichhorn (2018)	Comparison of underage citizens across different contexts	Population survey conducted in Scotland and the rest of the UK ahead of the 2015 national election, including a boost sample of 16- to 17-year olds.	Cross-sectional comparison of 16-17 year olds Scots who had experience the 2014 Independence referendum with voting age 18 to respondents of the same age in the rest of the UK who did not directly experience the referendum.	Political interest was higher among Scottish respondents who experienced the 2014 referendum than among 16-17 year olds in the rest of the UK.
Rosenqvist (2020)	Quasi-experimental approach	Swedish register data containg information on young citizens birth dates and high school social science grades.	RDD using birthdates relative to eligibility date as forcing variable and grades obtained in high social science classes as dependent variable	There was no effect of electoral eligibility of high school social science grades, which the author interprets as proxy for political knowledge.

Stiers, Hooghe and Dassonneville (2020)	Quasi-experimental approach	Survey of 15-20 year olds and their parents in Ghent, Belgium, conducted after the 2018 municipal elections	RDD using birthdates relative to eligibility date as forcing variable and respondents' self-assessed attention to politics as dependent variable	Eligibility has a positive effect on respondents' self-assessed attention to politics.
Hooghe and Stiers (2022)	Quasi-experimental approach	Survey of 15-20 year olds and their parents in Ghent, Belgium, conducted after the 2018 municipal elections	RDD using birthdates relative to eligibility date as forcing variable and political converstations in the family as dependent variable	Eligibility has a positive effect on the frequency of conversations about politics in the family, reported by both children and parents.

2 Case description

The German case can provide important insights into the effect of electoral eligibility at different ages because its federal system gives its 16 states the right to set the electoral law for state and municipal elections. In Germany, as elsewhere, centre-left parties tend to support reforms to lower the voting age, while the main centre-right party, the Christian Democrats, mostly oppose them. In a federal system like Germany, with its differing coalition patterns at the state level, this has led to a situation in which eleven out of Germany's 16 states have already lowered the voting age from 18 to 16, either for municipal elections only or for both state and municipal elections (Leininger & Faas, 2020). In our study, we cover three states—two that have lowered the voting age to 16 and one where the voting age continues to be 18—to analyse the consequences of these reforms. These states are Schleswig-Holstein, Brandenburg and Saxony—the latter two border each other and are located in Eastern Germany, whereas Schleswig-Holstein ist located in northwestern Germany. We deliberately chose Schleswig-Holstein, Brandenburg, and Saxony, because there we were able to cover a first-ever state election with voting age 16 (in Schleswig-Holstein), a second-ever state election with a lowered voting age of 16 (in Brandenburg) and a state election with voting age 18 (Saxony)—see Table A.2 for an overview.

Table A.2: Overview of the elections covered

State	Schleswig-Holstein	Brandenburg	Saxony
Voting age	16	16	18
Election date	7 May 2017	1 September 2019	1 September 2019
Electoral system	MMP	MMP	MMP
Eligible population	2.3 mio.	2.1 mio.	3.1 mio.
Eligible population aged 16 or 17	57,000	51,000	0
Field time	8 May – 6 June 2017	1 Sep – 30 Sep 2019	1 Sep – 30 Sep 2019
Target population	15- to 18-year-olds	15- to 24-year-olds	15- to 24-year-olds
Letters sent	22,133	26,784	18,216
Response rate	18.4%	14.8%	15.0%
Sample size	3,897	3,961	2,738

In all three states, elections to the state parliament were held based on a mixed-member proportional representation (MMP) system, which is also used in federal elections and many other state elections in Germany. Voters have two votes: one to give to a state-wide party list and another one to give to a local candidate in their constituency. However, the electoral laws in the three federal states differ in one fundamentally important point: in Saxony, the age limit for the right to vote and stand for election remains at 18 years, whereas in Schleswig-Holstein and Brandenburg, the age limit for the right to vote was lowered to 16 years in 2013 and 2011 respectively. The electoral register for all elections in Germany is based on the population register, which is administered at the municipal level. Any citizen reaching the required age on the day of the election at the latest is automatically added to the electoral register by the responsible returning officer. All eligible citizens receive a notification about the upcoming election via mail, informing them about their polling station and the possibility of applying for a postal ballot to be sent to them.

In Schleswig-Holstein, the 2017 state election was the first-ever election to be held with a voting age of 16. About 57,000 underage citizens in Schleswig-Holstein (2.5% of the eligible population

of 2.3 million) were called to the polls. In contrast, in Brandenburg, the lowered voting age came into effect for the first time in 2014, and, therefore, the 2019 state election was the second time that 16- and 17-year-old citizens of Brandenburg were able to vote. Around 100,000 citizens in Brandenburg were called upon to cast their votes for the first time in their lives; around 51,000 were minors (i.e., 16- and 17-year-olds), representing 1.7% of Brandenburg's 2.1 million eligible citizens. In Saxony, around 150,000 people (aged between 18 and 22 years) were allowed to vote for the first time in their lives in the 2019 state election. Hence, among 3.3 million eligible citizens in Saxony, 4.5% were potential first-time voters. The cases of Brandenburg and Saxony stand out because the state elections in the adjacent states were held on the same day: 1 September 2019. Furthermore, the two states are similar in many ways—for, instance, turnout rates were similar across the three states—but differ in the voting age.

Table A.3 provides information on the participation rates in three elections and compares them against self-reported turnout in our survey. Not surprisingly, our survey overestimates turnout. Overreporting of turnout is a well-known problem in election surveys, due to overrepresentation of actual voters among respondents and overreporting of voting by actual non-voters (Karp and Brockington 2005; Sciarini and Goldberg 2016). The extent of overreporting in our survey is not surprising given the tight budget on which it was conducted, and in fact compares quite favorably to the turnout overreporting in Germany's national election study, the German Longitudinal Election Study (GLES). The last two columns of A.3 compare actual turnout rates in 2017 and 2021 with raw turnout rates derived from the GLES post-election cross-sections.[1]

Thanks to representative election statistics,[2] we also know how voter turnout varies across different age groups in Brandenburg and Saxony.[3] The state returning officer calculates the representative election statistics based on the results of a stratified random sample of electoral districts. In these

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[1]The 2017 GLES post-election cross-section was conducted as a register-based CAPI survey, the 2021 iteration was conduced as a register-based mixed-mode survey (respondent were able to choose between paper questionnaire or CAWI).

[2]"Repräsentative Wahlstatistik" in German.

[3]Schleswig-Holstein does not compile a "Repräsentative Wahlstatistik" since 2012. Hence, no cohort-specific turnout rates are available for the 2017 election.

polling stations, voters receive ballot papers which mention the gender and age group to which a voter belongs. These so-called representative election statistics make it possible to compare the turnout of young people, young adults and older citizens. In order to preserve the anonymity of the voters concerned, only age groups spanning several years are printed on the ballot papers.

Table A.3: Participation rates in the elections covered

	Schleswig-Holstein 2017	Brandenburg 2019	Sachsen 2019	GLES 2017	GLES 2021
Overall turnout	64.2	61.3	66.5	76.2	76.6
Turnout among 16- to 17-year-olds	-	58	-	-	-
Turnout among 18- to 21-year-olds	-	48.2	61.5	-	-
Turnout in survey	81.3	86	87.6	89.9	95.4

3 Study description

3.1 Survey design

Our research is based on two separate surveys that we carried out in May 2017 in Schleswig-Holstein and in September 2019 in Brandenburg and Saxony. We obtained the addresses of potential respondents from municipal population registers and sent them a letter inviting them to an online survey. 67,133 young people in the three states received a postal invitation to participate in our survey immediately after the state elections. In Schleswig-Holstein, we sent out 21,133 letters to which 3,897 young people reacted (a response rate of 18.4%), of which 3,635 completed the survey. In Brandenburg and Saxony we sent out 45,000 letters in total. In Brandenburg, 3,961 15- to 24-year-olds took part and 2,738 in Saxony. The response rate was very similar in both federal states, 14.8% and 15%, respectively. The letters we mailed to our participant pool included the URL to our online survey and a personal access code to ensure that only the target population could access the

survey and participate once. In the latter two states, 15,000 randomly selected people who had not participated in our survey within the first week of our field time also received a reminder letter. In order to motivate as many as possible to participate, we raffled off money, in Schleswig-Holstein, and vouchers, in Brandenburg and Saxony, worth between 10 and 500 euros among all participants. To summarize, we have surveyed 10,596 respondents aged between 15 and 24 years; of these 3,402 16- and 17-year-olds were eligible and 870 16- and 17-year-olds had not yet not been enfranchised.

The survey was conducted in full compliance with national and European data protection laws at the time. It did not pose any risks or harm to individuals or groups who participated. The survey was carried out anonymously and did not entail deception or include any sensitive items. The unique feature of our study, in contrast to ordinary election studies or population surveys more generally, is that the target population includes minors, specifically citizens who were between 15 and 17 years old at the time of the state election. Consultations with various experts, including the project consulting of GESIS Leibniz Institute for the Social Sciences, revealed no fundamental objections to contacting minors for survey research. According to the Council of German Market and Social Research Institute's 'Guideline for Surveying Minors'[4], 14- to 17-year-olds can be principally thought of as capable of informed consent when it comes to participation in a survey. In our invitation letter to potential respondents, we specifically asked minors to discuss their possible participation in our survey with their parents.

Due to budget constraints, it was not possible for us to draw and contact a random sample of municipalities and ask them for extracts from the population register. Instead, we focused on the largest cities of Schleswig-Holstein exclusively to maximize the number of potential respondents we could contact. In Brandenburg, we focused on the state's largest cities along with a very few rural towns, and we collected addresses from similar-sized municipalities in Saxony. In most cases, municipalities provided a full list of citizens in the relevant age range, and we contacted all of them.

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[4] Arbeitskreis Deutscher Markt- und Sozialforschungsinstitute "Richtlinie für die Befragung von Minderjährigen" (https://www.adm-ev.de/wp-content/uploads/2021/01/RL-Minderjaehrigen-neu-2021.pdf, last accessed on 19 March 2021)

Due to this sampling procedure, we cannot and do not claim representativity of our descriptive results for the young population at-large because citizens from urban areas are grossly overestimated in our sample.

3.2 Questionnaire

Below we list the original wording and English translation of the items that we used to code the variables in our analyses.

