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VOTES AT 16: NEW INSIGHTS FROM SCOTLAND ON ENFRANCHISEMENT

Summary

This paper presents new evidence on the experience of 16-year olds voting after the reduction of the voting age in Scotland following the 2014 independence referendum. Using survey data from 2015 it compares 16-17 year olds Scottish respondents with their peers in the rest of the UK to see whether we can observe difference in their political attitudes and behaviour ahead of the 2015 General Election. The analyses show potentially significant positive effects following the reduced voting age but distinguish different domains and show that distinctive effects for the youngest age group seem to be most pronounced in relation to political behaviour (both electoral and non-electoral forms), but to a lesser extent in terms of evaluations of politics more generally. The findings also highlight the important interplay between enfranchisement and different socialising agents for young people, in particular parents and civic education in schools.

Keywords: Youth participation, Voting age, Political engagement, Enfranchisement, Scotland, Civic education

There are many arguments made in the literature about whether 16 and 17 year olds should be given the right to vote in elections, however opportunities to study what actually happens when this age group is enfranchised are rare. Therefore, a lot of evidence is based on studies of 'older' young people aged 18-24 (see for example Johnson & Marshall 2004) however, drawing conclusions for the younger age group can be difficult, in particular because of different socialising influences, such as living at home (Bhatti & Hansen 2012) and being in school. The influence of schooling and in particular civic education on political attitudes and behaviour have been well documented (Keating et al. 2010; Quintelier 2010; Torney-Purta 2002; Dassonneville et al. 2012), however, often the results have only limited explanatory power when looking at direct effects on political participation, as enfranchisement begins at a later stage in most countries (Schwarzer & Zeglovits 2013).

The lowering of the voting age to 16 in Austria in 2007 was one of the few exceptions that did allow studies into both voting behaviour and the impact of civic education. Other

examples exist, but often at much smaller scales or in experimental settings, such as the reduction of voting age trial in some Norwegian municipalities (Bergh 2013). A new opportunity arose in the context of the Scottish independence referendum of September 2014 in which 16 and 17 year olds were allowed to take part in a national vote at Scottish level for the first time. Subsequently the Scottish Parliament has legislated to make this change permanent for all Scottish elections. The situation provides a unique approach to studying the impact of this change of the franchise, because the voting age was not lowered in the rest of the UK, creating a setting that approximates a natural quasi-experiment. There are limitations to it, in particular that we were observing young people being enfranchised earlier, while at the same time living in a place where political debate was amplified generally, because of the unique context of the Scottish independence referendum. While this poses some analytical challenges - which we engage with below - it is nevertheless a unique opportunity to gain additional insights into the attitudes and the behaviour of young people who get a chance to vote when they are younger than 18. Using a survey with substantial samples of young people ahead of the General Election in May 2015, it was possible to investigate whether there had been changes in the political attitudes and behaviour of those young people who had experienced the lowering of the voting age in Scotland and those in the rest of the UK who had not experienced enfranchisement earlier.

This paper presents analyses based on this survey data to address the following main question:
Are there differences in political attitudes and behaviour amongst Scottish 16-17 year olds compared to their peers in the rest of the UK ahead of the 2015 general election, following the extension of the voting franchise in the Scottish independence referendum?

1. Literature review

Some concerns about the reduction of the voting age have been framed in normative accounts, focussed on the argument that there are many other crucial citizen rights that are not extended to 16-year olds (Chan & Clayton 2006: 534; Electoral Commission 2003a) and a change in the franchise may result in a confused conception of citizenship that is incongruent with the societal understanding (Tonge & Mycock 2010:190). On a different note, critics in the UK specifically also pointed out that there was no public support for a change in the voting age, with the majority of the public across the UK wanting the voting age to stay at 18 (Electoral Commission 2003b) thus raising legitimacy concerns in relation to the views of the wider public.

The majority of critiques however are based on empirical statements about the political attitudes and behaviour of young people. Usually based on studies of young adults (aged 18 to 24 or 30) young people have been shown to have a lower voter turnout (Russel 2014), lower levels of political knowledge (Johnson & Marshall 2004) and lower levels of partisanship and more frequent changes in attitudes (Chan & Clayton: 544).

Furthermore, there have been practical experiences of reductions in the voting age that did not lead to sustained positive changes. In an extensive experiment, the voting age for a number of municipalities in Norway was reduced to 16 for local elections, while a control set of young people in municipalities without this reduction was studied as well. The results were discouraging for proponents of a reduction in the voting age, as there was no comprehensive treatment effect for the newly enfranchised groups (Bergh 2013).

However, the generalisability of the experience is questionable. Whether the experience of effectively being part of an experiment or actually being given the right to vote may affect young people differently is a crucial question, as qualitative research has demonstrated that the feeling of genuine efficacy and engagement plays an important role in young people's motivations (Schwarzer & Zeglovits 2013; Stewart et al. 2014).

The situation in Scotland may be more helpful as the lowering of the voting age was genuine and ultimately sustained. Furthermore, the experience from Austria, where we are now

able to observe long-term effects of the reduction of the voting age, is largely positive. Concerns about negative effects were not verified, but positive consequences such as an increase in voter participation amongst young people in most contexts could be observed (Zeglovits & Aichholzer 2014). Positive results could also be observed for attitudinal dimensions contributing to political interest (Zeglovits & Zandonella 2013). Wagner et al. (2012) further find that the objective quality of vote choice of young people in Austria can actually be evaluated as equivalent to that of the population in general, addressing concerns about political maturity.

Positive changes cannot only be observed for the young people themselves, but also in the population more broadly who have experienced young people taking part. In the Scottish context following the experience in the referendum 60 % of adults are in favour of reducing the voting age to 16 (Scottish Parliament 2015: 65) while support in the rest of the UK remains at about one third (Eichhorn et al. 2015: 2).

Irrespective of the normative positions on the topic, there are substantial problems using studies of older young adults, aged 18 and above, to draw conclusions about the reduction of the voting age. Fundamentally, it has been shown previously that there are significant changes going on in the early years of adulthood (Hart & Atkins 2011; Prior 2010) with no clear linear pattern of increasing political engagement, but complicated changes due to multiple influences. Bhatti & Hansen (2012) for example found that 18-19 year olds had greater probabilities of voting than 20-21 year olds, which they argue is because voting as a social act is supported more when the first act of voting happens while living at home, which more younger people do. Most crucially for the question of voting age reduction is however, that several researchers have found that 16-17 year olds actually show greater levels of willingness to engage when given the vote compared to their slightly older peers. As Wagner et al. (2012) observe: "Thus, citizens just over 18 appear to be substantively influenced by their lacking ability and motivation to vote, but not citizens just under 18" (378).

We have to call into question the causality implied by those who argue that young adults' lower engagement with politics means that we should expect that 16-17 year olds would thus depress voter engagement and other forms of civic participation further. Indeed, it may be the other way around: knowing that early voting experiences can be habit forming (Dinas 2012), if younger people are enfranchised earlier, their motivation to take part may be larger due to the different influencing factors that shape the experience at this age. Zeglovits & Aichholzer (2014) confirm this analysis in Austria, identifying a voter turnout boost for 16-17 year olds compared to 18-20 year olds and conclude 'The older the first-time voter, the lower the turnout' (356). The exact same has been observed in Scotland where participation in the independence referendum was much higher amongst the 16-17 year old newly enfranchised voters, compared to their slightly older 18-24 year old counterparts (Electoral Commission 2014: 64).

