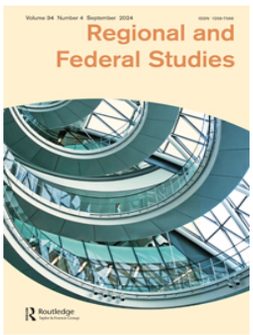

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Do candidates' policy positions matter in regional elections? Evidence from the 2021 elections to the Welsh Senedd

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ABSTRACT

An oft-cited benefit of candidate-based elections is that voters can hold individual candidates accountable for their issue stances. However, voters may not always be aware of candidates' policy positions, a concern which becomes especially salient in regional elections. Using mass online survey data and a fixed effects approach, we investigate the extent to which voters were influenced by the policy positions of individual candidates when voting in the 2021 elections to the Welsh Senedd. We find that candidates' policy positions did matter, but that this effect was small, limited to issues voters deemed to be particularly important, and only emerges among voters with high political interest. That said, our findings also suggest that the influence of candidates' policy positions on voting behaviour was not substantially smaller when compared to national elections in the UK and elsewhere. We discuss options for improving voter responsiveness to candidates' issue stances.

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KEYWORDS Candidate-based elections; political representation; issue voting; regional elections; Wales

Introduction

Many democracies assign a central role to individual candidates in their electoral systems. A prominent example are Westminster-style first-past-the-post elections, where voters choose from a set of individual candidates. But voters also cast votes for individual candidates (sometimes in addition to voting for party lists) in many other electoral systems, including the alternative vote, the single transferable vote, mixed-member systems, as well as open list

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proportional representation. One of the most oft-cited benefits of candidate-based elections is that voters can hold individual candidates accountable for their issue stances instead of having to vote for a list of candidates with often somewhat varied policy positions (Mitchell 2000). We investigate to what extent voters actually made use of the opportunity to sanction candidates for their issue stances in the context of a regional election: the 2021 election to the Welsh Senedd (i.e. the Welsh parliament).

Several prior studies have considered the impact of candidates' policy positions on voters' electoral preferences in national elections. The general consensus from that literature is that voters do pay attention to candidates' issue stances, but that the impact of candidates' policy positions tends to be comparatively small (e.g. Hanretty, Mellon, and English 2021; Highton 2019; Vivyan and Wagner 2012; von Schoultz and Papageorgiou 2021). However, few prior studies have considered the impact of candidates' policy positions in regional elections. In national elections, voter and media interest are often comparatively high. By contrast, media scrutiny and voter interest tend to be weaker in regional elections, leading them to be labelled second-order elections (Reif and Schmitt 1980). Therefore, it is possible that voter responsiveness to candidates' issue stances is even more limited, or absent entirely, in regional elections (Rogers 2017).

Welsh Senedd elections have a distinct second-order character, allowing us to shed empirical light on the impact of candidate positions in this electoral context. Throughout, we focus on voters' choices in the constituency elections, where voters choose from a set of individual candidates and the first-placed candidate wins the seat. Methodologically, we innovate by drawing our data from an online voting information tool or, to be more precise, a Voting Advice Application (Garzia and Marschall 2019; Germann and Gemenis 2019; Germann, Mendez, and Gemenis 2023). An important advantage of our approach is that Voting Advice Application (VAA) data allows us to measure the policy positions of voters, candidates, and political parties using identical survey items. This constitutes an improvement over prior studies, which often had to rely on different indicators for the measurement of the policy positions of voters and political elites. The VAA we leverage as our data source was used by more than 15,000 Welsh voters, providing us with a wealth of opinion data to analyse and high statistical power.

Using two-way fixed effects regressions, we find that voter-candidate policy congruence did have an effect on voters' electoral preferences in the 2021 Senedd elections. However, the effect was limited to issues which are particularly important to voters and was trumped in importance by other factors including the policy positions of political parties more generally, party identification, and tactical voting. Furthermore, additional analyses suggest that candidates' policy positions matter only for voters with high political interest. Overall, our results suggest that voters were only minimally

responsive to candidates' policy stances. At the same time, the effects we do observe are not substantially smaller when compared to national elections in the UK and elsewhere. As we discuss in the conclusion, this result is partly driven by the salience of issues relating to Wales' future relationship with the rest of the United Kingdom, suggesting a need for similar studies in regions where regional identities are weaker and territorial issues less important.

Background

The most well-established theory of programmatic voting is Downs' (1957) proximity model, which holds that a rational voter will choose the party or candidate whose policy preferences are closest to their own. Yet, according to existing research, the proximity model is best seen as a partial, rather than a complete explanation of voting behaviour because several non-programmatic factors may also influence the way a person votes. One key factor, party identification, or 'long-term, affective attachment to one's preferred political party' (Dalton 2016), is less about policy congruence and more about the affective or psychological bonds between voters and parties (Cohen 2003). Another relevant factor is the tendency to vote for the party that implements desired policy outcomes most effectively, otherwise known as valence voting (Green 2007; Stokes 1963).

