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*Does Schooling Affect Political Attitudes?  
Quasi-Experimental Evidence*

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# Does Schooling Affect Political Attitudes? Quasi-Experimental Evidence\*

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## Abstract

In this paper I study the direct causal effects of schooling on political attitudes of vocational students in Austria. I exploit that classes of apprentices of the same grade level and vocation are as good as randomly assigned to different school terms. This allows to compare apprentices who were at school for ten weeks with apprentices who were at work in their training firms during that time. I find that schooling has a positive direct causal effect on political interest of vocational students. This increase in political interest is, however, not accompanied by a significant increase in voting intention. Furthermore, my results suggest that apprentices who went to school while being exposed to a political affair support different parties than those apprentices who were exposed to the affair at work.

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# 1 Introduction

A large scientific literature about the effects of education on political preferences, voter turnout, and political interest demonstrates how important schools are for political opinion formation and for a lively democracy in general.<sup>1</sup> It was shown that education increases people's political interest and it is a powerful predictor for participation in elections (Milligan, Moretti, and Oreopoulos 2004, Sondheimer and Green 2010, Smets and Ham 2013). Furthermore, education seems to causally steer people to the political right, contrary to what correlational evidence would suggest (Marshall 2016, Meyer 2017 and Marshall 2019).

However, a direct link between schooling and changes in students' political attitudes has not been found yet. The studies cited above do not distinguish between direct effects of schooling and the indirect effects, they solely report the total effects of schooling. This means that the exact mechanism remains unclear since it could be just other, indirect (i.e. mediating) factors that cause the effects that were found. Obtaining a higher level of educational attainment increases income (Mincer 1974), it affects who people spend time with (Rockwell 1976, Chadwick and Solon 2002) and it can even affect health status in the long run (Meghir, Palme, and Simeonova 2018). As a consequence of these changes, political attitudes could be affected as well. In order to understand whether and how schooling per se shapes students' political attitudes, identifying the direct effects seems relevant.

In this paper I use a quasi-experimental design to study whether and how schooling directly affects political attitudes. My analysis is based on data from a field survey among vocational students in Austria. In the Austrian dual education system, vocational students are in a training and work relationship with their training company and they are students in a vocational school. They receive practical training in their company and ten weeks of general education as well as additional theoretical education and practical training in school during each year of training.

I exploit that vocational students in Austria are as good as randomly assigned to different classes and school terms, respectively. This allows comparing the political attitudes of vocational students who only differ in their period of schooling but not with respect to grade level, profession, expectation about the future or other characteristics. This means that it is indeed only the direct effect of schooling that is identified and not any other, indirect effect.

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<sup>1</sup>See for example Hyman (1979), Nie, Junn, and Stehlik-Barry (1996), Weakliem (2002), Berinsky and Lenz (2010), Gerber et al. (2010), Dunn (2011), Persson (2014), Friedman et al. (2015), Persson, Lindgren, and Oskarsson (2016), Croke et al. (2016), Larreguy and Marshall (2017), Solis (2017), Dang (2018).

The potential drivers for direct effects of schooling are manifold. It might be the peers in school who affect political attitudes of a student. Discussions of political issues might lead to higher political interest and to more knowledge about politics. Or it might be the teachers who pass on their passion for democracy to students. Attending the school subject *civic education* might be another potential factor that could expand students' political knowledge and trigger them to participate in elections. But many other school specific factors are plausible drivers for changes in political attitudes of students as well.

Isolating the direct effects of schooling from the indirect effects is trickier than one might think (Green, Ha, and Bullock 2010, Clarke 2005, Gillen, Snowberg, and Yarif 2019). Attempts to divide total effects econometrically into a direct and an indirect part are prone to bias. Omitted variables are one particular issue in this context because schooling has effects on so many different variables that in turn could all affect political attitudes. "Controlling" for these variables in a regression does not seem feasible. It is hard to imagine first, that we could know about all the relevant variables and second, that we are able to measure them without measurement error. Both conditions would be necessary to get unbiased results. But there is also another, more fundamental issue when political attitudes of people who went to school for a different period of time are compared. Even in the absence of any self-selection issue or the factual presence of any of the indirect factors that were mentioned above, future courses of life will differ between people under comparison. This could lead to different expectations about future prospects that might already cause political attitudes to change. Standard econometric approaches reach their limits under these circumstances. Comparing the political attitudes of two groups of students who only differ in their period of schooling but not with respect to other characteristics is a viable possibility to overcome these issues.

In a field survey in school year 2019, I collected data on political attitudes and on numerous background characteristics of two groups of vocational students. One group was surveyed at the end of the first school term and the other at the very beginning of the second term that started just a few days later. Each term lasts for ten weeks, so at the end of the first school term one group of vocational students had been at school for ten weeks, whereas the other had been at work during that time.

I observe a significant positive effect of ten weeks of schooling on political interest, moderate positive effects on students' likelihood to support the conservative party (ÖVP) and no significant effect on the intention to participate in an election. Furthermore, I can show that the general political situation when school is attended matters. Vocational students who were at school when a major political scandal in Austria was uncovered (the so called *Ibiza affair* in spring 2019) reported significantly different party preferences even five months after that event, compared to vocational students who went to work during

that time. They were significantly more likely to support no party at all and significantly less likely to support the *Austrian Freedom Party* (FPÖ) that caused the affair.

What could be the mechanism behind the direct effects of schooling on political attitudes? Suggestive evidence points towards the role of teachers as the driver for the positive effect on students' political interest. When apprentices attend school, they talk more often with teachers and with fellow students about politics and less often with workmates. Among these three groups, apprentices perceive teachers as most interested in politics (followed by workmates and fellow students). Furthermore, spending more time with peers does not significantly affect a student's political interest. I, therefore, conjecture that it is the teachers who are able to pass on part of their political interest to their students. Results for how students' party support could have been affected by schooling are ambiguous. Only weak indications suggest that attending the school subject *civic education* affects an apprentice's likelihood to support the ÖVP. I do not find evidence for an effect of schooling on knowledge about the positions of Austrian's political parties. Also the quality of vote, measured by the match of the political opinions of an apprentice and the positions of the party he or she supports, does not improve significantly.

My paper makes two contributions to the literature studying the causal effects of schooling. First, I add to the literature by showing that schooling has a direct and positive effect on political interest of vocational students. Other studies investigate the total effects of schooling, which does not allow for differentiating between the direct and indirect effects. Two papers in the literature are closely related to this contribution. Persson, Lindgren, and Oskarsson (2016) exploit the exogenous variation related to school entry age to estimate the effects of one additional year in school on civic values and on the intention to participate in an election. In contrast to my paper they do not study the effect of schooling on *political interest* or on *support for a political party*. Furthermore, their treatment and control groups slightly differ since they compare students who are among the oldest in a class with students who are among the youngest in another class. In the second paper, Solis (2017) does not investigate the effect of schooling but of higher education on students. He exploits the existence of a discontinuity in the eligibility criteria for college loans in Chile to investigate the effect of college education on political participation. In line with my results, neither of the two studies finds a causal effect of education on political participation.

Second, my findings suggest that the general political situation under which schooling takes place matters. All apprentices in my study were exposed to the so-called *Ibiza affair*. But it made a large difference whether an apprentice was going to school or to work while being exposed to the affair. Such contextual factors have, to the best of my knowledge, not been considered in the literature about causal effects of schooling on

political attitudes.

The remainder of the paper is structured as follows. Section 2 provides details about the study design and balance checks. Section 3 presents the main results, section 4 investigates potential mechanisms, and section 5 describes the so-called *Ibiza affair* and its different effects on apprentices at school and at work. Section 6 concludes.

## 2 Study Design

After nine years of compulsory education, students in Austria can decide between continuing with the general educational pathway and starting a vocational education and training (VET). More than 200 VET professions are offered and a considerable share of the Austrian population receives vocational training. 34% of the Austrian population aged from 25 to 64 held an apprenticeship diploma in 2017 and about the same share of the population starts an apprenticeship each year.<sup>2</sup>

To become an apprentice, one has to apply at a company that offers vocational training. If accepted, he or she receives both training at the company and complementary education at a part-time vocational school. In this dual system, the apprentice is in a training and work relationship with the training company and a student at a vocational school. The company is responsible for providing practical training, which makes up about 80% of the entire training time. In vocational school, apprentices receive general education (languages, civic education and religious education) as well as theoretical and practical education that complements their training. Depending on the profession, the duration of a VET is between two and four years.

I exploit that school classes of the same grade level and profession are as good as randomly assigned to different course blocks, respectively, school terms. In each school year, four course blocks of ten weeks each are offered and it is the vocational school's task to assign its apprentices to one of these terms. Consequently, at the end of the first term one group of apprentices had been at school for ten weeks, whereas apprentices of the second term had been at work in their training companies during that time. Between two school terms we have, therefore, the opportunity to compare groups of apprentices that had been at school with groups of apprentices of the very same grade level and profession that had not been at school during that time period.

I will show that it is reasonable to believe that school classes were as good as randomly assigned to term one (i.e. to receive the “treatment”) or to term two (i.e. the “control” condition). Based on that evidence, I infer that at the end of term one and the beginning

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<sup>2</sup>Statistik Austria (2019) and WKO (2020)

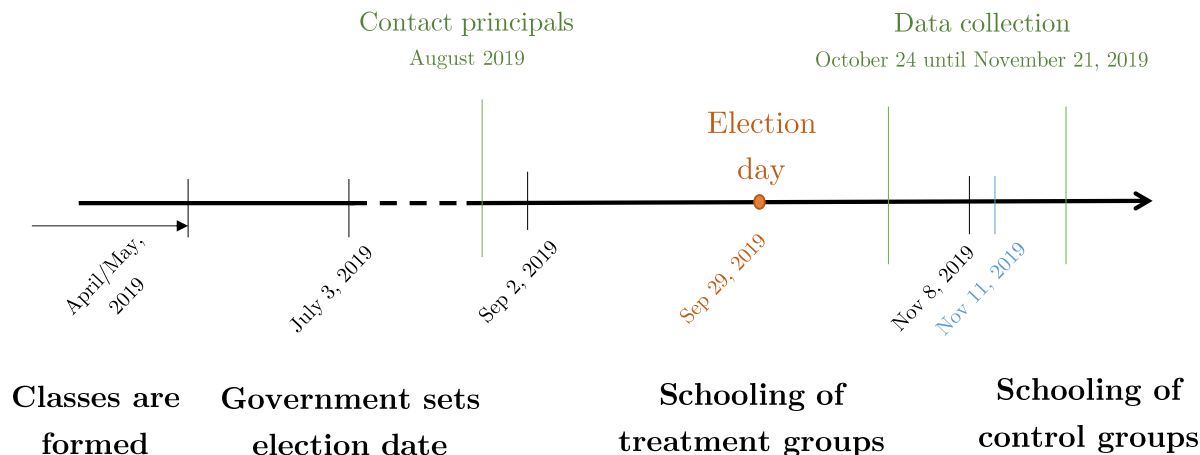


Figure 1: Timeline with the most important dates.

of term two significant differences between both groups of apprentices in terms of political attitudes can be attributed to the schooling experience.

## 2.1 Assignment of Apprentices to School Terms

The profession of an apprentice and the location of his or her training company determines the vocational school that has to be attended. Within vocational schools, the principals are responsible for assigning their students to one of the four school terms. That has to be done by the end of June for the following school year, which starts at the beginning of September.