Table A.4: Original wording and English translation of all items used to code variables

Item	Wording (Original SH)	Wording (English)
Political Interest (SH)	Wenn Sie jetzt einmal ganz allgemein an Politik denken: Wie stark interessieren Sie sich für Politik? 1. Sehr stark 2. Stark 3. Mittelmäßig 4. Weniger stark 5. Überhaupt nicht	If you think about politics in general, how interested are you in politics? 1. very strongly 2. strongly 3. moderately 4. not that strongly 5. not at all
Political Interest (BB/SN)	Wie stark interessieren Sie sich für Politik? 1. Überhaupt nicht 2. Weniger stark 3. Mittelmäßig 4. Stark 5. Sehr stark	How interested are you in politics? 1. not at all 2. not that strongly 3. moderately 4. strongly 5. very strongly
Subjective Class (SH/BB/SN)	Es wird heute viel über die verschiedenen Bevölkerungsschichten gesprochen. Welcher dieser Schichten würden Sie Ihre Familie zurechnen? 1. Unterschicht 2. Arbeiterschicht 3. Untere Mittelschicht 4. Mittlere Mittelschicht 5. Obere Mittelschicht 6. Oberschicht	There is a lot of talk today about the different social classes of the population. In which of these classes would you classify your family? 1. lower class 2. working class 3. lower middle class 4. middle middle class 5. upper middle class 6. upper class

Table A.4: Original wording and English translation of all items used to code variables *(continued)*

Item	Wording (Original SH)	Wording (English)
Duty to Vote (SH)	Im Folgenden finden Sie einige Aussagen rund um Wahlen. Bitte geben Sie jeweils an, inwieweit Sie den einzelnen Aussagen zustimmen. In der Demokratie ist es die Pflicht jedes Bürgers, sich regelmäßig an Wahlen zu beteiligen. 1. Stimme voll und ganz zu 2. Stimme eher zu 3. Teils/teils 4. Stimme eher nicht zu 5. Stimme überhaupt nicht zu	Below you will find a number of statements relating to elections. Please indicate the extent to which you agree with each statement. In a democracy, it is the duty of every citizen to participate in elections on a regular basis. 1. agree completely 2. rather agree 3. partly agree 4. rather disagree 5. do not agree at all
Duty to Vote (BB/SN)	Es gibt zu verschiedenen politischen Themen unterschiedliche Meinungen. Wie ist das bei Ihnen: Wie stehen Sie zu folgenden Aussagen? In der Demokratie ist es die Pflicht jedes Bürgers, sich regelmäßig an Wahlen zu beteiligen. 1. Stimme überhaupt nicht zu 2. Stimme eher nicht zu 3. Teils/teils 4. Stimme eher zu 5. Stimme voll und ganz zu 6. Weiß nicht	There are different opinions on different political issues. How about you: How do you feel about the following statements? In a democracy, it is the duty of every citizen to participate regularly in elections. 1. do not agree at all 2. rather disagree 3. partly agree 4. rather agree 5. agree completely 6. do not know

Table A.4: Original wording and English translation of all items used to code variables *(continued)*

Item	Wording (Original SH)	Wording (English)
Internal Efficacy (SH)	Im Folgenden finden Sie einige Aussagen rund um Wahlen. Bitte geben Sie jeweils an, inwieweit Sie den einzelnen Aussagen zustimmen. Ich traue mir zu, in einer Gruppe, die sich mit politischen Fragen befasst, eine aktive Rolle zu übernehmen. 1. Stimme voll und ganz zu 2. Stimme eher zu 3. Teils/teils 4. Stimme eher nicht zu 5. Stimme überhaupt nicht zu	Below you will find a number of statements relating to elections. Please indicate the extent to which you agree with each statement. I trust myself to take an active role in a group that deals with political issues. 1. agree completely 2. rather agree 3. partly agree 4. rather disagree 5. do not agree at all
Internal Efficacy (BB/SN, multiple items)	Inwiefern treffen die folgenden Aussagen auf Sie persönlich zu? - Wichtige politische Fragen kann ich gut verstehen und einschätzen. - Ich traue mir zu, mich an einem Gespräch über politische Fragen aktiv zu beteiligen. 1. Stimme überhaupt nicht zu 2. Stimme eher nicht zu 3. Teils/teils 4. Stimme eher zu 5. Stimme voll und ganz zu 6. Weiß nicht	To what extent do the following statements apply to you personally? - I can understand and assess important political issues well. - I feel confident to actively participate in a conversation about political issues. 1. do not agree at all 2. rather disagree 3. partly agree 4. rather agree 5. agree completely 6. do not know
External Efficacy (SH)	Im Folgenden finden Sie einige Aussagen rund um Wahlen. Bitte geben Sie jeweils an, inwieweit Sie den einzelnen Aussagen zustimmen. Politiker kümmern sich nicht darum, was junge Leute wie ich denken. 1. Stimme voll und ganz zu 2. Stimme eher zu 3. Teils/teils 4. Stimme eher nicht zu 5. Stimme überhaupt nicht zu	Below you will find a number of statements relating to elections. Please indicate the extent to which you agree with each statement. Politicians do not care what young people like me think. 1. agree completely 2. rather agree 3. partly agree 4. rather disagree 5. do not agree at all

Table A.4: Original wording and English translation of all items used to code variables *(continued)*

Item	Wording (Original SH)	Wording (English)
External Efficacy (BB/SN, multiple Items)	Es gibt zu verschiedenen politischen Themen unterschiedliche Meinungen. Wie ist das bei Ihnen: Wie stehen Sie zu folgenden Aussagen? - Die Politiker kümmern sich nicht darum, was einfache Leute denken. - Die Politiker bemühen sich um einen engen Kontakt zur Bevölkerung. 1. Stimme überhaupt nicht zu 2. Stimme eher nicht zu 3. Teils/teils 4. Stimme eher zu 5. Stimme voll und ganz zu 6. Weiß nicht	There are different opinions on different political issues. How about you: How do you feel about the following statements? - Politicians don't care what ordinary people think. - Politicians strive to maintain close contact with the population. 1. do not agree at all 2. rather disagree 3. partly/partly 4. rather agree 5. agree completely 6. do not know
Conversation about politics (Family) (SH)	Wenn Sie jetzt einmal an andere Personen in Ihrem Umfeld denken: An wie vielen Tagen haben Sie mit folgenden Personen in der letzten Woche vor der Wahl über den Wahlkampf und die Parteien gesprochen? Mit Ihrer Familie 1. Gar nicht 2. 1 Tag 3. 2 Tage 4. 3 Tage 5. 4 Tage 6. 5 Tage 7. 6 Tage 8. 7 Tage 9. Trifft nicht zu	If you now think about other people in your environment: On how many days did you talk about the election campaign and the parties with the following people in the last week before the election? With your family 1. not at all 2. 1 day 3. 2 days 4. 3 days 5. 4 days 6. 5 days 7. 6 days 8. 7 days 9. does not apply
Conversation about politics (Family) (BB/SN)	Wenn Sie jetzt einmal an andere Personen in Ihrem Umfeld denken: An wie vielen Tagen haben Sie mit folgenden Personen in der letzten Woche vor der Wahl über den Wahlkampf und die Parteien gesprochen? Mit Ihren Eltern 1. Gar nicht 2. 1 Tag 3. 2 Tage 4. 3 Tage 5. 4 Tage 6. 5 Tage 7. 6 Tage 8. 7 Tage 9. Trifft nicht zu	If you now think about other people in your environment: On how many days did you talk about the election campaign and the parties with the following people in the last week before the election? With your parents 1. not at all 2. 1 day 3. 2 days 4. 3 days 5. 4 days 6. 5 days 7. 6 days 8. 7 days 9. does not apply

Table A.4: Original wording and English translation of all items used to code variables *(continued)*

Item	Wording (Original SH)	Wording (English)
Conversation about politics (Friends) (SH)	Wenn Sie jetzt einmal an andere Personen in Ihrem Umfeld denken: An wie vielen Tagen haben Sie mit folgenden Personen in der Letzten Woche vor der Wahl über den Wahlkampf und die Parteien gesprochen? Mit Ihren Freunden 1. Gar nicht 2. 1 Tag 3. 2 Tage 4. 3 Tage 5. 4 Tage 6. 5 Tage 7. 6 Tage 8. 7 Tage 9. Trifft nicht zu	If you now think about other people in your environment: On how many days did you talk about the election campaign and the parties with the following people in the last week before the election? With your friends 1. not at all 2. 1 day 3. 2 days 4. 3 days 5. 4 days 6. 5 days 7. 6 days 8. 7 days 9. does not apply
Conversation about politics (Friends) (BB/SN)	Wenn Sie jetzt einmal an andere Personen in Ihrem Umfeld denken: An wie vielen Tagen haben Sie mit folgenden Personen in der Letzten Woche vor der Wahl über den Wahlkampf und die Parteien gesprochen? Mit Ihren Freundinnen und Freunden 1. Gar nicht 2. 1 Tag 3. 2 Tage 4. 3 Tage 5. 4 Tage 6. 5 Tage 7. 6 Tage 8. 7 Tage 9. Trifft nicht zu	If you now think about other people in your environment: On how many days did you talk about the election campaign and the parties with the following people in the last week before the election? With your friends 1. not at all 2. 1 day 3. 2 days 4. 3 days 5. 4 days 6. 5 days 7. 6 days 8. 7 days 9. does not apply
Use of Voting Advice Application (SH)	Haben Sie im Vorfeld der Wahl den "Wahl-O-Mat" genutzt? 1. Ja 2. Nein	Did you use the "Whal-O-Mat" in the run-up to the election? 1. yes 2. no
Use of Voting Advice Application (BB/SN)	Nochmal zurück zur Landtagswahl vom 1. September: Haben sie im Vorfeld der Landtagswahl den "Wahlomat" genutzt? 1. Ja 2. Nein 3. Kenne ich nicht	Back to the state elections on September 1: Did you use the "Wahlomat" in the run-up to the state elections? 1. yes 2. no 3. do not know