We also need to be careful to not assume that disassociation with traditional political institutions is equivalent to political disinterest or an unwillingness to engage. While young people specifically (Fieldhouse et al. 2007; Syversten et al. 2011) and publics generally (Welzel et al. 2005) in Western democracies indeed show lower levels of traditional political engagement, at the same time they are more likely to engage in new forms of elite challenging participation (Quintelier 2007) and community service engagement (Syversten et al. 2011). The general decline in party membership and long-term party affiliations (Scarrow 2002; Dalton 2014: 195) is particularly pronounced for young people (Dalton & Wattenberg 2002). This however is not disengagement from political questions altogether, but signifies young people's more complex approaches to engaging with political issues and civic duties that are acted upon not only through traditional means like voting, but a range of options (Quintelier & Hooghe 2011: 729). Young people, feeling often unheard, by the narrow political structures that they conceive the formal processes to represent (in particular political parties: see Schulz et al. 2009) therefore often opt for engagement through other means (Quintelier 2007: 177).

Political attitudes and behaviour of young people do not develop in an individualised and isolated way, of course, but are shaped by multiple socialising agents. In order to conduct a meaningful analysis of the impact of enfranchisement and early voting, it is crucial that we are able to appreciate those influencing factors conceptually and control for them operationally. The two dominant actors usually identified are parents and schools. In the Austrian case, Zeglovits & Zandonella (2013) attribute a substantial amount of the positive changes following the reduction of the voting age to changes in school curricula extending and improving civic education. They are able to differentiate both educational effects and effects based on the earlier enfranchisement suggesting that the interplay between the two is key for successful changes (further evidenced by Zeglovits & Aichholzer 2014: 354). This conclusion is also supported by Stewart et al. (2014) who suggest that the provision of voting itself is not enough, but schools play an important role in facilitating the experience and mark the main differentiating factor of voting at 16 for the majority of the population of young people.

Parents influence young people's interest in politics (Zeglovits & Zandonella 2013) and act as socialising agents more broadly when it comes to young people's civic engagement (Zaff et al. 2010: 607). However, it would be wrong to therefore conclude that young people will just follow their parents in political choices. In the Scottish independence referendum Eichhorn et al. (2014) showed that over 40 % of under 18-year olds interviewed had a different voting intention to the one a parent of theirs reported. Furthermore, it has been shown that young people also affect their parents' civic engagement and attitudes (Zaff et al. 2010) and that this is particularly the case when young people are exposed to civic education in school (McDevitt & Chaffee 2000).

The role of civic education is therefore complimentary to that of parents in terms of political socialisation, but it is also distinct and fulfils additional roles (Dassonneville et al. 2012; Lödén 2014). Greater civic knowledge has been associated with positive outcomes such as willingness to vote (Torney-Purta et al. 2001: 145) and formal civic education has been found to

positively affect a range of political attitudes and behaviour (Dassonville et al. 2012) and a willingness to obey the law (Torney-Purta & Wilkenfeld 2009). However, the mode of delivery matters greatly. There are important differences between the formal teaching of civics and formats that emphasise open classroom discussions of political issues in terms of the skills that can be developed (Torney-Purta & Lopez 2006: 20) and the impact on political attitudes and behaviour (Zaff et al. 2010: 615). Any analysis should therefore differentiate between formal civic education and actual interactions, as the interplay between both is seen to achieve the most promising outcomes (Torney-Purta 2002) and take it into account in addition to parental effects.

2. Methodological background

This analysis is part of a larger survey project carried out in February 2015 for which over 7400 adult respondents across the UK were interviewed.¹ In addition, a boost sample of 810 16-17 year olds across the UK was achieved split evenly between Scotland and the rest of the UK (RUK). The survey was conducted utilising a large online panel of over 500,000 respondents with a special youth section, from which the samples were drawn using stratified random sampling within geographic areas, gender and age groupings while using monitoring variables for socio-economic status during the sampling process. We used random sampling methods throughout the process until quotas (based on census data) for sub-region geographies, gender, age and socio-economic characteristics were filled. In the latter case some quotas had to be opened up ultimately to be able to achieve the desired sample size. As with any survey, deviations from estimates were adjusted for using sampling weights that were applied to the subsequent analysis and all results presented in this paper are weighted.² As part of the project a sensitivity analysis was conducted to investigate the extent of emerging biases. Employing a propensity-score-matching approach, using the British Social Attitudes Survey as our reference

¹ A reference will be included here to indicate funder, grant number and project website with a detailed methods note of the project – however, the exact reference is removed at the moment for purposes of anonymization.

² Except sample sizes are of course presented unweighted in the tables.

point, we were able to show that biases for coefficients were small (always smaller in magnitude than the associated adjusted standard errors) and not affecting the substantive results of the analyses, suggesting that the results are valid and trustworthy.³

The approach to the analysis aims to approximate a natural quasi-experiment design. In such a design we would not be able to randomly assign to groups of participants to a treatment, as we would in a lab, but we would see two groups for comparisons assigned to a treatment effect “as if” random (Dunning 2008). Otherwise however, the two groups should ideally be identical in other characteristics (for example if we were looking at a defined local population, a part of which experiences an accident that affects them might be considered a treatment group). The main influence we are interested in our study is the early enfranchisement of 16-year olds in Scotland. However, as mentioned earlier already, at the same time Scottish respondents had experienced the independence referendum of 2014. While this survey was conducted subsequently in February 2015 and ahead of the general election for the whole of the UK, we are not able to treat this as a pure experimental setup. However, it is still insightful to compare Scottish 16-17 year olds to their counterparts in the rest of the UK, especially when we are able to control for different socialising influences that we know to be associated with political behaviour and attitudes and young people.

We investigate whether there are differences in variables of interest between Scottish respondents and respondents in the rest of the UK, controlling for demographic factors (where previous studies have found only small geographic variation across the UK regarding political participation and attitudes that was not explained by socio-demographic differences).

To address our research question we investigate whether there are differences between 16-17 year olds in Scotland and the rest of the UK regarding a range of political attitudes and

³ A reference to this published analysis (a methodological chapter in a book on the project) will be added in the final version of the manuscript, but has to be kept out at the moment for purposes of anonymization.

behaviour, controlling for gender and occupational socio-economic class of the household. The variables of interest are:

Political participation (intended or actual)

1. Their likelihood to vote in the 2015 General Elections, if they were allowed to vote at the age of 16 (measured on a scale from 0 to 10);
2. Whether they have taken part in any form of non-electoral political participation (demonstrations, petitions, boycotts, writing to a member of parliament);

Political confidence and understanding

3. Whether 16-year olds should be given the right to vote in all elections;
4. Whether they consider politics difficult to understand;

Use of information sources

5. How many different types of information sources they have consulted for political information in the three months preceding the survey (0 to 6).⁴

Perceptions of relevance of elections and government

6. To what extent they say that it makes a difference who wins the General Elections;
7. To what extent they say that it makes a difference to their own lives how the UK is governed;

We use simple regression techniques to perform these analyses. For 1 and 5 we use ordinal regression, because of the clearly ordered nature of multiple response categories (for voting likelihood using a complimentary log-log function to account for the skew towards responses at the upper end of the scale). For all other variables we construct dichotomous variables (please see the regression tables for the coding of categories) and use logistic regressions.

⁴ The choices offered were: Newspapers, Online news sites, TV, radio, social media and campaign materials

In order to take account of the socialising influences that may differ in Scotland and the rest of the UK (generally and in particular at the time of the analysis, given the special situation in Scotland) we investigate the impact of civic education as well as the socialising influence of parents and friends. In a second modelling step we therefore add further explanatory variables to the seven base models. During the referendum we saw a substantial increase in political discussions of young people both with their family and their friends. Applying this to the context ahead of the 2015 General Election we include indicators asking whether the respondents had discussed 'how the UK was governed' in the last three months preceding the survey with their family and friends respectively.