In principle, vocational schools are free to assign an apprentice to any term they like. Although schools that I contacted claimed that assignment of apprentices to terms was “completely random”, they also informed me about some informal guidelines for class assignment:

Some vocational schools base their decisions on the place of residence of the apprentices. This is common for schools that are located in smaller towns that do not have good public transport connections. Apprentices from certain geographic regions are assigned to the same term in order to facilitate carpooling. I ignored schools that base their assignment decisions on the place of residence of apprentices and I did not collect data from any of their classes.

Second, in industries with seasonal fluctuations in workload, schools assign apprentices of the same company evenly across school terms. Apprentices are a valuable part of a company’s workforce and schools try to prevent a situation in which some companies lack a large fraction of their apprentices during peak season.

Third, vocational schools usually collaborate very closely with the firms and company

requests are fulfilled whenever possible. Some firms allow apprentices to choose their preferred term, others try to distribute their apprentices evenly across terms. But there might be many other reasons for firms to prefer having an apprentice at school for instance in term one and not in term two. It was, of course, not possible to verify the exact reasons for why a single apprentice was sent to term one or to term two by his or her training company.

Several factors make me confident that potential self-selection is not an issue in my setting. I surveyed apprentices of as many as 12 different professions, representing a very diverse set of industries and service sectors. Professions included information technology, office administration, automation technology, plumbing, etc. (see section A in the appendix for the complete list of professions). The data suggests that no particular term was favored by firms (29.0% of all apprentices in term 1 were sent by their companies compared to 29.9% in term 2) or by individual apprentices (12.8% of apprentices in term 1 and 13.9% in term 2).

For these reasons, I do not expect systematic assignment of apprentices with specific individual characteristics to a specific school term. In section 2.4 I provide balance checks that confirm these expectations. Balance tables with only apprentices whose firms suggested a specific school term provide further evidence for non-systematic assignment, and my main findings do not change if I exclude them from the analysis (see section B.1 in the appendix). These indications, therefore, suggest that assuming as good as random assignment of apprentices to terms is justified.

## **2.2 Institutional Background of Vocational Education in Austria**

All VET programs are standardized on the national level. Companies that want to provide vocational training are audited by the Chamber of Commerce and by the Chamber of Labor. They check whether the applying firm fulfills all legal (the company has to be entitled to operate in the professional field in which it wants to train apprentices) and operational (the capability of teaching apprentices all the skills that the profession requires) requirements. Furthermore, every company has to have a certified trainer for its apprentices.

The curricula in vocational schools are set by the national government and the federal administrative school boards. The government defines a framework curriculum for each VET program. These framework curricula contain the subjects and their contents that have to be taught as well as the number of total lessons in each of these subjects. The federal administrative school boards then assign the course contents and the number of



lessons of each subject to specific grade levels. The VET program content is, therefore, the same in every federal state for a given profession. In which school grade that content is taught can, however, differ between federal states.

The crucial feature of VET programs for my study is that teaching provided by vocational schools can be delivered on a course-specific basis. Apprentices that I focus on are at school during blocks of ten consecutive weeks in each year of their apprenticeship. Other apprentices attend school on a seasonal basis or either once or twice a week during an entire school year, depending on the profession and on the needs of the industry.

## 2.3 Data Collection

Preparatory work started in June 2019, when I called vocational schools in Austria to gather information about their class assignment procedures. Schools had to fulfill certain criteria to be suitable for my study. They had to offer course-specific teaching for at least two classes of apprentices of the same grade level and profession in terms one and two. I checked whether an apprentice's place of residence was considered for class assignment and I disregarded schools that did not confirm its irrelevance. For logistical reasons I also took the locations of vocational schools into consideration. I preferred schools that were close to Vienna and centrally located in their federal states. Schools in Upper Austria and Styria fulfilled above criteria best, so I focused on those two federal states for data collection.

The administrative school boards gave their approval for the research project in mid-August, so I could start contacting the schools at the end of August. Vocational schools in Upper Austria and Styria that were suitable according to the criteria above were asked to participate in the study. Seven out of twelve principals that I contacted showed interest and they allowed me to conduct the surveys in their schools.

In Upper Austria in school year 2019/2020, the first term began on September 2 and ended on November 8, 2019. Apprentices of the second term entered school immediately afterwards, namely on November 11, 2019. In Styria, the school year started a few days later. The first term began on September 9 and ended on November 13, 2019. The second term started on the next day on November 14, 2019.

Between October 24 and November 21, a team of at least two researchers visited the schools and carried out the data collection. Each school was visited twice, once at the end of the first term and once at the beginning of the second term. I surveyed 17 class pairs with one class of the same grade level and profession in both school terms. In total, 34 classes were surveyed – 17 classes in term one and 17 classes in term two. Figure 1 shows a timeline with an overview of the most important dates of my study and Table 1 provides

Table 1: Summary Statistics

	Upper Austria	Styria	Total
Number of schools	6	1	7
Number of classes	28	6	34
Classes with a			
technical profession	18	4	22
commercial profession	10	2	12
Classes in			
grade level two	16	4	20
grade level three	12	2	14
Number of apprentices	657	106	763

*Notes.* Overview of study participants and class characteristics.

information on basic background characteristics of apprentices, respectively classes that were surveyed.

The survey contained questions about socio-demographic characteristics, various background variables and three main questions regarding political interest, voting intention and party support. Several of the questions are based on the *Austrian National Election Survey, AUTNES* (Aichholzer et al. 2018), which is a well-established and institutionalized national election study that is designed by political scientists at the University of Vienna. Other questions are based on an unpublished draft questionnaire from *Europe Direct and VieCER (n.d.)*. This questionnaire was designed for an election study at schools, the questions were, therefore, tailored to the needs of young students.

The first two main questions were not incentivized. Apprentices were asked to state their political interest on a scale from 0 (not interested at all) to 10 (very interested) and whether they would turn out to vote in a national election on a scale from 1 (certainly not) to 10 (certainly). Note that the vocational students in my study were 16 years or older, which means that they are entitled to vote in national elections if they are Austrian citizens.<sup>3</sup>

To elicit party support, I offered each apprentice a donation of €10,- to his or her most preferred political party. All parties that participated nationwide in the parliamentary

<sup>3</sup>Austria is one of very few countries that have a general voting age of 16 in national elections. In the EU, Malta is the only other country that has also lowered its voting age to 16.

election in 2019 were listed in the survey. *No donation to any party* was also available as an option. Donations were randomly realized with a chance of 20% and paid by the researcher. Apprentices were also informed that I would make the transaction receipts publicly available on the author’s website.<sup>4</sup>

The surveys were conducted during school time. Each school had its own computer rooms, so it was not necessary to set up an own lab at the school sites. I equipped each PC in the computer rooms with a mobile privacy screen in order to guarantee anonymous answers for study participants. Apprentices received a public link to the online survey and each of them drew a unique private access code with which they were able to access the survey. The investigators were not able to connect any answer with a study participant. Participation in the study was voluntary and apprentices could leave at any time. Only two out of 769 apprentices decided not to participate in the survey. Data of four participants could not be used for further analyses since three apprentices turned out to be younger than 16 and one apprentice did not answer all questions due to time constraints. All apprentices who participated received a chocolate candy as a small thank-you gift.

## 2.4 Balance Checks

To test whether it is plausible to assume that classes were as good as randomly assigned to term one or to term two, I estimate the following linear probability model with class pair fixed effects:

$$x_{ik} = \alpha_k + T_{ik}\beta + e_{ik} \tag{1}$$

$k = 1, \dots, 17$  denotes the class pairs with  $i = 1, \dots, n_k$  individuals in each class pair.  $x_{ik}$  is the variable for which randomization is checked.  $\alpha_k$  is the fixed effect for class pair  $k$ ,  $T_{ik}$  is the treatment indicator for person  $i$  in class pair  $k$ , and  $\beta$  is the unknown parameter.  $e_{ik}$  is an individual specific error term, which is assumed to be independent between class pairs.

We can interpret the coefficient  $\beta$  as the difference between  $x_{ik}$  in the control and treatment groups after adjustments for different class sizes. Statistically significant differences would indicate that the assumption of as good as random assignment of classes

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<sup>4</sup>By the end of February 2020 all donations were realized, except to ÖVP. In August 2019 the ÖVP declared that it would not accept any donations from individuals or companies until the end of 2019. They, however, surprisingly continued that policy beyond 2019. I doubt that apprentices could anticipate that when they participated in my survey. Since I promised to realize the donations, I decided to transfer the money to *Hilfswerk Österreich* instead, an Austrian charity organization with strong historical and personnel connections to ÖVP.

into treatment and control has to be rejected. The data is clustered on the level of class pairs, which is the level of sampling conditional on the study approval from a principal (Abadie et al. 2017, Chaisemartin and Ramirez-Cuellar 2022). With just 17 class pairs, standard adjustments for clustering can lead to downward biased cluster-robust standard errors (Donald and Lang 2007). I, therefore, report  $p$ -values and 95% confidence intervals based on the wild cluster bootstrap- $t$  method (Cameron, Gelbach, and Miller 2008, Roodman et al. 2019).

Variables for the balance checks were pre-registered and selected based on their potential influence on any outcome variable and on their capability to act as a proxy for an influential (but unobservable) characteristic. Furthermore, it was required that the variables used could not be affected by ten weeks of schooling or working.

The balance tables look promising. Table 2 shows summary statistics for variables with binary and numerical data. We observe one estimate (*grade point average, GPA*) that is statistically significant at the 10% level, which is what we expect to find under randomization given twelve variables. Table 3 provides balance statistics for variables with categorical data. None of the joint  $F$ -tests for these variables shows significance at a conventional significance level. However, students from training companies with 10-49 employees, and students who prepare for the *A-levels* (“Matura”) are not evenly distributed in my sample. Two slightly imbalanced categories are again not surprising given the 18 different categories in my analysis. I, nevertheless, include these variables in my regression analyses as additional covariate controls. We will see that this increases the treatment effect estimates, which means that those imbalances render the estimates in my baseline analyses more conservative.

