The Straight Party Voting Option and Voter Roll-Off in Aiken County's 2018 General Election

A Technical Report by the University of South Carolina Aiken's Social Sciences and Business Research Lab

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The analyses and opinions contained herein are solely those of the author and do not necessarily represent University of South Carolina Aiken.

EXECUTIVE SUMMARY

- South Carolina is one of nine states that currently use the straight party voting option which allows voters to automatically mark the ballot for all candidates of a particular party.
- However, researchers have long been concerned that the straight party option induces satisficing and especially roll-off (failure to vote) in down-ballot nonpartisan races and referenda.
- Aggregate (precinct) analysis of Aiken in 2018 shows that precincts with a greater proportion of straight party voters also had higher roll-off for the referenda held in 2018.
- Ballot image logs show that those voting straight party are significantly more likely to roll-off on referenda in Aiken in 2018.
- Aiken's nonpartisan School Board races are especially prone to this phenomenon. Almost 30% of voters using the straight party option did not vote in competitive School Board races compared to only 8.6% of those who did *not* use the straight party option.
- These differences among straight party option and non-straight party option voters in roll-off persist even when controlling for various demographic and attitudinal characteristics.
- Strong partisans are more likely to use the SPVO. However, as the political information of the strong partisans increase, they become less likely to vote SPVO. The opposite effect of political information is observed among all other voters.
- The causal chain linking strong partisanship to the use of the SPVO and the use of the SPVO to roll-off is confirmed via mediation analysis that shows the SPVO allows a significant indirect effect of the strong partisanship on voters' failure to cast a ballot.

INTRODUCTION

South Carolina is one of nine states that currently use the straight party or "straight ticket" voting option (SPVO) (NCSL 2018). Once widespread, the popularity of the SPVO has been declining; since 1994, twelve states have abolished the SPVO, often for political reasons (ibid). Like many electoral institutions and rules (e.g. voter ID, early voting), policymakers have attached a number of assumptions to the SPVO and the candidates and parties it is believed to advantage in various situations. Thus, battles to either eliminate or establish the SPVO in a state have frequently ended up in court and the procedure remains contentious (Kimball et al. 2002).

In South Carolina, the SPVO remains a relic of the Democratic Party's dominance in the state. The now dominant Republicans in South Carolina have not made serious efforts to repeal SPVO, perhaps because the plurality of South Carolinians now identify with or lean towards the Republican Party. In South Carolina elections, the SPVO allows voters to initially choose to vote "straight party" for any qualifying party. This initial selection marks the ballot as voting for all candidates for office affiliated with the party selected. The voter then reviews and may modify the ballot as she wishes, including voting for any nonpartisan offices or referenda which are *not* marked by the selection of the SPVO. After this, the voter may submit the ballot and complete the voting process.

Theories about the effect of the SPVO on election outcomes are rooted in basic assumptions within political science about voters and how they behave. The most influential school of thought on voters, the so-called "Michigan School" (e.g. Downs 1957; Campbell et al. 1960) posits that American voters are generally poorly informed about politics and the positions held by candidates, especially candidates for "down-ballot" offices (e.g. "lower" offices that typically receive little attention). The vast majority of voters are unfamiliar with every single candidate that they encounter in the voting booth and the positions held by those candidates. However, voters use a number of heuristics or shortcuts to help them figure out which candidate to vote for. The most important such heuristic is the party of the candidate. Especially as the Democratic and Republican Parties have polarized in recent decades, simply knowing whether a candidate is a Democrat or Republican is a reliable source of information about the policy views and ideology of that candidate.

One interpretation of the SPVO is that the option to vote straight party allows voters to more easily make use of the partisan heuristic, especially in races down-ballot where the voter may have little information about the candidates. In keeping with this interpretation, scholars have found that the SPVO is associated with reduced roll-off (failure to vote) in down-ballot partisan offices such as county council and state legislature (Bonneau and Loepp 2014; Kimball et al. 2002) especially among African-Americans (Feig 2007).

The present study is agnostic on the question of whether voting based purely on party is better than not casting a vote at all. There does at least appear to be evidence, however, that the SPVO gets more voters participating in partisan races. One of the early conclusions of the aforementioned Michigan School that has not been seriously challenged in subsequent years is even though voting based on party misses a great deal of information, it is nonetheless a crude but effective way for voters to affect government in ways they want.

At the same time, one might also look at the SPVO as an instrument of satisficing. The concept of satisficing is derived from survey research (e.g. Krosnick et al. 1996) and refers to the tendency of some individuals who are completing a task that requires cognitive effort (such as a survey) using various shortcuts and cues to avoid applying their full mental effort to completing

the task. It is easy to see how one might view the SPVO as facilitating satisficing as it allows a vote for most offices with a single choice.

However, as previously noted, the SPVO does not cast votes for all offices on the ballot. In many places, some offices, such as School Board, are nonpartisan. In addition, referenda and ballot initiatives are not voted for when the SPVO choice is made as these are not "partisan" in the same sense an elected office is. Thus, after selecting the SPVO, the voter must go through the ballot and cast votes in these additional races.

This has led researchers to speculate that many voters utilizing the SPVO may skip these races either out of ignorance or satisficing and cast no vote for these nonpartisan offices or referenda. Evidence from a variety of contexts indicates that the SPVO is associated with greater roll-off in nonpartisan elections (Bonneau and Loepp 2014; Chertoff and Robinson 2012; Kritzer 2016).

METHODS

However, the vast majority of evidence martialed in the above studies utilizes aggregate level election returns (relationships observed in precincts or an election rather than voters). An association is found between roll-off in elections that utilize the SPVO and those that do not without seeing if the undervotes come from voters who use the SPVO. This is known as the ecological fallacy (Robinson 1950).

The present study seeks to improve on these methods using two new sources of data that report *individual-level* information about voters, including their roll-off, selection of the SPVO and even demographic characteristics. These individual-level data will be paired with some basic aggregate statistics precinct election returns in Aiken County in 2018 to generate a picture of the effect of SPVO on roll-off in Aiken County in 2018.