In candidate-centred elections, the situation is even more complex. While the proximity model would predict that candidates' policy stances are guiding voters' electoral choices, in practice, voters' choice of candidate may be partly or entirely dependent on their party preferences. Moreover, candidate-specific factors, to the extent they matter to voters, may or may not be related to candidates' policy stances. Much of the existing literature on the 'personal vote' (Zittel 2016) focuses on non-programmatic, personal characteristics of candidates such as gender (McElroy and Marsh 2010; Valdini 2013), race (Fisher et al. 2015), roots in the local community (Gallagher 1988; Shugart, Valdini, and Suominen 2005; Tavits 2010), incumbency (Dahlgaard 2016; Gelman and King 1990), physical attractiveness (Berggren, Jordahl, and Poutvaara 2010), charisma (Madsen and Snow 1991), or celebrity status (Arter 2014; von Schoultz and Papageorgiou 2021). An intervening factor here is whether voters know what their candidates stand for; even if they wish to choose the candidate that best reflects their policy perspectives, they may lack the information and resources to do so (Mitchell 2000).

Several prior studies have estimated the impact of candidates' policy positions on voting behaviour, with generally similar results. First, several recent studies showed that roll-call votes by individual legislators in the U.S. House of Representatives impact their chances of re-election; however, all these studies suggest that the effects are weak and limited to certain key issues,

such as healthcare reform (Bovitz and Carson 2006; Highton 2019; Nyhan et al. 2012). Similarly, while Hanretty, Mellon, and English (2021) found that voters tended to penalize incumbent candidates who disagreed with their stance on Brexit in the 2017 UK general election, the effects were weak and, according to the authors, only four out of 632 seats were likely to have changed hands if incumbent candidates had deliberately adopted a vote-maximising stance with respect to Brexit despite that issue's huge political significance. Other scholars obtained similar findings regarding the electoral consequences for British MPs of rebelling against their parties on issues such as the Iraq war (Curtice, Fisher, and Steed 2005; Vivyan and Wagner 2012) or capital punishment and the poll tax (Pattie, Fieldhouse, and Johnston 1994).

Other studies extended the focus beyond incumbents to include a broader range of electoral candidates, again with similar results. Employing survey data on voters' perceived positions of candidates in U.S. Congressional elections along a broad ideological scale, Hollibaugh, Rothenberg, and Rulison (2013) found that voters punish candidates that are out of step with their own ideological positions, provided there is a challenger candidate who is more compatible. Finally, in a study of the 2015 elections in Finland's open-list voting system, von Schoultz and Papageorgiou (2021) find that while candidate positions affect voters' electoral choices, the effects of candidates' policy positions are clearly outweighed by the impacts of personal attributes related to experience, locality, and celebrity status.

To sum up, prior studies have examined elections in a range of countries including the U.S., the UK, and Finland, and, irrespective of the country context, the broad conclusion was similar: candidate positions do matter for voter behaviour, but the effects tend to be small and limited to highly salient issues. However, most prior studies have studied national election contexts, where media interest tends to be high and information comparatively easy to access for voters. To our knowledge, the only exceptions are a series of studies focused on U.S. state legislative elections (Birkhead 2015; Hogan 2004, 2008; Rogers 2017). Broadly speaking, findings from these studies have mirrored those from national elections, that is, the policy positions of candidates in U.S. state legislative elections do have a small effect on voters' choices at the ballot box, yet generally only when it comes to important policy issues, such as same-sex marriage. In a direct comparison with elections to the U.S. Congress, Rogers (2017, 561) estimated that the effects of candidates' issue positions on vote choice are indeed a bit smaller in state compared to national elections, most likely due to less media attention, resulting in lower voter interest and familiarity with candidates' policy positions. Still, the difference in effect sizes was comparatively small, with the effects of ideological distance between a voter and a candidate amounting to around two-thirds of the effect in state elections

compared to elections to the U.S. Congress. What remains unclear is to what extent those findings are likely to travel beyond the U.S. context, where states have immense policy-making powers and the stakes in regional elections are therefore comparatively high.

We provide the first empirical evidence on the impact of candidates' policy positions in a regional election outside of the U.S. context. More specifically, we focus on the election that was held for the Parliament of Wales (Senedd Cymru, henceforth referred to as the Senedd) on 6th May 2021. Welsh Senedd elections can generally be considered second-order elections (Reif and Schmitt 1980). First, media coverage of Welsh elections remains relatively low (Thomas, Cushion, and Jewell 2004). This is because, unlike in Scotland, the most widely read newspapers in Wales are shared with England, and, apart from the Welsh language channel S4C, the main Welsh broadcasters share most of the same material with their English counterparts. Second, turnout tends to be much lower in Senedd elections compared to national elections. For example, at 46.6%, turnout for the 2021 elections was 20 percentage points lower than the turnout recorded in Wales in the 2019 UK general election. Notably, Wales also has significantly fewer competencies compared to a U.S. state. This remains true even after the Government of Wales Act of 2006 gave the Senedd some powers to legislate in key areas such as healthcare and education. From a rational-choice perspective, the incentives for voters to inform themselves about the policy positions of individual candidates are therefore lower in Wales, which could result in lower levels of responsiveness to candidates' policy stances.

