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The Effect of Belief of Victory on Third-Party Vote Share: Duverger's Law & Why Evan McMullin Lost Utah in 2016

John Geilman
Brigham Young University

Honors Thesis

THE EFFECT OF BELIEF OF VICTORY ON THIRD-PARTY VOTE SHARE: DUVERGER'S LAW & WHY EVAN MCMULLIN LOST UTAH IN 2016

by

John Geilman

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Political Science Department
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Advisor: David B. Magleby
Reader: Joshua Gubler

ABSTRACT

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John Geilman

Political Science Department

Bachelor of Arts

A key reason Duverger's Law is valid is voter's belief that a third-party does not have a chance at winning an election in a "first past the post" electoral system. Duverger's Law has traditionally been explained through two reasons—a mechanical factor and a psychological factor. The mechanical factor focuses on aspects of electoral systems that work against third parties, while the psychological factor focuses on what voters think and feel about third parties. In the 2016 presidential election in the United States, voters in the state of Utah demonstrated that their perception of the electability of a third-party candidate has a substantial effect on the third-party vote share. The Utah Colleges Exit Poll surveyed Utah voters during the 2016 election, asking if they would vote for a candidate other than Hillary Clinton or Donald Trump if the voter thought a third-party candidate could win Utah.

My research indicates that if people had believed that a third-party candidate could win the state of Utah and voted for their preferred candidate, Evan McMullin

potentially could have won the state of Utah and gained 6 votes in the Electoral College. If that had happened, Trump still would have had the 270 electoral votes needed to secure the presidency, but McMullin would have been the first third-party candidate to win votes in the Electoral College since George Wallace in 1968. This finding demonstrates the importance of the psychological factor in Duverger's Law. Duverger's Law was powerful, even with two very disliked candidates from the two major parties.

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Introduction

Every year there are elections held in the United States. Thousands of offices are filled according to the will of the people. With so many different offices to fill and the wide variety of ideas, one could reasonably expect to find many political parties vying for each seat. However, there are effectively only two—the Republican Party and the Democrat Party. There are other third parties in the United States, such as the Green Party, the Constitution Party, and the Libertarian Party. There also are individuals who run as independents, like Ross Perot. These parties do not fare well and rarely win seats, especially on the national level. Why does this happen? Why do only two parties consistently win elections? The answer can be found by examining Duverger's Law.

Duverger's Law states that in a single-majority single-ballot system, like that in the United States, there will only be two competitive political parties at the same time.[1] The only exceptions to this law are during transition times, when one party is fracturing and another is coming into power (such as the Republicans and Whigs in the 1800s), and when there are very strong, ethnically-based political groups, such as in Canada and India.[2] The durability of this law was seen in the United States in the 2016 election. While Donald Trump and Hillary Clinton were historically unpopular candidates, no nationally viable third-party option arose. However, there were some third-party candidates who found limited success. Evan McMullin was one of the third-party candidates who ran against Donald Trump and Hillary Clinton. While he finished with a lower percentage of the popular vote than Gary Johnson or Jill Stein, he came the closest to winning a state—Utah, with 21.3% percent of the vote.[3]

Using unique data gathered from the Utah Colleges Exit Poll (UCEP), this thesis demonstrates how Evan McMullin could have won the state of Utah if people had voted for their preferred candidate. This finding quantitatively explains the psychological causal mechanism of Duverger's Law, something that has not been done to this extent before. This thesis begins with a literature review to provide context on Duverger's Law, describes the situation of Utah in the 2016 election, traces the methodology used to discover why Evan McMullin could have won the state of Utah, and then closes with a general discussion on the findings and implications.