Item	Wording (Original SH)	Wording (English)
Education Level (SH, multiple Items)	Gehen Sie noch zur Schule? Wenn ja, welche Schulform besuchen Sie derzeit? 1. Ja, ich besuche ein Gymnasium 2. Ja, ich besuche ine Gemeinschaftschule 3. Ja, ich besuche eine Berufsschule 4. Ja, ich besuche eine andere Schulform 5. Nein, ich gehe nicht mehr zur Schule Welchen Schulabschluss streben Sie an? 1. Den ersten Abschluss (nach 9 Jahren) 2. Den mittleren Abschluss (nach 10 Jahren) 3. Das Abitur	Do you still go to school? If yes, what type of school do you currently attend? 1. yes, I attend a Gymnasium 2. yes, I attend a Gemeinschaftsschule 3. yes, I attend a Berufsschule 4. yes, I attend another type of school 5. no, I no longer go to school Which school-leaving qualification are you aiming for? 1. the first degree (after 9 years) 2. the intermediate degree (after 10 years) 3. the Abitur
Education Level (BB/SN, multiple Items)	Gehen Sie noch zur Schule? Wenn ja, welche Schulform besuchen Sie derzeit? 1. Ja ich besuche eine Oberschule 2. Ja ich besuche ein Gymnasium 3. Ja, ich besuche eine Förderschule 4. Ja, ich besuche eine Berufs- oder Berufsfachschule 5. Ja, ich besuche eine andere Schulform, nämlich 6. Nein, ich gehe nicht mehr zur Schule Welchen Schulabschluss streben Sie an? 1. Berufsbildungsreife bzw. Hauptschulabschluss 2. Erweiterte Berufsbildungsreife bzw. erweiterter Hauptschulabschluss 3. Fachoberschulreife bzw. Realschulabschluss 4. Abitur	Do you still go to school? If yes, what type of school do you currently attend? 1. yes I attend a Oberschule 2. yes I attend a Gymnasium 3. yes, I attend a Förderschule 4. yes, I attend a Berufs- or Berufsfachschule 5. yes, I attend another type of school, namely 6. no, I no longer go to school Which school-leaving qualification are you aiming for? 1. Berufsbildungsreife or Hauptschulabschluss 2. extended Berufsbildungsreife or extended Hauptschulabschluss 3. Fachoberschulreife or Realschulabschluss 4. Abitur
Migrant Family (SH)	Haben Sie einen Migrationshintergrund? 1. Ja 2. Nein 3. Weiß nicht	Do you have a migration background? 1. yes 2. no 3. do not know

Table A.4: Original wording and English translation of all items used to code variables *(continued)*

Item	Wording (Original SH)	Wording (English)
Lives at home (SH/BB/SN)	Zum Abschluss haben wir nochmal einige wenige Fragen zu Ihrer Person und Ihrer Familie: Wenn Sie an Ihre derzeitige Wohnsituation denken: Was beschreibt diese Wohnsituation am besten? 1. Ich wohne bei meinen Eltern. 2. Ich wohne bei meiner Mutter. 3. Ich wohne bei meinem Vater. 4. Ich wohne alleine. 5. Ich wohne in einer WG. 6. Ich wohne zusammen mit meinem Partner / meiner Partnerin 7. Andere Wohnsituation	Finally, we have a few more questions about you and your family: When you think about your current living situation, what best describes it? 1. i live with my parents. 2. I live with my mother. 3. i live with my father. 4. i live alone. 5. i live in a shared flat. 6. i live together with my partner. 7. other living situation
Subjective informedness (SH/BB/SN)	Wie gut oder schlecht fühlten Sie sich über die politischen Parteien und ihre Programme zur Landtagswahl informiert? 1. Sehr gut 2. Eher gut 3. Teils/teils 4. Eher schlecht 5. Sehr schlecht	How well or poorly did you feel informed about the political parties and their programs for the state election? 1. very well 2. rather well 3. partly 4. rather poorly 5. very bad
Political Knowledge (SH)	Bei der Landtagswahl hat man zwei Stimmen, eine Erststimme und eine Zweitstimme. Wie ist das eigentlich, welche der beiden Stimmen ist ausschlaggebend für die Sitzverteilung im Landtag? 1. Erststimme 2. Zweitstimme 3. Beide sind gleich wichtig 4. Weiß nicht	In the state election, you have two votes, a first vote and a second vote. How is it, which of the two votes is decisive for the distribution of seats in the state parliament? 1. first vote 2. second vote 3. both are equally important 4. don't know

Table A.4: Original wording and English translation of all items used to code variables *(continued)*

| Item	Wording (Original SH)	Wording (English)
Political Knowledge (BB/SN, multiple Items)	Und nun wüssten wir noch gerne von Ihnen, welche dieser Personen in den vergangenen sechs Jahren Ministerpräsident Brandenburgs war. 1 Matthias Platzeck 2. Ingo Senftleben 3. Dietmar Woidke 4. Weiß nicht Und nun wüssten wir noch gerne von Ihnen, welche dieser Personen in den vergangenen zwei Jahren Ministerpräsident Sachsens war. 1. Stanislaw Tillich 2. Martin Dulig 3. Michel Kretschmer 4. Weiß nicht Wie ist das eigentlich: Ab welchem Alter durfte man an der Landtagswahl in #u_bundesland# teilnehmen? Bitte geben Sie das Mindestwahlalter als ganze Zahl an.	And now we would like to know from you which of these people was Minister President of Brandenburg in the past six years. 1 Matthias Platzeck 2. Ingo Senftleben 3. Dietmar Woidke 4. do not know And now we would like you to tell us which of these people was Minister President of Saxony in the past two years. 1. Stanislaw Tillich 2. Martin Dulig 3. Michel Kretschmer 4. don't know How is it: at what age were you allowed to vote in the state election in #u_bundesland#? Please indicate the minimum voting age as a whole number.

3.3 Descriptive statistics

As can be seen in Table A.5 and Figure A.1, our respondents exhibit very similar levels of interest compared to respondents of the same age in higher quality surveys such as the German Longitudinal Election Study's (GLES) post-election cross-section or the well-known Shell Youth Study. Our surveys and the GLES use the same item to measure political interest: "how interested are you in politics?" and respondents could answer (1) very strongly (2) strongly (3) moderately (4) less strongly (5) not at all."[See above table for original question wording in German.] We inverted the scale so that higher numbers indicate stronger interest. The item wording in the Shell Youth Study

Table A.5: Mean levels of political interest by respondent age in our samples from Schleswig-Holstein (SH 2017), Brandenburg (BB 2019) and Saxony (SN 2019) compared to the German Longitudinal Elections Study's post-election cross-section (GLES 2017). Full sample includes respondents of all ages, who are 15–18 years old in SH 2017, 15–24 years old in BB 2019 and SN 2019 and 16-95 in GLES 2017.

Age group	SH 2017	BB 2017	SN 2017	GLES 2017
15	3.2	3.2	3.3	NA
16	3.3	3.2	3.3	2.9
17	3.3	3.3	3.3	2.7
18	3.2	3.2	3.2	3.3
19		3.2	3.3	3.1
20		3.2	3.0	3.1
21		3.2	3.2	2.9
22		3.2	3.1	3.0
23		3.2	3.2	3.3
24		3.2	3.2	3.2
Full sample	3.2	3.2	3.3	3.2

deviates by featuring only four answer categories "Are you interested in politics in general? Would you say you are…. (1) very interested, (2) interested, (3) not very interested, or (4) not interested at all?"[5] Hence, to compare against our data we coded a simple dummy variable indicating answers representing interest or strong interest. Both sets of results alleviates concerns that our samples consist of unusually politically engaged young citizens.

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[5]German original: *Interessieren Sie sich ganz allgemein für Politik? Würden Sie sagen, Sie sind… (1) stark interessiert, (2) interessiert, (3) wenig interessiert oder (4) gar nicht interessiert?*
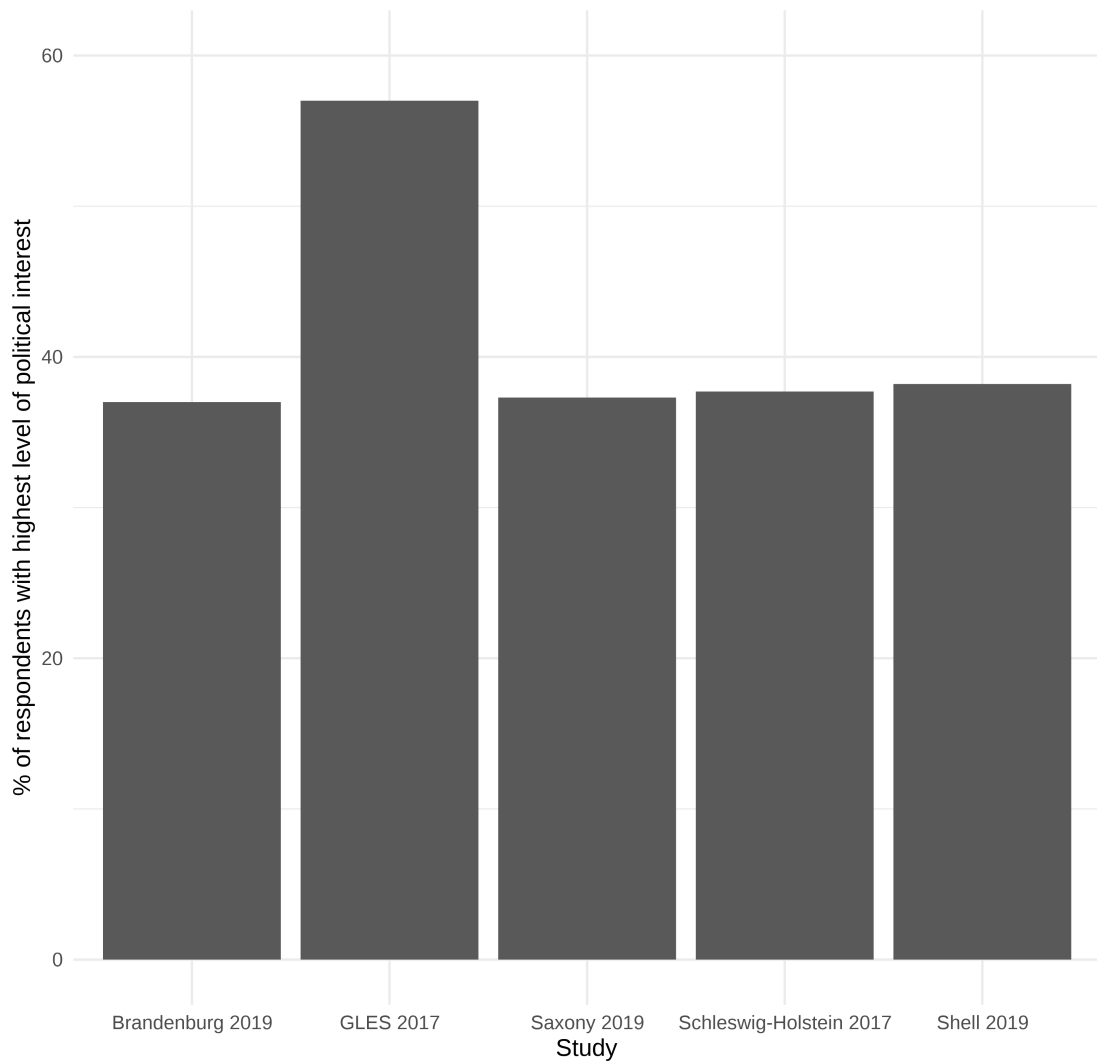
Figure A.1: Comparison of high political interest among our subsamples, full sample of the GLES and full sample of the Shell Youth Study 2019.

In our analyses, we compare respondents born close to the eligibility cut-off dates for the state elections—7 May 2001 in Schleswig-Holstein, 1 September 2003 in Brandenburg and 1 September 2001 in Saxony. Hence, in Schleswig-Holstein and Brandenburg, where the minimum voting age is 16, we are comparing 15- and 16-year-olds, while in Saxony, we are comparing 17-year-old adolescents with 18-year-old young adults. Table A.6 summarizes these groups.