Theoretical expectations

Wales uses mixed-member proportional representation (MMP) for its devolved elections, in which voters cast two votes. The first vote is for a member for the voter's constituency, elected by the first-past-the-post system. There are 40 constituencies in total. The second is for a closed regional party list. An additional 20 Senedd members are elected via the regional party lists in a total of five regions. Additional members are used to compensate parties that have been under-represented on the constituency vote and are elected using proportional representation. Wales' voting system is similar to those used in Germany and New Zealand; however, the small number of list seats (just one third of the total) and the lack of overhang or levelling seats means that the system provides less proportionality than these two cases. In this article, we are interested in the extent to which voters are influenced by the policy positions of individual candidates. Our hypotheses therefore focus on voters' choices in the constituency elections, where voters cast votes for individual candidates. We do not consider the list vote, which by definition involves a vote for a group of candidates.

We test a total of three hypotheses, all of which have been tested in similar form in prior studies. This approach allows us to draw comparisons with other electoral contexts. First, Downs' (1957) proximity model would suggest that voters carefully consider the different candidates' policy platforms and will vote for the candidate that is closest to them across a broad range of electorally relevant policy issues. Therefore, we will test the following hypothesis:

H1: Voters prefer candidates who are closer to them on policy issues.

However, prior studies suggest that this hypothesis is over-simplistic. For one, voters are unlikely to care about all issues equally. Many of the findings outlined above suggest that candidate positions only impact on voting behaviour when they relate to highly salient issues (Bovitz and Carson 2006; Hanretty, Mellon, and English 2021; Highton 2019; Nyhan et al. 2012; Rogers 2017; Vivyan and Wagner 2012). This could be for one of two reasons. First, voters may have less awareness of candidates' positions on issues that are not important to them. Second, positional differences may matter less to voters on issues they do not care about deeply. Based on this, we expect that candidate positions matter mostly, or even only, when it comes to issues they see as highly salient.

H2: Voters prefer candidates who are closer to them on policy issues they consider to be highly salient.

Finally, for candidate positions to impact voting behaviour, voters need to be aware of where candidates stand on policy issues, and not all voters are equally likely to have this knowledge. Broadly speaking, voters who have a strong interest in politics are much more likely to observe elections closely and be familiar with the different candidates and their policy positions. By contrast, voters with low political interest are less likely to know about candidates' policy positions and, therefore, candidates' policy positions are also unlikely to shape those voters' choices at the ballot box.

H3: Candidates' policy positions are more likely to shape the electoral preferences of voters with high political interest compared to voters with low political interest.

Of course, and as previously mentioned, another possibility is that candidates' policy positions do not matter at all for voters' electoral preferences, given the comparatively low salience of regional elections in Wales and beyond.

Research design

Data source

We test our hypotheses using data drawn from *MyVoteChoice*, a VAA platform which was deployed in Wales on 16th April 2021 and remained operational

until the Senedd elections on 6th May 2021. *MyVoteChoice* was freely available online and allowed Welsh voters to learn about their proximity with political elites. The platform was designed specifically for the context of the Senedd elections and therefore provided users with information on their policy proximity with both individual candidates and parties in general.

Before the VAA's launch, a panel of experts from a consortium of universities[1] identified a total of 28 policy issues relevant to the context of the elections. These 28 policy issues were associated with six broad policy areas: the economy, the environment, health and social care, education, Wales' relationship with the rest of the UK, as well as Welsh language and culture – and were formulated as statements with which voters, candidates and parties would be able to agree or disagree. Examples included 'Welsh businesses should have lower tax rates'; 'There should be no private sector involvement in the NHS in Wales'; and 'Wales should become an independent country'. Table A1 in the Online Appendix provides the full list of policy statements.

After identifying relevant policy issues, the VAA designers contacted the headquarters of each party to obtain the party positions on each of the issue statements. Independently, they also contacted all candidates standing in the election and invited them to provide their positions on the same statements. Each candidate and party could choose from a menu of five possible responses to each issue statement: 'completely agree', 'agree', 'neither agree nor disagree', 'disagree' and 'completely disagree'. All four main political parties in Wales – the Welsh Labour Party, the Welsh Conservatives, Plaid Cymru and the Welsh Liberal Democrats – provided their positions on each issue, as did 23 out of 40 Liberal Democrat candidates, 21 out of 40 Plaid Cymru candidates, nine out of 40 Labour candidates, and six out of 40 Conservative candidates.[2] Although candidates from smaller parties and independent candidates were included in the VAA platform, we do not include them in the analysis because several of our control variables are unavailable. Combined, candidates from small parties and independents garnered only 8.9 percent of the constituency vote and they tend to be rather less well-known.

When the VAA platform was launched, voters were able to enter the *MyVoteChoice* website and provide their own positions on each of the 28 policy statements using the same menu of responses that had been presented to candidates and parties. In addition, voters had a 'no opinion' option, which we treat as missing data. *MyVoteChoice* users were also invited to answer several supplementary questions, which we leverage for the measurement of our dependent variable as well as our statistical controls (see below). On completing the questionnaire, users saw a series of visual displays showing their proximity to both candidates and parties in policy terms. Importantly, they had not been exposed to this personalized information on policy proximity at the time when they answered the survey questions we leverage for our analysis.

