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Understanding Nonpartisan Roll-Off Among Straight Party Voters

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ABSTRACT

Voters who use the straight party voting option (SPVO) are more likely than those who do not to roll off when voting for nonpartisan offices and ballot questions. Previous research theorizes that this difference is due to voter error, as individuals fail to understand that they must still complete nonpartisan questions after selecting the straight party option. Using cast vote records from South Carolina's 2018 general election, we find such nonpartisan roll-off is intentional and not in error as relatively few voters roll off all nonpartisan items. Our analysis of cast vote records also shows SPVO voters consistently behave differently than non-SPVO voters. Compared with other voters, SPVO voters roll off more frequently on nonpartisan offices with lower campaign spending and more frequently on ballot questions preceded by a larger number of nonpartisan items. These findings show SPVO voters behave differently than others when interacting with the ballot and intentionally roll off nonpartisan items.

Keywords: ballot design, straight party voting option, roll-off

INTRODUCTION

The straight party option allows a voter to initially select a political party when entering the ballot box. This choice populates their ballot with votes for all candidates of that party. The voter then reviews their ballot, with the opportunity to make any changes before finally submitting it. Because the straight party voting option (SPVO) does not mark a vote for nonpartisan contests or ballot questions, the voter must still make those choices as they proceed through the ballot review. While the prevalence of the SPVO has declined in recent years, six states still use it as of 2025.

Research finds that usage of the SPVO is associated with *lower* levels of roll-off (i.e., failing to cast a vote in a contest but still submitting a ballot) for partisan contests (Bonneau and Loepp, 2014; Feig, 2007, 2009; Kimball, Owens and McLaughlin, 2002; Kimball and Kropf, 2006; Kritzer, 2016) and *higher* levels of roll-off for nonpartisan contests and ballot questions (Bonneau and Loepp, 2014; Feig, 2007, 2009; Herrnson, Hanmer, and Niemi, 2012; Kritzer, 2016; Remmel and LaForge, 2021) compared with voters not using the option. We are concerned in this

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The authors wish to thank Shiro Kuriwaki for introducing them to cast vote records in analysis.

article with the relationship between the usage of the straight party option and nonpartisan roll-off.

Prior research disagrees on the magnitude of this relationship. Bonneau and Loepp (2014) find an aggregate 12-point difference in nonpartisan roll-off comparing races where voters do and do not have access to the SPVO. Kritzer (2016) also compares nonpartisan races with and without the SPVO and finds a 6.3-point difference. Remmel and LaForge (2021) find a less than 2-point difference in nonpartisan roll-off comparing states before and after the elimination of the SPVO. Looking within a district, Thornburg (2019) finds that voters who report using the SPVO are 20 points more likely to roll off in nonpartisan, contested school board races compared to voters in those districts who do not use the SPVO, though this massive latter difference occurs within contests where the SPVO is available to all and may be driven by different types of voters opting to use or not use the SPVO within a race.

At present, there is uncertainty in the literature about why SPVO voters engage in nonpartisan roll-off. Some theorize that voters using the straight party option roll off unintentionally because they are unaware they must complete the nonpartisan questions after selecting the SPVO (Feig, 2007, 2009). Others suggest that the roll-off is intentional and due to a lack of information or motivation among straight party option voters (Bonneau and Loepp, 2014; Herrnson, Hanmer, and Niemi, 2012).

We focus on the state of South Carolina, where individual-level data on ballots are available via cast vote records used to audit elections. While the ballots are de-identified from any demographic or attitudinal information, we observe the relationship between the SPVO and roll-off at the individual level rather than with ecological inference. We thus see exactly how the characteristics of each voter's ballot and voting experience affect their behavior in the ballot box.

We confirm that SPVO voters are more likely to roll off on nonpartisan offices and ballot questions compared with those not using the option in the same election. However, with the cast vote records, we show that relatively few voters (SPVO or otherwise) leave *all* nonpartisan offices and ballot questions blank, suggesting that most SPVO voters are aware of the necessity to vote in nonpartisan races and ballot questions after selecting the straight party option. Indeed, even among voters who vote for at least one nonpartisan ballot question or office, SPVO voters are still more likely than others to engage in nonpartisan roll off. SPVO voters who completed the last item on the ballot in Charleston County's 2018 general election, and thus were attentive to the end of the ballot, were also more likely to roll off nonpartisan offices earlier in the ballot. When it occurs, rolling off of nonpartisan races and ballot questions is a conscious choice for most SPVO voters.

In understanding why SPVO and non-SPVO voters differ in intentional nonpartisan roll-off, we theorize that both voter information about candidates and expectations about the voting experience may play a role. With these theories, we are mindful that those who choose the SPVO are not randomly selected and may be different from those who choose to work through the ballot "manually." At the same time, the straight party option leads to a significantly different experience casting a ballot for those who select it compared to those who do not.

Following Bonneau and Loepp (2014), we expect to find a gap in nonpartisan roll-off between SPVO and non-SPVO voters due to lower voter information of the former. However, we expect the gap to be partially offset by campaign spending. Such spending may mark these races as salient as well as provide more information to voters that enables them to complete the ballot.

We compare cast vote records for 17 similar contested nonpartisan School Board races across the state and show that SPVO voters are more likely than non-SPVO voters to roll off on these races. However, campaign spending diminishes the difference between the two groups.

Voters using the SPVO may also expect a quick voting experience, especially after selecting the option and being invited to "review" their ballot. Encountering a large number of low-salience races and ballot questions lacking a partisan cue may violate that expectation and lead a voter to leave these questions blank or break off ballot completion partway through. We therefore theorize that the gap between SPVO and non-SPVO roll-off on ballot questions may be larger when preceded by more nonpartisan items.

