doi:10.1017/S000305542200034X © The Author(s), 2022. Published by Cambridge University Press on behalf of the American Political Science Association. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

Letter

Temporary Disenfranchisement: Negative Side Effects of Lowering the Voting Age

ARNDT LEININGER Chemnitz University of Technology, Germany MARIE-LOU SOHNIUS University of Mannheim, Germany THORSTEN FAAS Freie Universität Berlin, Germany SIGRID ROßTEUTSCHER Goethe University Frankfurt, Germany ARMIN SCHÄFER Johannes Gutenberg University Mainz, Germany

If ow does losing one's right to vote again after having been eligible to vote before affect political fundamentals such as political efficacy? We draw attention to the hitherto neglected phenomenon "temporary disenfranchisement," which, for instance, occurs regularly in states that extended the franchise to underage citizens in some but not all elections. If an election with voting age 16 is closely followed by an election with voting age 18, underage voters who are eligible for the former will have no right to vote in the latter. Using original panel data on young citizens in Germany and a differences-indifferences design, we find that temporary disenfranchisement results in a decrease in external efficacy, which remains even after regaining eligibility. Our findings highlight an important side effect of selective voting rights extensions and bear insights that are relevant to other cases of temporary disenfranchisement due to residential mobility, citizenship, or felony disenfranchisement.

INTRODUCTION

hat is the effect of temporarily losing one's franchise? Many countries grant and restrict voting rights selectively based on a variety of criteria such as a citizen's age, place of residence, citizenship, or criminal convictions. Most relevant to our case of study, in recent years, several countries have lowered the voting age to 16 for some but not all types of elections, leading to the increasing occurence of a phenomenon, which we call "temporary disenfranchisement." Every time an election with voting age 16 takes place less than two years

Arndt Leininger , Assistant Professor, Institute of Political Science, Chemnitz University of Technology, Germany, arndt.leininger@phil.tu-chemnitz.de.

Marie-Lou Sohnius , Graduate Student, Department of Political Science, University of Mannheim, Germany, marie-lou.sohnius@unimannheim.de.

Thorsten Faas, Professor, Otto Suhr Institute of Political Science, Freie Universität Berlin, Germany, thorsten.faas@fu-berlin.de. Sigrid Roßteutscher , Professor of Political Sociology, Department of Sociology and Political Science, Goethe University Frankfurt, Germany, rossteutscher@soz.uni-frankfurt.de.

Armin Schäfer , Professor, Johannes Gutenberg University Mainz,

Armin Schäfer , Professor, Johannes Gutenberg University Mainz Germany, schaefer@politik.uni-mainz.de.

Received: April 05, 2021; revised: September 21, 2021; accepted: March 02, 2022. First published online: May 10, 2022.

before an election with voting age 18, some underage voters who are eligible for the former will have no right to vote in the latter. Lowering the voting age at only one level of government, usually for local or state elections while the national voting age remains at 18, implies that many young voters will be temporarily disenfranchised after having been eligible to vote for the first time. Political scientists have responded to voting age reforms with a growing body of research on the advantages and disadvantages of a lower voting age (cf. Eichhorn and Bergh 2020). However, the effects of different voting ages within one country have so far gone unnoticed.

Temporary disenfranchisement occurs regularly in countries with a partially lowered voting age. For instance, in the United Kingdom, most 16- and 17-year-olds who were eligible to vote in the Scottish Independence Referendum in September 2014 could not vote in the subsequent UK general election in May 2015. In the United States, in Takoma Park alone, which in 2013 was the first city to lower the voting age for municipal elections to 16, temporary disenfranchisement has since occurred eleven times. As more jurisdictions adopt a lower voting age, more young citizens will experience temporary disenfranchisement as part of their political socialization.

In Germany, temporary disenfranchisement of underage voters has occurred in 46 elections since the first state lowered the voting age to 16 in 1996. Eleven of its 16 states have implemented voting age 16 for state elections, municipal elections, or both, while the voting

¹ For a more detailed explanation of temporary disenfranchisement and an overview of its occurrences worldwide, see section A of the online appendix.

age for national and European elections remains at 18. This makes Germany an excellent example of how voting age reforms will likely play out in other countries: gradual implementation of a lower voting age for lower-level elections resulting in the temporary disenfranchisement of young citizens.