Table 2: Balance Table I

	Control Groups		Treatment Groups		Test for Difference		
	Mean	SD	Mean	SD	$\beta$	95% CI	p-value
Age	18.11	2.48	18.46	2.58	0.283	[-0.296, 0.736]	0.375
Female	0.39	0.49	0.42	0.49	0.024	[-0.028, 0.077]	0.365
Austrian citizenship	0.89	0.31	0.88	0.33	-0.016	[-0.060, 0.031]	0.466
First apprenticeship	0.95	0.21	0.95	0.23	-0.005	[-0.045, 0.036]	0.813
Work experience <sup>†</sup>	0.49	1.10	0.54	1.13	0.048	[-0.095, 0.191]	0.483
Income <sup>†</sup>	5.49	1.38	5.37	1.42	-0.123	[-0.337, 0.081]	0.234
Exempted from							
civic education	0.22	0.41	0.19	0.39	-0.033	[-0.084, 0.020]	0.197
Attend boarding school	0.30	0.46	0.36	0.48	0.055	[-0.061, 0.172]	0.329
Grade point average	1.95	0.78	2.13	0.85	0.177*	[-0.008, 0.358]	0.060
Trade union member <sup>†</sup>	0.29	0.46	0.34	0.47	0.027	[-0.072, 0.126]	0.577
Active in a political party <sup>†</sup>	0.07	0.26	0.09	0.28	0.014	[-0.030, 0.058]	0.497
Vocational training							
started in summer	0.75	0.43	0.74	0.44	-0.019	[-0.108, 0.069]	0.649
<i>N</i>	411		352				

<sup>†</sup>Less observations due to non-responses (Income:  $N = 741$ , Active in a union:  $N = 617$ , Active in a party:  $N = 658$ ). Income was measured in steps of €150.  $5$  denotes net income of €750 to €900 and  $6$  denotes €900 to €1050, for example.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 3: Balance Table II

	Control Groups		Treatment Groups		Test for Difference		
	<i>N</i>	%	<i>N</i>	%	$\beta$	95% CI	p-value
<b>Company size</b>							<b>0.274</b>
0-9 employees	60	14.60	47	13.35	-0.001	[-0.040, 0.036]	0.964
10-49 employees	109	26.52	118	33.52	0.062*	[-0.003, 0.126]	0.059
50-249 employees	66	16.06	57	16.19	-0.000	[-0.066, 0.061]	0.989
250 employees or more	176	42.82	130	36.93	-0.061	[-0.143, 0.021]	0.129
<b>Hometown</b>							<b>0.709</b>
<5.000 inhabitants	228	55.47	201	57.10	0.021	[-0.076, 0.121]	0.646
5.000 to 20.000	81	19.71	73	20.74	0.008	[-0.048, 0.061]	0.762
20.000 to 100.000	44	10.71	40	11.36	0.006	[-0.038, 0.050]	0.766
>100.000 inhabitants:							
Center of a city	33	8.03	22	6.25	-0.019	[-0.061, 0.023]	0.349
Outskirts of a city	25	6.08	16	4.55	-0.017	[-0.044, 0.012]	0.220
<b>A-levels (Matura)</b>							<b>0.248</b>
Have Matura degree	21	5.11	24	6.82	0.011	[-0.064, 0.073]	0.820
Prepare for Matura	89	21.65	55	15.63	-0.066*	[-0.138, 0.006]	0.069
Neither have Matura nor prepare for it	301	73.24	273	77.56	0.055	[-0.042, 0.157]	0.267
<i>N</i>	411		352				

*Notes.* For the joint significance tests (p-values in bolt), the dummy for *treatment assignment* was regressed on the categorical variable.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

### 3 Results

In this section I report estimates for the effects of schooling on political interest, voting intention and party support. I use the following simple linear probability model to analyze my data.<sup>5</sup>

$$y_{ijk} = \alpha_k + \mathbf{x}'_{ijk}\boldsymbol{\gamma} + T_{jk}\delta + r_{jk} + e_{ijk}. \quad (2)$$

$y_{ijk}$  represents the response of person  $i$  in class  $j$  of class pair  $k$ . The class pair specific intercepts  $\alpha_k$  are modeled as fixed effects,  $\mathbf{x}'_{ijk}$  is a vector of covariates,  $T_{jk}$  is a treatment indicator and  $\delta$  denotes the mean treatment effect, which is my main variable of interest.  $r_{jk}$  and  $e_{ijk}$  are class-specific and individual-specific error terms.

Data are clustered on the level of class pairs, and  $p$ -values and confidence interval were calculated based on the wild cluster bootstrap-t method. I estimate four models with different sets of controls for each of the three outcome variables: Political interest, voting intention and party support. Model (1) does not include any covariates. To increase precision of estimates, my baseline model (2) controls for *age* and *gender* of apprentices. Models (3) and (4) include additional covariates that appeared to be imbalanced in the randomization checks: Model (3) adds *GPA* and model (4) includes categorical covariate controls for *size of training company* and *A-levels* (which indicates whether the apprentice has the Matura degree, prepares for it or none of these).

In the following sections I report the effects of schooling on political interest, voting intentions, and party support of vocational students.

#### 3.1 Political Interest

Table 4 shows my estimates of the effect of schooling on political interest. The treatment indicator is positive and statistically significant in any of my model specifications. The point estimate in my main specification suggests that the period of ten weeks in school increased political interest of apprentices by 0.586 on the eleven-point scale, which is an increase of 0.22 standard deviations.

Controlling for variables that appeared to be slightly imbalanced between treatment and control groups increases the treatment effect estimates. The estimate in my main specification is, therefore, conservative due to these imbalances.

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<sup>5</sup>I do not use a SURE model for two reasons. First, point estimates would not differ because each set of equations contains the same set of regressors. Second, I have to use the wild cluster bootstrap-t method to calculate  $p$ -values and 95% confidence intervals. Because of the low number of clusters in my data, standard adjustments for clustering would lead to downward biased cluster-robust standard errors, as also noted in section 2.4.

Table 4: Effects of schooling on political interest

	(1)	(2)	(3)	(4)
Treated	0.565**	0.586**	0.710**	0.740**
	[0.005, 1.119]	[0.027, 1.130]	[0.158, 1.250]	[0.197, 1.271]
Age		-0.020	-0.050**	-0.071***
		[-0.101, 0.043]	[-0.139, -0.005]	[-0.204, -0.006]
Female		-0.664**	-0.783***	-0.776***
		[-1.195, -0.140]	[-1.281, -0.295]	[-1.294, -0.262]
Grade point average	No	No	Yes	Yes
Additional controls	No	No	No	Yes
<i>N</i> (apprentices)	763	763	763	763
<i>N</i> (class pairs)	17	17	17	17

*Notes.* Dependent variable is *political interest*, from 0 (not interested at all) to 10 (very interested). 95% confidence intervals in brackets. Additional controls account for *size of training company* and *A-levels*. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

As commonly observed in surveys on political interest, women in my sample also stated lower levels of political interest than men (Bennett and Bennett 1989, Verba, Burns, and Schlozman 1997).

### 3.2 Voting Intention

Education is consistently found as one the strongest predictors of voter turnout (Smets and Ham 2013). A common explanation for this relationship is the increase in political interest through education. Dostie-Goulet (2009) and Miklikowska, Rekker, and Kudrnac (2022) show that political discussions in school increase students' political interest. And people who are more interested in politics are, in turn, more likely to be politically active (Milbrath and Goel (1977, p. 46) even write that “[...]the relationship is so regular that many authors do not bother to report it[...]”).

However, despite the significant increase in political interest that was directly caused by schooling, my results on the effect of schooling on voting intention are inconclusive. Table 5 shows the regression table for the effect of schooling on *voting intention* as the dependent variable.<sup>6</sup> We see that treatment effects are all positive but not significant in any of my model specifications.

<sup>6</sup> *Voting intention* was elicited on a scale from 1 (no intention) to 10 (strong intention) in order to exclude indecisive answers (i.e. the mean value) by design.



Table 5: Effects of schooling on voting intention

	(1)	(2)	(3)	(4)
Treated	0.142	0.167	0.331	0.339
	[-0.264, 0.559]	[-0.228, 0.573]	[-0.068, 0.748]	[-0.110, 0.806]
Age		-0.057	-0.096*	-0.101*
		[-0.184, 0.064]	[-0.220, 0.006]	[-0.258, 0.017]
Female		-0.359	-0.517*	-0.486
		[-1.020, 0.240]	[-1.164, 0.052]	[-1.171, 0.108]
Grade point average	No	No	Yes	Yes
Additional controls	No	No	No	Yes
$N$ (apprentices)	763	763	763	763
$N$ (class pairs)	17	17	17	17

*Notes.* Dependent variable is *voting intention*, from 1 (no intention) to 10 (strong intention). 95% confidence intervals in brackets. Additional controls account for *size of training company* and *A-levels*. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

### 3.3 Party Support

Table 6 reports estimates of the direct effects of schooling on the support for a specific political party. Every entry in the table shows the estimated effect of schooling on the likelihood to make a financial donation to the party indicated in the first column.

I do not find evidence for an effect of additional schooling on party support of vocational students. In my baseline specification, I only observe a marginally significant positive effect of schooling on the likelihood to support the conservative *Austrian People's Party* (ÖVP). After including *grade point average* as an additional control variable, the treatment effect estimate increases and becomes significant at the 5% level. None of the other estimates is significant at conventional significance levels.

Table 6: Effects of schooling on the likelihood to support a certain political party

Party	Sample Mean	(1)	(2)	(3)	(4)
ÖVP	0.165	0.041 [-0.019, 0.101]	0.048* [-0.009, 0.104]	0.057** [0.004, 0.111]	0.055** [0.003, 0.108]
SPÖ	0.152	-0.013 [-0.071, 0.042]	-0.011 [-0.068, 0.043]	-0.020 [-0.074, 0.032]	-0.017 [-0.069, 0.068]
FPÖ	0.189	-0.027 [-0.113, 0.064]	-0.024 [-0.104, 0.065]	-0.031 [-0.116, 0.061]	-0.036 [-0.119, 0.056]
GREENS	0.157	0.013 [-0.033, 0.059]	0.009 [-0.031, 0.050]	0.012 [-0.028, 0.052]	0.011 [-0.027, 0.052]
NEOS	0.058	0.019 [-0.015, 0.051]	0.018 [-0.013, 0.059]	0.024 [-0.009, 0.054]	0.026 [-0.007, 0.054]
<i>Other Parties</i>	0.025	0.013 [-0.023, 0.026]	0.001 [-0.023, 0.025]	0.001 [-0.024, 0.026]	0.000 [-0.025, 0.023]
<i>No Party</i>	0.254	-0.033 [-0.098, 0.032]	-0.040 [-0.104, 0.024]	-0.043 [-0.108, 0.022]	-0.039 [-0.108, 0.026]
Included Covariates					
Age and gender		No	Yes	Yes	Yes
Grade point average		No	No	Yes	Yes
Additional controls		No	No	No	Yes
<i>N</i> (apprentices)		763	763	763	763
<i>N</i> (class pairs)		17	17	17	17

*Notes.* Each entry shows the estimate of the effect of schooling on the likelihood to support a certain political party. 95% confidence intervals in brackets. Additional controls account for *size of training company* and *A-levels*. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## 4 Potential Mechanisms

With my rich survey data I can test several potential mechanisms for the effects of schooling that are proposed in the literature. First, I test the social network hypothesis and the cognitive ability hypothesis. Second, I investigate whether knowledge about the positions of Austrian parties increases and whether the quality of vote improves due to schooling. The statistical analyses in this section are all based on model 2 with the baseline covariates *age* and *gender* if not indicated otherwise.

### 4.1 Social Network Hypothesis and Cognitive Ability Hypothesis

The two most prominent hypotheses for why schooling could affect political attitudes of citizens are the social network hypothesis and the cognitive ability (or civic education) hypothesis. My research design allows to investigate both hypotheses.

According to the social network hypothesis it is the peers in school who affect political attitudes of apprentices. They might discuss political issues which could raise political interest, provide each other with political information or exert social pressure to motivate others to turn out to vote (Funk 2010, Dellavigna et al. 2017). The cognitive hypothesis states that schooling enhances the cognitive skills that citizens need to effectively participate in democracies (Wolfinger and Rosenstone 1980). Students learn how to participate in the political process and how to gather information about the political parties in their country. Such civic competencies increase political participation and they improve the quality of citizens' decisions (see Solis (2017) for a discussion).