Table A.7: Summary statistics for combined sample

Variable	N	Mean	SD	Min	Median	Max
Age	10596	18	3	15	17	24
Days to cutoff	10596	651	968	-1095	441	3286
Subjective class	10035	4	1	1	4	6
Female	10444	0.5	0.5	0	1	1
City	10596	0.6	0.5	0	1	1
Political Interest	10322	3	1	1	3	5
Duty to Vote	10158	4	1	1	4	5
Internal Efficacy	9884	3	1	1	4	5
External efficacy	9926	3	0.9	1	3	5
Conversations about politics (Family)	9999	3	2	0	2	7
Conversations about politics (Friends)	10095	3	2	0	3	7
Use of Voting Advice Apllication	9915	0.6	0.5	0	1	1

Table A.6: Overview of the relevant age groups for the RDD analysis

Election	Age	Born	Eligible	N
Schleswig-Holstein 2017	15	8 May 2001 – 7 March 2002	No	878
Schleswig-Holstein 2017	16	8 May 2000 – 7 May 2001	Yes	1,186
Brandenburg 2019	15	2 Sep 2003 – 1 Sep 2004	No	519
Brandenburg 2019	16	2 Sep 2002 – 1 Sep 2003	Yes	503
Saxony 2019	17	2 Sep 2001 – 1 Sep 2002	No	428
Saxony 2019	18	2 Sep 2000 – 1 Sep 2001	Yes	462

Finally, Tables A.7, A.8, A.9, and A.10 provide summary statistics of our key variables for the combined sample as well as the separate samples from Schleswig-Holstein, Brandenburg und Saxony.

Table A.8: Summary statistics for sample from Schleswig-Holstein

Variable	N	Mean	SD	Min	Median	Max
Age	3897	16	1	15	16	18
Days to cutoff	3897	321	342	-304	326	901
Subjective class	3695	4	1	1	4	6
Female	3836	0.5	0.5	0	1	1
City	3897	0.4	0.5	0	0	1
Political Interest	3789	3	1	1	3	5
Duty to Vote	3770	4	1	1	4	5
Internal Efficacy	3762	3	1	1	3	5
External efficacy	3767	3	1	1	3	5
Conversations about politics (Family)	3693	3	2	0	3	7
Conversations about politics (Friends)	3667	3	2	0	3	7
Use of Voting Advice Apllication	3800	0.6	0.5	0	1	1

Table A.9: Summary statistics for sample from Brandenburg

Variable	N	Mean	SD	Min	Median	Max
Age	3897	16	1	15	16	18
Days to cutoff	3897	321	342	-304	326	901
Subjective class	3695	4	1	1	4	6
Female	3836	0.5	0.5	0	1	1
City	3897	0.4	0.5	0	0	1
Political Interest	3789	3	1	1	3	5
Duty to Vote	3770	4	1	1	4	5
Internal Efficacy	3762	3	1	1	3	5
External efficacy	3767	3	1	1	3	5
Conversations about politics (Family)	3693	3	2	0	3	7
Conversations about politics (Friends)	3667	3	2	0	3	7
Use of Voting Advice Apllication	3800	0.6	0.5	0	1	1

Table A.10: Summary statistics for sample from Saxony

Variable	N	Mean	SD	Min	Median	Max
Age	3897	16	1	15	16	18
Days to cutoff	3897	321	342	-304	326	901
Subjective class	3695	4	1	1	4	6
Female	3836	0.5	0.5	0	1	1
City	3897	0.4	0.5	0	0	1
Political Interest	3789	3	1	1	3	5
Duty to Vote	3770	4	1	1	4	5
Internal Efficacy	3762	3	1	1	3	5
External efficacy	3767	3	1	1	3	5
Conversations about politics (Family)	3693	3	2	0	3	7
Conversations about politics (Friends)	3667	3	2	0	3	7
Use of Voting Advice Apllication	3800	0.6	0.5	0	1	1

4 Assumptions

4.1 Continuity in the distribution of the forcing variable

The core idea behind our research design is the following: Because a person's exact date of birth can be considered a random event, eligibility among respondents born close to the cut-off dates approximates random assignment. It should not matter, for instance, for the political interest of two interviewees that they were born a few days or weeks apart. Hence, if we compare respondents born within a few weeks before and after the cut-off date, we compare young citizens who, apart from electoral eligibility, are on average identical in all other respects.