We study a case of temporary disenfranchisement in the German state of Schleswig-Holstein, where 16- and 17-year-olds were eligible to vote in the state elections in May 2017, but almost all of them were barred from voting in the national elections five months later. We cover both elections as well as subsequent local elections through a register-based online panel survey of young voters aged 15 to 18. Almost half of 16- and 17-year-old respondents who voted in the state election said they also intended to vote in the national election, having not yet realized that most of them would not be eligible, hinting at the frustrating effects of temporary disenfranchisement.²

Building on a difference-in-differences design, we examine changes in young voters' political engagement as a response to the experience of being eligible in one but not the other election. We find that being temporarily barred from voting negatively affects citizens' perceptions of the political system's responsiveness to them as well as their satisfaction with democracy, whereas there is no effect on internal efficacy or political interest. The net effect of temporary disenfranchisement on the former remains negative even after citizens have regained their voting rights in municipal elections with voting age 16 another few months later.

Our findings highlight a hitherto overlooked side effect of selective voting rights extensions with important implications for the political and scientific debate around voting rights. In our case study, temporary disenfranchisement happens during affected citzens' formative years (Neundorf and Smets 2017); thus, the extent and longevity of disenfranchisement effects might extend beyond what we are able to establish in this article and remain important topics for future research. Furthermore, our findings bear insights that are relevant to temporary disenfranchisement due to residential mobility, citizenship, and felony disenfranchisement.

LITERATURE AND THEORY

Youth Voting

Research on underage voting mainly focuses on political maturity, turnout, and boost effects of the first election. With respect to political maturity, analyses of cases where voting age 16 applies have demonstrated that underage citizens are neither particularly unable nor unwilling to participate (Stiers, Hooghe, and Goubin 2020; Wagner, Johann, and Kritzinger 2012). Although prior research shows that turnout among young citizens is generally lower (Franklin 2004; Smets

2012) and more unequal (Schäfer, Roßteutscher, and Abendschön 2020), there are also indications that turnout among 18- and 19-year-olds is higher than among 20- to 30-year-olds and that this pattern may be even more pronounced among underage citizens (Bhatti, Hansen, and Wass 2012; Leininger and Faas 2020). Finally, several studies confirm a positive effect of turnout on political engagement (Schulte-Cloos 2019) and future turnout (Coppock and Green 2016). But what happens if (young) citizens lose their right to vote again?

Temporary Disenfranchisement

Previous research has demonstrated that attitudes toward the political system are malleable to short-term forces, as evidenced most prominently by the literature on electoral outcomes and democratic satisfaction. Partisans experience a decrease in democratic satisfaction when their favored party loses an election (Anderson and Guillory 1997; Rich and Treece 2018). Voters directly relate electoral losses to the functioning and responsiveness of the political system and adapt their attitudes. Therefore, one may assume that losing the right to vote—whether due to age restrictions, citizenship requirements, or conviction for a felony—will also negatively affect evaluations of the political system. Being barred from voting after having been eligible may convey an image of an inaccessible and unresponsive political system that in their view unfairly disenfranchises voters despite their previously demonstrated capability for participation.³

Furthermore, losing a fair election is not perfectly comparable with losing, even if only temporarily, one's franchise, which affected citizens may perceive as particularly discomforting.⁴ It is less clear whether temporary disenfranchisement affects the extent to which citizens are willing and feel capable of participating politically. Attitudes toward the political self are set early and change relatively little over the life course (Prior 2010).⁵ With this in mind and distinguishing between orientations toward the political system and the political self, we would expect that losing electoral eligibility decreases affected citizens' external political efficacy and satisfaction with democracy while having no effect on their internal political efficacy and political interest.

What happens after voting rights are restored? Just as winning an election after a spell in opposition can restore partisan's prior satisfaction with the political

² See Table C.1.

³ A similar argument comes from economics, where violations of earned benefits and expectations of employees toward their employer are found to be related with reactions of exit, voice, or neglect (Turnley and Feldman 1999).

⁴ In fact, our data suggest they do. Respondents who were not eligible to vote in the national election after having been eligible to vote in the state election were significantly angrier about their ineligibility than respondents who were ineligible for both elections (see Table C.2). ⁵ In contrast to external efficacy, which is shaped by ongoing experiences within a political system, internal efficacy beliefs are formed by early family socialization and later generalized to different domains in life (Lane 1965).