The *MyVoteChoice* platform was broadly advertised on Welsh news websites as well as Google, Facebook, and Instagram. Overall, 15,807 user records were collected. Following recommendations by Andreadis (2014) and Wheatley and Mendez (2021), we performed a light data cleaning and removed observations that appeared to represent repeated attempts by the same individuals, and users who failed simple data quality checks, such as speeders who rushed through the tool in less than two minutes.[3] After cleaning, 14,617 valid user records remained. Out of these, 13,298 lived in a constituency where at least one of the candidates from the four major parties provided their policy positions.

VAA data has several advantages for our purposes, but it also has an important weakness since VAA data is self-selected. We discuss the advantages first and turn to self-selection below. First, the users of VAAs are likely to want to learn what candidate or political party is closest to them on policy issues. Relative to more standard academic or commercial surveys, this is likely to reduce the risk of voters misreporting their attitudes due to considerations of social desirability. Second, *MyVoteChoice* includes data on the positions of candidates, parties, and voters on the same 28 policy issues. The key advantage is that this allows us to measure proximity on policy issues between voters and candidates using identical measures. Furthermore, we can control for proximity between voters and political parties on the same set of issues, which allows us to estimate the independent effects of candidates' policy positions. By contrast, a common approach in existing research has been to combine voter surveys with roll-call data from legislators (Hanretty, Mellon, and English 2021; Highton 2019; Vivyan and Wagner 2012). Possible problems with this approach include that the questions do not correspond perfectly with the policies being voted on due to the wording of survey items or number of response options (Jessee 2016). Furthermore, roll-call data do not necessarily reveal legislators' true preferences due to attempts by party leaders to enforce party discipline (Hug 2010). A second approach has been to estimate policy proximity by combining voters' own policy positions, as established in surveys, with voters' perceptions of where candidates and parties stand on the same issues (e.g. Hollibaugh, Rothenberg, and Rulison 2013). While this approach avoids problems due to different question wordings or response options, voters' perceptions of where candidates and parties stand on issues are known to be endogenous to their electoral preferences (Grand and Tiemann 2013; Merrill, Grofman, and Adams 2001).[4] Our approach avoids projection bias by measuring the positions of candidates and parties using elite surveys.

Of course, though, the fact that voters self-select into VAA usage is a potential concern. Perhaps counterintuitively, though, prior research suggests that it is not mainly voters with very low political knowledge who turn to VAAs. Indeed, many voters with high political knowledge and

relatively firm pre-existing voting intentions use VAAs to double-check their existing preferences, or simply for their entertainment value (van de Pol et al. 2014). Furthermore, in the case at hand, the target audience of online advertisements was continuously adjusted throughout the campaign to achieve a sample that was as representative of the Welsh electorate as possible. As a result, our sample is demographically diverse, even though there is some over-representation of younger and more highly educated voters (see Table 1). In the Online Appendix, we also report results which are weighted to better approximate the Welsh electorate. The results are similar (see Table A2 and Figure A1).

Statistical modelling and measurement

To test our hypotheses, we create a stacked dataset (voters x candidates) such that there are four observations for each voter (i.e. VAA user): one referring to the dyad between the voter and the candidate from Welsh Labour; another referring to the dyad between the voter and the Welsh Conservative candidate; and two more referring to the dyads between the voter and candidates from Plaid Cymru and the Welsh Liberal Democrats, respectively. Our dependent variable is a binary variable that captures whether or not a voter intends to vote for a given candidate, set to a value of 1 if the voter expresses an intention to vote for the candidate and 0 otherwise. VAA users who did not answer the vote intention question or indicated that they preferred not to say are treated as missing, while users who stated they were undecided whom to vote for, expressed a preference for a candidate who was not affiliated with any of the four major parties, or stated that they did not intend to vote are consistently coded with 0.

To test *H1*, we construct a measure which captures the proximity between a voter and a candidate across all 28 policy issues included in *MyVoteChoice*. More specifically, we measure proximity using the Euclidean distance (d)

Table 1. Sample descriptives including population reference figures.

	Sample	Wales population (census)
Female (%)	52	52
Age		
15–19 (%)	6[a]	7
20–29 (%)	23	14
30–39 (%)	28	15
40–49 (%)	18	14
50–59 (%)	12	17
60–69 (%)	9	15
70+ (%)	4	18
University degree (%)	66	25

[a]Percentage claiming to be under the age of 20.

between voters and candidates in a 28-dimensional space:

$$d = \sqrt{\sum_{i=1}^{n} (p_{vi} - p_{ci})^2} \quad (1)$$

where p_{vi} is the position of the voter on issue i, n is the total number of available issue statements (i.e. 28 minus the number of missing responses where the voter registered 'no opinion'), and p_{ci} is the position of the candidate on issue i. In a second step, we recode the proximity measure such that a value of 0 corresponds to the largest possible distance (d_{max}) between voter and candidate across all policy issues (e.g. the voter consistently completely agrees with all policy statements while the candidate completely disagrees with all policy statements), while a value of 1 indicates that they occupy exactly the same position ($d = 0$).