The other key independent variables of interest reflect the political and civic education of those young people. During the referendum a positive effect between engagement with political discussions in class and enhanced civic attitudes could be observed (Eichhorn 2014). To take those factors into account in our analyses here, we include indicators for two important potential experiences in school. We measure whether a respondent had ever taken a class which predominantly political themes formed the substance of the class (effectively whether the respondent had ever taken a 'civics'-style class). We distinguish between respondents who had chosen to take such classes, those who had to take them and those who had never taken a civics class. Additionally, we asked respondents whether they had recently (in the last three months preceding the survey) been in a class in which political issues were actively discussed (which could have been in a 'civics' class or elsewhere). This allows us to distinguish effects of the general provision of civics education and active classroom discussion of political issues, which do not have to go hand in hand. In our sample about one quarter of students who had taken a civics class had not discussed political issues recently, but 46 % of those who had never taken a specific civics class nevertheless had another class in which such discussions took place recently. Consequentially we estimate the difference between Scottish and RUK respondents in our sample controlling for other factors that influence political behaviour and attitudes. These

socialising influences will of course also be related to each other and the different experiences in Scotland and RUK more generally. It is therefore important to take them into account in the estimation, but remember that the estimation of effects should always be interpreted as seeing all other independent variables controlled for, reflecting the complexity of influences on young people's political socialisation reviewed earlier.

As we outlined above already, the referendum and the lowering of the voting age coincided of course, so it is impossible to isolate one effect from the other entirely. Nevertheless, it is worth examining whether the degree of the felt impact of the referendum matters when evaluating the robustness of other influences on the variables of interest as well as the distinction between Scotland and the rest of the UK. After analysing the regression models following the above approach, it is worth checking whether the results are robust to a measure that somehow captures a distinctive 'referendum effect' which may be felt by the individuals surveyed. If significant differences between Scottish 16-17 year olds and their peers from the rest of the UK remained robust to such a control, it would provide support for an effect of the earlier enfranchisement experience, in addition to a referendum effect.

The survey this study is based on included a variable measuring the extent to which respondents felt that the referendum had a lasting impact on their respective country (Scotland, England, Wales or Northern Ireland). This is useful, as it provides an indicator for the self-perceived impact of the referendum, which is a meaningful approximation to measure a referendum effect for the respondents. The measure is also useful in the context of aiming to approximate a natural quasi-experiment setting, as we need to allow for RUK respondents to state that the referendum had a subjective impact in their countries to allow for a qualified comparison (as other parts of the UK were also exposed to the referendum debate, of course, but not to the lowering of the voting age). While perceptions of a lasting effect are of course higher in Scotland (with 31 % strongly agreeing and a further 43 % agreeing), there is a

substantial proportion in the rest of the UK who consider a substantial impact of the referendum for their respective countries, too (with 4 % strongly agreeing and 24 % agreeing).

Finally, we add one further check to see how confident we can be in any differences we identify for 16-17 year olds being attributable to an enfranchisement effect rather than general differences between Scotland and the rest of the UK, with increased engagement in the Scottish context applicable to the whole population. To do this we fit the comparable models (using the base ones) to the adult sample from the same survey as well to see whether effect sizes differ. If they are the same for 16-17 year olds as they are for older age groups, it would be difficult to presume a distinctive effect for the younger age group. However, if differences were more pronounced in the young age group than for the general population, we would have some indication, that there might be a distinctive effect that is specifically associated with age rather than a general population difference between Scotland and the rest of the UK.

3. Results

3.1 Differences between Scotland and the rest of the UK

Table 1 about here

There are significant differences between respondents in Scotland and the rest of the UK for most of our dependent variables, however, the magnitude of the differences varies substantially (see table 1). The exception is the question of whether politics is difficult to understand which a majority of 16-17 year olds in Scotland agree or strongly agree with (57 %) at very similar levels to their peers across the country (60 %). There are moderate and significant differences about the perceptions of whether it matters who wins the election (58 % in Scotland in agreement compared to 50 % in RUK) and whether it matters to one's own life how the UK is governed (47 % for Scotland compared to 40 % for the rest). A substantially larger proportion

of 16-17 year olds in Scotland feels that they should be given the right to vote in all elections 66 % compared to only 52 % in the rest of the UK, suggesting a greater level of confidence in themselves and their peers.

The largest differences however can be observed for questions about actual practice or intended practice related to political engagement. Considering that voter turnout amongst 18-24 year olds in the last Scottish Parliament elections in 2011 was as low as under 30 %, it is staggering to see that 67 % of Scottish respondents rate their likelihood to vote, if allowed to do so in the General Election, at the top of the scale (9 or 10 on an 11-point scale from 0 to 10), compared to only a meagre 39 % amongst their peers elsewhere – which is much more reminiscent of previous findings.

Substantial and significant differences are not only found for electoral participation however. While 57 % of Scottish respondents had taken part in at least one form of non-electoral political engagement, only 40 % of 16-17 year olds from the rest of the UK reported the same. There are not only higher levels of political behaviour, actual or intended, in Scotland, but we also find a more extensive engagement with sources of political information. While 43 % of respondents elsewhere named at least three different sources of information, 60 % of Scottish respondents did.

To summarise, we indeed find that many of the effects observed previously within the referendum context were sustained into the General Election context. In particular focussing on expressions of political behaviour, young Scottish respondents are substantially more likely to show higher levels of engagement. In the following analyses we will investigate whether these differences are robust to accounting for discussions about politics with friends and family as well as school education.

Before we turn to those it is worth noting the results for the socio-demographic controls however. For social class we find very few significant differences between particular social class groupings and the reference category and when those are observed they are not present in a

systematic way, suggesting that social class variation for our variables of interest is small. This is in congruence with findings from the referendum process itself, where social class patterns found for adults could not be replicated to the same extent for young respondents (Eichhorn et al. 2014). We also find very few substantial differences between male and female respondents. An exception may be the question of self-perceived political understanding, where male respondents were less likely to say that they found politics difficult to understand.

3.2 Controlling for socialising agents

Table 2 about here

As outlined earlier, it is important to control for socialising influences on young people's political behaviour in attitudes to investigate the research question robustly. Taking into account whether young people had discussed how the UK was governed in the last three months preceding the survey with family or friends and what their experience in school was matters a lot (see table 2). It reduces the effect size of the difference between Scotland and the rest of the UK substantially, suggesting that parts of the differences described above can be explained by differences in those independent variables. Indeed, levels for all of them are higher in Scotland than they are in the rest of the UK on average (see table 3).

Table 3 about here

Moderately more 16-17 year olds in Scotland have recently discussed political issues in the classroom (64 %) compared to their counterparts in the rest of the UK (56 %). More substantial differences are found for the taking of 'civics'-style classes where 50 % of those elsewhere say they had never taken one compared to only 33 % in Scotland. Most strikingly, 41

% in Scotland say they had chosen such a subject (most likely Modern Studies) while only 20 % attest to that in the rest of the UK. Young Scottish respondents were also much more likely to have talked about politics with family members in the last three months (59 %) compared to their peers elsewhere (39 %). The difference is even greater when we ask whether they had talked to friends about how the UK is governed with 56 % in Scotland saying they did, compared to 34 % in the rest of the UK.

As we may expect, some of the differences previously found to be significant are rendered insignificant when adding those variables to our models. The difference in non-electoral political participation, is reduced in effect size, but remains marginally significant. While the new variables seem to explain some of the difference between Scotland and the rest of the UK in terms of whether respondents thought 16-year olds should be given the vote for all elections, there is a remaining significant difference for this variable as well. The strongest effect even after expanding the models however remains the difference in voting likelihood.

This suggests that there are some distinguishable Scottish ‘effects’ which cannot be explained by engagement with friends and family or the experience in schools. They relate to actual political engagement (voting, views about voting and non-electoral political participation). This seems plausible, considering that one distinguishable factor between Scotland and the other parts of the UK is the lowered voting age to 16 in the referendum (which will have seen many of the Scottish respondents already having casted their first ever vote). These findings are very similar to those found in Austria, suggesting indeed that an enfranchisement effect may be present following the same interpretation of such an effect as Zeglovits & Zandonella presented (2013: 1097).