TABLE 1. Study Design

State election National election Municipal elections
September 24, 2017 May 6, 2018 N

1 Control 18 Eligible Eligible Eligible 581

Note: The control group (1) comprises persons entitled to vote in the national election and all following elections because they were 18 on the day of the national election, and the treatment group (2) comprises persons entitled to vote in the state and municipal elections only because they were aged 16 or 17 on the day of the national election. N = 1 respondents who participated in both waves 1 and 2.

Ineligible

system, we would expect that citizens will rebuild confidence in the political system.⁶ Therefore, we might expect that regaining electoral eligibility increases affected citizens' external political efficacy and satisfaction with democracy. Regaining eligibility should undoubtedly have no unfavorable effect on citizens' political interest and efficacy.

16-17

Eligible

2 Treatment

Finally, what is the net effect of losing eligibility in one election and regaining it in a later election, which together constitute the phenomenon of temporary disenfranchisement? Drawing on prospect theory, we speculate that the negative effect of losing eligibility may outweigh the positive effects of regaining it. Kahneman and Tversky (1979) were the first to argue that individuals can be described as loss averse because their pain of losing is more powerful than their pleasure of gaining. Similarly, losing the right to vote might frustrate voters more than (re)gaining would, as voters can be considered loss averse (Lockwood and Rockey 2020). In our case study, young voters first gained the right to vote in a less salient state election and then lost eligibility in a highly salient national election before regaining it in lowsalience local elections. The difference in salience between the elections might further contribute to a difference in absolute subjective values, which individuals assign to the gain and loss of eligibility. This leads us to expect that, in sum, temporary disenfranchisement decreases affected citizens' external political efficacy and satisfaction with democracy, whereas finding any such effects for affected citizens' internal political efficacy or interest is less likely.

RESEARCH DESIGN

To subject these expectations to empirical scrutiny, we use survey data collected in Germany's northern-most state, Schleswig-Holstein. The state represents a typical case of temporary disenfranchisement caused by inconsistent voting age regulations. We conducted a three-wave panel survey following a state election (with voting age 16) in May 2017, the national elections (voting age 18) just five months later, and municipal

elections (voting age 16) in May of the following year. To contact potential respondents, we obtained the names, addresses, and dates of birth of all German citizens aged 15–18 at the time of the state election from the population registers of the largest municipalities in Schleswig-Holstein. We chose the population of respondents so that they are relatively similar in age but at the same time have very different voting rights in these three elections. 8

Eligible

916

We compare two groups of young citizens—see Table 1—in a difference-in-differences (DiD) setup. We conceive of the respondents eligible in the state election in May 2017 but not the subsequent national election as the treatment group. The group that was eligible in all elections serves as the control group. For both groups, the state election in May 2017 was the first-ever election they were eligible to vote in. We investigate the effect of temporary disenfranchisement on external political efficacy, satisfaction with democracy, internal political efficacy, and political interest, treating the dependent variables as quasicontinuous.⁹

A DiD is a commonly applied method of causal identification, which compares the differences in trends in the dependent variable between the treatment and control group-see Figure 1. We assume that both groups would have followed the same trend in the dependent variable if it were not for the treatment group having experienced temporary disenfranchisement. The difference between the observed value and the counterfactual established through the DiD constitutes the treatment effect. To guard against the possibility that differential nonresponse patterns drive the differences in trends between treatment and control groups, we estimate all models on a subsample of respondents who have participated in both waves.¹⁰ For a more extensive elaboration of the research design see section D of the online appendix and for robustness checks, including matching, see sections F, G, and H.

⁶ This mirrors the finding from the literature on felony disenfranchisement that negative effects of disenfranchisement through incarceration can be reversed once a former inmate's right to vote is restored (Shineman 2020).

⁷ See section B for more information on the survey.

⁸ See also Table B.2 and Figure B.1.

 $^{^9}$ Details on the coding of variables and item wordings can be found in sections B.3 and B.4

¹⁰ However, panel attrition is very similar across treatment and control groups (Table B.3).

FIGURE 1. Visualization of the Difference-in-Differences Design Using Data from All Three Waves of the Survey Net effect of Losing eligiblity Regaining eligibility temporary disenfranchisement 3.2 Counterfactual trend External Efficacy Treatment effect 2.6 state municipal national municipal national state municipal state national Interview after ... election

Note: The graph plots mean values of external efficacy after the three elections in the treatment (dark gray) and control group (black)—light gray dots represent data not used in the specific analysis. Solid lines connect observed values (dots). The dashed line illustrates the parallel trends assumption, which constructs the counterfactual (circle) from the pretreatment value in the treatment group and the trend in the control group. The difference between counterfactual and observed value represents the treatment effect.