The fundamental assumption behind our design and, in fact, any RDD is that of quasi-random allocation of treatment status around the cut-off. This assumption may be violated if respondents can manipulate the forcing variable. As explained in our manuscript, in our case, the idea that parents could or would want to time childbirth with sufficient precision to affect their children's future electoral eligibility is unrealistic. As can be seen in Figures A.2 and A.3, respondents' birthdates are distributed uniformly across the calendar. Nevertheless, we carry out several sorting tests in this section to scrutinize the assumption empirically. The tests—see Figures A.4, A.5, A.6, and A.7—confirm our assumption by failing to reject the null hypothesis of smoothness of the forcing variable at the cut-off.
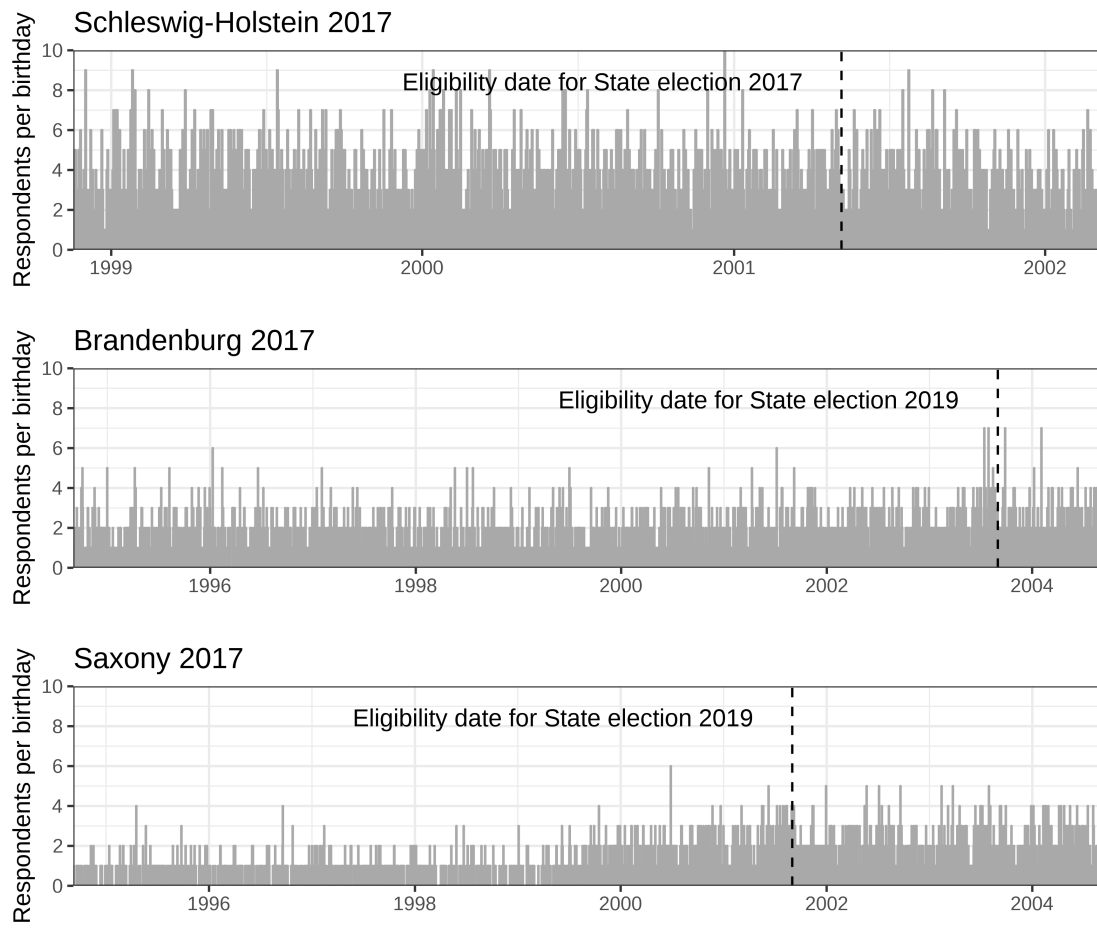
Figure A.2: Distribution of respondents across birth dates. Bars indicate the number of respondents sharing the same birth date. The dashed lines indicate the cutoff date for eligibility for the respective state election. The number of respondents per birth date follows a uniform distribution.
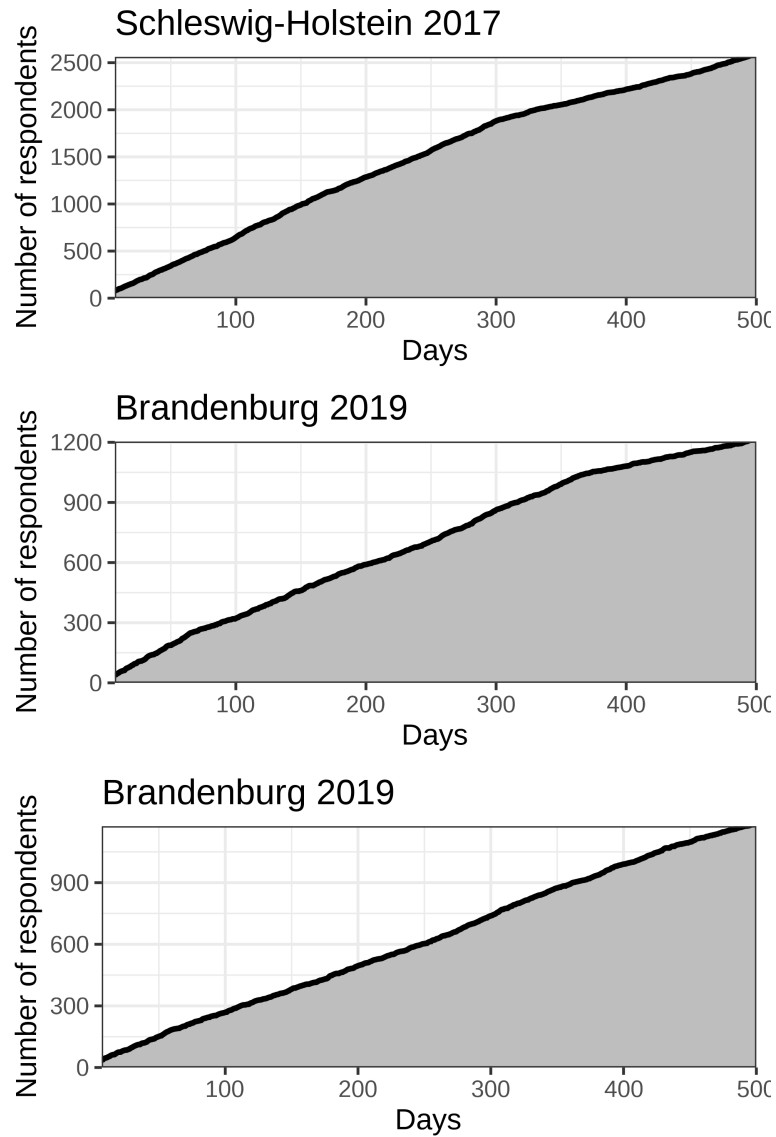
Figure A.3: The number of respondents within a given bandwith. Given the uniform distribution of respondents across birth dates, the number of respondents within a given bandwidth increases linearly in the size of the bandwidth.
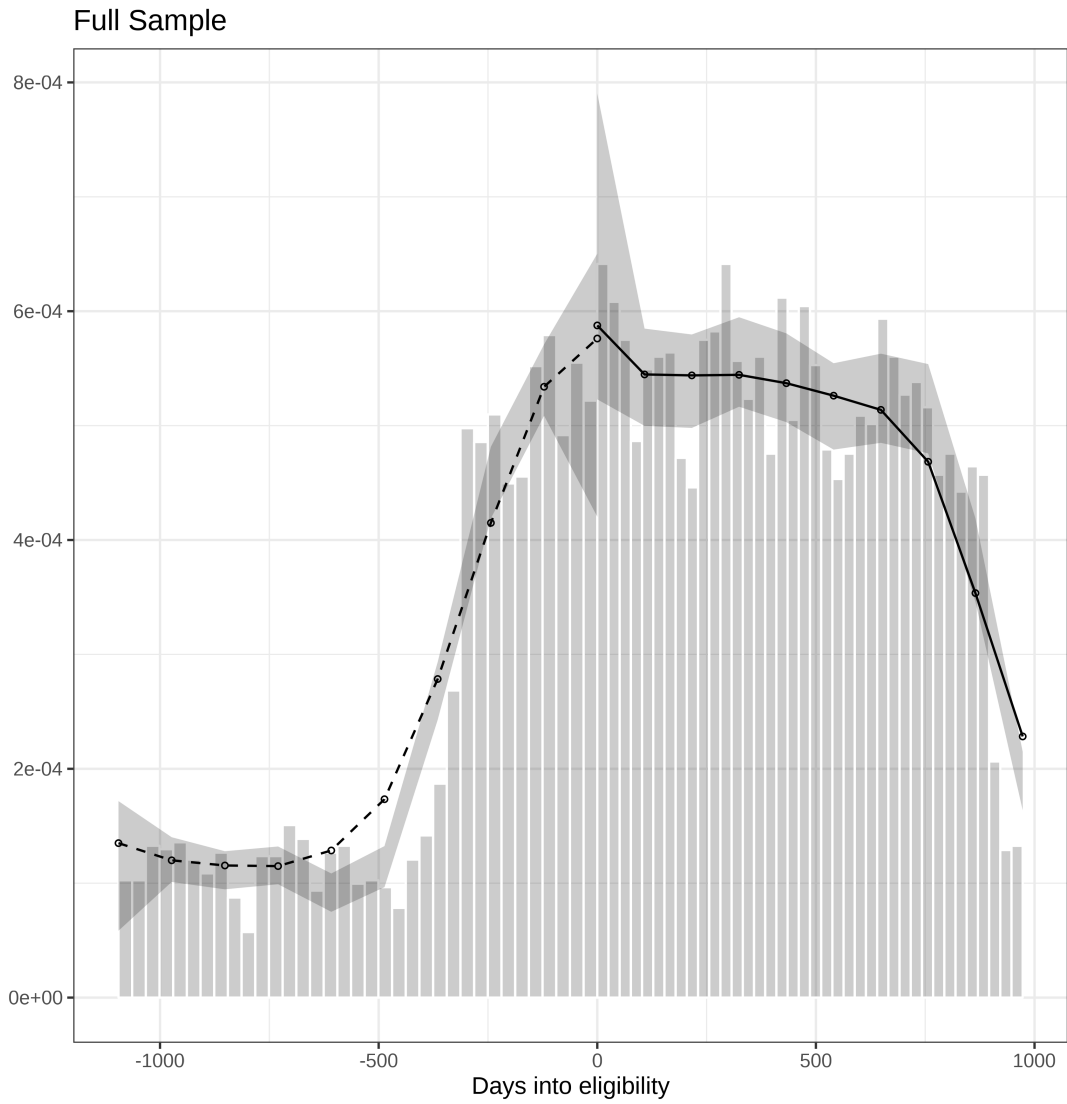
Figure A.4: Distribution of observations per day across full sample with confidence intervals to check for a potential discontinuity (which would imply sorting) at the the treshold.
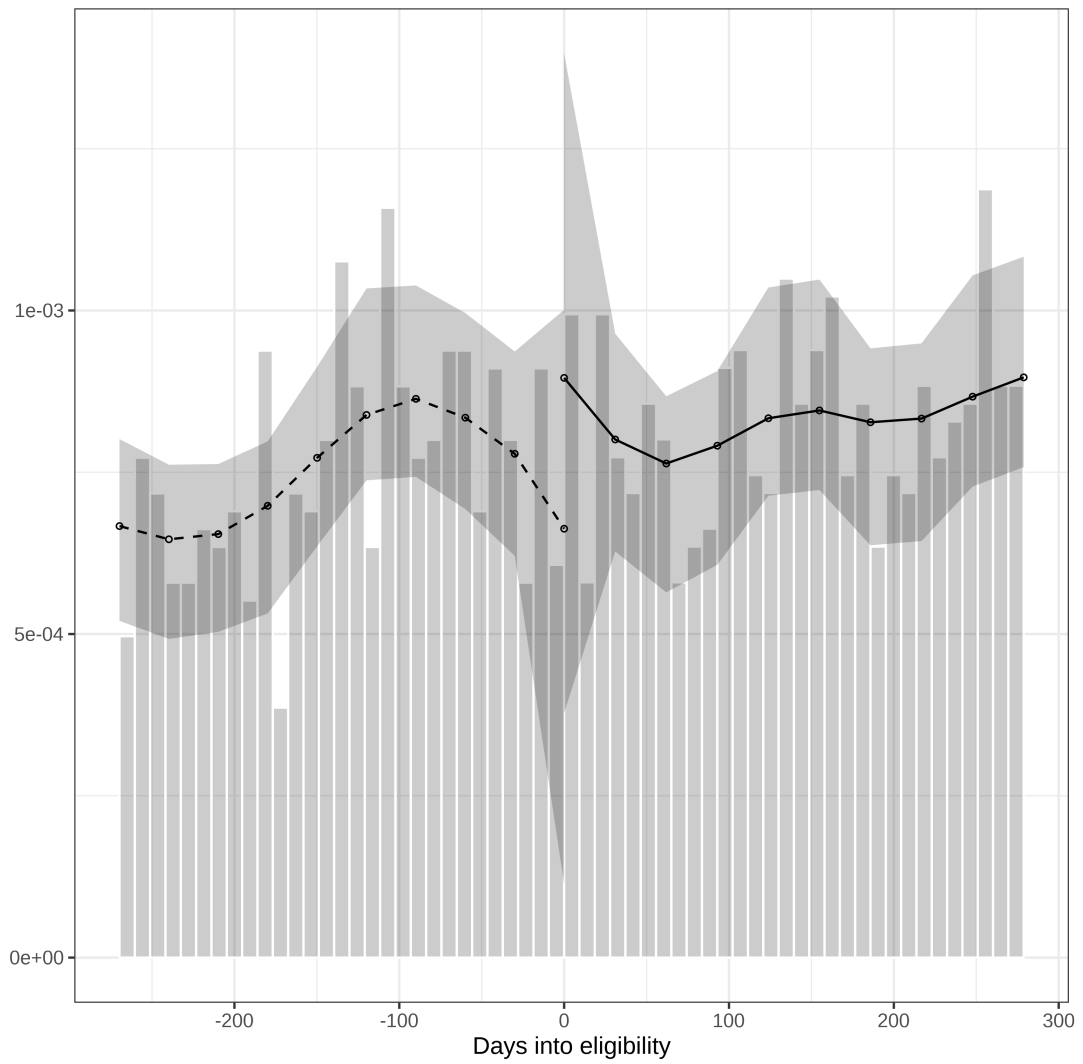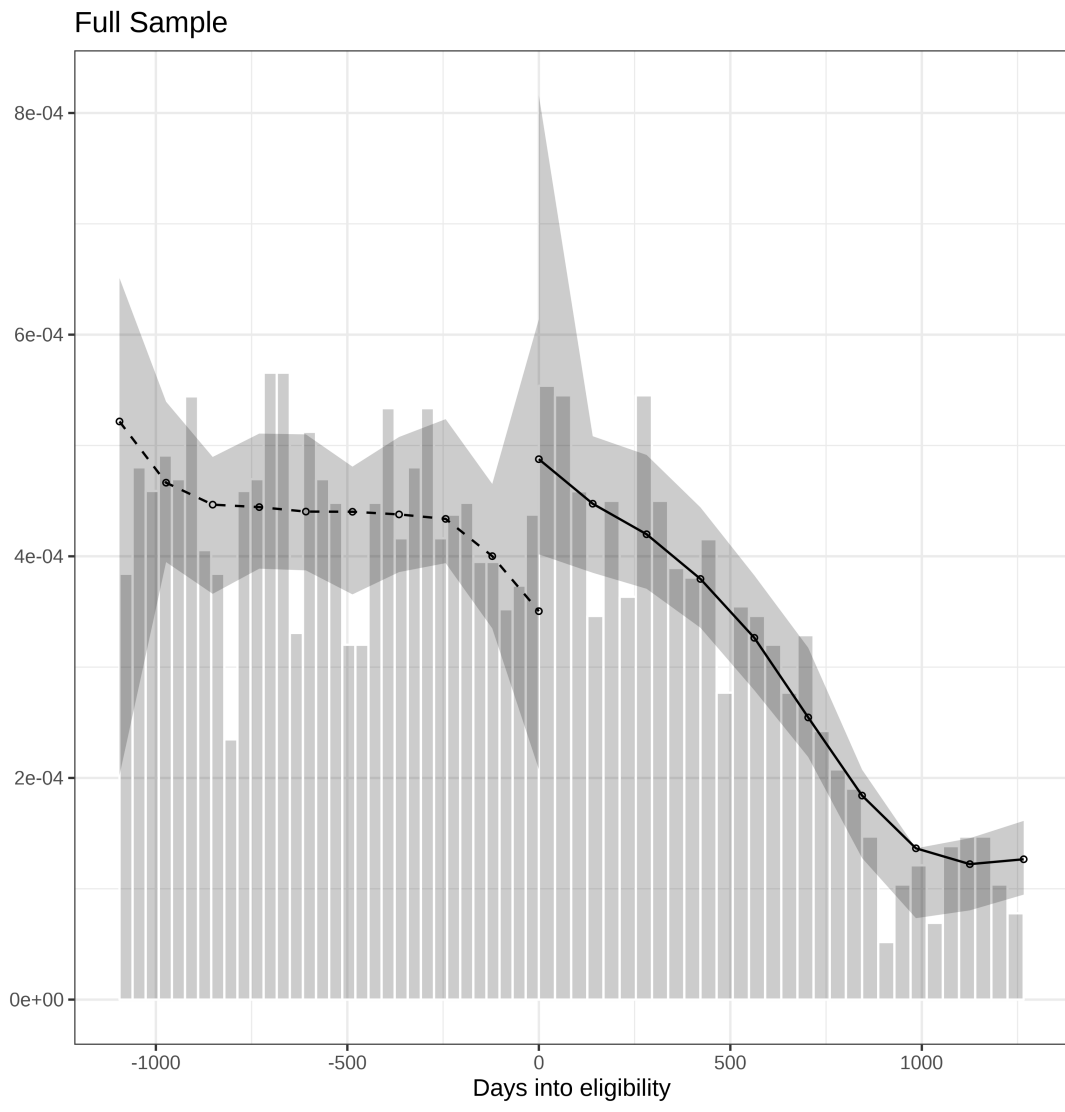
Figure A.5: Distribution of observations per day across full sample with confidence intervals to check for a potential discontinuity (which would imply sorting) at the the treshold.
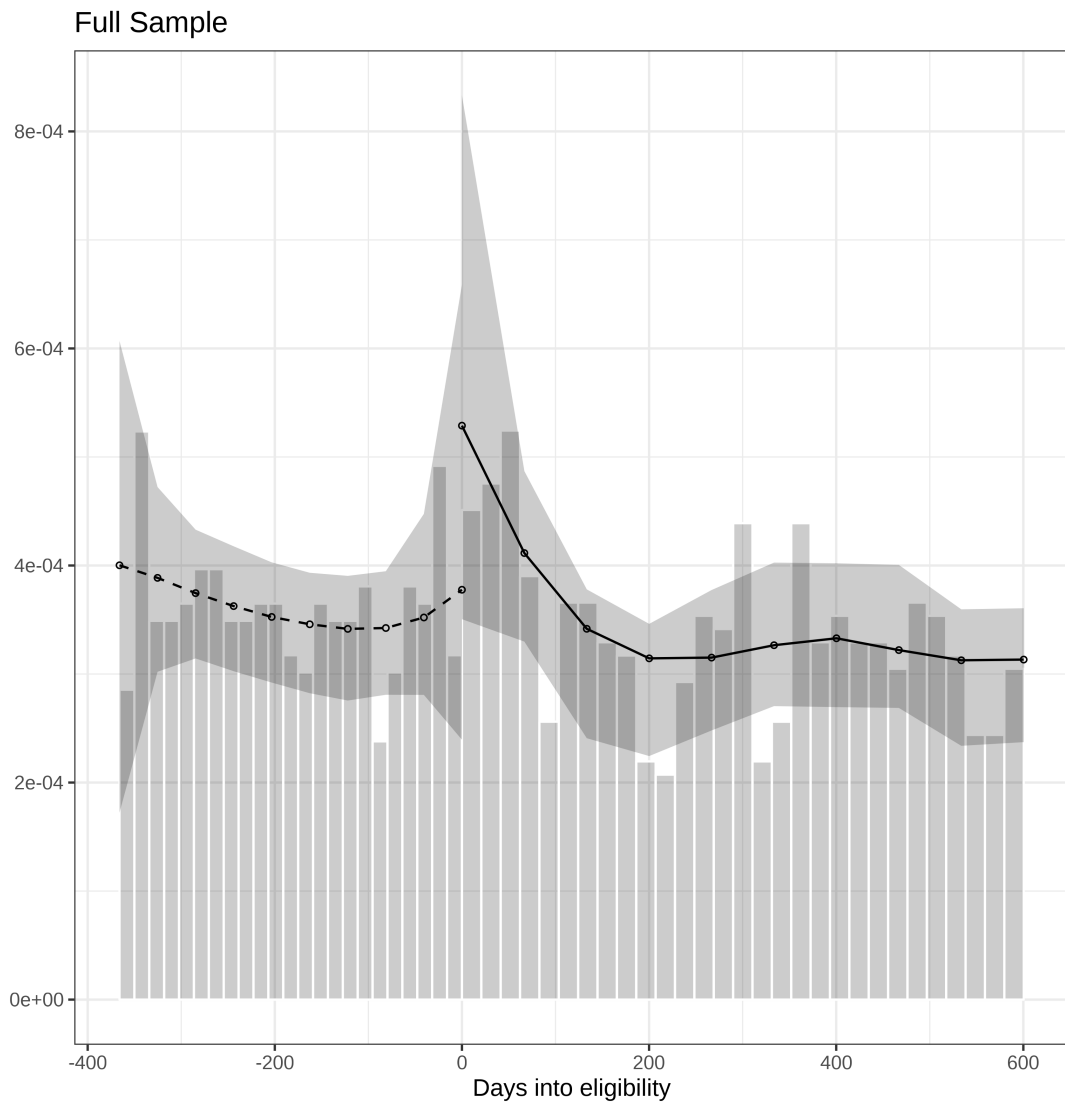
Figure A.6: Distribution of observations per day across full sample with confidence intervals to check for a potential discontinuity (which would imply sorting) at the the treshold.