Ballot Image Logs

One source of data available to us is unique to South Carolina elections. As part of an initiative towards transparency and auditing the electronic voting systems employed by the state, the South Carolina Board of Elections makes available "ballot image logs" which are records of each ballot cast in South Carolina. What makes ballot image logs useful as opposed to aggregate data, is that the logs provide full de-identified records of each individual ballot. Thus, we can see, for example, how many people who voted for one party for governor voted for that same party for State House at the level of the voter rather than making guesses. The data are de-identified from individual voters but allow us to examine questions such as our present inquiry into the relationship between the SPVO and roll-off in referenda and other nonpartisan races.

Exit Poll

Continuing a long-running tradition in Aiken County, the USCA Social Sciences and Business Research Lab conducted a countywide exit poll of Aiken County on Election Day 2018. Exact procedures for the poll are available on the USCA SSBRL website. However, the exit poll asked questions regarding vote for the nonpartisan Penny Tax referendum as well as whether voters voted using the SPVO and various demographic factors. These data are especially useful in separating the effect of choosing the SPVO for a party from demographic factors related to voting SPVO. Controlling for these factors allows us to isolate the effect of the SPVO independent of other things it may be correlated with.

ROLL-OFF ON AIKEN REFERENDA—AGGREGATE PRECINCT DATA

Before examining the individual-level data, it is worth examining whether the relationship observed in previous research on the SPVO-nonpartisan roll-off relationship can be observed in Aiken County in 2018 with aggregate data. To do so, I computed the proportion of voters in each of Aiken's election precincts who voted SPVO, as well as the proportion who voted SPVO Democratic and SPVO Republican. These quantities served as my independent variables and I wished to ascertain whether the proportion of a precinct using the SPVO affected roll-off for the Penny Tax and the State Constitutional Amendment 1. This was done with simple linear regression models in Table 1.

Table 1: Effect of SPVO Proportion on Proportion Roll-Off in Aiken Precincts

	Aiken Penny Tax Roll-Off				**State Constitutional Amendment 1 Roll-Off**			
	Coeff (SE)	***p*-value**	**Coeff (SE)**	***p*-value**	**Coeff (SE)**	***p*-value**	**Coeff (SE)**	***p*-value**
Proportion SPVO	0.223 (0.025)	0.000	- -	-	0.238 (0.035)	0.000	- -	-
Proportion SPVO Democrat	- -	-	0.225 (0.029)	0.000	- -	-	0.221 (0.041)	0.000
Proportion SPVO Republican	- -	-	0.214 (0.042)	0.000	- -	-	0.191 (0.058)	0.002
Constant	-0.089 (0.017)	0.000	-0.083 (0.023)	0.000	-0.093 (0.023)	0.000	-0.067 (0.032)	0.046
Number of Observations	84		84		84		84	
Adjusted R^2	0.48		0.46		0.35		0.31	

Table 1 indicates a strong relationship between SPVO proportion and roll-off proportion in referenda among Aiken's precincts in 2018. All of the coefficients are positive and statistically significant for the SPVO variables, indicating that an increase in the proportion of the precinct choosing the SPVO is associated with an increase in roll-off in the both the Penny Tax and Constitutional Amendment 1. Figures 1 and 2 plot each precinct's proportion of SPVO voters on the x-axis versus roll-off for the Penny Tax and Amendment 1 (respectively) on the y-axis. In both cases a strong positive relationship is apparent; the greater the proportion of the precinct using the SPVO, the more precinct voters rolled-off.

Figure 1: Penny Tax Roll-Off

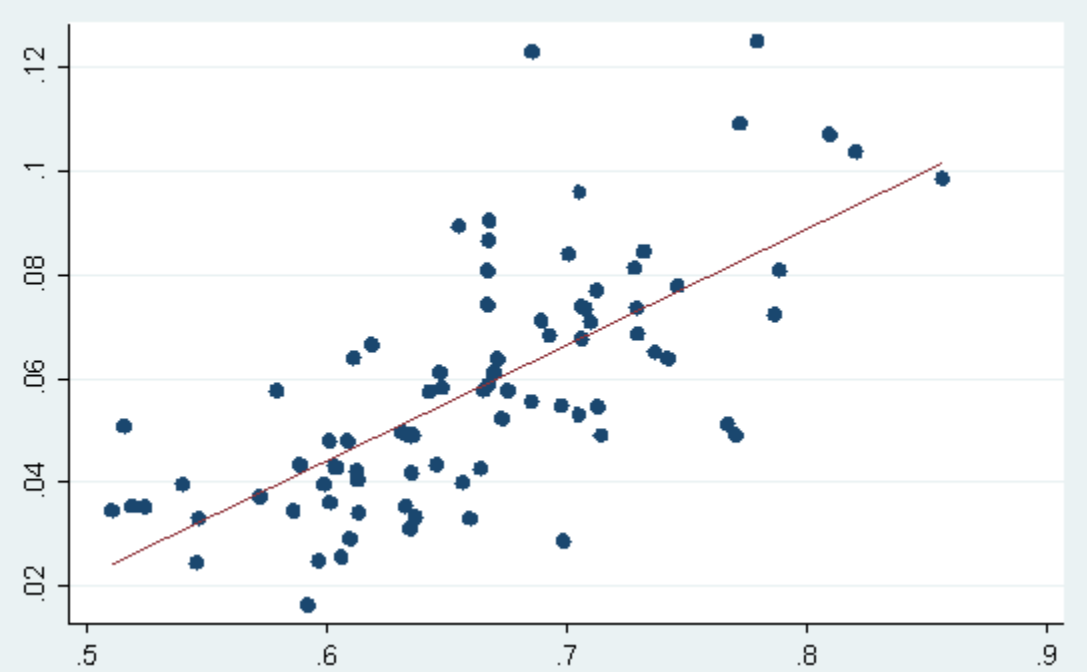
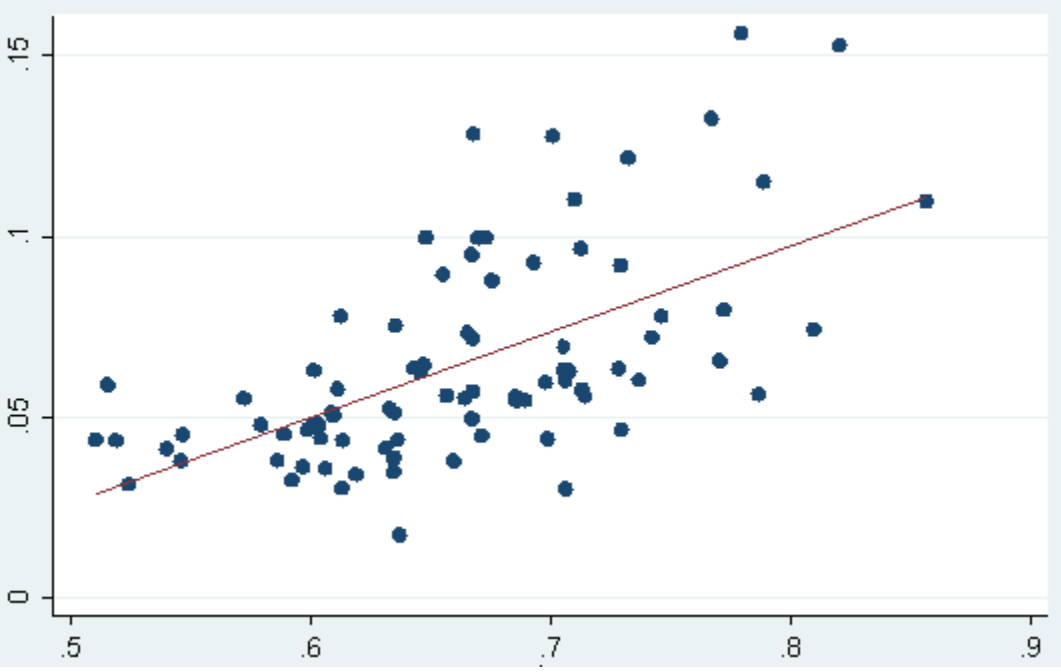