Eligible for national election - Temporarily disenfranchised

RESULTS

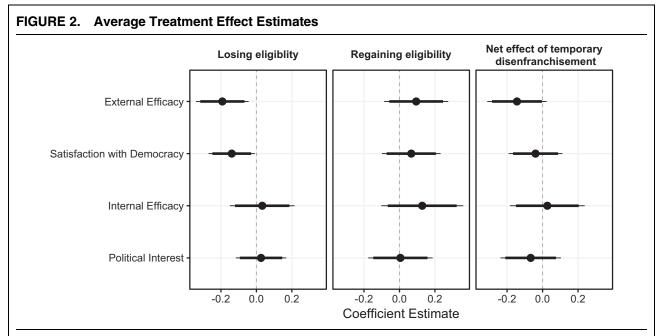
We first estimate the effect of losing eligibility by comparing how young citizens' political attitudes belonging to the two groups change from the first to the second wave. We then analyze differences in trends from waves two to three to measure the effect of regaining one's right to vote. Finally, we estimate the net effect of temporary disenfranchisement by comparing voters' attitudes before (wave 1) and after (wave 3) having experienced both dis- and reenfranchisement as a whole. To summarize our results, we plot the coefficients representing the average treatment effects along with their 90% and 95% confidence intervals in Figure 2.¹¹

As the first panel of Figure 2 indicates, the effect of losing the right to vote is negative and significant for both external efficacy and satisfaction with democracy. External efficacy in the treatment group decreased by an average 0.19 points, which is roughly a fifth of the variable's standard deviation. Compared with the mean difference in external efficacy between respondents having obtained or pursuing a high school degree qualifying for university studies ("Abitur") and those

who have or do not, our effect estimate is equivalent to 67% of that difference. Losing the right to vote is also associated with a statistically significant 0.14-point decrease in satisfaction. This effect size is equivalent to 34% of the education differential in democratic satisfaction. In short, when experiencing a loss of voting rights, respondents in the treatment group perceived the political system as less responsive to their needs and were less satisfied with the way democracy works. In contrast, internal efficacy and political interest remain unaffected by losing the right to vote.

When respondents received the invitation to the third wave of the survey, they had already regained eligibility by having been able to vote in the municipal elections. The results in the second panel suggest that reenfranchised respondents have increased in external efficacy, satisfaction with democracy, and internal efficacy vis-à-vis the control group, which did not experience a change in eligibility status. However, these effects are not significantly different from zero. Although there might be a slightly positive effect of regaining the right to vote, we cannot say with sufficient certainty that it significantly ameliorates respondents' perceptions of the political system to make up for the loss in efficacy and satisfaction experienced through disenfranchisement in the first place.

¹¹ We report the models behind these results in section F.



Note: Estimates of the effect of losing eligibility (*left panel*), regaining eligibility (*middle*), and temporary disenfranchisement (*right*) on external political efficacy, democratic satisfaction, political interest, and internal efficacy. The coefficient plot shows results from the DiD specifications comparing groups 1 and 2 across waves 1 and 2 (*left*), waves 2 and 3 (*middle*), and waves 1 and 3 (*right*). Models are estimated on samples of respondents who took part in both waves. Horizontal bars indicate 90% and 95% confidence intervals.

Finally, the net effect of temporary disenfranchisement comprises the effect of losing and regaining one's right to vote. As can be seen in the third panel, temporary disenfranchisement results in decreased external efficacy while not significantly affecting the remaining three dependent variables. An average respondent of the treatment group decreased by -0.14 in external efficacy after losing and regaining their right to vote. Apparently, losing eligibility after having voted before seems to represent such a great loss that the slightly positive effects of regaining eligibility cannot outweigh the damage caused.