To test *H2*, we construct an analogous proximity measure which, however, only considers policy issues that are personally salient to voters. In doing so, we provide a more nuanced measure of issue salience compared to prior literature, which typically distinguished salient from non-salient issues based on *ad hoc* criteria and without actually measuring issue salience. Building on Krosnick (1990) and Niemi and Bartels (1985), we suggest that issue salience has a psychological component and that, as a result, different people are likely to care more about different issues. Therefore, we choose to measure issue salience by tapping the extent to which voters are *personally* invested in an issue. More specifically, we rely on one of the supplementary questions, which asked *MyVoteChoice* users which (if any) of the six policy areas listed above they deemed to be the most important in the election.[5] The proximity measure then reflects the reversed Euclidean distance between a voter and a candidate on only those policy issues that belong to that policy area (e.g. the economy or Wales' relationship with the rest of the UK; see Table A1 in the Online Appendix for reference).

To test *H3*, we interact both proximity measures with another supplementary question, which asked *MyVoteChoice* users about their level of interest in the forthcoming election. Our measure of election interest ranges from 1 (not at all interested) to 4 (very interested). Notably, the number of voters who expressed a low or very low interest in the election in our sample is relatively small (17%) compared to those who expressed high (45%) or very high (38%) interest in the election. However, given the large number of observations, we retain sufficient statistical power in the interaction models despite the relatively small share of uninterested voters.

The candidate preferences of Welsh voters are likely to be a function of many factors other than candidates' issue positions. To counter the resulting risk of omitted variable bias, we include both voter and candidate fixed effects in our specifications. The candidate fixed effects remove the effects

of any candidate-level confounders, such as incumbency, celebrity status, or candidates' gender. Meanwhile, the voter fixed effects remove any general, cross-candidate effects of voter-specific factors, such as potential bias due to voters with certain demographic traits being more or less likely to intend to participate in the election. The voter fixed effects cannot, however, account for the candidate-specific effects of voter traits. We therefore also include several statistical controls tapping reasons why a voter may prefer some candidates over other candidates. First, we control for the proximity between voters and the parties of candidates on policy issues. This is a vital control since the positions of candidates and parties are likely to be strongly correlated, and voters often are better informed about the positions of parties than candidates. We measure voter-party proximity analogously to voter-candidate proximity, that is, as the reversed Euclidean distance between a voter and a party across all 28 policy issues included in *MyVoteChoice*, whereby we normalize the final score such that it ranges from a theoretical minimum of 0 to a theoretical maximum of 1.

Second, another likely confounder is whether voters identify with a party. Therefore, we control for party identification, which we measure using an item which asked *MyVoteChoice* users whether they feel close to a party and, if so, which one. Third, to capture habitual partisan voting, we control for previous vote choice in the 2019 UK general election. Both party identification and previous vote choice are binary variables which are coded 1 if a voter felt close to, or previously voted for, a given candidate's party, and 0 otherwise. Finally, to capture tactical considerations, we control for voters' perceived likelihood of a candidate winning the seat. The likelihood to win variable is based on four slider scales which asked *MyVoteChoice* users to rate the likelihood of each of the four main parties' candidates winning in their constituency on a scale from 0 (impossible) to 10 (certain). Table 2 provides descriptive statistics for all variables we consider in the paper. In the Online Appendix, we consider several additional potential confounders, including the choice-specific effects of voters' age, gender, and education. The results remain similar (see Table A3 and Figure A2).

We estimate all models using linear regression. We prefer to use linear regression instead of non-linear alternatives for several reasons. First, our

Table 2. Descriptive statistics.

Variable	*N*	Mean	Std. dev.	Min	Max
Vote intention for candidate	20997	0.10	n/a	0	1
Proximity to candidate (all issues)	24162	0.60	0.11	0.08	0.92
Proximity to candidate (personally salient issues)	20368	0.62	0.18	0	1
Interest in election	22446	3.17	0.77	1	4
Proximity to party	24162	0.60	0.10	0.13	0.87
Party identification	21148	0.09	n/a	0	1
Previous vote choice	19099	0.13	n/a	0	1
p(candidate win)	20153	3.75	2.79	0	10

data includes a substantial number of voters who are consistently coded with 0 on the dependent variable, for example, because they expressed a vote intention for a candidate that is not included in the analysis. Linear regression allows us to retain these voters even in the presence of voter fixed effects while nonlinear alternatives, such as conditional logit regression, would force us to drop all voters with consistently positive or negative outcomes, thus causing significant loss of information (Beck and Katz 2001; Timoneda 2021). Furthermore, estimates from linear probability models are significantly easier to interpret (Angrist and Pischke 2009; Hellevik 2009) and non-linear alternatives are sensitive to the omission of third variables even if they are unrelated to measured independent variables (Mood 2010). Notably, linear regression provides unbiased and consistent estimates of average effects even when the dependent variable is binary (e.g. Hellevik 2009, 61; Wooldridge 2010, 563). That being said, an important concern with linear regression is that binary variables have a Bernoulli structure, leading to non-constant variance of the error term. We therefore calculate heteroskedasticity-robust (Huber-White) standard errors. Furthermore, to relax the independence of observations assumption, we cluster our standard errors at the voter level. Throughout, we drop observations with missing values (listwise deletion). Finally, while we prefer to draw on linear regression, we show that our results are robust to the use of conditional logit regression in the Online Appendix (see Table A7 and Figure A6).