To test the social network hypothesis, I exploit that some of the apprentices spend much more time with their peers than others. For each profession, only a very small number of specialized vocational schools exists. They are usually located in the major towns of each federal state, which means that a sizable share of apprentices cannot commute to school each day due to long travel distances. As an alternative, they stay in a boarding school with their peers (33% of all apprentices in my sample). To estimate the effects of staying in a boarding school and, hence to have more contact with peers from school I use baseline model 2 with two additional dummy variables: One that indicates whether an apprentice attends boarding school or not and the other is its interaction with the treatment indicator. All  $p$ -values below refer to the estimated effect of the latter interaction term. I do not observe any significant effect of attending boarding school on apprentices' political interest ( $p = 0.665$ ), voting intention ( $p = 0.774$ ), or support for a specific political party (effect on support for *ÖVP*,  $p = 0.617$ ; *SPÖ*,  $p = 0.850$ ; *FPÖ*,

$p = 0.942$ ; *GREENS*,  $p = 0.658$ ; *NEOS*,  $p = 0.771$ ; *no party*,  $p = 0.727$ ).

For the cognitive ability hypothesis I can find a weak indication in the data. Vocational schools in Austria offer *civic education*, which is a compulsory subject<sup>7</sup> that is specifically designed to improve the civic competencies of apprentices. I exploit that the number of *civic education* lessons in the curriculum varies across vocations, school grades, and federal states. To estimate the effects of *civic education* I proceed analogous to the analysis above. I use baseline model 2 with two additional variables, one for the number of civic education lessons that an apprentice receives per week and its interaction with the treatment indicator. Again,  $p$ -values below refer to the estimated effect of the latter interaction term. There is no significant effect of the number of lessons in *civic education* on apprentices' political interest ( $p = 0.461$ ) or on voting intention ( $p = 0.371$ ). Only support for the ÖVP seems to increase by 0.004 on average for each lesson of *civic education* per week,  $p = 0.0409$  (effect on support for SPÖ,  $p = 0.5681$ ; FPÖ,  $p = 0.5139$ ; GREENS,  $p = 0.5951$ ; NEOS,  $p = 0.5897$ ; *no party*,  $p = 0.9743$ ). However, due to the multiple hypothesis testing problem, the interpretation of one significant result remains ambiguous.

## 4.2 Knowledge about Politics

The social network hypothesis and the cognitive skill hypothesis both suggest that schooling improves citizens' knowledge about politics. With my data I can test whether schooling affects knowledge about the positions of political parties. In Austria an editorial team of journalists and political scientists summarizes the political positions of Austrian parties before national elections in the following way. They work out a list of questions that cover a broad range of political topics. Then they ask each party that stands for election to answer each of the questions with either "yes" or "no". In addition, the parties are asked to weight each question according to its importance for the party on a scale from one (less relevant) to three (very important). If an answer or a weighting does not match the policy of a party, the editorial team can make adaptations. About six weeks before the election the list of questions is published in form of an election compass on the website <https://wahlkabine.at/> (subsequently denoted as *Wahlkabine*).<sup>8</sup> Interested citizens can then answer the questions to see how their political options match the positions of the political parties that stand for election.

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<sup>7</sup>If an apprentice has already had *civic education* in school, he or she can be exempted from this subject by the principal upon request. About 20% of apprentices in my sample were exempted from *civic education*.

<sup>8</sup>See <https://wahlkabine.at/nationalratswahl-2019/stellungnahmen> for the list of all questions and the positions of the political parties in 2019. Accessed: 2022-01-27.

For five of these questions I asked the apprentices to guess the answers that the five parties with the highest shares of votes had given. To make certain terms easier understandable, the additional information that *Wahlkabine* provides online was also shown in my survey (see the footnotes below). The following questions were shown in my survey.

*And what do the parties think about the following question:*

*Q38 Should the weekly working time be reduced to 30 hours without wage adjustment?*

*Q39 Should company taxes<sup>9</sup> be reduced?*

*Q40 Should the joint school for 10 to 14 year-olds be realized?*

*Q41 Should criminal foreigners be deported, independent of their duration of stay in Austria?*

*Q42 Should a CO2-tax<sup>10</sup> be introduced?*

Each question had to be answered for each of the five political parties with the highest shares of votes in Austria: ÖVP, SPÖ, FPÖ, GREENS, and NEOS. The apprentices had to select one of the five answers below.

1. I am sure: the party agrees
2. I believe: this party agrees
3. I don't know
4. I believe: the party disagrees
5. I am sure: the party disagrees

If schooling increased knowledge about party positions, then apprentices who went to school should have been able to answer more questions correctly than those apprentices who were at work. However, I do not find evidence for such an effect. The average number of correct answers is slightly higher in the group of apprentices that went to school (+0.38) but the difference is not significant ( $p = 0.368$ ). In a second specification I weight the answers by the apprentice's confidence: An answer is counted as +2 (-2) if the apprentice was right (wrong) and sure about his or her answer, +1 (-1) if the apprentice was right (wrong) and not sure about his or her answer, and 0 if the apprentice did not know. The effect of schooling on this weighted outcome variable is +0.33 but again insignificant ( $p = 0.593$ ).

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<sup>9</sup>Company taxes refer to all taxes that companies have to pay. These taxes include profit taxes (like income tax, corporate income tax, and business tax), consumption taxation (value added tax and real estate transfer tax), and property taxation (land tax, inheritance tax and gift tax).

<sup>10</sup>A CO2-tax taxes carbon dioxide and other greenhouse gases that substantially contribute to the climate change crisis. The subject of taxation is mainly the combustion of fossil energy sources, for example in the industry, but also fuels.

### 4.3 The Match between Political Opinion and Party Support

To assess whether schooling improves the match between an apprentice’s political opinions and the positions of the political party that he or she supports, I asked apprentices to answer 13 questions from *Wahlkabine*. The questions cover a broad range of political topics, see Appendix A.2 for the list of questions that I used. Apprentices could answer with “yes”, “no”, or “no answer”. In addition, the apprentices were asked to rate the importance of each question from 1 (less relevant) to 9 (very important).

I analyze whether schooling increases the number of answers that coincide with the political positions of the party that an apprentice supports. For the analysis I also construct a weighted measure of how well the political opinions of an apprentice matches the positions of his or her supported party. This measure is identical to the measure that is used by *Wahlkabine* to assess the closeness of one’s political opinions and the positions of the political parties that stand for election.<sup>11</sup> The measure is calculated as the product sum of the apprentice’s and the party’s weight on the respective question and the factor +1 if the answer of the apprentice and the party coincide, -1 if they differ and 0 if the apprentice did not answer the question.

I do not find evidence for an effect of schooling on the quality of match between an apprentice’s political opinions and his or her support for a party. Neither the unweighted number of coinciding answers increases significantly (+0.11,  $p = 0.627$ ) nor the weighted number of coinciding answers (-2.10,  $p = 0.584$ ).

### 4.4 Teachers and Peers

Political discussions with parents, friends or teachers play a crucial role in fostering a student’s interest in politics. Dostie-Goulet (2009) shows that an increase in the frequency of political discussions in teenagers’ social networks leads to an increase in their political interest. Miklikowska, Rekker, and Kudrnac (2022) confirms this positive relationship between political discussions in school and political interest of students. When students have the impression that teachers try to involve them in discussions about political issues, their general interest in politics increases.

Engagement in political discussions with teachers and with fellow students has, therefore, very likely also affected apprentices in my study. In school, apprentices meet teachers who might be more enthusiastic about politics than their regular workmates. They might engage in political discussions with them or with fellow students, which could stimulate their own political interest. We indeed find suggestive evidence for this mechanism in our

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<sup>11</sup>See [https://wahlkabine.at/downloads/Wahlkabine\\_Methodik\\_NRW2019.pdf](https://wahlkabine.at/downloads/Wahlkabine_Methodik_NRW2019.pdf), accessed: 2022-01-27

data. It seems that teachers were able to pass on their political interest to students.<sup>12</sup>

In my study, I asked apprentices how often they had talked about politics with different people or groups. Not surprisingly, apprentices in school talked more often with teachers ( $p = 0.000$ ) and fellow students ( $p = 0.000$ ) about politics and less often with workmates ( $p = 0.006$ ). The frequency of discussions with others did not change significantly.<sup>13</sup>

Table 2 shows how politically interested these reference groups appear to apprentices on a scale from 0 (not at all interested) to 10 (very interested). We see that teachers are perceived as the most interested group (7.05 on average), classmates are perceived as being least interested in politics (4.49 on average) and the perceived political interest of workmates is in between (5.80 on average).<sup>14</sup>

It seems, therefore, plausible to conjecture that political discussions with politically highly interested teachers were a driving factor for the increase in political interest of apprentices.

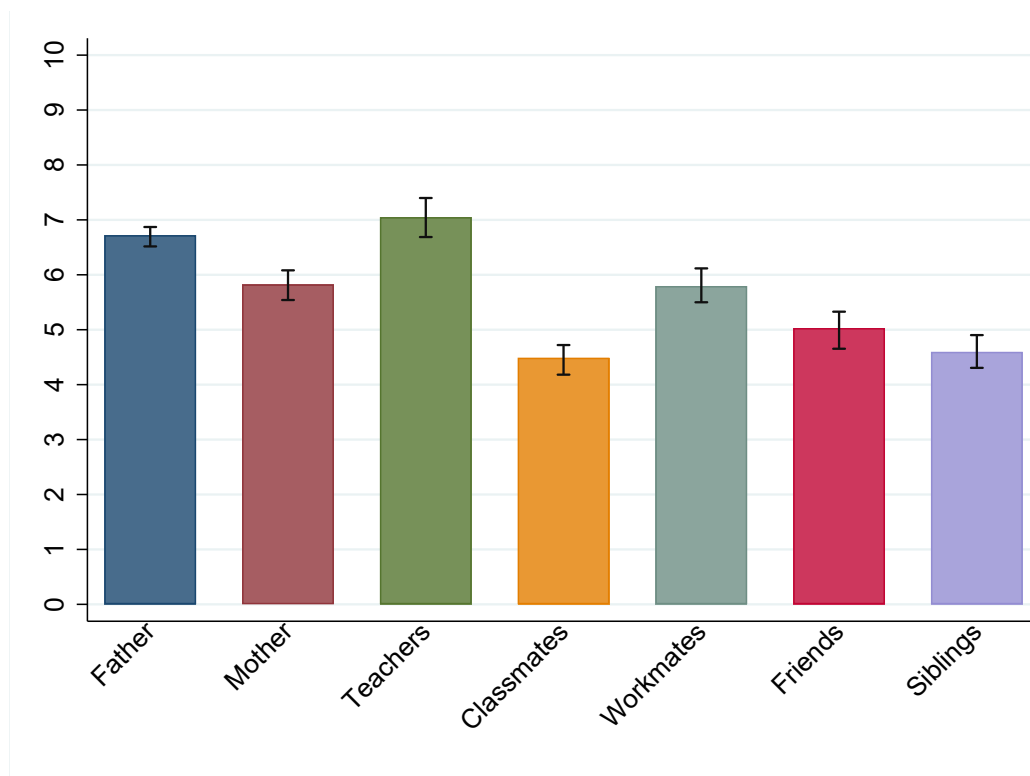


Figure 2: How politically interested others appear on a scale from 0 (not at all interested) to 10 (very interested). Error bars represent 95% confidence intervals.

<sup>12</sup>The analyses in this subsection were not pre-registered.

<sup>13</sup>Father ( $p = 0.652$ ), mother ( $p = 0.132$ ), siblings ( $p = 0.771$ ), friends ( $p = 0.541$ ).

<sup>14</sup>All three values are significantly different from each other ( $p = 0.000$  for each comparison, unpaired  $t$ -tests between class pairs' mean values of each variable).