Figure 2: Constitutional Amendment 1 Roll-Off



INDIVIDUAL LEVEL BALLOT IMAGE LOG DATA

While the aggregate data are clearly suggestive of the effect of the SPVO on roll-off in nonpartisan races, aggregate data are vulnerable to the so-called "ecological fallacy". Most importantly, while we see that precincts with more SPVO voters also have more voters rolling-off, we do not know with 100% certainty that the voters rolling-off are the SPVO voters. To know this, we need a source of data that provides *individual-level* voter information. In other words, we need to see that whether the voters who roll-off are using the SPVO. The ballot image log data publicly provided by the South Carolina Election Commission for auditing purposes provide individual-level data on vote choice. While the ballots are de-identified, we are able to see each voter's choices together for every ballot in Aiken County. This allows us to identify whether voters using the SPVO are also rolling off. These data also allow us to see if individuals voting straight party for Democrats versus Republicans are more likely to roll-off.

Roll-Off in Referenda

We initially look at the two Aiken referenda that we examined using aggregate data above. Comparing SPVO voters who roll-off versus non-SPVO voters who rolled-off reveals a striking pattern in Table 2. For the Penny Tax, almost 8% of SPVO voters rolled compared to less than 3% of non-SPVO voters. For the Constitutional Amendment 1, over 9% of SPVO voters compared to 2% of non-SPVO voters.

Table 2: Individual Level Roll-off in Aiken County Referenda

Penny Tax	
SPVO Roll-Off	7.74%
Non-SPVO Roll-Off	2.70%
Constitutional Amendment 1	
SPVO Roll-Off	9.02%
Non-SPVO Roll-Off	2.20%

Examining the roll-off by those voting SPVO Democratic versus Republican reveals interesting differences in Table 3. For both the Penny Tax and Constitutional Amendment 1, a greater proportion of SPVO Democrats rolled-off compared to SPVO Republicans. One might be inclined to interpret this as saying that SPVO-induced roll-off hurts Democratic outcomes more than Republican outcomes. However, two caveats should be kept in mind. First, a significantly greater number of individuals in Aiken County vote SPVO Republican compared to SPVO Democrat. Thus, in absolute terms more SPVO Republicans than SPVO Democrats rolled-off in the Penny Tax (1504 vs. 1422) and Amendment 1 (1785 vs. 1645) in 2018. Also, it is highly likely that other factors such as education and socioeconomic status more broadly affect whether a voter rolls-off in nonpartisan races. One might suppose, for example, that older voters might be less likely to roll-off. These variables are almost certainly correlated with whether someone chooses to vote SPVO Republican vs. SPVO Democrat. Therefore, when we compare the percentage roll-off for the two SPVO parties it is important to remember that this is not an unbiased estimate of the effect of voting SPVO Republican and Democrat but also includes the demographics of the two groups. Later in this report, these demographics will be statistically controlled for and the direct effect of the SPVO choice will be estimated.

Table 3: Individual Level Roll-off in Aiken County Referenda by Party

Penny Tax	
SPVO Democratic	9.96%
SPVO Republican	6.36%
Constitutional Amendment 1	
SPVO Democratic	11.52%
SPVO Republican	7.54%

School Board

Perhaps the most important nonpartisan races taking place in Aiken County are those elections for School Board. While partisanship may creep into the School Board races sometimes, these races are officially nonpartisan and candidates do not run on party. Significantly, this means that when a voter chooses the SPVO they must go back through the ballot and still vote in the School Board race. In 2018, a number of competitive School Board races were run. None of these races was a landslide victory for the winner and in one case an incumbent lost by fewer than fifty votes. Thus, it is in our interest to examine how the SPVO may have potentially affected roll-off in these School Board races.

School Board races present a methodological complication for us because School Board districts often split precincts. Because the SC ballot image logs only identify the precinct that the ballot was cast in and tell us nothing about what School Board district the voter resided in, this makes accurately measuring roll-off difficult. School Board elections in Aiken County are staggered and so if a precinct is split between a School Board district that had a race in 2018 and one that did not, we cannot distinguish between roll-off by voter in an actual School Board district race and a voter simply residing in the precinct whose district that had no race this cycle.

For this reason, I have elected only to examine precincts where one or more School Board races was taking place among the entire precinct's voters. The 2018 Aiken School Board races also give us an interesting opportunity to examine the effect of the SPVO on roll-off in a number of different election scenarios. Three of the districts up for election were relatively conventional races between two candidates on the ballot (2^{nd}, 3^{rd}, 6^{th}). However, in another district, a candidate was running uncontested (7^{th}) and in still another district, two candidates did not appear on the ballot but instead ran write-in campaigns (5^{th}). We thus have the opportunity to observe not only how the SPVO affects roll-off in contested nonpartisan races but also roll-off in uncontested races and the rare situation of no candidates appearing on the ballot.