We conducted several robustness tests—see sections F, G, and H of the online appendix. Using alternative subsamples—created through focusing on voters only, employing matching, reducing the age range, or replacing the control group with underage ineligible voters—produces substantively similar if not even stronger results. Furthermore, although we are unable to test the parallel trends assumption in pretreatment periods, we can make it plausible through a placebo treatment group. ¹² Because the nature of first-time eligibility (Bhatti, Hansen, and Waas 2016) and interruptions in voting habit formation (Plutzer 2002) can influence future participation, we also had a look at turnout, with inconclusive results due to limitations imposed by our data. ¹³

CONCLUSION

An increasing number of countries extend voting rights selectively to underage citizens and residents without

citizenship. Most relevant to our case of study, voting age reforms are usually implemented in lower-level elections such as municipal or state elections first, with the result that young citizens often temporarily lose their right to vote again after having voted for the first time. This article is the first to investigate the phenomenon of temporary disenfranchisement, using voting age reductions as a case study. We show that stripping citizens of their right to vote, even if only temporarily, leads to a reduced perception of the system's responsiveness. On a positive note, affected voters' internal efficacy or political interest do not suffer. In summary, although voters do not lose faith in their abilities to participate politically, their belief that their voices will be heard in the democratic process decreases.¹⁴

Our findings have implications for the political and scientific debate around voting rights: they suggest that innovative policy makers in regional jurisdictions might counteract the improvement they were trying to achieve when giving citizens the right to vote at an earlier age. It is widely assumed that lowering the voting age may facilitate participation because citizens will be more likely to vote while still being embedded in family homes and schools. However, the negative effects of temporary disenfranchisement caused by voting age reductions contradict the positive effects of first-time voting. Therefore, policy makers might want to be cautious about continuing on the path of gradual reductions in the voting age and might instead want to

¹² See Table F.1.

¹³ See section F.4.

¹⁴ This also seems to lead to a short-term behavioral response: results in Table C.3 suggest that temporarily disenfranchised respondents engaged more in nonelectoral political participation, including protest, than both older and younger respondents.

follow the principle of all or nothing. Because raising the voting age again is unrealistic, this would imply lowering the voting age to 16 for all elections.¹⁵

Our results also bear relevance for our understanding of temporary disenfranchisement due to other reasons such as residential mobility, citizenship, or felony disenfranchisement.¹⁶ Citizens are sometimes temporarily barred from voting after moving (and not registering or being registered in time), which, as our results suggest, has not just a mechanical effect on electoral participation but also an attitudinal component, which might translate into longer-term behavioral consequences. Additionally, some noncitizen residents regularly experience temporary disenfranchisement. In the European Union, for instance, residents from other EU countries can vote in European and local elections but not national or regional elections in their country of residence, with, as of yet, unknown consequences for their political integration. Finally, our results suggest that on top of the effect of the hostile experience of the carceral state, the loss of franchise that goes along with a prison sentence may have an independent effect on former inmates' political attitudes, which contributes to lower turnout after release from prison. Investigating these other cases of temporary disenfranchisement, testing the mechanisms undergirding our findings, and extending the focus to behavioral implications, most importantly turnout, constitute important topics for future research.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit http://doi.org/10.1017/S000305542200034X.

DATA AVAILABILITY STATEMENT

Research documentation and data that support the findings of this study are openly available at the American Political Science Review Dataverse: https://doi.org/10.7910/DVN/T5LYWS.

ACKNOWLEDGMENTS

We thank David Fortunato, Jane Green, Max Schaub, Sean Carey, Thomas Gschwend, and Oliver Rittmann, as well as participants of the "OSIBag" colloquium at Freie Universität Berlin and audiences at EPSA 2021 and APSA 2021 for their thoughtful comments. Anna Schulze, Anton Könneke, Elena Kalter, and Julian Sigle provided excellent research assistance.

CONFLICT OF INTEREST

The authors declare no ethical issues or conflicts of interest in this research.

ETHICAL STANDARDS

The authors affirm that this article adheres to the APSA's Principles and Guidance on Human Subjects Research.