Figure A.7: Distribution of observations per day across full sample with confidence intervals to check for a potential discontinuity (which would imply sorting) at the the treshold.

4.2 Placebo Tests

4.2.1 Further pre-treatment variables

In Table 1 in the manuscript we provided evidence on some pre-treatment variables—subjective class, gender, and living n a large city—along with some attitudinal variables, showing that these variables were not affected by electoral eligibility. The fact that values of variables determined prior to treatment do not vary at the cutoff date further confirm our assumption of quasi-random assignment at the cut-off. Here, in Table A.11, we provide further evidence that pre-treatment variables to not vary at the cutoff.

Table A.11: Group comparison: eligible vs. not eligible

Dependent variable	LATE (se)	h (N)	b (N)
Schleswig-Holstein			
Education level	0.02	125	191
	(0.11)	(229)	(354)
Migrant family	-0.16	85	126
	(0.09)	(154)	(230)
Lives at home	-0.02	78	124
	(0.02)	(144)	(229)
Brandenburg			
Education level	0.15	155	255
	(0.09)	(238)	(374)
Migrant family	-0.08	221	298
	(0.08)	(312)	(429)
Lives at home	-0.05	208	306
	(0.04)	(305)	(448)
Saxony			
Education level	-0.01	482	731
	(0.08)	(676)	(993)
Migrant family	-0.08	254	460
	(0.06)	(339)	(627)
Lives at home	-0.01	291	469
	(0.05)	(399)	(646)

Note: * p < .05; ** < .01

4.2.2 False cutoffs

Table A.12 shows that the 'jump' in information-seeking behaviour documented at the cutoff date for electoral eligibility does not occur at other arbitrary dates that have no legal relevance. Specifically, we set the cutoff date to half a year earlier and a year later. The fact that we see no change in

behaviour at these cutoffs makes us more confident that what we are picking up in our primary analysis is a distinct effect of electoral eligibility and not some idiosyncratic variation in the outcome of interest.

Table A.12: Information seeking: eligible vs. not eligible with eligibility cut-off date set to 1/2 year earlier and 1 year later than actual date

Dependent Variable	LATE (se)	h (N)	b (N)
1/2 year earlier			
Conversations about Politics (Family)	-0.16	335	565
	(0.23)	(613)	(1003)
Conversations about Politics (Friends)	0.01	300	465
	(0.24)	(555)	(832)
Use of Voting Advice Application	-0.01	275	500
	(0.06)	(516)	(889)
1 year later			
Conversations about Politics (Family)	-0.02	368	589
	(0.19)	(732)	(1154)
Conversations about Politics (Friends)	-0.31	313	492
	(0.23)	(623)	(977)
Use of Voting Advice Application	-0.03	316	473
	(0.05)	(627)	(940)

Note: * p < .05; ** < .01

The cut-offs chosen in the previous table implied placebo eligibility ages of 15 1/2, 17, 17 1/2, and 19, which are not tied to eligiblity in any context in Germany. In Table A.13, we appyl the incorrect but plausible cutoffs of 16 for Saxony, where the real voting age is 18, and 18 for Brandenburg und Schleswig-Holstein, where the real voting age is 16, with similar results.

Table A.13: Information seeking: eligible vs. not eligible with minimum eligibility age set to 18 in Schleswig-Holstein and Brandenburg and to 16 in Saxony

| Dependent Variable	LATE (se)	h (N)	b (N)
Conversations about Politics (Family)	-0.13	397	640
	(0.21)	(766)	(1217)
Conversations about Politics (Friends)	-0.39	316	484
	(0.23)	(609)	(929)
Use of Voting Advice Application	0.04	360	634
	(0.04)	(693)	(1206)

Note: * p < .05; ** < .01

4.3 Survey participation

Finally, we also investigate whether electoral eligibility affects participation in our survey. For this test, we use an anonymized list of our target population, including information about our survey participation. Estimating an RDD on this dataset, we find that electoral eligibility has little to no effect on participating in our survey. Saxony represents an exception for which there may be at least two reasons. First of all, in Saxony, only adults were allowed to vote, and, in any state, adults could participate in our survey without consulting their parents first—see section 1 of this document. Hence, 18-year-olds may be more likely to participate than 17-year-olds in general. Secondly, there might be an effect of eligibility on survey participation, which would be supported by the theoretical arguments we put forward in the manuscript. Participating in a survey about the election may seem more worthwhile if one was allowed to vote.