We confirm this prediction, using cast vote records to show that while SPVO voters are more likely to roll off on the final nonpartisan question on a ballot than non-SPVO voters, this difference between SPVO and non-SPVO voters increases

with the number of nonpartisan questions on the ballot prior to the final one. This is primarily due to an increase in the number of voters leaving all nonpartisan questions blank or breaking off the nonpartisan questions partway through on longer ballots.

Overall, the results show that voters using the straight party option exhibit different patterns of roll-off from those who do not. Even among individuals who understand the necessity to vote in these races, SPVO voters remain more likely to roll off questions preceded by a large number of additional nonpartisan items or where they may have less information available.

BACKGROUND AND THEORY

The SPVO is a relic of the era of party machines before the advent of the secret ballot (Rusk, 1970). While a large number of states have used the straight party option on their ballot at some point since the advent of secret voting, there has been a steady decline in its prevalence in recent decades, reaching a low of six in 2025. By marking the ballot for all candidates of a particular political party, the SPVO changes the process of casting a vote and a number of studies have explored the relationship of the straight party option to voter roll-off.

Evidence indicates that roll-off in votes for *partisan* offices decreases significantly with the use of the SPVO. While the largest differences are observed down-ballot in state legislative (Feig, 2007, 2009; Kimball, Owens and McLaughlin, 2002), U.S. House (Herrnson, Hanmer, and Niemi, 2012), or partisan judicial (Bonneau and Loepp, 2014; Kritzer, 2016) elections, some evidence has found reduced roll-off even in presidential races (Kimball and Kropf, 2006). At the same time, significant evidence exists that roll-off in votes for *nonpartisan* offices and ballot questions increases with the usage of the straight party option. Roll-off is higher on referenda (Feig, 2007, 2009) as well as nonpartisan judicial elections (Bonneau and Loepp, 2014; Kritzer, 2016) under the SPVO rather than without it. Differences between SPVO and non-SPVO roll-off appear to be conditioned on race (Feig, 2007, 2009; Kimball, Owens and McLaughlin, 2002) and political information (Herrnson, Hanmer, and Niemi, 2012; Thornburg, 2019).

In understanding why nonpartisan roll-off increases with the usage of the straight party option, scholars disagree as to whether the abstention is *intentional* or *unintentional* on the part of voters. Feig (2007, 2009) suggests that the nonpartisan roll-off may be unintentional in that voters using the straight party option are unaware that they must still vote in nonpartisan contests and ballot questions. Campbell and Byrne (2009) surveyed voters and found significant confusion among respondents regarding how they believed the straight party option worked. Bonneau and Loepp (2014) suggest confusion as a possibility as well, although they acknowledge that it is impossible to know with their aggregate data. Bonneau and Loepp (2014) find evidence that the difference between SPVO and non-SPVO races in roll-off in nonpartisan judicial races is conditioned on political information. While roll-off in nonpartisan judicial elections is higher where the SPVO is present, high levels of spending by campaigns partially offset this difference. This suggests that the failure of SPVO voters to participate in nonpartisan contests is not purely due to failure to understand the voting process. Herrnson, Hanmer, and Niemi (2012), the only study to date exploring this question that does not rely on ecological inference, also suggest that the nonpartisan roll-off observed with the SPVO is intentional. However, the latter study's sample size is small and its results approach conventional statistical significance in rejecting the null hypothesis that there is no voter error.

Aside from ballot design explanations, some scholars studying ballot roll-off generally theorize "behavioral" factors explain the phenomenon (Augenblick and Nicholson, 2016; Bullock and Dunn, 1996; Wattenberg, McAllister and Salvanto, 2000). Voters may grow tired, especially further down the ballot, leading to roll-off in these races (Augenblick and Nicholson, 2016; Bullock and Dunn, 1996). Voters may also simply lack the information to complete the ballot and choose to leave the questions blank, approaching the act of voting like a test and not wishing to get a question wrong (Wattenberg, McAllister and Salvanto, 2000).

Because we are using observational data, voters are not randomly assigned to the SPVO or non-SPVO experience. There is some evidence that voters who use the straight party option are different from those who do not (Feig, 2007, 2009; Herrnson, Hanmer, and Niemi, 2012; Thornburg, 2019). The suggestion of this literature is that voters who use the SPVO exhibit lower levels of political sophistication. Remmel and

LaForge (2021) examine this question from the perspective of structural change; specifically the effect of removing the straight party option. The authors theorize that the removal of the SPVO may not affect individuals with low levels of political sophistication.

While the behavioral explanations are important, we also acknowledge that a voter selecting the straight party option faces a very different voting experience compared to the individual who does not use it. The majority of the voting is front-loaded and completed with a single click. Selecting the SPVO populates the ballot with votes for all partisan races in which a candidate from the selected party is running. Only upon a "review" of one's ballot must the individual make any voting decisions beyond the initial partisan selection. By definition, the remaining questions and races are nonpartisan. These races and ballot questions are usually after the partisan items on the ballot and evidence suggests these races are particularly difficult for voters (Garlick, 2015). Thus, a voter selecting a party with the SPVO may be unprepared for the difficult work at the end of their ballot.