Table 4 indicates the difference between voters exercising the SPVO and those who did not in roll-off for School Board races under these three scenarios. Once again, it is important to remember that these statistics do not include all voters living in a district with a School Board race in 2018 but only those that did not live in a precinct split between two School Board districts of different types.

Table 4: Individual Level Roll-Off in Aiken County School Board Races

Contested School Board Race with Candidates on Ballot	
SPVO Roll-Off	29.90%
Non-SPVO Roll-Off	8.65%
Uncontested School Board Race with Candidate on Ballot	
SPVO Roll-Off	34.45%
Non-SPVO Roll-Off	19.10%
Contested School Board Race with Write-In	
SPVO Roll-Off	91.17%
Non-SPVO Roll-Off	82.00%

It is clear that a major difference exists between those who use the SPVO and those who do not in their likelihood to roll-off. Even in the case of a competitive election between two candidates on the ballot, almost 30% of voters using the SPVO will leave the question blank, more than three times the number of those not using the SPVO. An interesting point one can take from Table 4 is that it provides the most obvious evidence yet that the SPVO serves as a satisficing mechanism. While a greater proportion of voters in uncontested districts roll-off while using the SPVO compared to those in contested districts (34.45% vs. 29.90%), the gap between those using the SPVO and those who do not is much larger in the contested race. In the uncontested race, both those using the SPVO and those who do not roll-off, likely reasoning that their vote makes no difference or casting a protest vote against the lone candidate. The fact that such a large divergence exists between SPVO and non-SPVO voters in contested races indicates that the two types of voters perceive this type of race differently from one other.

As with the referenda, I also evaluated the percentage of SPVO Democrats and SPVO Republicans rolling off for Aiken School Board. The numbers for the contested races are generally fairly similar between the parties and it is once again important to remember that because there are many more SPVO Republicans than Democrats, a higher Democratic percentage in Table 5 may not necessarily mean that more Democrats are rolling-off. The larger percentage of Republicans crossing over in the uncontested 7th School Board District race is probably an artifact of that contest—the incumbent and only candidate on the ballot in 2018 is Rosemary English who is associated with the "Democratic" faction of the School Board. Thus many Republicans may choose not to vote for her out of protest.

Table 5: Individual Level Roll-Off in Aiken County School Board Races by Party

Contested School Board Race with Candidates on Ballot	
SPVO Democratic	33.23%
SPVO Republican	28.69%
Uncontested School Board Race with Candidate on Ballot	
SPVO Democratic	31.05%
SPVO Republican	45.23%
Contested School Board Race with Write-In	
SPVO Democratic	90.50%
SPVO Republican	91.65%

A MODEL OF SPVO ROLL-OFF

As I mentioned in the previous section, it is important when looking at the raw percentage of SPVO voters rolling-off as well as when examining differences between SPVO Democrats and Republicans to remember that these numbers do not control for various demographic and attitudinal characteristics.

In the language of statistics, the choice to vote SPVO Democratic or SPVO Republican is not a random one. It is most likely a function of factors such as socioeconomic status, political sophistication and various other individual characteristics that may or may not also affect whether or not someone chooses to roll-off. At the extreme it is possible that choosing the SPVO does not actually lead to higher roll-off itself. Instead, those who choose the SPVO are naturally more predisposed to roll-off. In statistics this is referred to as a *spurious relationship.*

However, there is reason to believe that the link between the SPVO and nonpartisan roll-off is not a spurious relationship. Most importantly, political science research dating back to the dawn of systematic study of voter behavior (e.g. Campbell et al. 1960) finds that strong partisans are generally more knowledgeable about politics than independents and more willing and enthusiastic participants. Thus, it is unlikely that strong partisans choosing the SPVO would be naturally more predisposed to roll-off in nonpartisan contests.

At the same time, it is worth attempting to isolate the effect of the SPVO itself versus other demographic and attitudinal characteristics that may be associated with it. Because ballot image logs are de-identified and anonymous, they are unsuited for this purpose. However, in the 2018 election, the USCA SSBRL conducted a large exit poll of Aiken County. In addition to collecting data on questions such as demographics, political knowledge and attitudes, the survey asked voters if they selected the SPVO and how they voted on the Aiken Penny Tax (including whether they rolled off). This will allow us to isolate the statistical effect of the SPVO by controlling for other voter characteristics.

My dependent variable is dichotomous—coded a 1 if the voter rolled-off the Penny Tax and 0 if they voted (I am not for the moment concerned with how those who cast ballots voted only whether they voted or rolled-off). My primary independent variables are dummy variables coding for whether the voter was a SPVO Democratic or Republican voter. In addition, I control for gender, ethnicity, age, education, political sophistication and local news consumption. I use a logistic regression model, the estimates of which appear in Table 6.

Table 6: Model of Penny Tax Roll-Off

		Aiken Penny Tax Roll-Off	
		Coeff (SE)	***p*-value**
SPVO (Ref. Cat: *Did not use SPVO***)**	*Democratic SPVO*	1.621	0.005
		(0.581)	
	Republican SPVO	0.975	0.028
		(0.443)	
Gender	*Female*	-0.403	0.269
		(0.365)	
Age	*Age in Years/100*	-4.833	0.000
		(1.049)	
College	*College Graduate*	-0.445	0.181
		(0.333)	
Ethnicity (Ref. Cat: *White***)**	*Black*	0.456	0.328
		(0.466)	
	Other	2.675	0.001
		(0.830)	
Political Sophistication	*Political Sophistication (0 – 2)*	0.430	0.120
		(0.276)	
Local News	*Consume Local News*	-0.637	0.101
		(0.389)	
Constant	*Constant*	-0.973	0.073
		(0.543)	
Number of Observations		622	
Log Pseudolikelihood		-126.546	

Even when controlling for the various demographic, attitudinal and behavioral factors, it is still apparent that choosing the SPVO Democratic or Republican leads to a greater likelihood of rolling off in the Penny Tax vote in 2018. Notably, the coefficient is larger for the Democratic SPVO but both coefficients are positive and statistically significant even when controlling for other factors. Because the coefficients of a logit model do not have an intuitive interpretation, Table 7 shows the probability of rolling off on the Penny Tax for SPVO D and R voters as well those not choosing the SPVO. To obtain these estimates, the probability of rolling-off was estimated and averaged for the three SPVO possibilities for all individuals in the sample and averaged.