However, the lowered voting age itself is not responsible for all differences between Scotland and the rest of the UK. Some of the differences are attributable to the higher levels of school and family or friends engagement with politics by Scottish respondents as shown above. These factors show significant relationships with our dependent variables of interest. Discussing

political issues in the classroom setting has the most consistent effect. It is positively related to nearly all dependent variables (voting likelihood, perceptions of electoral outcomes mattering, the desirability of 16-year olds voting, non-electoral political participation and information sources variety). This is an important finding, as classroom agendas are mostly set by teachers and therefore we are unlikely to observe substantial amounts of self-selection biases here where those young respondents most interested in politics would choose to have such discussions (as they may with friends or family). This suggests that such classroom interactions can provide a very strong lever to influence positive civic attitudes and behaviour.

The one area that is not affected by such discussions is the self-perceived understanding of politics. This is what is most strongly influenced by the taking of a 'civics'-style class, such as Modern Studies in Scotland. While there may be some self-selection bias in those choosing these classes also feeling more confident in their knowledge about politics, there is a substantial and significant additional effect also for those who had to take such a class, suggesting that compulsory civics-oriented education can have positive results for the understanding of politics. Unless self-selected the size of the effects is smaller however, for other variables (such as the number of information sources used) or insignificant for evaluations of whether election results mattered. For several variables there was not even a significant relationship between our dependent variables and whether respondents chose to take such a class. This included the likelihood to vote. So while civics classes can have great importance for the development of confidence in political knowledge, they do not appear to be the key vehicles for facilitating political behaviour without discursive practice in class.

Talking to friends and family about how the UK is governed, is positively associated with voting likelihood, the number of information sources used, non-electoral political participation and (for talking to friends) the understanding of politics. However, it is difficult here to hypothesise causal relationships, as the respondents could be the instigators of such discussions and may be engaging in all the political behaviours discussed because of an underlying interest.

Most likely those effects would be mutually reinforcing. Neither talking to parents or friends is substantially associated with evaluations about whether it makes a difference who wins elections or how the UK is governed or whether 16-17 year old should be allowed to vote. These attitudinal evaluations seem to be most strongly influenced by having discussions in the classroom. The findings therefore indeed suggest that school effects are complimentary and distinct to influence from parents and friends (Zaff et al. 2010; McDevitt & Chaffee 2000).

3.3 Robustness checks: referendum impact and comparisons to older age groups

Table 4 shows the results of models when we add the variable that measures the respondents' self-perception of the impact of the referendum for their respective countries. Most importantly, we need to investigate whether taking this variable into account affected the identified differences between Scottish and RUK respondents. If differences that were found to be significant in previous models were diminished, we would have to conclude that those differences were mainly attributable to a specific referendum effect.

Tables 4 about here

This however is not the case for most of the variables. Three major differences between Scottish and RUK respondents remained significant indeed (for voting likelihood, whether 16-17 year olds should be allowed to vote and for the perception of whether politics is difficult to understand). Furthermore, when taking the referendum effect into account we also find that the difference in the number of information sources used between young Scottish respondents and their counterparts in the rest of the UK becomes significant again. There is one notable exception however: the difference between both sets of respondents regarding their non-electoral political participation is reduced strongly and rendered statistically insignificant when controlling for the referendum effect. This suggests that for this particular dimension the greater

participation of young Scottish respondents may so far be more strongly attributable to a referendum effect than a voting age reduction effect (in addition to the other influencing factors identified).

For the other independent variables, relationships with the dependent variable are not affected strongly. While there are some minor changes in magnitude of effects, there are no major changes that would alter the substantive interpretation of the results from the previous models with the control.

Table 5 about here

Finally, we compare the results for the 16-17 year olds with the results for the sample of adults in the survey. Table 5 shows the results for the adults in the sample applying the same base models used earlier for the young people (table 1). We do find that for each of the seven dependent variables under investigation there is a significant difference for the adults, including the question of whether politics is difficult to understand or not (with Scottish respondents being less likely to say that it is). The direction of the effects for the adults is the same as for the 16-17 year olds otherwise: Scottish respondents on average show greater levels of participation, information and efficacy attitudes. However, the strength of the effects differs substantially. For actual political engagement, both in terms of voting likelihood and non-electoral participation the differences between Scottish and RUK respondents are more pronounced for the 16-17 year olds. For voting likelihood, the odds ratio for adults is 1.76, while it is 2.11 for the young respondents, in relation to political participation it is only 1.30 for adults, but 1.95 for 16-17 year olds. The gap is also more pronounced for the number of information source types used (1.85 for the young respondents compared to 1.57 for the adults) and the question of whether it makes a difference who gets elected (1.41 for the 16-17 year olds compared to 1.19 for the others). So

for these measures it appears that there is indeed a distinguishable additional effect to the overall population difference between Scotland and the rest of the UK.

However, for some of the indicators the difference is bigger for the adult respondents. As already suggested, while there was no significant difference in self-perceived political understanding for the 16-17 year olds, the difference was significant for the adults (with an odds ratio of 0.79). Also, the difference in relation to the question of whether 16-year olds should be allowed to vote was greater for adults (2.31) than for young people (1.70). This is likely to be caused by the higher level of support for the question amongst 16-17 year olds in the rest of the UK, as this question obviously directly affects them. Finally, and to a lesser extent, the difference is also more pronounced for adults in relation to the question of whether it makes a difference to one's own life how the UK is governed (1.59 compared to 1.37). In summary, we see that we need to distinguish between different dimensions of political attitudes and engagement. For those areas that reflect political behaviour (voting participation, non-electoral participation and information source usage) there seems to be a distinct additional effect for the young people that is greater than the overall effect we can observe for the Scottish population more generally, suggesting that the effects we observed are plausibly more than merely caused by the independence referendum. However, for domains that are more evaluative we do not see the same additionality effects, with the exception of the evaluation whether it makes a difference who gets elected.

4. Discussion

The results from the survey show that indeed there are significant differences between Scottish 16-17 year olds and their peers in the rest of the UK. In particular, in terms of issues related to electoral and non-electoral participation and views on that levels in Scotland are higher or more favourable even when taking into account educational experiences and personal

interactions. These findings add to previous evidence that earlier enfranchisement can have distinctively positive effects on political behaviour of young people. However, we need to be careful in interpreting the results in detail, as the Scottish respondents participated in this survey in the aftermath of the independence referendum in September 2014. We do find that indeed there is an effect that seems to apply to the Scottish population overall and that the differences observed between Scottish and RUK 16-17 year olds are partially moderated when taking into account how important the referendum is perceived to be. However, we cannot explain all the differences merely by referendum impacts. On several indicators, in particular those where we are able to observe robust difference between young Scottish respondents and their peers in the rest of the country (including electoral and non-electoral political participation), the differences for 16-17 year olds are substantially more pronounced than the general differences we could observe for the adult population. It suggests that indeed for those indicators we can have some confidence that the differences are not only created by the impact of the Scottish independence referendum.

We should note however, that there were domains for which we could not observe differences between young people in Scotland and the rest of the country respectively. Indicators reflecting evaluations of the importance of electoral outcomes were rendered insignificant when taking into account socialising agents' influences, for example. Young people in Scotland are indeed more likely to have been engaged in political discussions with parents and friends and are more likely to have chosen to take civics classes and to have discussed politics in the classroom. All of these factors appear to affect young people's political attitudes and behaviour, but in agreement with prior research on this topic we also find that it is important to distinguish between the respective roles of parental influences, taking formal civics education and having political discussions in the classroom, as they perform complimentary, but not identical roles.