A well-confirmed finding in survey research is that when a substantial gap exists between the respondent's *expected* burden taking a survey and their *actual* burden, respondents will be more likely to discontinue or satisfice (Boltz, 1993; Crawford, Couper and Lamias, 2001; Yan et al., 2011). Respondents who receive indicators leading them to believe they are approaching the end of the survey and whose progress then slows behave in a similar manner (Amer and Johnson, 2016; Conrad et al., 2010; Matzat, Snijders, and van der Horst, 2009). Because of this, SPVO voters may be more likely to roll off nonpartisan questions, even though their overall cognitive burden is lower than voters not using the straight party option. This likelihood of nonpartisan roll-off should increase with the number of nonpartisan items they must complete after selecting the SPVO.

It is important to note that this latter theory differs from simple voter fatigue in predicted patterns of roll-off. With voter fatigue, we would predict that non-SPVO roll-off would be greater than SPVO roll-off because the former voters face a greater cognitive burden in working through every question on the ballot "manually". In contrast, SPVO voters skip much of the work of decisions on the ballot by using the straight party option.

Overall, we may expect differences in nonpartisan roll-off between voters using and not using the straight party option. These differences may be due to voters with lower political sophistication opting to use the SPVO where it is available. We may also expect to see differences through voters using the straight party option having different expectations for the work on the ballot than voters working through the questions manually.

METHODOLOGICAL APPROACH

The key difference from previous studies making the analysis in this article possible is the usage of individual-level data on voter behavior. With the exception of Herrnson, Hanmer, and Niemi (2012), studies of nonpartisan voter roll-off related to the usage of the SPVO have relied on aggregate election returns. These studies have either correlated the proportion of a precinct voting straight party with the precinct undervote (Feig, 2007, 2009) or compared roll-off in states that do and do not use the SPVO (Bonneau and Loepp, 2014; Kritzer, 2016; Remmel and LaForge, 2021). While sophisticated methods exist for such ecological inference, the fact remains that we are studying individual-level behavior at an aggregate level. Such analysis requires modeling and assumptions about the relationship between these two levels of analysis. Aggregate analysis also robs us of the opportunity to examine how individual characteristics influence the relationship between SPVO usage and nonpartisan roll-off. This information is easiest to determine via individual-level data.

We use cast vote records from the state of South Carolina's 2018 general election. Statewide in this election, South Carolina used electronic voting machines (i.e., direct-recording electronic) whereby voters cast their ballots with a touchscreen interface. Elections are concerned with aggregate totals for precincts and these totals are usually reported. However, the actual combination of vote choices made by an individual voter (i.e., what they recorded for each question on the ballot) is grouped together and stored in the machine. As part of its elections audit process, South Carolina made these data publicly available. Cast vote records therefore offer a number of attractive features for studying individual voter behavior (Kuriwaki, 2024). Because we can see, for example, whether the voters choosing the straight party option are indeed the same voters who engage

in nonpartisan roll-off, cast vote records allow us to forego ecological inference. Cast vote records measure all votes on the ballot comprehensively and without error, in contrast to a survey. They also feature data on all voters rather than just a sample. Even large surveys such as Cooperative Election Studies may only contain a few hundred voters in each congressional district. The large number of records allows us to observe finer trends within these data. While cast vote records do not contain demographic or attitudinal information about the voters due to the secret ballot, this article's analysis does not use these data.

We once again caution that we are using observational data from a single straight party option state. Our ability to isolate the contribution to nonpartisan roll-off of differences in political sophistication between SPVO and non-SPVO voters and differences in expectation as to their expected burden when using the SPVO or not is limited.

ROLL-OFF AS ERROR OR INTENTIONAL

We first use cast vote records to test patterns of roll-off among voters in Charleston County, South Carolina's 2018 general election. Patterns that cast vote records reveal can show whether individuals are aware of the need to vote for nonpartisan offices after using the straight party option and the number who do so. Voters who vote for some nonpartisan items are clearly aware of the need to vote in these races, even if they leave others blank. On the other hand, voters rolling off of *all* nonpartisan items may either be confused about the need to participate in these contests or intentionally roll off. Thus, while cast vote records cannot necessarily distinguish between intentional and unintentional roll-off, they can clearly identify some voters who know they need to participate in nonpartisan races, marking these individuals by their participation in some nonpartisan elected offices and ballot questions.

First, using these records, we compare straight party option voters to non-straight party option voters on general patterns of roll-off for nonpartisan offices and ballot questions. In Charleston County in 2018, the number of nonpartisan elected offices on the ballot varied between five and eight and every ballot in the county ended with a statewide constitutional amendment proposal.

To better compare SPVO and non-SPVO partisans, we examine all voters but also those individuals who cast the same partisan ballots—a vote for all Democrats or all Republicans running for statewide offices (excluding uncontested races). The only measurable difference between the Democratic and Republican groups on partisan races is that the SPVO group cast their votes using the option, while the non-SPVO group cast these same vote choices "manually."

The results for all voters, Democrats, and Republicans appear in Table 1. Voters are classified into one of five categories depending on which nonpartisan items they completed during the 2018 general election. Voters may have (1) completed every single nonpartisan item on the ballot (including offices and ballot questions), (2) rolled off of every single nonpartisan item on the ballot, (3) rolled off of all nonpartisan offices on the ballot (while still completing the constitutional amendment question), (4) broke off completion of the ballot by failing to complete the constitutional amendment as well as at least the last two nonpartisan offices listed on the ballot, or (5) rolled off of some nonpartisan items but voted for others [including at least one nonpartisan office and did not break off completion of the ballot according to the definition for (4)].