Table 7: Predicted Probabilities of Rolling-Off in Penny Tax

	Probability of Rolling Off	Upper Confidence Interval	Lower Confidence Interval
Democratic SPVO	0.118	0.170	0.066
Republican SPVO	0.071	0.105	0.039
No SPVO Chosen	0.032	0.053	0.011

According to Table 7, the "average" voter choosing the Democratic SPVO has an 11.8% chance of rolling-off the Penny Tax, choosing the Republican SPVO they have a 7.1% probability and not choosing any SPVO they have only a 3.2% chance. These numbers accord reasonably well with the ballot image logs, indicating that the demographic and attitudinal characteristics do not significantly distort the original estimates of the SPVO effect.

WHO VOTES STRAIGHT PARTY OPTION?

A question that is completely unexplored in the political science literature (largely due to the lack of individual-level survey data on this question) is *who* chooses to utilize the SPVO. Is the decision to vote SPVO simply correlated to one's partisanship or is it also predicated on an individual's desire to satisfice or their need to utilize the partisan heuristic to compensate for a paucity of information available about the candidates down-ballot? Exploring this question can allow us to understand the purpose the SPVO serves to the electorate and perhaps also help explains the patterns of roll-off we have observed.

As previously mentioned, questions about voter behavior, including use of the SPVO were asked on the 2018 Aiken County Exit Poll conducted by the USCA Social Sciences Business and Research Lab. Thus, we can use these data to make inferences about the individuals that choose to use the SPVO and perhaps make guesses at why they do so.

The dependent variable for this analysis is whether the voter completed the exit poll survey used the SPVO. Initially, I am not concerned with whether a voter used the Democratic or Republican SPVO, only that they chose some method of straight party option. An easy hypothesis to establish is that strong partisans (i.e. those describing themselves as "Strong" Democrats or Republicans) will be more likely to use the SPVO. It is well-established that strong partisans are much less likely than other voters to split tickets and so the SPVO may make sense for someone who, because of their strong affinity for the party, intends to vote for all of its candidates.

However, I am also interested in the effect of political information and "political sophistication". Political sophistication describes the level of information individual voters have about politics and government as well as the complexity of their internal belief system that dictates their political behavior. While the exit poll does not include questions on the individual's belief system, it does include several factual questions designed to gauge voters' level of political information. These questions were used to assign voters a score from 0 to 2 depending on how many questions the voter got correct. This measure of political information was interacted with the strong partisanship because it is possible that political information affects the likelihood of strong and non-strong voters to use the SPVO differently. Finally, I control for whether the voter is a Democrat or Republican, their ethnicity, gender and age, their education and whether they consume local news.

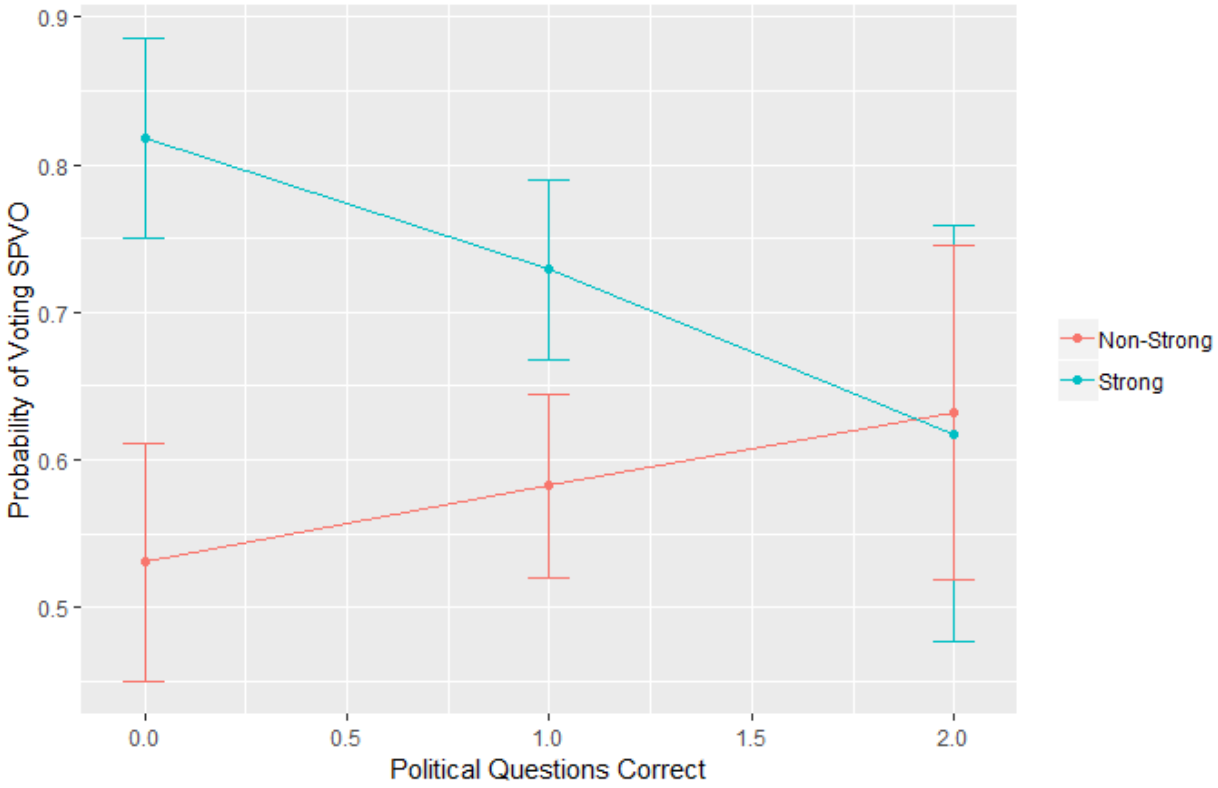
This model is shown in Table 8. The strong partisanship variable is positive and statistically significant, indicating that strong partisans are more likely to use the SPVO. However, the interaction variable is statistically significant and negative. This indicates that for politically sophisticated voters (those who got the factual questions correct), there is relatively little difference between strong and non-strong partisans in their likelihood of using the SPVO. On the other hand, for voters who did not know the political questions, being a strong partisan is a major incentive towards using the SPVO. Because these logistic regression models are difficult to interpret intuitively, I plot the probability of using the SPVO for strong and non-strong partisans of various levels of political sophistication in Figure 3.