In summary, the unique opportunity to study political behaviour and attitudes of 16-17 year olds in the aftermath of the Scottish independence referendum and ahead of the 2015

general election provided us with a range of deep and meaningful insights. By not only looking at Scottish respondents, but being able to contrast them to their RUK counterparts, we were able to distinguish multiple influencing factors on them. Particularly, we were able to at least partially differentiate the impact of the Scottish independence referendum on the population generally and specifically the experience of early enfranchisement. From a research methods perspective ideally only one of the two should have taken place, however, in practice the two occurred at the same time. This however allowed us to gain two important insights: young people in Scotland clearly increased their political participation (both electorally and in non-representative engagement formats) alongside the general increase experienced by the population. Especially in terms of political behaviour we find that the differentiation to the rest of the UK is even more pronounced for those people who got enfranchised to vote for the first time. While for other factors such effects can be explained by parental and school socialisation differences in Scotland, for those variables measuring actual political behaviour, these influences only explained the variation partially.

Further studies are required to examine whether these effects are sustained over longer time periods and whether they can be replicated without the presence of an extraordinary event, such as an independence referendum. However, at least in relation to practical political engagement, the results seem to suggest a degree of optimism that indeed early enfranchisement – in a good relationship with other factors, such as civic education and parental socialisation – can play a positive role on the political participation of young people.

References

Bergh, J. 2013 'Does voting rights affect the political maturity of 16- and 17-year olds? Findings from the 2011 Norwegian voting-age trial', *Electoral Studies* 32(1): 90-100.

Bhatti, Y and Hansen, K. 2012 'Leaving the nest and the social act of voting: turnout among first-time voters. Journal of Elections', *Public Opinion & Parties* 22(4): 380-406.

Chan, T. and Clayton, M. 2006 'Should the Voting Age be Lowered to Sixteen? Normative and Empirical Considerations', *Political Studies* 54: 533-558.

Dalton, R. 2014 *Citizen Politics. Public Opinion and Political Parties in Advanced Industrial Democracies* (6th edition), Washington, D.C.: CQPress.

Dalton, R. and Wattenberg, M. 2002 *Parties Without Partisans. Political Change in Advanced Industrial Democracies*, Oxford: Oxford University Press.

Dassonneville, R., Quintelier, E., Hooghe, M. and Claes, E. 2012 'The Relation Between Civic Education and Political Attitudes and Behavior: A Two-Year Panel Study Among Belgian Late Adolescents', *Applied Developmental Science* 16(3): 1-11.

Dinas, E. 2012 'The formation of voting habits. Journal of Elections', *Public Opinion & Parties* 22(4): 431-456.

Dunning, T. 2008 'Improving Causal Inference. Strengths and Limitations of Natural Experiments', *Political Research Quarterly* 61(2): 282-293.

Eichhorn, J. 2014 'How lowering the voting age to 16 can be an opportunity to improve youth political engagement. Lessons learned from the Scottish Independence Referendum', d|part Research Paper.

Eichhorn, J., Paterson, L, MacInnes, J. and Rosie, M. 2014 'Results from the 2014 survey on 14-17 year old persons living in Scotland on the Scottish independence referendum', AQMeN briefing paper.

Eichhorn, J., Kenealy, D., Parry, R., Paterson, L. and Remond, A. 2015 'Voting at 16 – What next? 16-17 year olds' political attitudes and civic education', Academy of Government Briefing Paper.

Electoral Commission 2003a 'How old is old enough? The minimum age of voting and candidacy in UK elections', Consultation paper by the Electoral Commission.

Electoral Commission 2003b 'The Age of Electoral Majority. Report by the ICM prepared for the Electoral Commission.'

Electoral Commission 2014 'Scottish Independence Referendum. Report on the referendum held on 18 September 2014', Report by the Electoral Commission.

Fieldhouse, E., Trammer, M. and Russel, A. 2007 'Something about young people or something about elections? Electoral participation of young people in Europe: evidence from a

multilevel analysis of the European Social Survey', *European Journal of Political Research* 46(6): 797-822.

Hart, D. and Atkins, R. 2011 'American sixteen- and seventeen-year-olds are ready to vote', *The ANNALS of the American Academy of Political Science* 633(1): 201-222.

Johnson, C. and Marshall, B. 2004 'Political engagement among young people: an update', Research paper by the Electoral Commission.

Keating, A., Kerr, D., Benton, T., Mundy, E. and Lopes, J. 2010 'Citizenship education in England 2001-2010: young people's practices and prospects for the future: the eighth and final report from the Citizenship Education Longitudinal Study (CELS)', Department for Education.

Lödén, H. 2014 'Citizenship education, national identity and political trust: The case of Sweden', *Nordidactica – Journal of Humanities and Social Science Education* 2: 116-136.

McDevitt, M., and Chaffee, S. 2000 'Closing gaps in political communication and knowledge: Effects of a school intervention', *Communication Research* 27: 259–292.

Prior, M. 2010 'You've either got it or you don't? Stability of Political Interest over the Life Cycle', *The Journal of Politics* 72(3): 747-766.

Quintelier, E. 2007 'Differences in political participation between young and old people', *Contemporary Politics* 13(2): 165-180.

Quintelier, E. 2010 'The effect of schools on political participation: a multilevel logistic analysis', *Research Papers in Education* 25(2): 137-154.

Quintelier, E. and Hooghe, M. 2011 'Political attitudes and political participation: a panel study on socialization and self-selection effects among late adolescents', *International Political Science Review* 33(1): 63-81.

Russell, A. 2014 'The case for lowering the voting age is less persuasive now than at any point in the last 50 years', Democratic Audit UK.

Scarrow, S. 2002 'Parties Without Members? Party Organization in a Changing Electoral Environment.' In Dalton, R. and Wattenberg, M. (eds) *Parties Without Partisans. Political Change in Advanced Industrial Democracies*, Oxford: Oxford University Press.

Schulz, W., Ainley, J., Fraillon, J., Kerr, D. and Losito, B. 2009 'Initial Findings from the IEA International Civic and Citizenship Education Study', International Association for the Evaluation of Education Achievement.

Schwarzer, S. and Zeglovits, E. 2013 'The role of schools in preparing 16- and 17-year-old Austrian first time voters for the election', In S. Abendschön (ed.) *Growing into Politics: Contexts and Timing of Political Socialisation*. Colchester: ECPR Press.

Scottish Parliament. 2015 'Devolution (Further Powers) Committee. Stage 1 Report on the Scottish Elections (Reduction of Voting Age) Bill, 4th Report (SP Paper 725)'.