## 5 The General Political Situation Matters

My research design allows to investigate whether the general political situation in which schooling happens matters.<sup>15</sup> After every school year, vocational students have been in school for the very same number of weeks. The specific school term that they were assigned to, however, differs. I find that vocational students who attended school during exposure of a major political scandal in Austria were significantly less likely to support the party whose officials were responsible for the affair.

On May 17, 2019, a secretly recorded video was published, in which two high-level officials of the *Austrian Freedom Party* (FPÖ) were, inter alia, allegedly promising public contracts in return for campaign support. The FPÖ, an Austrian right-wing populist party with immigration as its core issue (Ennser-Jedenastik 2016), received almost 26% of the votes in the national election 2017. Since then it had been the junior partner in a coalition with the conservative *Austrian People's Party* (ÖVP). The so-called *Ibiza affair* (named after the island where the video was shot) eventually caused the collapse of this governing coalition and it led to snap elections in September, 2019.

The fourth term in that school year 2018/19 lasted from April 8 until June 28, 2019. Hence, when the video was published and publicly discussed, 26% of the apprentices in my sample happened to be at school whereas the others were working in their training companies.

To test whether apprentices in school were differently affected by the *Ibiza affair* than those who were working, I apply equation 2 and use schooling in term 4 of the previous school year as the treatment indicator. Table 7 summarizes my estimation results. In each row I report the point estimates of the effects of schooling in term 4 of the previous school year on the likelihood to support the party in the first column. I ran five regressions for each party with different sets of control variables. *Additional schooling* is *one* if an apprentice had been at school in the ten weeks before I conducted the survey and *zero* otherwise. This variable is added as a control variable in models two to five.

We see that apprentices who were at school during exposure of the *Ibiza affair* were five months later (when I conducted the survey) significantly less likely to support FPÖ and more likely to support no party at all. There is no significant difference for any other party, neither for schooling in term 4 nor for any other term of the previous school year. If I include a term for the interaction between *additional schooling* and *schooling during exposure of the Ibiza affair*, the negative effect on support for the FPÖ in my main specification is still significant. However, randomization checks (see Appendix C) show slight imbalances between treated and untreated apprentices. My results do not change

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<sup>15</sup>The analyses in this section were not pre-registered.



Table 7: Effects of schooling during the *Ibiza affair* on the likelihood to support a specific political party

	(1)	(2)	(3)	(4)	(5)
ÖVP	0.018 [-0.051, 0.085]	0.032 [-0.040, 0.105]	0.039 [-0.034, 0.113]	0.033 [-0.040, 0.105]	0.027 [-0.044, 0.094]
SPÖ	-0.044* [-0.102, 0.008]	-0.051 [-0.118, 0.011]	-0.050 [-0.118, 0.010]	-0.045 [-0.110, 0.013]	-0.033 [-0.091, 0.018]
FPÖ	-0.059** [-0.117, -0.008]	-0.071** [-0.132, -0.013]	-0.065** [-0.121, -0.012]	-0.061** [-0.113, -0.011]	-0.069** [-0.119, -0.019]
GREENS	0.016 [-0.054, 0.088]	0.021 [-0.058, 0.098]	0.021 [-0.055, 0.097]	0.019 [-0.057, 0.096]	0.015 [-0.060, 0.092]
NEOS	-0.006 [-0.063, 0.056]	-0.000 [-0.055, 0.063]	-0.003 [-0.060, 0.062]	-0.006 [-0.065, 0.061]	-0.003 [-0.059, 0.064]
<i>Other Parties</i>	-0.008 [-0.023, 0.010]	-0.008 [-0.026, 0.010]	-0.010 [-0.030, 0.010]	-0.010 [-0.031, 0.011]	-0.011 [-0.037, 0.014]
<i>No Party</i>	0.083** [0.011, 0.160]	0.077** [0.009, 0.151]	0.068** [0.001, 0.139]	0.071** [0.004, 0.140]	0.074** [0.006, 0.143]
Included Covariates					
Additional schooling	No	Yes	Yes	Yes	Yes
Age and gender	No	No	Yes	Yes	Yes
Grade point average	No	No	No	Yes	Yes
Additional controls	No	No	No	No	Yes
<i>N</i> (apprentices)	763	763	763	763	763
<i>N</i> (class pairs)	17	17	17	17	17

*Notes.* Each entry shows the estimate of the effect of schooling in term 4 in 2018/19 on the likelihood to support a certain political party. 95% confidence intervals in brackets. Additional controls account for the apprentice's *citizenship*, the *size of hometown*, whether it is the *first apprenticeship* and whether the *vocational training started in summer*.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

qualitatively when I control for these imbalances.

## 6 Conclusion

In this article I investigate the direct causal effects of schooling on political attitudes of apprentices in Austria. I exploit that classes of apprentices of the same grade level and vocation are as good as randomly assigned to different school terms. This allows to compare apprentices who were at school for ten weeks during a national election campaign with apprentices who were working in their training firms during that time. My main variables of interest are political interest, voting intention and party support of the apprentices. To elicit party support, I offered each apprentice a monetary donation to his or her most preferred political party.

I find that apprentices who attended school are significantly more interested in politics.

This increase in political interest seems to be driven by political discussions with teachers who were perceived as highly interested in politics. The increase in political interest is, however, not accompanied by a significant increase in voting intention or by a change in support for a specific political party.

The uncovering of the *Ibiza affair* in Spring 2019 allowed to test whether the general political situation matters for the effects of schooling. And indeed, apprentices who were at school and not at work during exposure of the affair were five months later still less likely to support the FPÖ and more likely to support no party at all. Ten weeks of schooling can, therefore, already affect, which party an apprentice supports. However, it seems that a very strong trigger like the *Ibiza affair* is necessary for this effect to evolve during the relatively short period of schooling that I consider in this study.

Many previous studies have investigated the effects of additional schooling on political attitudes without taking into account the general political situation during the periods under investigation. In the light of my results, studying the interaction effects of schooling and such contextual factors seems a fruitful opportunity for future research.

# A Additional Information, Graphs and Tables

## A.1 List of Professions

I surveyed apprentices from the following professions:

- |                              |                            |
|------------------------------|----------------------------|
| 1. computer science          | 7. electrical engineering  |
| 2. plumbing                  | 8. mechatronics            |
| 3. office administration     | 9. construction technology |
| 4. retail business           | 10. metal technology       |
| 5. automation technology     | 11. chemical engineering   |
| 6. pharmaceutical assistance | 12. coating technology     |

## A.2 Political Opinions

I asked apprentices about their political opinion on the following 13 questions.

*Now we focus on political topics. What do you think about the following questions?*

*Q25 Should the weekly working time be reduced to 30 hours without wage adjustment?*

*Q26 Should company taxes be reduced?*

*Q27 Should inheriting remain tax-exempt?*

*Q28 Should the legal retirement age be raised?*

*Q29 Should an independent agency be established that investigates police violence?*

*Q30 Should the joint school for 10 to 14 year-olds be realized?*

*Q31 Should asylum seekers get a work permit?*

*Q32 Should criminal foreigners be deported, independent of their duration of stay in Austria?*

*Q33 Should the general right to vote in national elections remain restricted to Austrian citizens?*

*Q34 Should the Court of Auditors be allowed to audit all party finances and to impose penalties?*

*Q35 Should the compulsory broadcasting fees („GIS Gebühren“) be abolished?*

*Q36 Should internet forums be obliged to record the real names of all its users and to release them if necessary?*

*Q37 Should a CO<sub>2</sub>-tax be introduced?*

Apprentices could answer with “yes”, “no”, or “no answer”. In addition, the apprentices were asked to rate the importance of each question from 1 (less relevant) to 9 (very important).