Table 8: Model of Choosing the SPVO

		SPVO	
		Coeff (SE)	***p*-value**
Strong	*Strong Partisan*	1.438	0.000
		(0.299)	
Political Sophistication	*Political Sophistication (0 – 2)*	0.220	0.209
		(0.175)	
Strong*PS	*Interaction Term*	-0.752	0.008
		(0.285)	
Gender	*Female*	0.109	0.557
		(0.186)	
Age	*Age in Years*	0.011	0.034
		(0.005)	
College	*College Graduate*	-0.166	0.375
		(0.187)	
Ethnicity	*Black*	0.562	0.034
(Ref. Cat: *White***)**		(0.266)	
	Other	-0.489	0.380
		(0.558)	
Local News	*Consume Local News*	-0.401	0.076
		(0.226)	
Party Id	*Democrat*	0.782	0.008
(Ref Cat.:		(0.296)	
*Ind.***)**	*Republican*	0.613	0.026
		(0.276)	
Constant	*Constant*	-0.808	0.051
		(0.415)	
Number of Observations		632	
Log Pseudolikelihood		-368.024	

Figure 3 shows that the effect of political information on the probability of strong partisans and other voters using the SPVO operate essentially in reverse. Among voters who have low levels of political information (got 0 questions correct), strong partisans have a very high probability of using the SPVO (>80%) but as the level of political information increases among strong partisans, they are less likely to use the SPVO. Among non-partisans, increasing political information triggers an *increase* in the likelihood of voting SPVO.

Figure 3: Probability of Voting SPVO



As previously mentioned, there is a relative lack of individual-level information that can be used to help us figure out who uses the SPVO. We can, for example, use aggregate election returns such as the percentage of voters in a precinct that vote SPVO and the percentage of that precinct that is, say, African-American, to make guesses about who chooses the SPVO. However, this is once again vulnerable to the ecological fallacy: we don't know for certain that the African-Americans in the districts are the ones using the SPVO even if districts with more African-Americans also have more SPVO voters. To truly figure out who uses the SPVO, we need to be able to examine voters at the *individual level* and see, for example, whether the African-Americans are the one the SPVO. I wish to make use of an additional source of individual level information to confirm my conclusions about the interaction of political information and strong partisanship at the national level.

I make use of the 2018 Cooperative Congressional Election Study (CCES). The CCES is a large collaborative project conducted by a consortium of research universities that is conducted every federal general election as an internet survey. In addition to learning a wealth of information about how a large group of voters think and behave, the CCES also records their demographics, allowing political scientists to examine how demographic characteristics, attitudes and behavior are all related.

The 2018 CCES was the first major national election survey to ask voters whether they used the SPVO or not. Thus it makes sense to compare the results of Aiken to the 2018 CCES to see whether the patterns observed in who chooses to use the SPVO in Aiken County are also observed among Americans more generally.

Wherever possible, I attempt to use the same variables in the CCES analysis as used in the Aiken exit poll model in Table 8. I take advantage of the greater number of political knowledge questions appearing in the 2018 CCES to create a 0 to 4 scale of political information

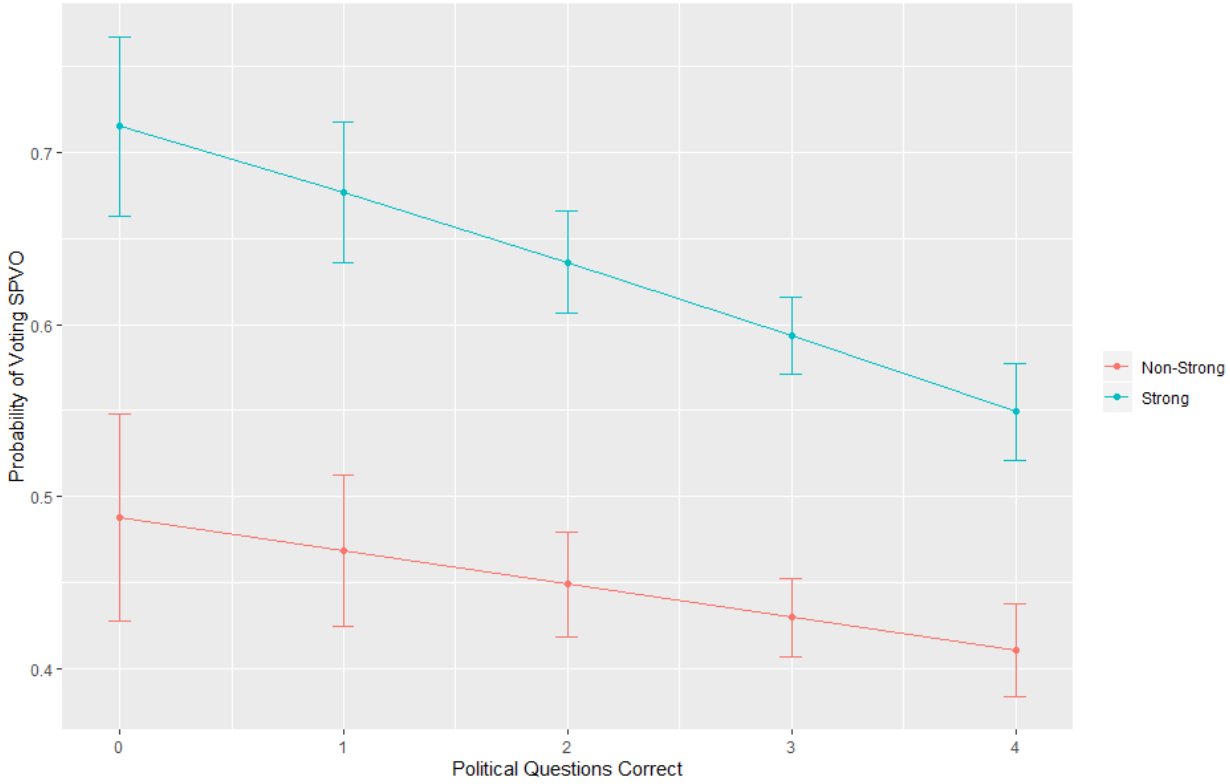
(Voters in the 2018 CCES are asked to recall which party controls the US House and Senate as well as the voter's State House and State Senate. The number of questions correct form the basis for my political information variable here). As before, my dependent variable is whether the voter used the SPVO and I control for partisanship, demographics, and political news interest (rather than consumption). Results appear in Table 9.