Among voters in Charleston County, over 20 points fewer SPVO voters completed all nonpartisan items

Table 1. Patterns of Nonpartisan Roll-Off in Charleston Cast Vote Records

	All voters		*Straight Democratic*		*Straight Republican*	
	Non-SPVO	*SPVO*	*Non-SPVO*	*SPVO*	*Non-SPVO*	*SPVO*
Voted for all	55.98	38.25	56.31	36.09	59.91	38.64
Rolled off all	1.11	4.13	0.74	3.98	0.67	4.42
Rolled off all offices	8.14	21.11	8.43	18.34	7.55	25.92
Discontinued/Breakoff	0.64	0.97	0.39	1.10	0.57	0.77
Some roll-off	34.14	35.54	34.13	40.50	31.30	30.26
Number of obs.	47,571	60,976	12,212	30,475	12,911	26,695

SPVO, straight party voting option.

compared to those voting for the same partisan offices but proceeding through the ballot without the SPVO. While fewer SPVO voters completed all nonpartisan items, relatively few voters (SPVO or otherwise) left all nonpartisan items blank. Less than 5% of SPVO straight Democrats and Republicans left all nonpartisan items blank. SPVO voters instead were more likely to leave *some* nonpartisan items blank; many rolled off of some or all nonpartisan elected offices while completing the ballot using the straight party option. And breakoff midway through completing the nonpartisan items was more common among SPVO voters.

We next test whether SPVO voters are more likely to leave nonpartisan offices blank even if they vote in other nonpartisan races. Along with the preceding analysis, we elucidate whether voter error is a valid explanation for the greater level of nonpartisan roll-off observed among voters utilizing the straight party option. In Charleston County's 2018 general election, four nonpartisan offices appeared on the ballot of every voter: Soil and Water District Commissioner and three at-large school board races. Figure 1 plots roll-off in these races, comparing all voters, straight Democratic, and straight Republican voters with and without the SPVO. These graphs include only voters who voted in at least one nonpartisan item other than the one indicated, showing that they were aware of the need to vote in nonpartisan races.

These results clearly indicate that even among voters who knew they needed to vote for nonpartisan offices, those using the SPVO were significantly less likely to do so. We also examine patterns of roll-off for the four countywide nonpartisan offices among those who completed the constitutional amendment (and therefore were attentive to the end of their ballot). These results in Figure 2 show that SPVO voters remained more likely to roll off these offices than non-SPVO voters.

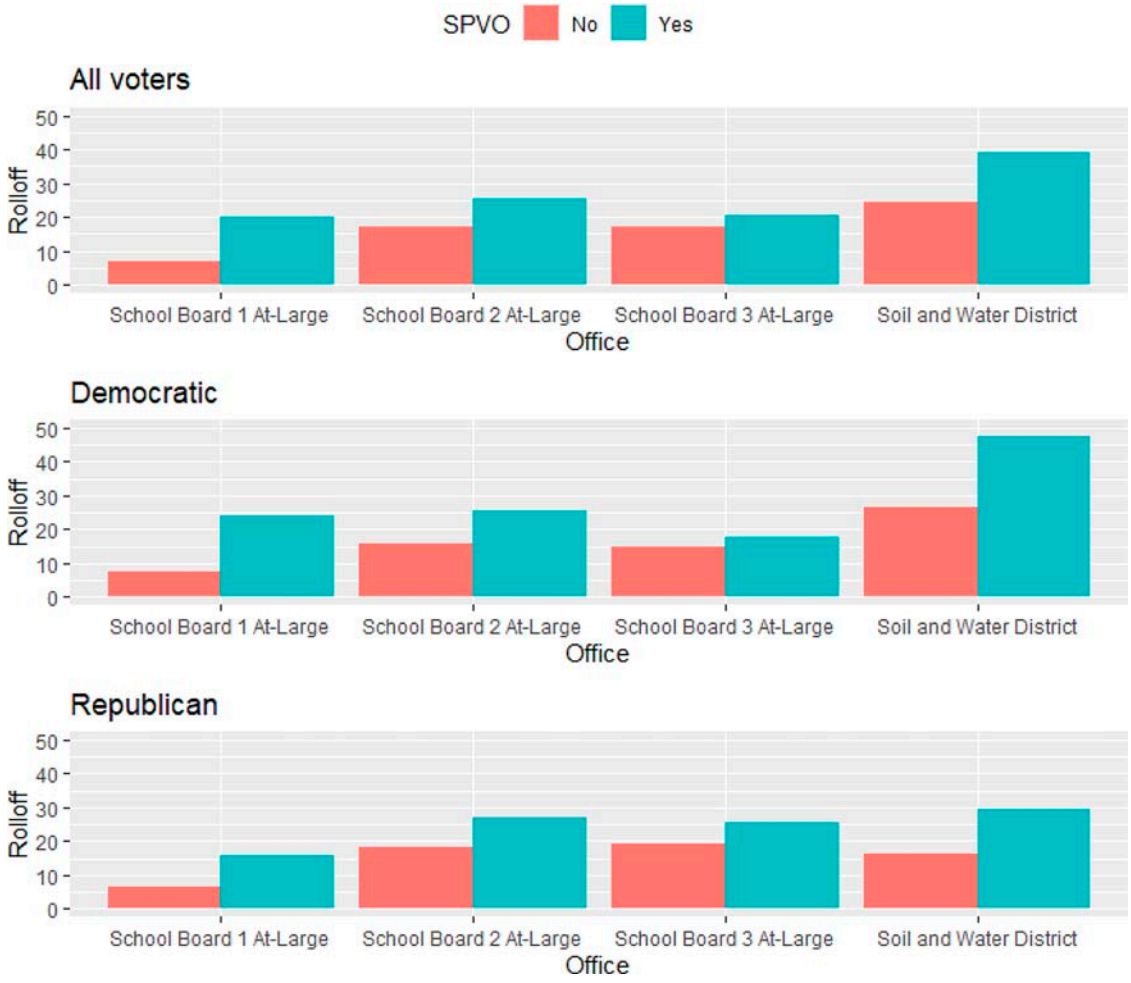

FIG. 1. Nonpartisan roll-off among those voting for at least one nonpartisan office in Charleston County.