### A.3 Histograms - Political Interest and Voting Intentions

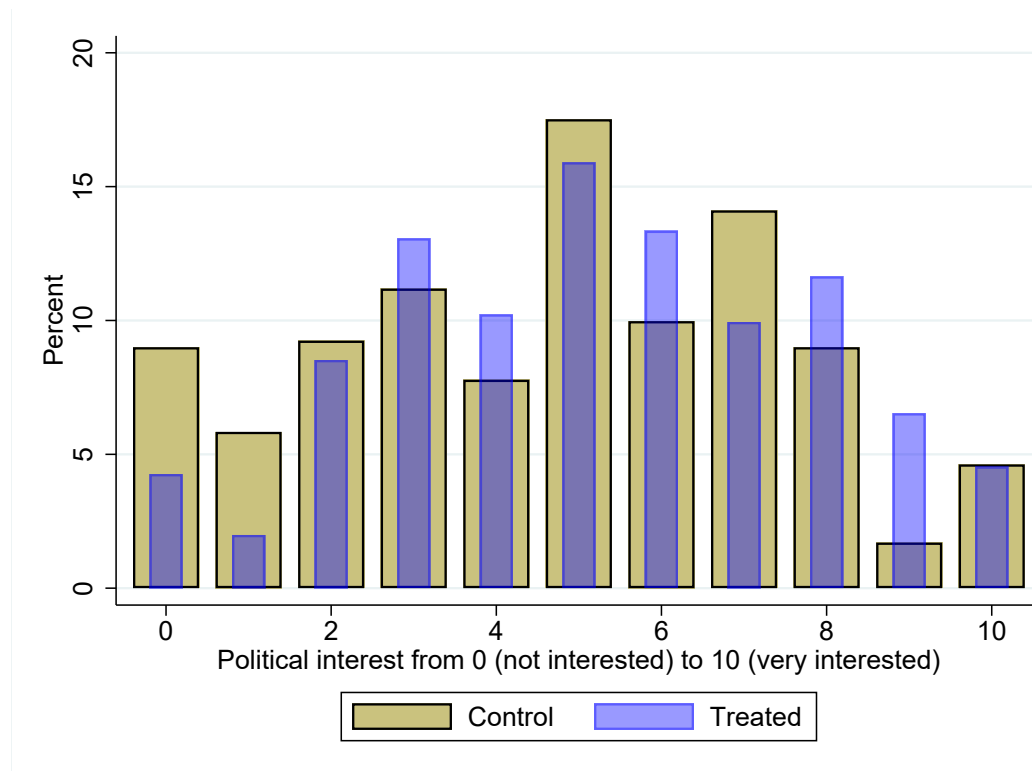


Figure 3: Histogram of political interest

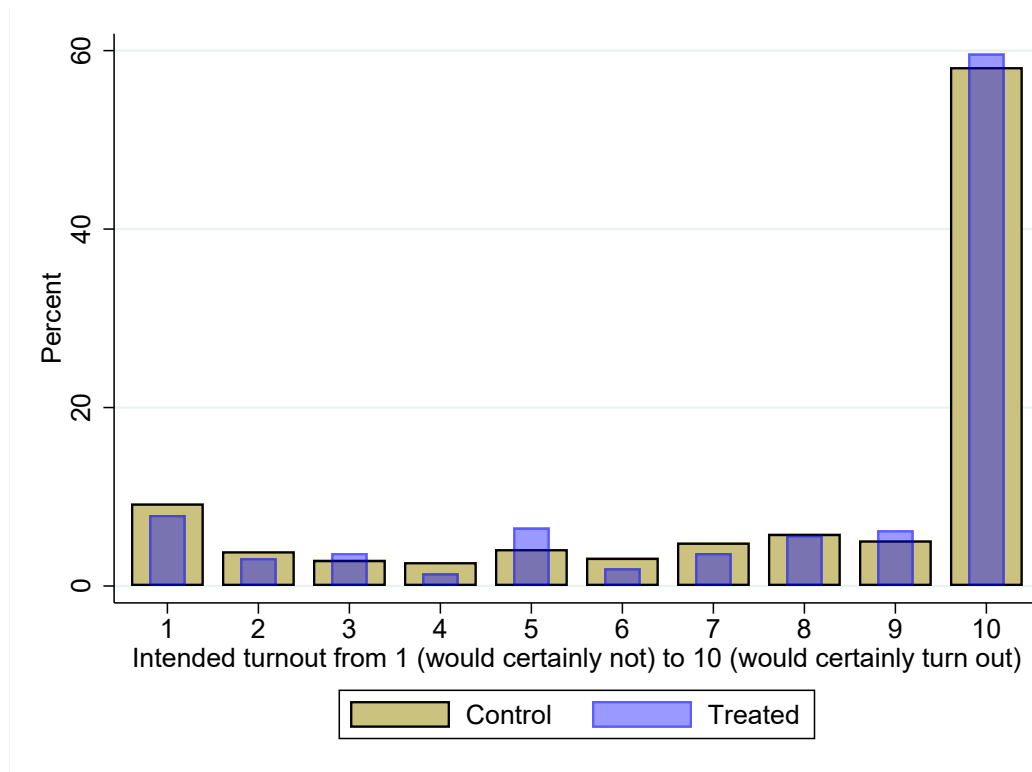


Figure 4: Histogram of voting intentions

## A.4 Additional Summary Statistics

Table 8: Summary statistics for party support

	Control groups		Treatment groups		Total		Parliamentary election 2019
	N	%	N	%	N	%	
ÖVP	60	14.6%	66	18.8%	126	16.5%	28.0%
SPÖ	65	15.8%	51	14.5%	116	15.2%	15.8%
FPÖ	84	20.4%	60	17.0%	144	18.9%	12.1%
GREENS	61	14.8%	59	16.8%	120	15.7%	10.4%
NEOS	20	4.9%	24	6.8%	44	5.8%	6.1%
Other	10	2.4%	9	2.6%	19	2.5%	2.4%
Nonvoters	111	27.0%	83	23.6%	194	25.4%	25.3%

*Notes.* This table shows the share of apprentices that support a specific party in my sample. The result of the parliamentary election 2019 is shown in the last column.

## A.5 Standardized Treatment Effects

Table 9: Standardized treatment effect on political interest

	(1)	(2)	(3)	(4)
Treated	0.213**	0.221**	0.268**	0.279**
	[0.002, 0.422]	[0.010, 0.426]	[0.060, 0.472]	[0.074, 0.479]
Age		-0.008	-0.019**	-0.027***
		[-0.038, 0.016]	[-0.052, -0.002]	[-0.077, -0.002]
Female		-0.250**	-0.295***	-0.293***
		[-0.451, -0.053]	[-0.483, -0.111]	[-0.488, -0.099]
Grade point average	No	No	Yes	Yes
Additional controls	No	No	No	Yes
<i>N</i> (apprentices)	763	763	763	763
<i>N</i> (class pairs)	17	17	17	17

*Notes.* Dependent variable is *political interest*, standardized with mean 0 and variance 1. 95% confidence intervals in brackets. Additional controls account for *size of training company* and *A-levels*. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 10: Standardized treatment effect on voting intention

	(1)	(2)	(3)	(4)
Treated	0.046	0.053	0.106	0.109
	[-0.085, 0.180]	[-0.073, 0.184]	[-0.022, 0.240]	[-0.035, 0.259]
Age		-0.018	-0.031*	-0.032*
		[-0.059, 0.021]	[-0.071, 0.002]	[-0.083, 0.005]
Female		-0.115	-0.166*	-0.156
		[-0.328, 0.077]	[-0.374, 0.017]	[-0.376, 0.035]
Grade point average	No	No	Yes	Yes
Additional controls	No	No	No	Yes
$N$ (apprentices)	763	763	763	763
$N$ (class pairs)	17	17	17	17

*Notes.* Dependent variable is *voting intention*, standardized with mean 0 and variance 1. 95% confidence intervals in brackets. Additional controls account for *size of training company* and *A-levels*. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## B Robustness Checks

### B.1 Self-selection

As noted in section 2.1, firms can propose a specific school term for their apprentices and schools usually follow these suggestions. Because of this self-selection, my assumption of as good as random assignment of apprentices into treatment and control classes could be violated.

Several observations make me confident that my main results are not caused by such self-selection issues. First, no term was particularly favored by firms or apprentices. As already mentioned above, 29.0% of all apprentices were sent to term 1 because of their companies' preference compared to 29.9% in term 2 ( $p = 0.811$ , Fisher's exact test). 12.8% of apprentices selected term 1 and 13.9% term 2 ( $p = 0.671$ , Fisher's exact test).

I also do not observe major differences in observable characteristics between these groups of vocational students in term 1 and term 2. Tables 11 and 12 report balance checks for those apprentices that might have been systematically assigned to different terms. We see that *grade point average* is a significant predictor for treatment assignment, *active in a union* is marginally significant. The data seems, therefore, to be slightly less balanced than we would expect with 30 variables under randomization.

As a further check, I exclude those apprentices from the analysis and re-estimate the effects of schooling with the remaining apprentices. The results suggest that my main finding is robust against potential imbalances that could have been induced by self-selection. Table 13 provides estimates for the effect of schooling on political interest. All estimates are positive and significant at the 5% level.

Table 14 shows estimates for the effect of schooling on the likelihood to donate for a specific party. Compared to the large and highly significant effects of schooling on political interest, the effects on the likelihood to support *ÖVP* are already in the full sample smaller and less significant. In my subsample analysis the point estimates are even smaller and not significant anymore.



Table 11: Balance Table I - Apprentices whose terms were suggested by firms

	Control Groups		Treatment Groups		Test for Difference		
	Mean	SD	Mean	SD	$\beta$	95% CI	p-value
Age	17.97	2.24	18.22	2.06	0.018	[-0.018, 0.058]	0.308
Female	0.35	0.48	0.37	0.49	-0.034	[-0.258, 0.226]	0.744
Austrian citizen	0.93	0.26	0.86	0.35	-0.166	[-0.396, 0.057]	0.120
First apprenticeship	0.95	0.22	0.94	0.24	-0.078	[-0.364, 0.212]	0.550
Work experience <sup>†</sup>	0.44	1.04	0.59	1.13	0.034	[-0.022, 0.090]	0.206
Income <sup>†</sup>	5. 53	1.33	5.53	1.51	-0.009	[-0.074, 0.047]	0.738
Exempted from							
civic education	0.21	0.41	0.18	0.38	-0.134	[-0.426, 0.156]	0.219
Attend boarding school	0.29	0.45	0.40	0.49	0.130	[-0.088, 0.361]	0.234
Grade point average	1.87	0.80	2.17	0.85	0.098**	[0.018, 0.169]	0.025
Active in a union <sup>†</sup>	0.34	0.48	0.47	0.50	0.148*	[-0.002, 0.321]	0.054
Active in a party <sup>†</sup>	0.07	0.25	0.11	0.31	0.112	[-0.110, 0.351]	0.323
Vocational training							
started in summer	0.81	0.40	0.79	0.41	-0.051	[-0.285, 0.151]	0.603
<i>N</i>	180		147				

<sup>†</sup>Less observations due to non-responses (Income:  $N = 319$ , Active in a union:  $N = 275$ , Active in a party:  $N = 288$ ). Income was measured in steps of €150. *5* denotes net income of €750 to €900 and *6* denotes €900 to €1050, for example.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 12: Balance Table II - Apprentices whose terms were suggested by firms

	<u>Control Groups</u>		<u>Treatment Groups</u>		<u>Test for Difference</u>		
	<i>N</i>	%	<i>N</i>	%	$\beta$	95% CI	p-value
<b>Company size</b>							<b>0.576</b>
0-9 employees	19	10.56	19	12.93	0.083	[-0.109, 0.275]	0.352
10-49 employees	35	19.44	39	26.53	0.116	[-0.120, 0.316]	0.248
50-249 employees	26	14.44	20	13.61	-0.055	[-0.326, 0.284]	0.698
250 employees or more	100	55.56	69	46.94	-0.095	[-0.296, 0.110]	0.282
<b>Hometown</b>							<b>0.770</b>
<5.000 inhabitants	112	62.22	83	56.46	-0.051	[-0.179, 0.093]	0.422
5.000 to 20.000	27	15.00	29	19.73	0.081	[-0.041, 0.206]	0.184
20.000 to 100.000	20	11.11	18	12.24	-0.014	[-0.216, 0.170]	0.877
>100.000 inhabitants:							
Center of a city	13	7.22	9	6.12	-0.035	[-0.317, 0.245]	0.776
Outskirts of a city	8	4.44	8	5.44	0.092	[-0.215, 0.388]	0.472
<b>A-levels (Matura)</b>							<b>0.371</b>
Have Matura degree	8	4.44	8	5.44	0.097	[-0.225, 0.569]	0.546
Prepare for Matura	45	25.00	28	19.05	-0.062	[-0.176, 0.042]	0.211
Neither have Matura nor prepare for it	127	70.56	111	75.51	0.035	[-0.091, 0.173]	0.558
<b>Country of birth</b>							<b>0.681</b>
Austria	169	93.89	131	89.12	-0.029	[-0.114, 0.035]	0.482
Other EU country	4	2.22	8	5.44	0.029	[-0.033, 0.105]	0.458
Non-EU country	7	3.89	8	5.44	0.000	[-0.041, 0.046]	0.996
<b>Parents' country of birth</b>							<b>0.492</b>
Both born in Austria	136	75.56	93	63.27	-0.097	[-0.278, 0.069]	0.229
One born in Austria	17	9.44	17	11.56	0.030	[-0.049, 0.106]	0.415
None born in Austria	27	15.00	37	25.17	0.067	[-0.053, 0.196]	0.277
<i>N</i>	180		147				

*Notes.* For the joint significance tests (p-values in bolt), the dummy for *treatment assignment* was regressed on the categorical variable.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 13: Effects of schooling on political interest. Without self-selection

	(1)	(2)	(3)	(4)
Treated	0.791**	0.812**	0.925**	1.002***
	[0.149, 1.393]	[0.163, 1.411]	[0.245, 1.549]	[0.350, 1.601]
Age		0.006	-0.024	-0.037
		[-0.113, 0.080]	[-0.156, 0.031]	[-0.203, 0.011]
Female		-0.474	-0.569	-0.472
		[-1.270, 0.363]	[-1.317, 0.235]	[-1.236, 0.324]
Grade point average	No	No	Yes	Yes
Additional controls	No	No	No	Yes
<i>N</i> (apprentices)	436	436	436	436
<i>N</i> (class pairs)	17	17	17	17

*Notes.* Dependent variable is *political interest*, from 0 (not interested at all) to 10 (very interested). 95% confidence intervals in brackets. Additional controls account for *size of training company* and *A-levels*. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 14: Schooling and party support. Without self-selection