- Stewart, E., Wilson, I., Donnelly, P. and Greer, S.** 2014 “I didn’t have a clue what we were doing’: (Not) engaging 16 and 17 year old voters in Scotland’, *Scottish Affairs* 23(3): 354-368.
- Syversten, A., Wray-Lake, L., Flanagan, C., Osgood, D. and Briddell, L.** 2011 ‘Thirty-Year Trends in U.S. Adolescents’ Civic Engagement: A Story of Changing Participation and Educational Difference’, *Journal of Research on Adolescence* 21(3): 586-594.
- Tonge, J. and Mycock, A.** 2010 ‘Citizenship and Political Engagement Among Young People: The Workings and Findings of the Youth Citizenship Commission’, *Parliamentary Affairs* 63(1): 182-200.
- Torney-Purta, J.** 2002 ‘The School’s Role in Developing Civic Engagement: A Study of Adolescents in Twenty-Eight Countries’, *Applied Developmental Science* 6(4): 203-212.
- Torney-Purta, J., Lehmann, R., Oswald, H. and Schulz, W.** 2001 ‘Citizenship and Education in Twenty-Eight Countries: Civic Knowledge and Engagement at Age Fourteen’, The International Association for the Evaluation of Education Achievement.
- Torney-Purta, J. and Vermeer Lopez, S.** 2006 ‘Developing Citizenship Competencies from Kindergarten through Grade 12: A Background Paper for Policymakers and Educators’, Education Commission of the States.
- Torney-Purta, J. and Wilkenfeld, B.** 2009 *Paths to 21st Century Competencies through Civic Education Classrooms: An Analysis of Survey Results from Ninth-Graders. (A Technical Assistance Bulletin)*, Chicago: American Bar Association Division for Public Education.
- Wagner, M., Johann, D. and Kritzinger, S.** 2012 ‘Voting at 16: Turnout and the quality of vote choice.’ *Electoral Studies* 31: 372-383.
- Welzel, C., Deutsch, F. and Inglehart, R.** 2005 ‘Social Capital, Voluntary Associations and Collective Action: Which Aspects of Social Capital Have the Greatest “Civic” Payoff?’, *Journal of Civil Society* 1(2): 121–146.
- Zaff, J., Hart, D., Flanagan, C., Youniss, J. and Levine, P.** 2010 ‘Developing Civic Engagement within a Civic Context’, In Lamb, M. and Freund, A. (eds) *The Handbook of Life-Span Development (2nd ed)*, Hoboken: John Wiley & Sons.
- Zeglovits, E. and Aichholzer, J.** 2014 ‘Are People More Inclined to Vote at 16 than at 18? Evidence for the First-Time Voting Boost among 16-25-Year-Olds in Austria’, *Journal of Elections, Public Opinion and Parties* 24(3): 351-361.
- Zeglovits, E. and Zandonella, M.** 2013 ‘Political interest of adolescents before and after lowering the voting age: the case of Austria’, *Journal of Youth Studies* 16(8): 1084-1104.

Table 1: Base models (Scotland and Rest of UK comparison)																
	1				2				3				4			
Dependent Variable	Hypothetical voting likelihood				Political participation				16-year olds should be allowed to vote in all elections				Politics is difficult to understand			
Regression type	Ordinal				Logistic				Logistic				Logistic			
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald
Intercept					-0.569	(0.21)**	0.57	7.10	0.395	(0.23)+	1.48	3.08	0.450	(0.23)*	1.57	3.08
Social Class (Base: D/E)																
A	0.293	(0.18)	1.34	2.60	0.406	(0.28)	1.50	2.11	-0.438	(0.29)	0.65	2.34	-0.107	(0.29)	0.90	2.34
B	0.402	(0.16)*	1.49	6.04	0.233	(0.25)	1.26	0.88	-0.115	(0.26)	0.89	0.19	-0.432	(0.26)+	0.65	0.19
C1	0.160	(0.14)	1.17	1.32	-0.243	(0.23)	0.78	1.16	-0.344	(0.24)	0.71	2.08	-0.189	(0.24)	0.83	2.08
C2	-0.091	(0.16)	0.91	0.35	-0.107	(0.26)	0.90	0.18	-0.427	(0.27)	0.65	2.54	-0.231	(0.27)	0.79	2.54
Female	-0.008	(0.09)	0.99	0.01	0.347	(0.15)*	1.41	5.75	-0.034	(0.15)	0.97	0.05	0.274	(0.15)+	1.32	0.05
Scottish respondent	0.747	(0.10)***	2.11	59.1	0.667	(0.15)***	1.95	20.9	0.533	(0.15)***	1.70	12.5	-0.055	(0.15)	0.95	12.5
-2loglikelihood	682.7				1080.7				1018.8				1022.1			
(Pseudo) Nagelkerke R-Square	0.099				0.066				0.032				0.013			
N	810				810				769				759			
Descriptives for dependent	<i>9-10 on 0-10 scale</i>				<i>Taken part in at least one form</i>				<i>Allowed to vote in all elections</i>				<i>Strongly agree/agree</i>			
Scotland	67%				57%				66%				57%			
Rest of the UK	39%				40%				52%				60%			
	5				6				7							
Dependent Variable	Number of information source types used				Making a difference who gets elected				Making a difference to own life how UK is governed							
Regression type	Ordinal				Logistic				Logistic							
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald				
Intercept					-0.100	(0.21)	0.91	0.23	-0.620	(0.23)**	0.54	7.55				
Social Class (Base: D/E)																
A	0.276	(0.24)	1.32	1.32	0.156	(0.28)	1.17	0.32	0.034	(0.29)	1.04	0.01				
B	0.440	(0.22)*	1.55	4.19	-0.126	(0.25)	0.88	0.26	-0.112	(0.26)	0.89	0.19				
C1	0.078	(0.19)	1.08	0.16	-0.032	(0.22)	0.97	0.21	0.337	(0.24)	1.40	2.05				
C2	-0.005	(0.22)	1.00	0.00	-0.169	(0.25)	0.84	0.45	-0.159	(0.27)	0.85	0.34				
Female	0.154	(0.12)	1.17	1.55	0.276	(0.14)+	1.32	3.76	0.297	(0.15)*	1.35	3.98				
Scottish respondent	0.615	(0.13)***	1.85	23.5	0.343	(0.14)*	1.41	5.66	0.316	(0.15)**	1.37	4.39				
-2loglikelihood	567.3				1106.8				1014.8							
(Pseudo) Nagelkerke R-Square	0.047				0.018				0.026							
N	810				810				748							
Descriptives for dependent	<i>Used 3-6 (of 6)</i>				<i>A great deal/quite a lot</i>				<i>A great deal/quite a lot</i>							
Scotland	60%				58%				47%							
Rest of the UK	43%				50%				40%							