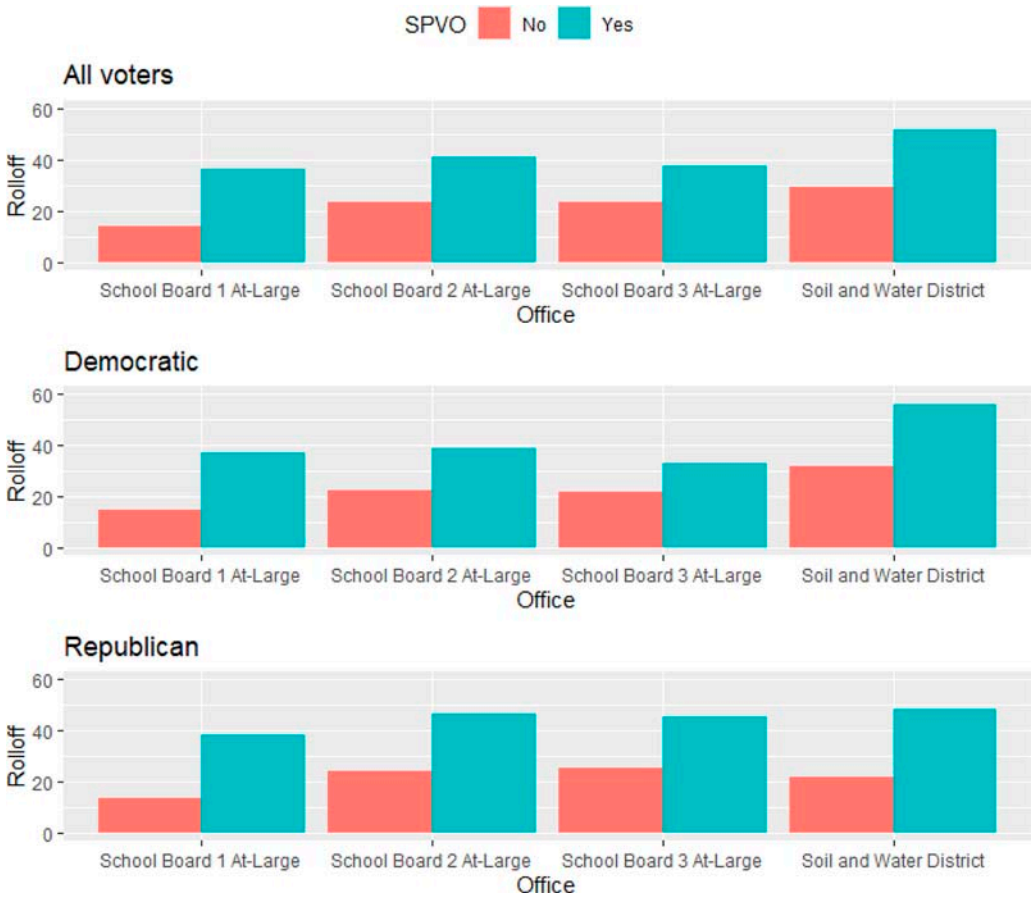

FIG. 2. Nonpartisan roll-off among those voting on the ballot question in Charleston County.

Using the cast vote records, we observe patterns of roll-off that eliminate voter error as the predominant explanation for the greater level of nonpartisan roll off observed among SPVO voters. While straight party option voters are more likely to leave all nonpartisan items blank on the ballot, less than 5% do so. This means that the vast majority of SPVO voters are aware of the need to vote for the additional nonpartisan items on the ballot as they review it after selecting the straight party option. Overall, nonpartisan roll-off among straight party option voters is an intentional choice.

PATTERNS OF SPVO ROLL-OFF

The preceding results of this article suggest that while the SPVO may play some role in nonpartisan roll-off through voter error, the vast majority of voters who use the straight party option are aware of the need to vote in nonpartisan races and ballot questions and complete at least some of these items. We examine patterns of nonpartisan roll-off among SPVO and non-SPVO voters here. In particular, we test whether campaign spending decreases the gap in roll-off for nonpartisan school board races between SPVO and non-SPVO voters. We also examine whether the likelihood of SPVO voters rolling off of a ballot question increases with the number of nonpartisan questions preceding it, especially when compared to non-SPVO voters.

Campaign spending and school board roll-off

The literature on nonpartisan roll-off by SPVO voters versus non-SPVO voters shows greater roll-off by the former. The foregoing results largely eliminate voter error as an explanation for this difference; most SPVO voters know they must vote on nonpartisan items. Why, then, are SPVO voters more likely to engage in intentional nonpartisan roll-off?

Those who use the SPVO may differ from those who do not. Evidence suggests SPVO voters exhibit lower political sophistication than those who do not

use the straight party option (Herrnson, Hanmer, and Niemi, 2012; Thornburg, 2019). This may partially explain the difference. Wattenberg, McAllister, and Salvanto (2000) find that voters who lack the requisite information to choose a candidate often leave that question blank on a ballot. If this is the case, when campaigns provide voters with more information about the candidates and race, roll-off should decrease. Bonneau and Loepp (2014) tested this theory, comparing nonpartisan judicial races where the SPVO did and did not exist. The authors found that roll-off was higher where the SPVO was present, but that campaign spending partially offset this difference.