	(1)	(2)	(3)	(4)
ÖVP	0.015 [-0.073, 0.100]	0.022 [-0.058, 0.099]	0.028 [-0.049, 0.102]	0.031 [-0.041, 0.102]
SPÖ	0.013 [-0.062, 0.089]	0.015 [-0.058, 0.089]	0.007 [-0.065, 0.079]	0.013 [-0.057, 0.084]
FPÖ	0.006 [-0.079, 0.094]	0.005 [-0.074, 0.090]	0.001 [-0.085, 0.092]	-0.005 [-0.090, 0.084]
GREENS	-0.018 [-0.072, 0.036]	-0.020 [-0.076, 0.034]	-0.018 [-0.071, 0.034]	-0.021 [-0.077, 0.034]
NEOS	0.033 [-0.017, 0.085]	0.035 [-0.014, 0.084]	0.039 [-0.011, 0.087]	0.035 [-0.015, 0.085]
<i>Other Parties</i>	0.016 [-0.007, 0.043]	0.016 [-0.006, 0.040]	0.016 [-0.007, 0.040]	0.015 [-0.008, 0.042]
<i>No Party</i>	-0.065 [-0.185, 0.053]	-0.073 [-0.193, 0.043]	-0.073 [-0.196, 0.047]	-0.068 [-0.196, 0.058]
Included Covariates				
Age and gender	No	Yes	Yes	Yes
Grade point average	No	No	Yes	Yes
Additional controls	No	No	No	Yes
<i>N</i> (apprentices)	436	436	436	436
<i>N</i> (class pairs)	17	17	17	17

*Notes.* Each entry shows the estimate of the effect of schooling on the likelihood to support a certain political party. 95% confidence intervals in brackets. Additional controls account for *size of training company* and *A-levels*. \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## C Balance Checks Ibiza

Table 15: Balance Table I - Term 4 as Treatment (*Ibiza* affair)

	Control Groups		Ibiza Groups		Test for Difference		
	Mean	SD	Mean	SD	$\beta$	95% CI	p-value
Age	18.25	2.51	18.36	2.61	0.283	[-0.169, 0.818]	0.222
Female	0.42	0.49	0.36	0.48	-0.017	[-0.068, 0.033]	0.468
Austrian citizen	0.87	0.33	0.92	0.28	0.050*	[-0.009, 0.103]	0.088
First apprenticeship	0.96	0.20	0.93	0.26	-0.047*	[-0.108, 0.006]	0.083
Work experience <sup>†</sup>	0.51	1.09	0.54	1.19	0.167	[-0.038, 0.393]	0.106
Income <sup>†</sup>	5.38	1.28	5.59	1.67	0.102	[-0.215, 0.446]	0.493
Exempted from							
civic education	0.20	0.40	0.21	0.41	0.029	[-0.036, 0.099]	0.375
Attend boarding school	0.34	0.47	0.29	0.45	0.002	[-0.058, 0.067]	0.934
Grade point average	2.08	0.82	1.88	0.76	-0.189**	[-0.349, -0.032]	0.024
Active in a union <sup>†</sup>	0.31	0.46	0.33	0.47	-0.029	[-0.152, 0.088]	0.601
Active in a party <sup>†</sup>	0.07	0.26	0.09	0.29	0.016	[-0.030, 0.065]	0.580
Vocational training							
started in summer	0.76	0.43	0.71	0.46	-0.089*	[-0.183, 0.004]	0.060
<i>N</i>	563		200				

<sup>†</sup>Less observations due to non-responses (Income:  $N = 741$ , Active in a union:  $N = 617$ , Active in a party:  $N = 658$ ). Income was measured in steps of €150. *5* denotes net income of €750 to €900 and *6* denotes €900 to €1050, for example.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

Table 16: Balance Table II - Term 4 as Treatment (*Ibiza* affair)

	Control Groups		Ibiza Groups		Test for Difference		
	<i>N</i>	%	<i>N</i>	%	$\beta$	95% CI	p-value
<b>Company size</b>							<b>0.788</b>
0-9 employees	91	16.16	16	8.00	-0.018	[-0.071, 0.036]	0.454
10-49 employees	180	31.97	47	23.50	-0.002	[-0.057, 0.053]	0.937
50-249 employees	79	14.03	44	22.00	0.041	[-0.052, 0.125]	0.322
250 employees or more	213	37.83	93	46.50	-0.021	[-0.114, 0.079]	0.623
<b>Hometown</b>							<b>0.211</b>
<5.000 inhabitants	310	55.06	119	59.50	0.052	[-0.021, 0.120]	0.137
5.000 to 20.000	123	21.85	31	15.50	-0.058*	[-0.131, 0.010]	0.091
20.000 to 100.000	62	11.01	22	11.00	-0.013	[-0.074, 0.054]	0.657
>100.000 inhabitants:							
Center of a city	39	6.93	16	8.00	0.010	[-0.034, 0.052]	0.648
Outskirts of a city	29	5.15	12	6.00	0.009	[-0.033, 0.054]	0.682
<b>A-levels (Matura)</b>							<b>0.789</b>
Have Matura degree	35	6.22	10	5.00	0.007	[-0.031, 0.046]	0.748
Prepare for Matura	97	17.23	47	23.50	0.021	[-0.044, 0.087]	0.498
Neither have Matura nor prepare for it	431	76.55	143	71.50	-0.027	[-0.108, 0.047]	0.488
<i>N</i>	563		200				

*Notes.* For the joint significance tests (p-values in bolt), the dummy for *class assignment* was regressed on the categorical variable.

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$

## D Questionnaire

# Welcome!

This short survey  
is addressed to more than 600  
**apprentices in Austria.**

The survey is conducted  
by **Dominik Stelzeneder,**  
**University of Vienna,**  
as part of a **research project.**

Your data will be collected **anonymously**  
and treated in **strict confidence.**  
Participation is **voluntary**; you can leave the survey at any time.

The survey will take about 20 minutes.

---

*Participant information and declaration of consent*

---

I have read the participant information and the declaration of consent. I agree to participate in the survey.



## VOTER ELIGIBILITY: 3 ITEMS

Thank you very much for your participation! We begin with two introductory questions on voter eligibility...

Q1. In which year are you born?

Q2. *[If Q1 = 2003]* Are you born before September 29, 2003?

yes ..... 1  
no ..... 2

Q3. Are you an Austrian citizen?

yes ..... 1  
no ..... 2

## INTRODUCTORY QUESTIONS: 4 ITEMS

Thanks! Now we will ask you some content issues.

Q4. Talking very general, are you interested in politics...

Not interested at all ..... 0  
to  
very interested ..... 10

Q5. Which of the following **political issues** are very important for you currently?

You can select up to three issues.

*[RANDOMIZE ITEMS]*

Item 1: Economic Policy (e.g. economic growth)

Item 2: Social Inequality

Item 3: Labor Market and Employment (e.g. unemployment)

Item 4: Immigration

Item 5: Security and Crime

Item 6: Terrorism

Item 7: Climate Change

Item 8: Party financing (e.g. regulation of campaign contributions, transparency)

Item 9: European Integration (e.g. European cohesion)

Item 10: Health and Nursing Care

- Item 11: Corruption
- Item 13: Pensions and Old-Age Provision
- Item 13: Tax Policy
- Item 14: Asylum Policy
- Item 15: Education and Research
- Item 16: Housing
- Item 17: Environmental Protection
- Item 18: Judicial System
- Item 19: Media (e.g. regulation, press freedom, fake news)
- Item 20: No Issue
- Item 21: Other Issue [*please specify:*]

Q6. In politics people often talk of “left” and “right”. Where would you place the following parties on a scale from 0 to 10, where 0 means “left” and 10 means “right”?  
 [RANDOMIZE ITEMS]

- Item 1: ÖVP
- Item 2: SPÖ
- Item 3: FPÖ
- Item 4: NEOS
- Item 5: GREENS

left .....	0
to	
right.....	10
I don't know this party .....	77
Don't know .....	88

Q7. Where would you place yourself on this scale from 0 to 10, where 0 means “left” and 10 means “right”?

left .....	0
to	
right.....	10
Don't know .....	88
Refused .....	99

## POLITICAL PARTICIPATION and VOTING BEHAVIOR: 8 ITEMS

The following part of the survey is about participation in elections and voting decisions.

Q8. *[if Q1 < 2003 and Q3 = 1 or if Q1 = 2003 and Q2 = 1 und Q3 = 1]* The last parliamentary election was on September 29, 2019. If the election would be next Sunday instead, how likely would you turn out to vote?

Would certainly not turn out to vote ..... 1  
 to  
 would certainly turn out to vote..... 10

Q9. *[if Q1 > 2003 or Q3 = 2 or if Q1 = 2003 and Q2 = 2]* The last parliamentary election was on September 29, 2019. If the election would be next Sunday instead and you were entitled to vote, how likely would you turn out to vote?

Would certainly not turn out to vote ..... 1  
 to  
 would certainly turn out to vote..... 10

Q10. Now suppose, the next parliamentary election would indeed be held next Sunday. Which party would you vote for?

ÖVP .....	1
SPÖ .....	2
FPÖ .....	3
NEOS .....	4
JETZT .....	
5	
GREENS .....	6
KPÖ .....	7
WANDL .....	8
Invalid vote.....	66
Don't know .....	88
Refused .....	99

Q11. At the last parliamentary election on September 29, 2019, many citizens did not go to the election for good reason. How about you? Which statement applies to you?

- I was not entitled to vote, therefore I did not turn out to vote ..... 0
- I did not turn out to vote at the parliamentary election on September 29, 2019 ..... 1
- I thought about turning out to vote but I did not this time ..... 2
- I am sure that I turned out to vote on September 29, 2019 ..... 3

Q12. *[if Q11 = 3]* Which party did you vote for in the last national election on September 29, 2019?

- ÖVP ..... 1
- SPÖ ..... 2
- FPÖ ..... 3
- NEOS ..... 4
- JETZT ..... 5
- GREENS ..... 6
- KPÖ ..... 7
- WANDL ..... 8
- Invalid vote ..... 66
- Refused ..... 99

Q13. *[if Q11 ≠ 3]* Suppose you would have turned out to vote in the national election on September 29, 2019. Which party would you have voted for?

- ÖVP ..... 1
- SPÖ ..... 2
- FPÖ ..... 3
- NEOS ..... 4
- JETZT ..... 5
- GREENS ..... 6
- KPÖ ..... 7
- WANDL ..... 8
- Invalid vote ..... 66
- Don't know ..... 88
- Refused ..... 99

Q14. On a scale from 0 to 10, how likely is it that you will ever vote for the following parties? 0 means „highly unlikely“ and 10 means „very likely“.

- Item 1: ÖVP
- Item 2: SPÖ
- Item 3: FPÖ
- Item 4: GREENS
- Item 5: NEOS

Highly unlikely.....	0
to	
very likely .....	10
I don't know this party .....	77
Don't know .....	88

Q15. For your participation in this survey, we will donate money to a political party. Every participant can donate € 10. Which party would you like us to support with a donation of € 10?\*

ÖVP .....	1
SPÖ .....	2
FPÖ .....	3
NEOS .....	4
JETZT .....	5
GREENS .....	6
KPÖ .....	7
WANDL .....	8
No party .....	12

\*In total, more than 600 apprentices take part in this study. After every apprentice has made a choice, the computer will randomly select 20% of the choices and we will donate the money based on those randomly selected choices. To prove that we indeed donated the money to the parties, we will publish scanned receipts of the transactions and publish them for three months, starting on December 1, 2019, on <https://homepage.univie.ac.at/dominik.stelzener/>

The donations are legal and they support the parties doing their work.