Brandenburg 2019
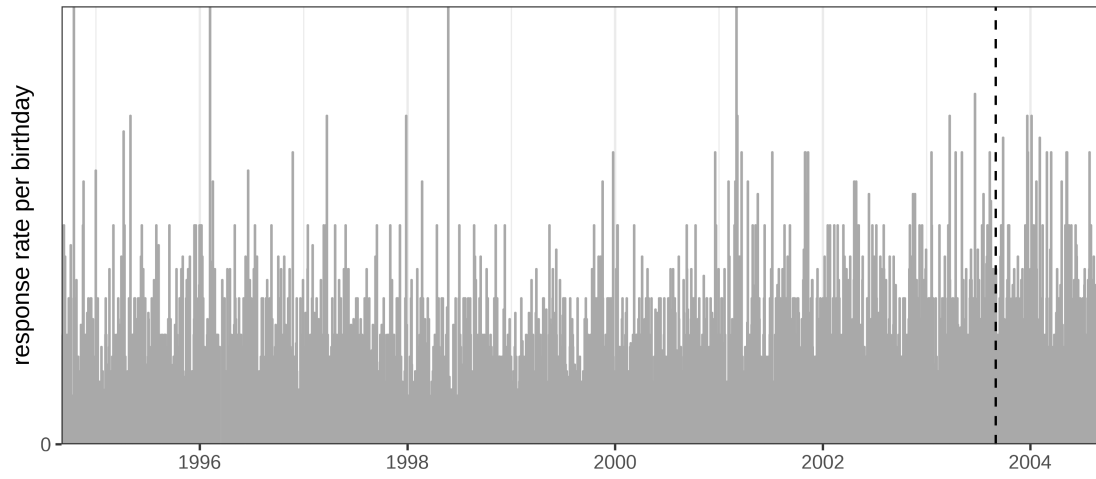
Saxony 2019
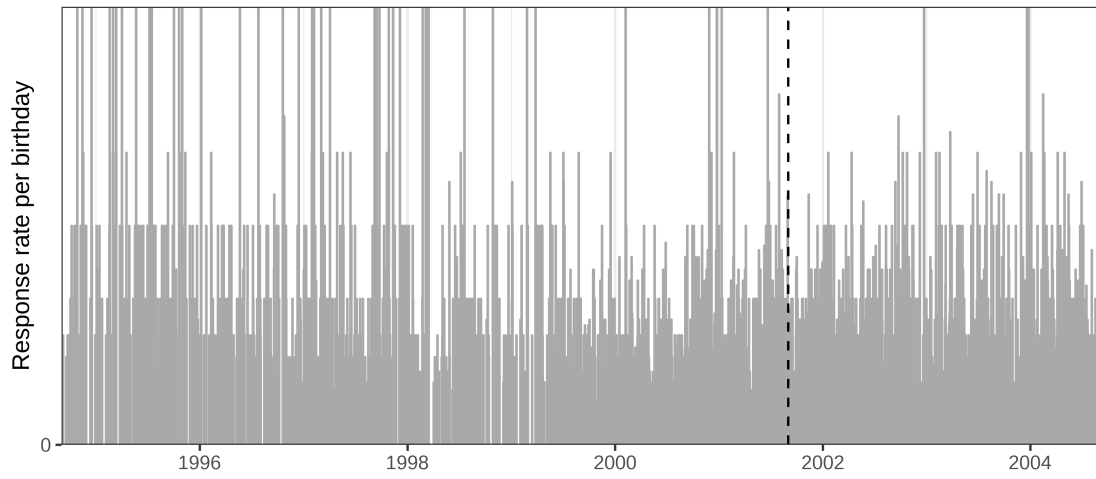
**Table A.14:** Survey participation: eligible vs. not eligible

| Sample	LATE (se)	h (N)	b (N)
Full gross sample	0.03	385	647
	(0.02)	(771)	(1293)
Brandenburg	0.03	215	325
	(0.04)	(428)	(650)
Saxony	0.06*	459	711
	(0.03)	(916)	(1421)

Note: * p < .05; ** < .01

5 Robustness checks

5.1 Varying bandwidths

The choice of bandwidth is a critical decision in an RDD design. For this reason, we left it to an algorithm to choose the optimal bandwidth. Nevertheless, we have also re-estimated our model within several increasingly smaller bandwidths to further probe the robustness of our results—see Figures A.8 and A.9. Generally, effect estimates remain stable until bandwidths reduce to a few days around the cutoff date. Within these small bandwidths, sample sizes are very small, and estimates become unstable. Overall, these results make us more confident of the results of our primary analysis presented in the manuscript, as they also reproduce with narrower manually set bandwidths.
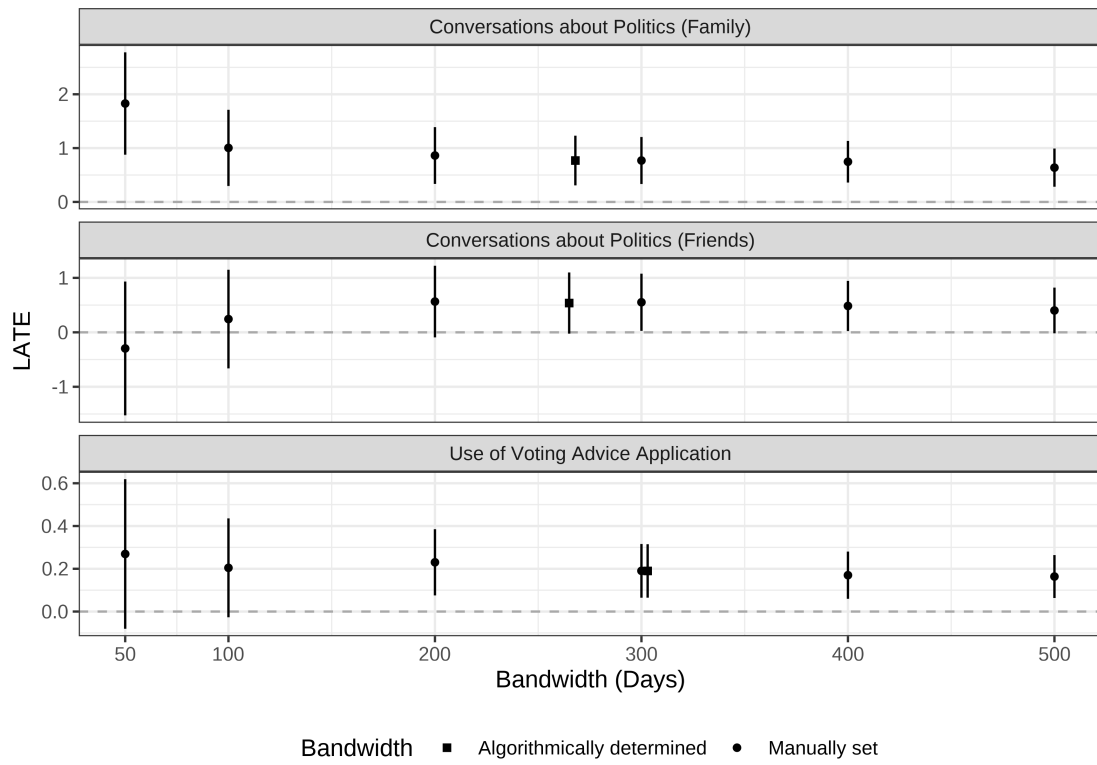
Figure A.8: RDD models for eligibility effect on socio-demographics estimated with various bandwidths to test the robustness of the results presented in Table 1.
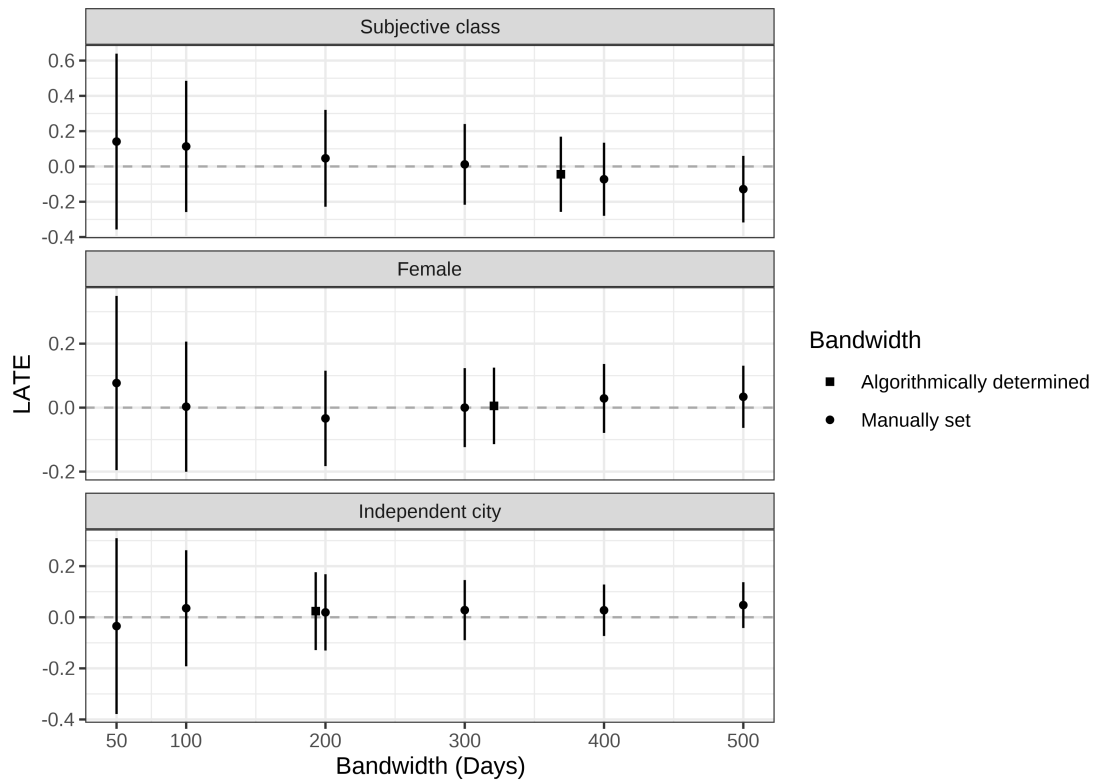
Figure A.9: RDD models for eligibility effect on information-seeking behaviour estimated with various bandwidths to test the robustness of the results presented in Table 2.