We conduct a similar test here, comparing SPVO and non-SPVO voters in roll-off for nonpartisan school board races in South Carolina during 2018 using cast vote records. For the sake of comparison, we examine cast vote records in every single nonpartisan School Board race taking place in South Carolina in a single-member district with three competing candidates. This led to a total of 17 such races in the state. Our unit of analysis is the individual voter in each of the 17 School Board races.[1]

We analyze Democrats and Republicans separately. Here, an individual is included as a Democrat or Republican based purely on their vote for governor with Republicans being those who voted for Henry McMaster in 2018 and Democrats being those who voted for James Smith. Prior research finds different patterns of roll-off and voter error among Black and white respondents (Feig, 2007, 2009). Racial polarization in South Carolina is such that a majority of votes for the Democrats were cast by Black voters, while a majority of Republican votes were from white voters.

Our independent variables of interest are whether the voters used the SPVO for their party as well as the total amount of spending by all candidates in the School Board race and an interaction term between the two. We control the total number of voters participating in the race,[2] the proportion of the race's voters voting for the Democrat for governor,[3] the margin of victory in the race between first and second place candidates,[4] and whether there was an incumbent running in the School Board race.[5] Our dependent variable is a dichotomous measure of whether the individual rolled off of the School Board race. We use a multilevel mixed linear probability model with random intercepts at the level of the contest.

Table 2. Roll-Off of Contested, Three-Candidate School Board Races Across South Carolina, 2018

	Democrats	*Republicans*
Straight party voting option	0.288*** (0.008)	0.266*** (0.007)
Total School Board spending/1,000	–0.000 (0.007)	–0.003 (0.006)
Interaction term	–0.008*** (0.001)	–0.003*** (0.001)
Proportion of district vote Dem.	–0.211 (0.152)	0.286* (0.136)
Incumbent in race	–0.055 (0.065)	0.005 (0.057)
Number of voters/1,000	0.002 (0.002)	0.002 (0.001)
Margin of victory	0.001 (0.002)	0.000 (0.002)
(Constant)	0.219 (0.115)	–0.031 (0.101)
Random effects constant	0.006** (0.002)	0.005** (0.002)
Random effects residual	0.184*** (0.001)	0.184*** (0.001)
Log likelihood	–53243.69	–39607.20
Num. obs.	96,649	69,024

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

Table 2 shows the estimates from the models, and Figure 3 plots the predicted probability of rolling off for the School Board race as a function of total campaign spending and usage of the straight party option among Democrats and Republicans. The results confirm the analysis by Bonneau and Loepp (2014) for nonpartisan judicial elections. Campaign spending is not significantly associated with roll-off among non-SPVO voters in nonpartisan School Board races across South Carolina but is associated with reduced roll-off among SPVO voters. Overall, usage of the SPVO increases roll-off. The overall pattern observed is the difference between SPVO and non-SPVO voters diminishes with increased campaign spending.

Ballot length and referendum roll-off

Respondent motivation to answer survey questions decreases with the length of the questionnaire (Heberlein and Baumgartner, 1978; Yammarino, Skinner and Childers, 1991). The more questions a respondent must answer, the lower their motivation to continue and the greater their probability of engaging in non-response or breakoff. This

[1]See the Appendix for the races included in the analysis.
The authors wish to thank Shiro Kuriwaki for introducing them to cast vote records in analysis.
[3]This is a proxy for the racial composition of the electorate, shown by Feig (2007, 2009) to influence nonpartisan roll-off.
[4]Shown to influence school board roll-off (McGregor and Lucas, 2019).
[5]Shown to lower roll-off (Vanderleeuw and Sowers, 2007).

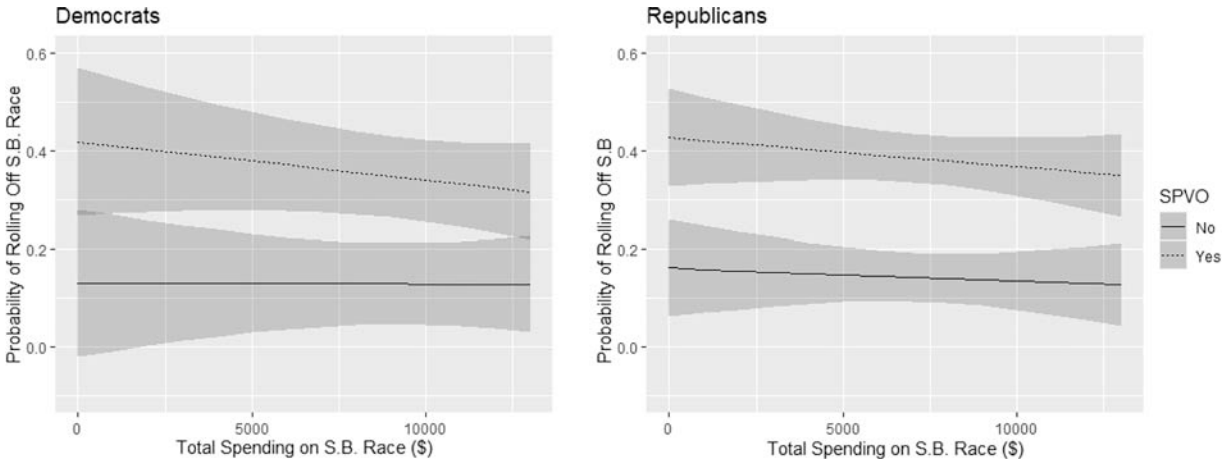

FIG. 3. Probability of School Board roll-off in South Carolina, 2018.

probability increases when the expected survey burden exceeds the actual burden (Boltz, 1993; Crawford, Couper and Lamias, 2001; Yan et al., 2011) or when the respondent's perceived progress significantly slows (Amer and Johnson, 2016; Conrad et al., 2010; Matzat, Snijders, and van der Horst, 2009). In evaluating nonpartisan roll-off during voting, we should therefore see roll-off increase with the length of the ballot and increase more among those voters using the straight party option.