Significance levels: ***p≤0.001, **p≤0.01, *p≤0.05, +p≤0.10

Table 2: Full models

Table 2: Full models																
Dependent Variable	1 Hypothetical voting likelihood				2 Political participation				3 16-year olds should be allowed to vote in all elections				4 Politics is difficult to understand			
Regression type	Ordinal				Logistic				Logistic				Logistic			
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald
Intercept					-1.376	(0.27)***	0.25	25.4	0.049	(0.27)	1.05	0.03	1.231	(0.28)***	3.36	18.4
Social Class (Base: D/E)																
A	0.231	(0.19)	1.26	1.43	0.404	(0.31)	1.50	1.75	-0.580	(0.30)+	0.56	3.76	-1.81	(0.31)	0.83	0.34
B	0.318	(0.17)+	1.37	3.41	0.123	(0.27)	1.13	0.21	-0.196	(0.27)	0.82	0.51	-0.561	(0.27)*	0.57	4.19
C1	0.220	(0.15)	1.25	2.15	-0.199	(0.25)	0.82	0.65	-0.310	(0.25)	0.73	1.54	-0.345	(0.26)	0.71	1.83
C2	-0.083	(0.17)	0.92	0.24	0.062	(0.28)	1.06	0.05	-0.503	(0.28)+	0.61	3.13	-0.482	(0.29)+	0.62	2.76
Female	-0.076	(0.10)	0.93	0.56	0.283	(0.16)+	1.33	3.04	-0.083	(0.16)	0.92	0.23	0.497	(0.17)**	1.64	9.05
Political issues in class (Base: No)																
Discussed in past 3 months	0.462	(0.11)***	1.59	18.2	0.396	(0.17)*	1.49	5.27	0.524	(0.17)**	1.69	9.40	-0.137	(0.18)	0.87	0.59
No classes in past 3 months	-0.387	(0.21)+	0.68	3.39	0.439	(0.38)	1.55	1.32	-0.203	(0.38)	0.82	0.29	-0.533	(0.39)	0.59	1.90
Ever taken 'civics' class (Base: No)																
Yes, had to	0.010	(0.14)	1.01	0.01	0.487	(0.21)*	1.63	5.20	0.085	(0.22)	1.09	0.16	-0.568	(0.22)**	0.57	6.62
Yes, chose to	0.191	(0.14)	1.21	1.98	0.942	(0.20)***	2.56	21.8	0.160	(0.20)	1.17	0.42	-1.034	(0.21)***	0.36	25.1
Yes, not sure about choice/had to	0.008	(0.18)	1.01	0.00	0.304	(0.30)	1.36	1.01	0.044	(0.30)	1.05	0.88	-0.134	(0.31)	0.88	0.18
Scottish respondent	0.482	(0.11)***	1.62	20.0	0.311	(0.17)+	1.36	3.43	0.412	(0.17)*	1.51	5.95	0.335	(0.17)+	1.40	3.69
Talked about politics with family	0.401	(0.11)***	1.49	13.5	0.370	(0.03)*	1.45	4.70	0.229	(0.17)	1.26	1.82	-0.197	(0.17)	0.82	1.29
Talked about politics with friends	0.411	(0.11)***	1.51	14.1	0.445	(0.45)**	1.56	6.75	-0.058	(0.17)	0.94	0.12	-0.470	(0.18)**	0.63	7.25
-2loglikelihood	2177.5				937.0				949.0				924.8			
(Pseudo) Nagelkerke R-Square	0.191				0.172				0.062				0.111			
N	742				742				722				719			
Dependent Variable	5 Number of information source types used				6 Making a difference who gets elected				7 Making a difference to own life how UK is governed							
Regression type	Ordinal				Logistic				Logistic							
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald				
Intercept					-0.269	(0.26)	0.76	1.06	-1.259	(0.28)***	0.28	20.9				
Social Class (Base: D/E)																
A	0.126	(0.25)	1.13	0.25	-0.035	(0.30)	0.97	0.01	-0.037	(0.30)	0.96	0.02				
B	0.350	(0.23)	1.42	2.42	-0.409	(0.27)	0.67	2.35	-0.133	(0.27)	0.88	0.25				
C1	0.276	(0.21)	1.32	1.78	0.003	(0.25)	1.00	0.00	0.386	(0.25)	1.47	2.45				
C2	0.158	(0.24)	1.17	0.45	-0.171	(0.28)	0.84	0.37	-0.216	(0.29)	0.81	0.57				
Female	-0.057	(0.14)	0.94	0.18	0.129	(0.16)	1.14	0.66	0.323	(0.16)*	1.38	4.02				
Political issues in class (Base: No)																
Discussed in past 3 months	1.182	(0.15)***	3.26	62.1	0.620	(0.17)***	1.86	13.5	0.381	(0.17)*	1.46	4.80				
No classes in past 3 months	-0.024	(0.32)	0.98	0.01	-0.761	(0.40)+	0.47	3.58	-0.215	(0.40)	0.81	0.29				
Ever taken 'civics' class (Base: No)																
Yes, had to	0.317	(0.18)+	1.37	3.00	0.076	(0.21)	1.08	0.13	0.341	(0.22)	1.41	2.48				
Yes, chose to	0.765	(0.17)***	2.15	20.0	0.397	(0.20)*	1.49	3.89	0.137	(0.20)	1.15	0.46				
Yes, not sure about choice/had to	0.482	(0.26)+	1.62	3.54	-0.782	(0.31)*	0.46	6.23	0.380	(0.31)	1.46	1.51				
Scottish respondent	0.040	(0.14)	1.04	0.08	0.057	(0.17)	0.97	0.12	0.118	(0.17)	1.13	0.49				
Talked about politics with family	0.968	(0.15)***	2.63	43.2	0.370	(0.17)*	1.45	4.74	0.293	(0.17)+	1.34	2.95				
Talked about politics with friends	0.563	(0.15)***	1.76	14.9	-0.026	(0.17)	0.97	0.02	0.430	(0.17)*	1.54	6.24				
-2loglikelihood	2026.7				964.3				946.5							

(Pseudo) Nagelkerke R-Square	0.280	0.079	0.079
N	742	742	708
Significance levels: ***p≤0.001, **p≤0.01, *p≤0.05, +p≤0.10			

Table 3: Descriptives for independent variables

		Scotland (%)	Rest of the UK (%)	N
Have you ever taken a subject in school in which mainly issues about politics and society were discussed?	Yes, as a course I had to take	21	20	154
	Yes, as a course I chose to take, but didn't have to take	43	18	230
	Yes, but I don't know whether I had to take it	4	12	62
	No	32	50	310
Have you been in a class in school during the last three months in which current political issues were discussed?	Yes	64	56	462
	No	32	40	41
	Didn't have classes	4	6	267
Discussed how the UK is governed in the last three months with Family	Yes	63	39	397
	No	37	61	413
Discussed how the UK is governed in the last three months with Friends	Yes	65	38	366
	No	35	62	444

Table 4: Full models with referendum impact control

Table 4: Full models with referendum impact control																				
	1				2				3				4							
Dependent Variable	Hypothetical voting likelihood				Political participation				16-year olds should be allowed to vote in all elections				Politics is difficult to understand							
Regression type	Ordinal				Logistic				Logistic				Logistic							
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald				
Social Class (Base: D/E)	Intercept				-.133	(0.30)***	0.27	20.0	-.091	(0.29)	0.91	0.10	1.72	(0.32)***	5.60	29.3				
	A	.194	(0.20)	1.21	0.98	.365	(0.31)	1.44	1.37	-.552	(0.30)+	0.58	3.29	-.120	(0.32)	0.89	0.14			
	B	.289	(0.18)	1.34	2.69	.080	(0.28)	1.08	0.08	-.080	(0.28)	0.92	0.08	-.592	(0.28)*	0.55	4.48			
	C1	.252	(0.16)	1.29	2.65	-.153	(0.25)	0.86	0.37	-.271	(0.26)	0.76	1.12	-.328	(0.26)	0.72	1.58			
	C2	-.097	(0.17)	0.91	0.31	.126	(0.29)	1.13	0.19	-.467	(0.29)	0.63	2.59	-.482	(0.30)	0.62	2.63			
	Female	-.047	(0.11)	0.95	0.19	.294	(0.17)+	1.34	3.10	-.086	(0.17)	0.92	0.27	.473	(0.17)**	1.61	7.80			
Political issues in class (Base: No)	Discussed in past 3 months				.465	(0.11)***	1.59	17.4	.369	(0.18)*	1.45	4.34	.487	(0.18)**	1.63	7.72	-.213	(0.18)	0.81	1.36
	No classes in past 3 months				-.389	(0.21)+	0.68	3.35	.553	(0.39)	1.74	2.01	-.236	(0.38)	0.79	0.39	-.693	(0.40)+	0.50	3.08
Ever taken 'civics' class (Base: No)	Yes, had to				.005	(0.14)	1.01	0.00	.468	(0.22)*	1.60	4.58	.096	(0.22)	1.10	0.19	-.574	(0.23)*	0.56	6.51
	Yes, chose to				-.173	(0.14)	1.19	1.56	.957	(0.21)***	2.60	21.4	.134	(0.20)	1.14	0.43	-1.02	(0.21)***	0.36	23.5
	Yes, not sure about choice/had to				-.002	(0.18)	1.00	0.00	.187	(0.31)	1.21	0.36	.052	(0.31)	1.05	0.03	-.138	(0.32)	0.87	0.19
	Scottish respondent				.328	(0.12)**	1.39	7.39	-.085	(0.19)	0.92	0.19	.395	(0.19)*	1.48	4.36	.438	(0.20)*	1.55	4.90
	Talked about politics with family				.363	(0.11)***	1.44	10.6	.303	(0.17)+	1.35	3.03	.226	(0.17)	1.25	1.70	-.212	(0.18)	0.81	1.43
	Talked about politics with friends				.420	(0.11)***	1.52	14.2	.424	(0.18)*	1.53	5.88	-.112	(0.18)	0.89	0.42	-.490	(0.18)**	0.61	7.56
Ref. impact (Base: strongly/disagree)	Strongly agree				.369	(0.19)*	1.45	3.88	.711	(0.27)**	2.04	7.20	.731	(0.27)**	2.08	7.11	-.640	(0.26)*	0.53	5.88
	Agree				.021	(0.13)	1.02	0.03	.468	(0.21)*	1.60	5.15	-.115	(0.20)	0.89	0.33	-.639	(0.21)**	0.53	8.90
	Neither agree nor disagree				-.183	(0.14)	0.83	1.68	-.377	(0.25)	0.69	2.24	.497	(0.25)*	1.64	4.11	-.817	(0.26)***	0.44	10.2
	-2loglikelihood				2372.2				903.3				914.8				892.5			
	(Pseudo) Nagelkerke R-Square				0.193				0.188				0.090				0.135			
	N				723				723				706				705			
	5				6				7											
Dependent Variable	Number of information source types used				Making a difference who gets elected				Making a difference to own life how UK is governed											
Regression type	Ordinal				Logistic				Logistic											
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald								
Social Class (Base: D/E)	Intercept				-.110	(0.29)	0.70	0.15	-.161	(0.31)***	0.20	26.4								
	A	.058	(0.26)	1.06	0.05	-.087	(0.31)	0.92	0.08	-.102	(0.31)	0.90	0.31							
	B	.366	(0.23)	1.44	2.56	-.452	(0.28)	0.64	2.70	-.137	(0.28)	0.87	0.28							
	C1	.312	(0.21)	1.37	2.20	.044	(0.26)	1.05	0.03	.463	(0.26)+	1.59	0.26							
	C2	.285	(0.24)	1.33	1.38	-.183	(0.29)	0.83	0.39	-.191	(0.30)	0.83	0.30							
	Female	-.055	(0.14)	0.95	0.16	.205	(0.17)	1.23	1.56	.372	(0.17)*	1.45	0.17							
Political issues in class (Base: No)	Discussed in past 3 months				1.23	(0.15)***	3.42	64.3	.618	(0.17)***	1.86	12.7	.371	(0.18)*	1.45	0.18				
	No classes in past 3 months				.090	(0.33)	1.09	0.08	-.693	(0.41)+	0.50	2.89	-.036	(0.41)	0.97	0.41				
Ever taken 'civics' class (Base: No)	Yes, had to				.285	(0.19)	1.33	2.36	.120	(0.22)	1.13	0.30	.409	(0.23)+	1.51	0.23				
	Yes, chose to				.787	(0.17)***	2.20	20.7	.415	(0.21)*	1.51	3.99	.172	(0.21)	1.19	0.21				