Results

Table 3 provides the results. Model 1 shows the simple bivariate correlation of voter-candidate policy proximity on all 28 policy issues included in *MyVote-Choice* and whether a voter intends to vote for a candidate. We find a positive correlation between voter-candidate proximity and vote intention which, however, vanishes when we include our control variables and fixed effects. As can be seen from model 2, the size of the coefficient decreases by more than 90% and is no longer statistically significant at conventional levels when controls are added. Contrary to *H1*, this suggests that candidates' issue stances, when taken in aggregate across a broad range of issues, did not impact the probability of a voter voting for a given candidate in the Senedd elections. Notably, this is consistent with prior studies of national elections and U.S. state legislative elections, which also tended not to find evidence for a general issue accountability link.

At the same time, however, we do find evidence that voters factored in candidates' positions for those issues they deem to be particularly important. In models 4 and 5, we repeat the same analyses with our second voter-candidate proximity measure, which considers proximity only in terms of the issue area that voters have flagged as most important to them. As before,

Table 3. Assessing the impact of candidates' issue positions on vote intention.

	All issues			Personally salient issues		
	(1)	(2)	(3)	(4)	(5)	(6)
Proximity to candidate	0.55***	0.03	−0.05	0.26***	0.09**	−0.20
	(0.02)	(0.09)	(0.17)	(0.01)	(0.03)	(0.10)
Proximity to party		0.53***	0.55***		0.42***	0.40***
		(0.09)	(0.09)		(0.06)	(0.06)
Party identification		0.55***	0.54***		0.55***	0.55***
		(0.02)	(0.02)		(0.02)	(0.02)
Previous vote choice		0.06***	0.06***		0.06***	0.06***
		(0.01)	(0.01)		(0.01)	(0.01)
p(candidate win)		0.02***	0.02***		0.02***	0.02***
		(0.00)	(0.00)		(0.00)	(0.00)
Proximity to candidate * interest in election			0.02			0.09**
			(0.04)			(0.03)
Candidate fixed effects	No	Yes	Yes	No	Yes	Yes
Voter fixed effects	No	Yes	Yes	No	Yes	Yes
Candidates	59	59	59	59	59	59
Voters	11580	8513	8288	10047	7622	7428
Observations	20997	15163	14758	18305	13624	13273

Note: The dependent variable in all models is whether a voter intends to vote for a candidate. All models are estimated with linear regression. Standard errors clustered by voter in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

we find a positive bivariate correlation which decreases in size when the controls and fixed effects are added. However, the decrease in effect size is now smaller and the association remains statistically significant ($p < 0.01$). As predicted by *H2*, this suggests that voters in the Senedd elections did take candidates' policy positions into account when it comes to issues that are personally salient to them. In terms of effect size, model 5 suggests that a standard deviation increase in voter-candidate congruence on issues deemed important by the voter increases vote intention by 1.6 percentage points. This is a relatively small effect, but at the same time the effect size seems broadly comparable to studies from other contexts. For example, Hanretty, Mellon, and English (2021, 1281) found that voters were 2.3 percentage points more likely to vote for an incumbent in the 2017 UK general election if they shared their representative's position on Brexit, one of the most salient and contentious issues in recent British political history. Rogers (2017, 559f) found that a one-standard-deviation increase in congruence improves incumbents' vote shares by 1.1 percentage point in U.S. Congress elections and by about 0.7 percentage points in U.S. state legislative elections. Similar to prior studies (e.g. Birkhead 2015; Rogers 2017; von Schoultz and Papageorgiou 2021), the effect of candidates' policy positions is also trumped by other factors. For example, according to model 5, a standard-deviation increase in ideological closeness to a candidate's party increases vote intention by almost three times as much (4.2 percentage points). Similarly, tactical voting seems to play a more important role than candidates' policy positions; according to model 5, a standard deviation increase in the perceived

probability of the candidate winning increases vote intention by 5.6 percentage points. With a more than 50 percentage points increase, by far the strongest effect emerges for party identification.

Finally, we investigate whether candidates' policy positions have stronger effects on the electoral preferences of voters with high political interest. In models 3 and 6, we add the interaction between voter-candidate policy proximity and voters' self-reported interest in the Senedd elections. In keeping with *H3*, the interaction is positive in both models, but it reaches statistical significance only in model 6 ($p < 0.01$), where we consider the interaction with proximity on the issues that are most important to voters. Figure 1 shows the conditional effect sizes. We find that a standard-deviation increase in a voter's proximity to a candidate's position on the issues that are most important to the voter increases vote intention by around 1.2 percentage points if a voter reports high interest in the election and 2.8 percentage points if a voter reports very high interest in the election. By contrast, we do not find any statistically significant effects for voters with low or very low political interest.