Table 8: Model of Choosing the SPVO, 2018 CCES

		SPVO	
		Coeff (SE)	***p*-value**
Strong	*Strong Partisan*	0.990	0.000
		(0.181)	
Political Sophistication	*Political Sophistication (0 – 4)*	-0.080	0.031
		(0.037)	
Strong*PS	*Interaction Term*	-0.104	0.046
		(0.052)	
Gender	*Female*	-0.022	0.742
		(0.068)	
Age	*Age in Years*	0.010	0.000
		(0.002)	
College	*College Graduate*	-0.338	0.000
		(0.062)	
Ethnicity	*Black*	0.371	0.007
(Ref. Cat: *White***)**		(0.139)	
	Other	0.340	0.005
		(0.120)	
Local News	*Consume Local News*	0.128	0.108
		(0.080)	
Party Id	*Democrat*	0.405	0.001
(Ref Cat.:		(0.124)	
*Ind.***)**	*Republican*	0.481	0.000
		(0.123)	
Constant	*Constant*	-0.977	0.000
		(0.221)	
Number of Observations		8,493	
Log Pseudolikelihood		-5056.066	

The coefficients for strong partisanship, the political sophistication variable and their interaction are all statistically significant and in the expected direction. Figure 4 plots the predicted probability of voting SPVO given the strength of an individual's partisanship as well as their political knowledge. Once again, we find that those most likely vote SPVO are strong who partisanships with lower levels of political information. As political information increases among strong partisans, their probability of voting SPVO declines.

Figure 4: Probability of Voting SPVO, 2018 CCES



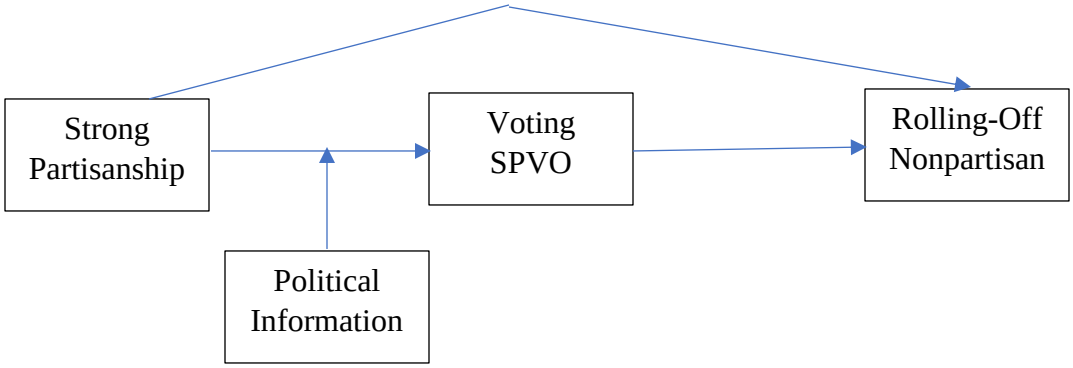
CAUSAL ANALYSIS OF ROLL-OFF IN PENNY TAX AND SCHOOL BOARD

This report has used a variety of data to carefully build a case that the SPVO affects voting in nonpartisan races negatively. I find in 2018 Aiken County elections a relationship between voting straight party option and rolling off of nonpartisan referenda at both the individual and aggregate level. In addition, I illustrate a large effect of straight party option on failing to vote in School Board races in Aiken. I show that the relationship between voting party option and rolling-off the Penny Tax persists even when controlling for various demographic and attitudinal factors. Finally, I use exit poll data to show that the voter's decision to vote straight party option is based on the strength of their partisanship—interacting with their knowledge about politics. Voters who were strong partisans but were unable to answer some political knowledge questions were most likely of all respondents to vote straight party option. This probability of voting SPVO declined as the level of knowledge among the strong partisans increased.

What I have yet to do in this report is build a case that explicitly connects partisanship and political knowledge to voting straight party option and then to rolling off. Statistically I have explored each of these individual relationships but have yet to take them together. This is important, once again, because spurious relationships may exist. We know, for example, that voters who have less political information (especially strong partisans) are more likely to vote straight party option. It is possible, even with some basic statistical controls, that the roll-off with observe among straight party option voters may be therefore due to these voters naturally knowing less about nonpartisan and lower ballot offices and being less likely to cast a ballot here. It is therefore necessary for us to connect all of the pieces together.

In the language of statistics and social science, we are working to establish *causality*—we are attempting to show that one thing affects something else and in this case attempting to claim that one thing is affecting something else through a third factor that is termed a causal mechanism. For clarity, I diagram our proposed relationship in Figure 5.

Figure 5: Proposed Causal Relationship



Essentially, I theorize that strong partisanship affects the decision to vote SPVO. However, at the same time this relationship is complicated by the role political information plays in the decision to cast a SPVO vote. Once the voter chooses to vote using the straight party option, they are then more likely to roll-off in nonpartisan races. Notice that this means that there are two ways for a voter's strong partisanship to affect whether or not they roll-off. As previously mentioned, independent of political information or the SPVO, research has shown that strong partisans are more interested in politics and more willing to participate. Therefore, just being a strong partisan may make the voter *less* likely to roll-off. However, because strong partisans are more likely to vote SPVO, they may also, under certain circumstances be *more* likely to roll off. We need to clarify the relationship between these things more clearly.

I use the methods developed by Imai et al. (2011) to establish mediation and isolate the direct effect of the independent variable (the line connecting strong partisanship directly to non-partisan roll-off) from the indirect effect of the independent variable (the pathway connecting strong partisanship and nonpartisan roll-off *through* voting SPVO). Because political information plays a role in this indirect pathway, we say that political information is *moderating* this relationship.

My primary goal for this analysis is to see whether the indirect pathway through choosing the SPVO leads to significantly more nonpartisan roll-off even when taking the direct pathway into account. An important second goal is to see whether the effect of the indirect pathway diminishes among voters with large amounts of political information. In plain English, I am interested in whether the SPVO leads to nonpartisan roll-off, *even among well informed voters.* If I find that even well-informed voters roll-off it will provide more evidence that the SPVO facilitates satisficing among strong partisans.