Yes, not sure about choice/had to	.378	(0.26)	1.46	2.12	-.826	(0.32)**	0.44	6.60	.415	(0.32)	1.51	0.32
Scottish respondent	-.468	(0.16)**	0.63	8.37	-.297	(0.19)	0.74	2.37	-.380	(0.20) ⁺	0.68	0.20
Talked about politics with family	.886	(0.15)***	2.43	35.4	.302	(0.18) ⁺	1.35	2.99	.243	(0.18)	1.28	0.18
Talked about politics with friends	.596	(0.15)***	1.81	16.2	-.025	(0.18)	0.98	0.02	.456	(0.18)**	1.58	0.18
Ref. impact (Base: strongly/disagree)												
Strongly agree	1.07	(0.22)***	2.92	23.9	.661	(0.27)*	1.94	6.08	1.64	(0.27)***	5.15	0.27
Agree	.907	(0.18)***	2.48	26.6	.074	(0.21)	1.08	0.13	.580	(0.21)**	1.79	0.21
Neither agree nor disagree	.170	(0.21)	1.19	0.68	-.583	(0.24)*	0.56	5.76	.172	(0.26)	1.12	0.26
-2loglikelihood	2270.5				916.9				887.0			
(Pseudo) Nagelkerke R-Square	0.312				0.142				0.153			
N	723				723				695			
Significance levels: ***p≤0.001, **p≤0.01, *p≤0.05, +p≤0.10												

Table 5: Adult Population (18+) - Base models (Scotland and Rest of UK comparison)

Table 5: Adult Population (18+) - Base models (Scotland and Rest of UK comparison)																
	1				2				3				4			
Dependent Variable	Hypothetical voting likelihood				Political participation				16-year olds should be allowed to vote in all elections				Politics is difficult to understand			
Regression type	Ordinal				Logistic				Logistic				Logistic			
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald
Intercept					0.138	(0.06)*	1.15	6.28	-0.623	(0.06)***	0.54	108	0.054	(0.06)	1.06	0.90
Social Class (Base: D/E)																
A	0.335	(0.08)***	1.40	16.4	0.480	(0.10)***	1.62	24.1	-0.312	(0.10)**	0.73	9.03	-0.646	(0.10)***	0.52	44.2
B	0.402	(0.06)***	1.49	50.1	0.381	(0.38)***	1.46	31.9	-0.255	(0.07)***	0.78	12.3	-0.697	(0.07)***	0.50	103
C1	0.016	(0.05)	1.02	0.10	0.091	(0.07)	1.10	1.98	-0.020	(0.07)	0.98	0.08	-0.335	(0.07)***	0.72	25.2
C2	-0.041	(0.06)	0.96	0.46	-0.031	(0.08)	0.97	0.16	0.000	(0.09)	1.00	0.00	-0.071	(0.08)	0.93	0.78
Female	-0.238	(0.04)***	0.79	37.5	-0.036	(0.05)	0.96	0.58	-0.190	(0.05)***	0.83	13.9	0.589	(0.05)***	1.80	150
Scottish respondent	0.564	(0.05)***	1.76	110	0.262	(0.06)***	1.30	20.5	0.837	(0.06)***	2.31	202	-0.242	(0.06)***	0.79	17.4
-2loglikelihood	949.3				10083.7				8879.3				7269			
(Pseudo) Nagelkerke R-Square	0.038				0.015				0.045				0.9797.5			
N	7067				7479				7011				0.058			
	5				6				7							
Dependent Variable	Number of information source types used				Making a difference who gets elected				Making a difference to own life how UK is governed							
Regression type	Ordinal				Logistic				Logistic							
	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald	Coeff.	s.e.	OR	Wald				
Intercept					0.274	(0.06)***	1.32	24.4	-0.947	(0.06)***	0.39	223				
Social Class (Base: D/E)																
A	0.912	(0.08)***	2.49	119	0.528	(0.10)***	1.70	28.6	0.429	(0.10)***	1.54	17.9				
B	0.899	(0.06)***	2.46	232	0.572	(0.07)***	1.77	69.7	0.062	(0.08)	1.06	0.67				
C1	0.421	(0.42)***	1.51	54.5	0.009	(0.07)	1.01	0.02	-0.012	(0.08)	0.99	0.03				
C2	0.169	(0.17)*	1.18	6.08	0.107	(0.08)	1.11	1.88	0.101	(0.09)	1.11	1.28				
Female	-0.482	(0.04)***	0.62	136	-0.262	(0.05)***	0.77	30.0	-0.073	(0.05)	0.93	1.91				
Scottish respondent	0.452	(0.05)***	1.57	83.0	0.174	(0.06)**	1.19	8.88	0.466	(0.06)***	1.59	59.7				
-2loglikelihood	783.4				9947.5				8477.0							
(Pseudo) Nagelkerke R-Square	0.072				0.029				0.017							
N	7479				7479				6904							
Significance levels: ***p≤0.001, **p≤0.01, *p≤0.05, +p≤0.10																