However, a simple comparison of questions appearing earlier on the ballot with those appearing near the end risks confounding. Questions appearing early in the ballot tend to be for partisan office and are usually more prominent and familiar to voters compared to questions near the ballot's end. Early questions on most ballots are thus inherently more likely to be completed by the voter irrespective of their place in the order of completion.

During the 2018 general election in South Carolina, a constitutional amendment question appeared on every ballot in the state. The question proposed changing the State Superintendent of Education position from an elected one to an appointment made by the governor. Voters defeated the measure but its place on the ballot was notable: on nearly every single ballot in the state, the constitutional amendment question appeared last. Using cast vote records, we examine how many questions appeared on the ballot prior to the amendment proposal. Because different ballots, even within a county or precinct, had a variable number of offices and referenda depending on the districts the voter was located in, the constitutional amendment proposal presents us with a quasi-experiment to examine how the number of questions before an item on a ballot affects roll-off in the vote for that item.

We compare different numbers of *nonpartisan* races on the ballot. We expect that the number of nonpartisan races will matter the most on roll-off by both SPVO and non-SPVO voters given that partisan questions are already essentially completed by selection of the straight party option. In Charleston County, there is also very little variation in the number of partisan questions throughout the county compared to variation in nonpartisan questions within the county.

Of the different patterns of nonpartisan roll-off documented in the previous section, we expect that the increasing number of nonpartisan races will affect roll-off on the constitutional amendment primarily by causing SPVO voters to either roll-off *all* nonpartisan items or break off completing the nonpartisan items partway through. This pattern follows previous research on the difference between expected and actual burden (Boltz, 1993; Crawford, Couper and Lamias, 2001; Yan et al., 2011) and slowing progress in surveys (Amer and Johnson, 2016; Conrad et al., 2010; Matzat, Snijders, and van der Horst, 2009).

Our dependent variable is the manner of roll-off or completion of the constitutional amendment. It has four values: (1) completion of the constitutional amendment by the voter, (2) complete abstention from all nonpartisan races and items (including the constitutional amendment), (3) break off of completing the nonpartisan races and items partway through (defined as failure to complete at least the last two nonpartisan races and amendment question), and (4) roll-off of the amendment question and none or some of the nonpartisan races but completion of one of the last two nonpartisan races (so not break off).

Table 3. Constitutional Amendment Roll-Off and Ballot Length, Charleston County, SC

	Total roll-off	*Breakoff*	*Some roll-off*
Straight party voting option	–0.003 (0.0391)	–0.856 (0.442)	0.629 (0.582)
Number of nonpartisan offices	0.093 (0.058)	0.428*** (0.061)	–0.151 (0.084)
Interaction term	0.240*** (0.065)	0.232** (0.070)	0.035 (0.100)
Proportion African American voters in precinct	0.420* (0.163)	0.150.1 (0.276)	273*** (0.341)
Proportion voters 65+ in precinct	0.953** (0.345)	–0.800.1 (0.463)	055 (0.588)
Number of voters voting in precinct/1,000	–0.112 (0.080)	–0.126 (0.129)	–0.544** (0.209)
Straight Democratic	–0.391*** (0.065)	–0.457*** (0.106)	–0.508*** (0.092)
Straight Republican	–0.186** (0.067)	–0.531*** (0.126)	–1.091*** (0.113)
(Constant)	–5.187*** (0.390)	–7.020*** (0.455)	–4.105*** (0.483)
Log psuedolikelihood		–23522.31	
Num. obs.		108,513	

Reference category: Completed Amendment. ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

Our primary independent variables of interest are whether the voter used the straight party option, the number of nonpartisan races on the voter's ballot, and their interaction. We control for the proportion of the precinct that is Black,[6] the proportion of the precinct that is over 65 years old,[7] the size of the precinct divided by 1,000,[8] and whether the voter voted for all Democratic or Republican for all statewide offices.[9] We include robust standard errors clustered on the precinct.

Table 3 shows the estimates for the model. Figure 4 shows the predicted probability of roll-off for the constitutional amendment as a function of the usage of the SPVO and the number of nonpartisan questions on the ballot.

As predicted, the number of nonpartisan questions on the ballot is positively associated with roll-off on the last question. Also, as predicted, usage of the SPVO is associated with significantly higher levels of roll-off on the ballot question. However, there is a notable interaction of these two factors. The number of nonpartisan questions on the ballot modestly affects roll-off among voters who do not use the SPVO. It much more significantly affects roll-off among straight vote Democrats and Republicans using their party's SPVO. As predicted, the number of nonpartisan races on the ballot affects roll-off through increasing the likelihood the voter either leaves all nonpartisan items blank or breaks off completion of the items partway through.

DISCUSSION AND CONCLUSION

We leverage cast vote records to examine patterns of nonpartisan roll-off at the individual level and their relationship to the straight party option. One major contribution of the article is to show that most nonpartisan roll-off among SPVO voters is *not* a result of voter error. We find relatively few voters leave all nonpartisan items on the ballot blank, SPVO or otherwise. Thus, the greater nonpartisan roll-off observed among SPVO voters is intentional.