Literature Review and Explanation of Duverger's Law

In the 1950s, Maurice Duverger presented what became known as Duverger's Law. He wrote "the simple-majority single-ballot system favours the two-party system. Of all the hypotheses that have been defined in this book, this approaches the most nearly perhaps to a true sociological law."[4] He qualified his claim by saying "The electoral system [simple-majority single-ballot] works in the direction of bipartism; it does not necessarily and absolutely lead to it in spite of all obstacles. The basic tendency combines with many others which attenuate it, check it, or arrest it. With these reserves we can nevertheless consider that dualism of parties is the 'brazen law'… of the simple-majority single-ballot electoral system."[5] A simple-majority single-ballot system was his term for electoral systems in which everyone has one vote and do not hold runoff elections if a candidate did not receive an absolute majority. These systems do not result in coalition governments. The ballot system he describes is the electoral system used to form the United States government.

Other political scientists had written about this same dual-party trait in a simple-majority single-ballot system before Duverger. They include Ferdinand Hermens in 1941, Herman Finer in 1949, Carl Friedrich in 1950, and V.O. Key Jr. in 1952.[6] William Riker explained why the law is named after Duverger instead of these earlier political scientists, writing that "It is customary to call the law by Duverger's name, not because he had much to do with developing it but rather because he was the first to dare to claim it was a law. The memorial honors, therefore, a trait of character as much as a scientific breakthrough."[7] Consequently, Duverger retains the fame for having come up with a prominent law in political science.

As with all significant claims, it was immediately challenged by other political scientists. Their challenges were understandable; Duverger had made a bold claim. Political science is often referred to as a "soft science" because of the lack of concrete laws. Human nature, although it has predictable tendencies, can still be erratic and is generally unquantifiable. Most social scientists acknowledge this problem and refer to those unquantifiable characteristics as "unobservables." The standard approach is to attempt various statistical methods to account for that problem.[8] For Duverger to claim that this tendency was a "brazen law" was seen as particularly extraordinary, and not in a good way. These political scientists then held the law up to the cold light of examination. As time went on, the most successful attack was done by political scientists who contrasted the examples of Canada and India. According to Kenneth Benoit,

> [both countries have] single-member district plurality electoral systems but both supporting more than two parties… Conducting the most systematic review (up to his time) of evidence for and against Duverger's law, Rae (1971) found that Canada

offered regular exceptions…Rae suggested a revision to Duverger's law, asserting that 'plurality formulae are always associated with two party competition except where strong local minority parties exist' (Rae, 1971, 95). Subsequent attempts to 'amend' the laws have tended to do so by offering similar qualifications of conditions, or by weakening the categorical language suggesting universal applicability.[9]

While Duverger later "claimed in a 1986 essay that he had not intended for his 'law' to have the deterministic significance later attributed to it," he clearly had made a stir in the political science community and enshrined a law that still stands with only a few tacked-on qualifications.[10] For those who live in a simple-majority single-ballot system it is important to understand why this law works. Elected officials and citizens both need to know the causal mechanism behind the law to fully understand the effects that Duverger's Law has on elections. Duverger wrote,

[that this law] is itself the result of two factors working together: a mechanical factor and a psychological factor. The mechanical factor consists in the 'under-representation of the third, i.e. the weakest party, its percentages of seats being inferior to its percentage of the poll…The psychological factor is ambiguous in the same way. In cases where there are three parties operating under the simple-majority single-ballot system the electors soon realize that their votes are wasted if they continue to give them to the third-party: whence their natural tendency to transfer their vote to the less evil of its two adversaries in order to prevent the success of the greater evil.[11]

These two factors—the mechanical and the psychological—are the reasons that Duverger's Law stands. Both aspects are important and create Duverger's Law as we know it.

Mechanical Factor

Duverger points out that there is a mechanical factor that plays a role in limiting the power of third parties. The mechanical aspect is the rules and conditions that set up the electoral structure in a manner unfavorable to third parties. There are lots of obstacles that limit the electability of third-party candidates. There are laws requiring a certain number of signatures to be placed on the ballot.[12] Signature gathering requires funding and time, two things that third parties often lack. There often are filing fees for candidates, something that consultants warn potential third-party candidates about.[13] States have different filing deadlines, creating a logistical nightmare of keeping track of the efforts in different states, as well as limiting the access of candidates who don't enter the race soon enough. These externalities from election laws make it hard for third parties to appear on the ballot to run against the major two parties. These obstacles all hurt Evan McMullin during his candidacy. He missed the deadline for filing in Pennsylvania (August 1) and Wisconsin (August 2) and consequently did not appear on the ballots for those two states. He also did not make it onto the Michigan ballot. These three states are all swing states. His presence on the ballot could have swung the results in those states. In some states he got on the ballots after getting 5,000 signatures, such as in Kentucky and Virginia. All in all,