Robustness checks

We report several robustness checks in the Online Appendix. First, we correct for bias in the composition of our sample by re-estimating all models using weighted regression. The weights adjust the sample means such that they match census data in terms of age, sex, and education (see Table 1). We

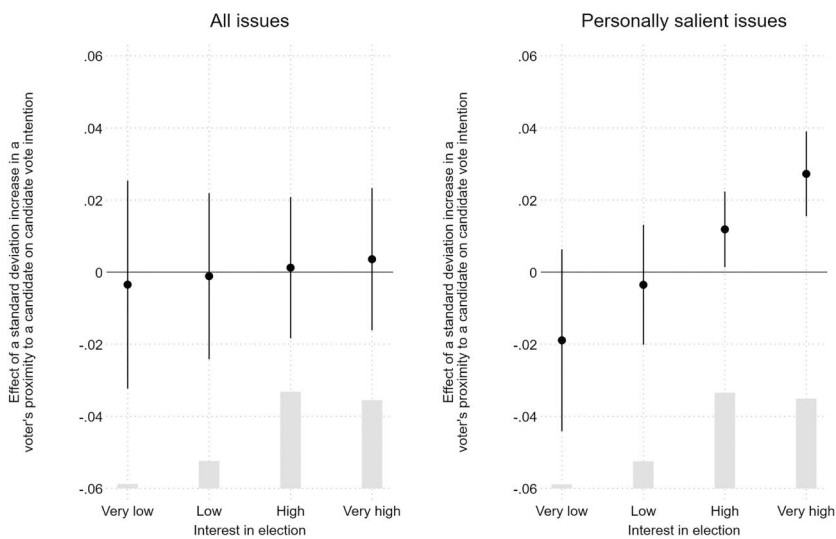

Figure 1. Effects of candidate' issue positions conditional on election interest.

estimate weights using entropy balancing (Hainmueller 2012). The results remain highly similar (see Table A2 and Figure A1). Second, we report models including several additional control variables. On the one hand, in addition to voter-party proximity across all 28 issues featured in *MyVoteChoice*, we control for voter-party proximity on only those issues voters flagged as most important to them. On the other hand, we control for the candidate-specific effects of key demographics by including multiplicative interactions between the candidate fixed effects and voters' age, sex, and educational attainment. The results are again similar (see Table A3 and Figure A2).

Third, a potential problem with our modelling strategy is that candidates and their parties often report identical positions on policy issues, leading to high correlations between voter-candidate and voter-party policy proximity ($r = 0.88$ and $r = 0.59$ when voter-candidate proximity is measured across all issues and only for voters' most important issue areas, respectively). We note that multicollinearity is small-sample problem (Lindner, Puck, and Verbeke 2020; Wooldridge 2018, 89–92) and that all models reported above include more than 10,000 observations. Still, to further mitigate the risk of multicollinearity and inflated standard errors, we re-estimate all models using alternative policy proximity measures which are less highly correlated. The alternative measures consider only those 15 *MyVoteChoice* policy statements for which we observe the highest levels of disagreement between candidates and their parties. To establish the level of disagreement, we calculate the average deviation between candidates and their respective parties on each issue. The removal of the remaining 13 policy items substantially reduces the correlations between voter-candidate and voter-party proximity measures ($r = 0.71$ and $r = 0.44$, respectively). Table A1 in the Online Appendix shows which of the 28 policy items are retained and which are dropped. The substantive conclusions remain unchanged, with the only notable difference being that we now find a statistically significant interaction between voter-candidate proximity and election interest also when looking at all policy issues and not just those personally salient to voters (see Table A4 and Figure A3). This provides additional support to *H3*.

Fourth, it is possible that errors are correlated not just within voters, but also within clusters of candidates. To address this, we report standard errors which are clustered at both the voter and the candidate level (see Table A5 and Figure A4). Fifth, to further assuage concerns related to the distribution of errors, we report models including block-bootstrapped standard errors, which do not make any distributional assumptions (see Table A6 and Figure A5). Sixth, due to possible concerns related to our use of linear regression for binary choice data, we re-estimate all models using (conditional) logit regression (see Table A7 and Figure A6). Seventh, to fully remove unobserved candidate- and voter-level heterogeneity in the

interaction models, we re-estimate models 3 and 6 using double-demeaned interactions (Giesselmann and Schmidt-Catran 2022) (see Table A8 and Figure A7). Eighth, we report models in which we interact our voter-candidate policy proximity measures with voters' self-reported levels of familiarity of candidates instead of self-reported election interest (see Table A9 and Figure A8). Finally, we re-estimate all models while including user records which were removed in the data cleaning process (e.g. speeders or repeated attempts from the same computer) (see Table A10 and Figure A9). The results are always similar.