## ATTITUDES TOWARDS DEMOCRACY IN AUSTRIA: 6 ITEMS

Now we want to ask you some general questions about Austrian politics and about political issues.

Q16. How satisfied or unsatisfied are you in general with how democracy works in Austria? Are you...

Very unsatisfied ..... 0  
to  
very satisfied ..... 10

Q17. Please indicate how strongly you agree or disagree with the following statements.

*[RANDOMIZE ITEMS]*

Item 1: "I have a good understanding of the most important political topics in Austria."

Item 2: "I am confident with actively participating in political discussions."

Item 3: "Politicians do not care about what people like me think."

Item 4: "No matter who I vote for, it would not change anything in Austrian politics."

I fully agree ..... 0  
to  
I fully disagree ..... 10

Q18. When you think about Austria's future, how optimistic or pessimistic are you?

very optimistic ..... 0  
to  
very pessimistic ..... 10

Q19. Please indicate how strongly you agree or disagree with the following statements.

*[RANDOMIZE ITEMS]*

Item 1: "Income differences are too large in Austria."

- Item 2: "The welfare state makes people languid and lazy."
- Item 3: "The police needs more competences to enforce law and order."
- Item 4: "Immigrants are taking the jobs of Austrians'."

I fully agree.....0  
to  
I fully disagree..... 10

Q20. Please indicate how strongly you agree or disagree with the following statements.

*[RANDOMIZE ITEMS]*

- Item 1: "When talking about 'compromises' in politics, one actually means that one is betraying one's principles."
- Item 2: "Most politicians only care about the interests of the rich and powerful."
- Item 3: "Most politicians are trustworthy."
- Item 4: "The parties are the major problem in Austria."

I fully agree.....0  
to  
I fully disagree..... 10

Q21. Please indicate how strongly you agree or disagree with the following statements.

*[RANDOMIZE ITEMS]*

- Item 1: "A strong leader in government is good for Austria, even if he/she does not always follow the rules to move things forward."
- Item 2: "The people should make important political decisions, not politicians."
- Item 3: „Corporations and not the government decide over politics."

I fully agree.....0  
to  
I fully disagree..... 10

## „VOTING WITH 16“: 3 ITEMS

Next, we will ask you three questions about conversations and discussions about politics.

Q22. How often have you talked about politics with these people or groups?  
*[RANDOMIZE ITEMS]*

Item 1 Father

Item 2 Mother

Item 3 Workmates

Item 4 Teachers

Item 5 Fellow students

Item 6 Other friends

Item 7 Siblings

daily.....	1
almost daily .....	2
several times per week .....	3
several times per month.....	4
hardly ever.....	5
never.....	6
not applicable .....	77

Q23. How interested are these people or groups in politics?  
*[RANDOMIZE ITEMS]*

Item 1 Father

Item 2 Mother

Item 3 Workmates

Item 4 Teachers

Item 5 Fellow students

Item 6 Other friends

Item 7 Siblings

Very interested .....	0
to	
not at all interested.....	10
not applicable .....	77
don't know.....	88



Q24. In the current term in school, have you...

[RANDOMIZE ITEMS]

Item 1: discussed about Austrian politics?

Item 2: talked about the parliamentary election 2019?

Item 3: participated in school democracy, e.g. have you participated in the election of the school representative or have you participated in a student assembly?

Item 4: participated in a project that was related to politics?

yes ..... 1

no ..... 2

don't know..... 88

## POLITICAL ATTITUDES: 13 ITEMS

Now we focus on political topics. What do you think about the following questions?

Q25. Should the weekly working time be reduced to 30 hours without wage adjustment?

Q26. Should company taxes<sup>1</sup> be reduced?

Q27. Should bequests remain tax-exempt?

Q28. Should the legal retirement age be raised?

Q29. Should an independent agency be established that investigates police violence?

Q30. Should the joint school for 10 to 14 year-olds be realized?

Q31. Should asylum seekers get a work permit?

Q32. Should criminal foreigners be deported, independent of their duration of stay in Austria?

Q33. Should the general right to vote in national elections remain restricted to Austrian citizens?

Q34. Should the Court of Auditors be allowed to audit all party finances and to impose penalties?

Q35. Should the compulsory broadcasting fees („GIS Gebühren“) be abolished?

Q36. Should internet forums be obliged to record the real names<sup>2</sup> of all its users and to release them if necessary?

Q37. Should a CO2-tax<sup>3</sup> be introduced?

---

<sup>1</sup> Company taxes refer to all taxes that companies have to pay. These taxes include profit taxes (like income tax, corporate income tax, and business tax), consumption taxation (value added tax and real estate transfer tax), and property taxation (land tax, inheritance tax and gift tax).

<sup>2</sup> Real name (“Klarname”) means the real and official first and second name, in contrast to nicknames or pseudonyms of users in social networks or internet forums.

<sup>3</sup> A CO2-tax taxes carbon dioxide and other greenhouse gases that substantially contribute to the climate change crisis. The subject of taxation is mainly the combustion of fossil energy sources, for example in the industry, but also fuels.

yes .....	1
no .....	2
no answer.....	88

AND each time: How important is this topic to you?

unimportant.....	1
to	
important.....	9

## KNOWLEDGE QUESTIONS ABOUT PARTY POSITIONS: 5 ITEMS

Q38. And what do the parties think about the following question:

Should the weekly working time be reduced to 30 hours without wage adjustment?

Q39. And what do the parties think about the following question:

Should company taxes<sup>4</sup> be reduced?

Q40. And what do the parties think about the following question:

Should the joint school for 10 to 14 year-olds be realized?

Q41. And what do the parties think about the following question:

Should criminal foreigners be deported, independent of their duration of stay in Austria?

Q42. And what do the parties think about the following question:

Should a CO<sub>2</sub>-tax<sup>5</sup> be introduced?

---

<sup>4</sup> Company taxes refer to all taxes that companies have to pay. These taxes include profit taxes (like income tax, corporate income tax, and business tax), consumption taxation (value added tax and real estate transfer tax), and property taxation (land tax, inheritance tax and gift tax).

<sup>5</sup> A CO<sub>2</sub>-tax taxes carbon dioxide and other greenhouse gases that substantially contribute to the climate change crisis. The subject of taxation is mainly the combustion of fossil energy sources, for example in the industry, but also fuels.

- Item 1: ÖVP
- Item 2: SPÖ
- Item 3: FPÖ
- Item 4: GREENS
- Item 5: NEOS

I am sure: the party agrees.....	1
I believe: this party agrees .....	2
I don't know.....	3
I believe: the party disagrees.....	4
I am sure: the party disagrees .....	5

## SOCIO-DEMOGRAPHIC FACTORS and BACKGROUND: 26 ITEMS

Finally, some questions for statistical purposes.

SD1. Gender

male.....	1
female .....	2

SD2. In which month has your apprenticeship begun?

SD3. How many years had you worked in a company before your apprenticeship begun?<sup>6</sup>

SD4. Have you already completed another apprenticeship?

SD5. Are you part of the program „**Lehre mit Matura**“<sup>7</sup>?

yes .....	1
no.....	2

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<sup>6</sup> If you had not worked in a company before, please select „0 years“

<sup>7</sup> This program combines an apprenticeship with additional theoretical courses to acquire the general qualification for university entrance.

no, I already have the general qualification for university entrance....3

SD6. Do you get exactly the legally required minimum remuneration or do you get more than the legally required minimum remuneration?

I get exactly the legally required minimum remuneration .....1

I get more than the legally required minimum remuneration.....2

SD7. What is your net salary after taxation and social security contributions?

Less than 300€ .....1

300 to 450€ .....2

450 to 600€ .....3

600 to 750€ .....4

750 to 900€ .....5

900 to 1050€ .....6

1050 to 1200€ .....7

1200 to 1350€ .....8

1350 to 1500€ .....9

1500 to 1650€ .....10

1650 to 1800€ .....11

1800€ or more .....12

No answer .....99

SD8. How many employees does your company have in total?

0 – 9 .....1

10 – 49 .....2

50 – 249 .....3

250 or more .....4

SD9. Did your employer ask you about your preferred term of schooling this year?

Yes and, therefore, I attend the current school term .....1

Yes, however, I preferred a different term .....2

No, my company has decided .....3

No, the vocational school has decided .....4

Don't know .....5

SD10. In which term did you attend school last year?

- In the first term (September-November) ..... 1
- In the second term (November-January) ..... 2
- In the third term (February-April)..... 3
- In the fourth term (April-June)..... 4

SD11. Are you exempted from the subject „Civic Education“?

- yes ..... 1
- no..... 2

SD12. Do you stay in a boarding school?

- yes ..... 1
- no..... 2

SD13. With whom do you usually live in a household?

- Father ..... 1
- Mother..... 2
- Siblings ..... 3
- With one or more friends ..... 4
- With one or more friends ..... 5
- Husband, wife oder partner ..... 6
- It's only me..... 7
- Others: *[please specify:]*..... 8

\*Please check all that apply.

SD14. Which grade did you get on average last school year?

SD15. Have you ever visited the website “wahlkabine.at“?

- yes ..... 1
- no..... 2

I don't know this website ..... 99

SD16. [if SD15 = 1] On “wahlkabine.at“, have you...

Item 1 answered the questions on the national election 2019?

Item 2 enquired about party positions?

yes ..... 1

no..... 2

SD17. [if SD15 = 1] Who has told you about the website „wahlkabine.at“?

Item 1 Parents

Item 2 Workmates

Item 3 Teachers

Item 4 Fellow students

Item 5 Other friends

Item 6 Others: [please specify]

\*Please check all that apply.

SD18. In which country are you born?

Austria..... 1

In another country in the EU..... 2

In a country outside of the EU..... 3

SD19. Are your parents born in Austria?

[NOTE: It's about your biological parents]

Yes, both of them ..... 1

Yes, one of them ..... 2

No, none of them ..... 3

SD20. What is the educational attainment of your father?

Secondary school.....	4
Vocational school.....	7
Vocational middle school [e.g. HASCH].....	8
High school with Matura [e.g. HTL, HAK, HBLA].....	10
University.....	13
Other [ <i>please specify</i> ].....	16
Does not apply.....	77
Don't know.....	88

SD21. What is the educational attainment of your mother?

Secondary school.....	4
Vocational school.....	7
Vocational middle school [e.g. HASCH].....	8
High school with Matura [e.g. HTL, HAK, HBLA].....	10
University.....	13
Other [ <i>please specify</i> ].....	16
Does not apply.....	77
Don't know.....	88

SD22. Are you member of a union?

yes.....	1
no.....	2
no answer.....	3

SD23. Are you active in a political association or a political organization?

yes.....	1
no.....	2
no answer.....	3

SD24. Where do you live?

Village [less than 5.000 inhabitants] .....	1
Small town [5.000 to 20.000 inhabitants] .....	2
Town [20.000 to 100.000 inhabitants] .....	3
In the center of a city [more than 100.000 inhabitants] .....	4
On the outskirts of a city .....	5

SD25. How many siblings do you have?

0 .....	0
1 .....	1
2 .....	2
3 .....	3
4 .....	4
More than 4 .....	5

SD26. And how many of your siblings are older than you?

0 .....	0
1 .....	1
2 .....	2
3 .....	3
4 .....	4
More than 4 .....	5

## END: 1 Item

Q43. Do you want to tell us something about the survey or individual questions?

[OPEN ANSWER]: \_\_\_\_\_

**Thank you very much for your participation in the survey!**

Please remain seated; the other participants will also finish soon.



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