For this analysis, I use the 2018 Aiken County Exit Poll conducted by USCA. The first analysis will look at the indirect effect of strong partisanship (moderated by political information) on roll-off in the Penny Tax vote due to using the SPVO. This uses a large representative sample of Aiken County. In addition, I also use the six precincts I sampled in School Board Districts 3 and 6 to gauge roll-off in two contested School Board races. In addition to the variables in the model in Figure 5, I also control for ethnicity, age, education and gender.

The model for roll-off in the Penny Tax is shown in Table 9 and the model for roll-off in School Board is in Table 10.

Table 9: Mediation Model for Penny Tax Roll-Off

		Value	95% CI		*p*-value
For Uninformed Voters					
Direct Effect	*Strong Partisanship*	0.0373	-0.0410	0.1102	0.334
Indirect Effect	*SPVO*	0.0314	0.0100	0.0621	0.008
Total Effect	*Strong Partisanship*	0.0687	-0.0059	0.1512	0.080
Proportion Mediated		0.4182	-2.1395	2.5013	0.088
For Informed Voters					
Direct Effect	*Strong Partisanship*	-0.0649	-0.1240	0.0000	0.048
Indirect Effect	*SPVO*	0.0082	-0.0001	0.0201	0.064
Total Effect	*Strong Partisanship*	-0.0567	-0.1171	0.0102	0.068
Proportion Mediated		-0.1231	-1.0201	0.3023	0.128
Test For Difference Between Uninformed and Informed					
Direct Effect	*Strong Partisanship*	0.0960	0.0041	0.1899	0.038
Indirect Effect	*SPVO*	0.0309	0.0035	0.0647	0.032
Number of Observations		632			

The values in Tables 9 and 10 take some care to interpret. The numbers depicted under "Value" and the corresponding confidence intervals, represent the change in probability of rolling off when one goes from being a non-strong partisan to a strong partisan. The total effect represents the percentage change between those who are strong partisans and those who are not in rolling off but does not decompose this quantity into the direct and indirect effects. Also, due to the fact political information is moderating the relationship, the effect of strong partisanship and its direct and indirect effect may change for informed versus uninformed partisans. First, looking at total effect for uninformed and informed voters, being a strong partisan versus a non-strong partisan exerts different effects on the likelihood of rolling off. Among the uninformed, this coefficient is positive, indicating that being a strong partisan makes uninformed voters more likely to roll-off. Among informed voters, this number is negative indicating that being a strong partisan actually makes an individual less likely to roll-off compared to a non-strong partisan.

Our quantity of interest, the indirect effect by which strong partisanship affects roll-off through usage of the SPVO shows interesting variation between uninformed and informed voters. Among uninformed voters, the value is modestly large and positive (0.0373), indicating that strong partisanship leads to 3.73% roll-off among uninformed voters just through the SPVO. This represents approximately 41.82% of the effect of strong partisanship on roll-off among uninformed partisans. Interestingly, among informed voters, the indirect of strong partisanship through the SPVO shrinks dramatically. This is hardly surprising given that the models in Tables

8 and 9 find a large gap between strong and weak partisans in using the SPVO when the voters are uninformed, compared to when the voters are informed (e.g. Figures 3 and 4). Thus, strong partisanship does not make a huge difference among the informed voters in whether they use the SPVO and roll-off.

Table 10: Mediation Model for School Board Roll-Off

		Value	95% CI		*p*-value
For Uninformed Voters					
Direct Effect	*Strong Partisanship*	-0.0214	-0.1397	0.0901	0.746
Indirect Effect	*SPVO*	0.0629	0.0191	0.1120	0.004
Total Effect	*Strong Partisanship*	0.0415	-0.0725	0.1612	0.746
Proportion Mediated		0.7817	-9.3795	15.2612	0.494
For Informed Voters					
Direct Effect	*Strong Partisanship*	-0.0629	-0.1902	0.0714	0.340
Indirect Effect	*SPVO*	0.0645	0.01823	0.1310	0.006
Total Effect	*Strong Partisanship*	0.00162	-0.1369	0.1385	0.956
Proportion Mediated		0.3536	-15.830	21.0200	0.958
Test For Difference Between Uninformed and Informed					
Direct Effect	*Strong Partisanship*	-0.0018	-0.0653	0.0609	0.944
Indirect Effect	*SPVO*	-0.0412	-0.2001	0.1091	0.574
Number of Observations		319			

For the School Board results in Table 10, we witness a similar pattern with one major difference—there is no difference between informed and uninformed voters in the indirect effect of strong partisanship via SPVO. However, in both the Penny Tax and School Board cases, we see that, especially among the uninformed, strong partisanship affects the likelihood of roll-off via strong partisans' proclivity to use the straight party option. It is not simply that SPVO are less informed, but the option itself exerts its own effect.

CONCLUSION

The straight party voting option has long been a fixture in South Carolina elections and seems to be in no danger of elimination. An argument can be made in the early 21st century that when the parties are so polarized and most Democrats and Republicans hold similar views to the rest of their party that voting based on party is a crude but nonetheless accurate way of voting for certain policy preferences and voting issues among candidates.

The analysis in the last section of this report indicates that strong partisans with low levels of political information are by far the most likely to use the SPVO. This is in keeping with the idea that voters who lack information about the candidates use party to help them choose who to vote for and that the SPVO facilitates this process. As levels of political information increase,

strong Democrats and strong Republicans become less likely to vote using the SPVO and the most informed strong Democrats and Republicans are no more likely to use the SPVO than any other voter.

However, this report also makes clear that unintended consequences exist of this electoral feature. The decision to vote SPVO is associated with a much greater likelihood of rolling-off in nonpartisan contests on the ballot. Both aggregate, ballot image and exit poll data bear out this fact. Using the capacity of ballot image logs to allow us to peer "into the ballot box", we can see a major difference between voters who vote SPVO versus non-SPVO. These differences are pronounced in referenda and grow to disturbing size in School Board races. Given that one School Board race in Aiken County in 2018 was decided by fewer than 50 votes, this feature of elections and its unintended consequences truly matters.

While the SPVO has advantages and serves an important democratic function, those who choose to cast a straight-party option ballot need to remember that they are not finished when they select the SPVO and nonpartisan races truly matter—often as much as those races at the top of the ballot.

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