Conclusion

Voters can hold legislative candidates accountable on different grounds, but a particularly important form of accountability is that voters reward candidates who share their policy preferences while sanctioning those who do not. Our results suggest that there is the potential for this form of electoral accountability to take place even in the context of a regional election with low levels of media scrutiny as voter choices are shaped, at least to a small degree, by individual candidates' policy stances. However, we also found that the impact of candidates' policy positions in Wales is clearly trumped by other factors such as party identification or tactical voting, and is limited to issues voters care deeply about and to voters with high political interest. To be sure, these patterns are not unique to Wales or even to the context of regional elections. Indeed, studies of national elections have routinely reported similarly small effects which tend to be limited to certain highly salient issues and voters with high political interest. On the positive side, our study therefore suggests that voters' responsiveness to candidates' policy stances is not necessarily very different in regional elections. At the same time, though, our study also suggests that the responsiveness of voters to candidates' issue stances remains (too) low in both regional and national elections.

Of course, this is a single case study, and there are several possible reasons why results from Wales may not generalize to other regional elections. Perhaps most importantly, there is electorally significant support for independence in Wales, and several parties, including Labour and the Liberal Democrats, are internally split on the preferred extent of devolution. In additional analyses reported in Tables A11–A12 and Figure A10 in the Online Appendix, we disaggregate the results by policy area. The results show that while territorial issues are not the only policy dimension driving our results, they are particularly important to voters, including voters who have not flagged Wales' relationship with the UK as their most important issue area. Notably, this is consistent with recent experimental evidence suggesting that voters pay particular attention to territorial issues in regions where those are

relevant (Balcells, Daniels, and Kuo 2023). This suggests that our findings may be more relevant in sub-national units where there is a strong regional identity and where the current relationship between the region and the centre is challenged. Future studies should consider whether voter responsiveness to candidates' policy positions is lower in regions without a salient territorial dimension.

Second, even though Wales' autonomy is more limited compared to a U.S. state, Wales still has significant policy autonomy and the extent to which voters factor in candidates' policy stances could be smaller in regions with less autonomy. At the same time, under Wales' mixed-member electoral system voters have the chance to cast a second, proportional vote for a party list. This gives them an extra chance to vote for their most-preferred party and could therefore increase their incentives to make concessions on policy congruence in the majoritarian constituency elections. Third, another limitation of this study is that a significant number of the constituency candidates did not participate in the candidate survey and could not therefore be considered in the analysis. Finally, a fourth limitation is that our sample is self-selected and, in particular, over-represents voters with comparatively high interest in the Senedd elections. Reassuringly, our results remain highly similar when the sample is re-weighted to approximate the Welsh electorate on several key demographics. Still, it remains possible that our data somewhat exaggerates voters' responsiveness to candidates' issue stances compared to a probability-based sample.

While more work therefore remains to be done, an important conclusion of our study is that even though voters appear to sanction candidates to a broadly similar extent for their issue positions in national and regional elections, the impact of candidates' policy stances on voter behaviour is generally weak. As a result, representatives have only weak incentives to represent their constituents' interests and may be more easily swayed by pressures from special interest groups. One policy option that could be used to increase the potential for issue-based accountability is the improvement of civic education, which is widely neglected in the United Kingdom and other advanced democracies. Such education should be aimed not only at increasing young people's knowledge of parties and their policies, but also at encouraging them to find out for themselves what parties and candidates stand for and providing them with the skillset necessary for finding this information. Relatedly, civic education courses should clearly explain the important policy issues at stake in elections, especially when it comes to regional and other second-order elections. A second area of relevance is media; voters' capacity to distinguish the policy preferences of candidates both from other candidates and from their parties depends on extensive media coverage of the elections. There is therefore a need to incentivize media outlets to report on these elections in greater depth, especially in the context of regional

elections. Finally, a more short-term answer could consist of the more widespread adoption of online voting information tools, such as VAAs, which provide voters with easily accessible information on the policy positions of the different candidates running in elections and could therefore help to improve issue representation in candidate-based elections (Germann et al. 2024).

Notes

1. The University of Aberystwyth, the University of Bath, the University of Cardiff, Oxford Brookes University, the University of Surrey, and the University of Swansea.
2. Taken together, the response rate in the candidate survey was therefore 37% among candidates from the four major parties. Response rates ranging from 20% to 50% are relatively typical in the context of candidate surveys (CCS 2016, 2022).
3. Details on the data cleaning criteria can be found in the Online Appendix.
4. A third approach has been to eschew the measurement of voter positions altogether and, instead, correlate candidates' policy positions (however these are measured) with aggregate-level vote shares (Bovitz and Carson 2006; von Schoultz and Papageorgiou 2021). Yet, in the absence of data on voters' policy preferences, it can be difficult to establish the role of policy preferences in voters' electoral choices.
5. The highest share of users (28%) indicated that health and social care is most important to them, followed by economic matters (20%) and Wales' relationship with the UK (18%). Somewhat smaller shares indicated that the environment (12%) or education (10%) are most important to them. Only 2% indicated that issues related to Welsh language and culture were most important to them.

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Data availability

All data and statistical code necessary for the replication of the results can be found at: https://doi.org/10.7910/DVN/4TRJYZ.

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