REFERENCES

- Anderson, Christopher J., and Christine A. Guillory. 1997. "Political Institutions and Satisfaction with Democracy: A Cross-National Analysis of Consensus and Majoritarian Systems." *American Political Science Review* 91 (1): 66–81.
- Bhatti, Yosef, Kasper M. Hansen, and Hanna Wass. 2012. "The Relationship between Age and Turnout: A Roller-Coaster Ride." *Electoral Studies* 31 (3): 588–93.
- Bhatti, Yosef, Kasper M. Hansen, and Hanna Wass. 2016. "First-Time Boost Beats Experience: The Effect of Past Eligibility on Turnout." *Electoral Studies* 41 (March): 151–58.
- Coppock, Alexander, and Donald P. Green. 2016. "Is Voting Habit Forming? New Evidence from Experiments and Regression Discontinuities." *American Journal of Political Science* 60 (4): 1044–62.
- Eichhorn, Jan, and Johannes Bergh, eds. 2020. Lowering the Voting Age to 16: Learning from Real Experiences Worldwide. Cham: Palgrave Macmillan.
- Franklin, Mark N. 2004. Voter Turnout and the Dynamics of Electoral Competition in Established Democracies since 1945. Cambridge: Cambridge University Press.
- Kahneman, Daniel, and Amos Tversky. 1979. "Prospect Theory:
 An Analysis of Decision under Risk." *Econometrica* 47 (2): 263–91.
 Lane, Robert E. 1965. *Political Life: Why and How People Get Involved in Politics*, 2nd ed. Glencoe, IL: Free Press.
- Leininger, Arndt, Marie-Lou Sohnius, Thorsten Faas, Sigrid Roßteutscher, and Armin Schäfer. 2022. "Replication Data for: Temporary Disenfranchisement: Negative Side Effects of Lowering the Voting Age." Harvard Dataverse. Dataset. https://doi.org/10.7910/DVN/T5LYWS.
- Leininger, Arndt, and Thorsten Faas. 2020. "Votes at 16 in Germany: Examining Subnational Variation." In *Lowering the Voting Age to 16: Learning from Real Experiences Worldwide*, eds. Jan Eichhorn and Johannes Bergh, 143–66. Cham: Palgrave Macmillan.
- Lockwood, Ben, and James Rockey. 2020. "Negative Voters? Electoral Competition with Loss-Aversion." *The Economic Journal* 130 (632): 2619–48.
- Neundorf, Anja, and Kaat Smets. 2017. "Political Socialization and the Making of Citizens." In *Oxford Handbooks Online*. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199935307.013.98.
- Plutzer, Eric. 2002. "Becoming a Habitual Voter: Inertia, Resources, and Growth in Young Adulthood." *American Political Science Review* 96 (1): 41–56.
- Prior, Markus. 2010. "You've Either Got It or You Don't? The Stability of Political Interest over the Life Cycle." *The Journal of Politics* 72 (3): 747–66.
- Rich, Timothy, and Mallory Treece. 2018. "Losers' and Non-Voters' Consent: Democratic Satisfaction in the 2009 and 2013 Elections in Germany." *Government and Opposition* 53 (3): 416–36
- Schäfer, Armin, Sigrid Roßteutscher, and Simone Abendschön. 2020. "Rising Start-Up Costs of Voting: Political Inequality among First-Time Voters." West European Politics 43 (4): 819–44.
- Schulte-Cloos, Julia. 2019. "The Effect of European Parliament Elections on Political Socialisation." *Journal of European Public Policy* 26 (7): 1094–111.

¹⁵ Increasing the voting age again could also be perceived as disenfranchisement by young citizens who had expected to be able to vote at age 16 or 17.

¹⁶ For a detailed discussion of these sources of temporary disenfranchisement, see sections A.4, A.5, and A.6.

- Shineman, Victoria. 2020. "Restoring Voting Rights: Evidence That Reversing Felony Disenfranchisement Increases Political Efficacy." *Policy Studies* 41 (2–3): 131–50.
- Efficacy." *Policy Studies* 41 (2–3): 131–50.

 Smets, Kaat. 2012. "A Widening Generational Divide? The Age Gap in Voter Turnout through Time and Space." *Journal of Elections, Public Opinion and Parties* 22 (4): 407–30.
- Stiers, Dieter, Marc Hooghe, and Silke Goubin. 2020. "Are 16-Year-Olds Able to Cast a Congruent Vote? Evidence from a 'Voting at
- 16' Initiative in the City of Ghent (Belgium)." *Electoral Studies* 63 (February): article 102107.
- Turnley, William H., and Daniel C. Feldman. 1999. "The Impact of Psychological Contract Violations on Exit, Voice, Loyalty, and Neglect." *Human Relations* 52 (7): 895–22.
- Wagner, Markus, David Johann, and Sylvia Kritzinger. 2012. "Voting at 16: Turnout and the Quality of Vote Choice." *Electoral Studies* 31 (2): 372–83.