We use observational data here and do not randomize the use of the straight party option, therefore we urge caution in interpreting whether it exerts an independent effect on nonpartisan roll-off. Comparisons of elections where the SPVO is and is not present yield a variety of estimates of an SPVO "effect" (Bonneau and Loepp, 2014; Kritzer, 2016; Remmel and LaForge, 2021). Because we examine elections within an SPVO state, we cannot be sure differences between SPVO and non-SPVO voters are not just selection into these options. Cast vote records also lack attitudinal and demographic information related to the ballot, requiring care in interpretation.

However, our work demonstrates that SPVO and non-SPVO voters in a state with the straight party option exhibit different patterns of nonpartisan roll-off. SPVO voters are more likely to leave all nonpartisan items blank on a ballot or break off nonpartisan completion partway through as the number of nonpartisan items to be completed grows. Non-SPVO voters do not exhibit this pattern. This accords with research from survey methodology showing that slowing progress on survey completion or a task

[6]This correlates with nonpartisan roll-off (Feig, 2007, 2009).
[7]A group that is significantly more likely to roll off and make errors in voting (Herrnson et al., 2012).
[8]A measure of how long the voter may have waited and the social pressure they may have felt to vote quickly.
[9]Strong partisans generally have greater political sophistication than others, all else equal (Campbell et al., 1960).

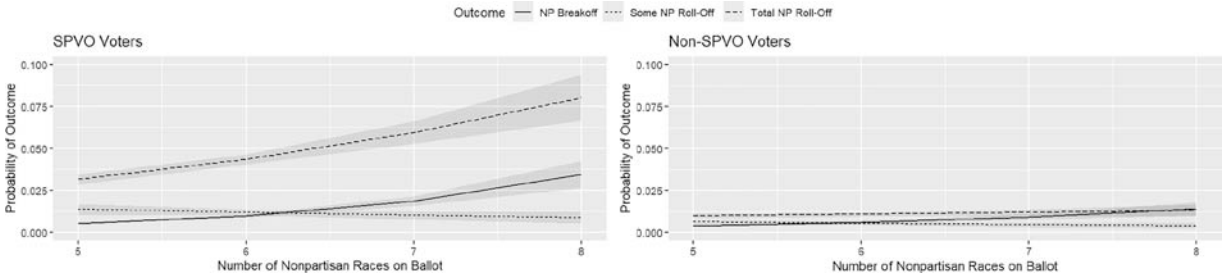

FIG. 4. Probability of constitutional amendment roll-off in Charleston County, SC.

exceeding expected effort leads to break off and abstention on questions. We also replicate the findings of Bonneau and Loepp (2014) within races in an SPVO state by finding that campaign spending partially offsets the greater roll-off of SPVO voters in voting for a nonpartisan School Board.

Additional avenues for research remain in determining what effect the SPVO option itself exerts on the difference between SPVO and non-SPVO voters compared with these two ballot choices as a selection effect. Future researchers should also confirm the connections between the patterns of SPVO and non-SPVO nonpartisan roll-off observed here and the social scientific theories proposed. Lacking random assignment and data that includes attitudinal and demographic data, our ability to connect the two is limited in the present article.

Overall, we suggest that the straight party option serves as another example of the role electoral institutions play in shaping human behavior. The fact that different voters may respond differently to these institutions raises normative concerns about representation. If the straight party option prompts roll-off among some voters but not others, it may well play a role in distorting representation.

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(*Appendix follows*→)

Appendix A. Nonpartisan Races Used in the Article.

Table A1. School Board Races Used in "Ballot Length and Referendum Roll-Off" Section

County	*Race*	*# of ED votes*
Beaufort	School Board District 7	4,732
Beaufort	School Board District 8	5,260
Florence	School Board District 1 Seat 6	3,532
Florence	School Board District 1 Seat 8	2,448
Florence	School Board District 1 Seat 9	1,789
Lancaster	School Board District 5	2,881
Laurens	School Board District 55 Seat 2	1,841
Marlboro	School Board District 3	954*
Orangeburg	School Board District 3	2,596
Orangeburg	School Board District 4	2,975
Orangeburg	School Board District 5	2,834
Orangeburg	School Board District 7	3,099
Richland	School Board District 1 At Large	44,652
Sumter	School Board District 2	3,004
Union	School Board District 8	729
York	York School District Trustee At Large	8,270
York	Rock Hill School District Trustee At Large	29,389

Table A2. Nonpartisan Races and Ballot Questions in Charleston County in 2018

Name	*Vote for*	*# of ED votes*
Constitutional Amendment	1	103,620
Soil and Water District Commission	2	94,865
Charleston School Board East Cooper	2	131,614
Charleston School Board North Area	1	70,416
Charleston School Board West Ashley	1	72,195
Constituent School Board St. James Santee District 1	4	3,231
Constituent School Board Moultrie At Large District 2	1	17,549
Constituent School Board Town of Mount Pleasant District 2	1	18,680
Constituent School Board James Island District 3	3	18,493
Constituent School Board Cooper River Area 1 District 4	1	10,361
Constituent School Board Cooper River Area 2 District 4	1	10,329
Constituent School Board Cooper River Area 3 District 4	1	10,306
Constituent School Board St. Johns District 9	4	15,844
Constituent School Board St. Andrews District 10.3	3	30,093
Constituent School Board City of Charleston District 20.4	4	14,436
Constituent School Board St. Pauls District 23	3	7,773
Public Service District James Island	4	14,646
Public Service District St. Andrews At Large	1	2,130
Public Service District St. Andrews Section 1	1	2,304
Public Service District St. Andrews Section 2	1	2,386