6 Additional results

6.1 Further RDD plots

For completeness, we also present RDD plots for our other primary dependent variables, political conversations with friends and using a voting advice application.
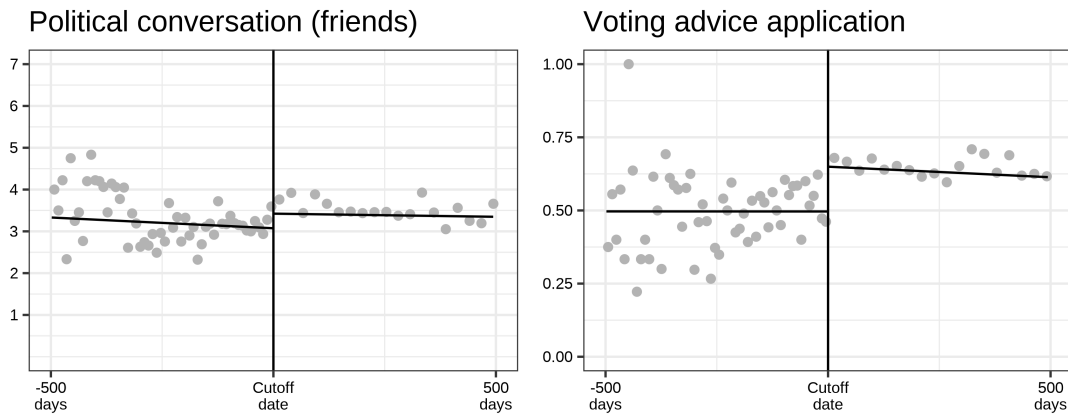
Figure A.10: Illustration of the RDD approach with the two other key dependent variables: Conversations about politics (Friends) and Use of Voting Advice Application

6.2 Effect sizes in perspective

To give readers a better understanding of the effect sizes, we compare them to the standard deviation in the outcome variables and the difference in outcome variables between education levels, gender and age. We obtain the latter through bivariate regressions of the outcome variables on a dummy variable indicating whether respondents are pursuing or have obtained a high school diploma ("Abitur"), a dummy variable indicating whether respondents identify as female and a continuous age variable. Table A.15 reports these values.

Table A.15: ATE relative to standard deviations of outcome variables and 'effect' of gender, age and education on outcomes variables.

	Pol. Conservations (Family)	Pol. Conversations (Friends)	VAA
ATE	0.72	0.47	0.17
SD	1.62	1.63	NA
	(44.44%)	(28.83%)	(NA%)
Female	0.17	-0.05	-0.02
	(423.53%)	(940%)	(850%)
Age	-0.14	-0.02	-0.01
	(514.29%)	(2350%)	(1700%)
Abitur	0.62	0.74	0.16
	(116.13%)	(63.51%)	(106.25%)

6.3 Differences across contexts

Table A.16 provides a tabular display of the RDD results presented in Figure 2 in the manuscript.

Table A.16: Tabular dispaly of results visualized in Figure 2 in the manuscript: Eligibility effects in three states

Dependent variable	LATE (se)	h (N)	b (N)
Schleswig-Holstein			
Conversations about Politics (Family)	0.94*	132	198
	(0.45)	(243)	(367)
Conversations about Politics (Friends)	-0.6	52	100
	(0.83)	(94)	(183)
Use of Voting Advice Application	0.18	118	193
	(0.12)	(216)	(356)
Brandenburg			
Conversations about Politics (Family)	0.69	163	238
	(0.57)	(241)	(344)
Conversations about Politics (Friends)	-0.4	233	317
	(0.56)	(335)	(466)
Use of Voting Advice Application	0.1	251	333
	(0.11)	(340)	(464)
Saxony			
Conversations about Politics (Family)	0.52	321	489
	(0.49)	(445)	(671)
Conversations about Politics (Friends)	1.13*	215	400
	(0.51)	(291)	(561)
Use of Voting Advice Application	0.14	389	573
	(0.09)	(536)	(768)

Note: * p < .05; ** < .01

6.4 Further outcome variables

In our survey, we also sought to measure respondents' subjective and objective knowledge about politics. To measure the former, we asked respondents, "How well or poorly did you feel informed

about the political parties and their programs for the state election?"[6] In both cases, respondents could answer on a 5-point scale from 1 "Very poor" to 5 "Very Well."

We measured objective political knowledge through a set of different items in the two surveys. In Schleswig-Holstein 2017, we asked, "In the state election, you have two votes, a first and a second. How does this work again: which of the two votes is decisive for the distribution of seats in the state parliament?"[7] In Brandenburg and Saxony 2019, we asked, "How is it actually: At what age were you allowed to vote in the state elections in [Brandenburg/Saxony]?",[8] and "And now we would like to know from you which of these people was Minister President of Brandenburg in the past six years."[9] Respondents had to choose the correct answer among several options presented to them. We operationalize political knowledge as the sum of correct answers provided by the respondents.

Table A.17: Subjective and objective knowledge: eligible vs. not eligible

Dependent variable	LATE (se)	h (N)	b (N)
Subjective informedness	0.22**	380	599
	(0.07)	(748)	(1116)
Political Knowledge	0.02	210	329
	(0.05)	(416)	(654)

Note: * p < .05; ** < .01

The results presented in Table A.17 show that eligibility apparently instilled greater confidence in our respondents about their political knowledge. Eligibility led to a significant 0.22 points increase on the 5-point subjective informedness scale. We cannot fully clarify whether more optimistic

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[6] Our translation of the German original wording: "Wie gut oder schlecht fühlten Sie über die politischen Parteien und ihre Programme zur Landtagswahl informiert?"

[7] Our translation of the German original wording: "Bei der Landtagswahl hat man zwei Stimmen, eine Erststimme und eine Zweitstimme. Wie ist das eigentlich, welche der beiden Stimmen ist ausschlaggebend für die Sitzverteilung im Landtag?"

[8] our translation of the original German wording, "Wie ist das eigentlich: Ab welchem Alter durfte man an der Landtagswahl in [Brandenburg/Sachsen] teilnehmen?"

[9] Our translation of the original German question wording, "Und nun wüssten wir noch gerne von Ihnen, welche dieser Personen in den vergangenen sechs Jahren Ministerpräsident Brandenburgs war."

self-assessments of eligible citizens respondents are driven by increases in objective knowledge or not. Our results on objective knowledge suggest that these self-assessments are not driven by actual increases in political knowledge, as we see no eligibility effect on objective knowledge. However, we should also caution that we measure political knowledge through one (Schleswig-Holstein) or two items only (Brandenburg and Saxony). This approach may be too blunt to capture political knowledge and potential changes due to eligibility in all its nuances.

6.5 Results based on individual-level dataset

As explained in the manuscript, the forcing variable in our RDD, a respondent's birthdates, takes on discrete values with many days containing multiple observations. As using standard continuity-based regression discontinuity models with such "mass points" is problematic (Cattaneo 2023), we based our primary analyses on an aggregated dataset, where one observation represents one day, and the dependent variable takes on the mean value of all responses by respondents born on that day. In our case, 10,596 respondents are distributed over 3,119 unique birthdates. In this section, we also estimate our main specifications on the individual-level data set, which leads to similar results.

**Table A.18:** Group comparison: eligible vs. not eligible

Dependent variable	LATE (se)	h (N)	b (N)
Socio-demographics			
Subjective class	-0.03	223	401
	(0.1)	(2371)	(3975)
Female	0.03	403	660
	(0.04)	(4167)	(5857)
Independent city	0.05	207	315
	(0.05)	(2372)	(3562)
Attitudes			
Political Interest	0.08	265	427
	(0.09)	(2897)	(4294)
Duty to Vote	-0.05	382	651
	(0.1)	(3926)	(5654)
Internal Efficacy	0.08	300	484
	(0.1)	(3176)	(4498)
External Efficacy	0.02	210	349
	(0.09)	(2252)	(3614)

Note: * p < .05; ** < .01

Table A.19: Information seeking: eligible vs. not eligible

Dependent variable	LATE (se)	h (N)	b (N)
Conversations about Politics (Family)	0.69**	190	334
	(0.23)	(2070)	(3495)
Conversations about Politics (Friends)	0.54*	264	450
	(0.21)	(2804)	(4307)
Use of Voting Advice Application	0.13**	314	522
	(0.04)	(3313)	(4744)

Note: * p < .05; ** < .01
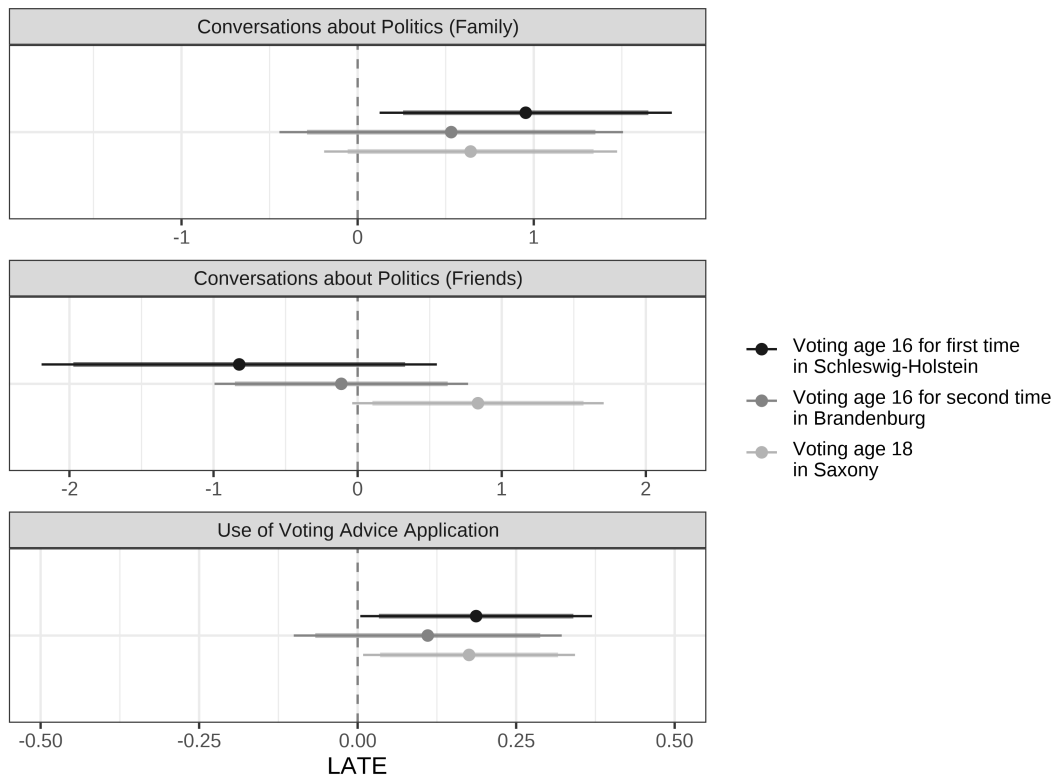
Figure A.11: Eligibility effects in three states, with 90% and 95% confidence intervals, based on individual-level data

7 References

Cattaneo, Matias D., Nicolas Idrobo, and Rocio Titiunik. 2023. "A Practical Introduction to Regression Discontinuity Designs: Extensions." http://arxiv.org/abs/2301.08958 (November 19, 2023).

Karp, Jeffrey A., and David Brockington. 2005. "Social Desirability and Response Validity: A Comparative Analysis of Overreporting Voter Turnout in Five Countries." Journal of Politics 67(3): 825–40.

Sciarini, Pascal, and Andreas C. Goldberg. 2016. "Turnout Bias in Postelection Surveys: Political Involvement, Survey Participation, and Vote Overreporting." Journal of Survey Statistics and Methodology 4(1): 110–37.