McMullin only got on the ballots of 11 states, making it hard to be a viable nationwide candidate.[14]

There also are obstacles that aren't codified into law, but are certainly part of the election structure. These include things such as needing to have a certain percent of the population supporting you to qualify for nationally televised debates and finding enough donors to fund both TV ads and a ground game. Another obstacle is receiving insufficient media attention—the media in a horse race fashion focuses their coverage on the top two candidates, limiting the amount of unearned media that third-party candidates receive.

The simple-majority single-ballot itself makes it difficult for third-party candidates to succeed. In a "first past the post" system, voters naturally coalesce around two parties. While some view this behavior as psychological, it is clear that these are the mechanical effects of the system itself.[15] These mechanical effects include the effects that the seats available in a district and the magnitude of seats in the national assembly have on encouraging or dissuading third party candidates, something that goes beyond the obstacles mentioned above. These mechanical effects have been studied by many political scientists, including Douglas Rae, Michael Gallagher, Arend Lijphart, and Gary Cox.[16] They all agree with Duverger that mechanical effects play an important role in the duality of electoral systems with a winner take all system. Other political scientists, such as Leslie Lipson, disagreed with the findings of mechanical effects and claimed that the number of parties had stabilized due to social equilibrium.[17] This theory has largely fallen out of favor, as demonstrated by the extensive, and ongoing,

research of Riker, Octavio Neto and Gary Cox, and Benoit.[18] Those political scientists catalogue the history of research into Duverger's Law in their literature reviews, going all the way up to 2006 in the case of Benoit.

Political scientists have tried to create predictive models and equations on the number of competitive parties that will be present in any given country. Rein Taagepera and Matthew Shubart argue that number of seats in a district and the overall assembly size have the most impact on determining the amount of effective parties in a country.[19]

Psychological Factor

The psychological factor focuses on why voters make the decisions that they do, differing from the mechanical factor which focuses on setting the structural conditions for third parties to fail. The idea of a psychological factor was strongly attacked by some political scientists when Duverger introduced his law. John Grumm in 1958 wrote that "the examination of the voting statistics of these countries supplies almost no evidence of the existence of the hypothetical 'psychological' factor."[20]

Other political scientists have not dismissed it so readily and have tried to study the psychological factor behind Duverger's Law. They have met with numerous problems as they have attempted to study the actual chances third-party candidates have in an election. One problem consistently encountered was the lack of quality data on the subject. This was the problem Grumm experienced in his analysis in 1958.

Political scientists have come up with creative ways to get around this problem. Some rely on qualitative observations and hypothetical theorems, such as Roger Myerson and Robert Weber.[21] Others have used cultural cleavages as their psychological factor to determine the number of political parties that a country can hold. In 1997, Neto and Cox found that the number of cultural cleavages, combined with the electoral structure, are indicative of the number of parties.[22] This supported earlier findings by Peter Ordeshook and Olga Shvetsova.[23]

Still others have speculated that "the greater the distance between the voter and the nearest major party candidate, the more likely it is that the voter will look for a third-party alternative."[24] Political scientists who follow this school of thought look at voter satisfaction with candidates as they create their models of voter behavior.[25] Others, such as Paul Abramson, use "feeling thermometers" of favorability instead of satisfaction to determine which candidate should have fared the best. Abramson, using his feeling thermometer method, concluded that "at least some voters responded to the wasted vote argument [but that] the mechanical effects of the plurality-vote-win system had more of an impact than its psychological effects."[26] His findings, as with others using similar methods, are full of caveats because they use data that only indirectly measures the electability of third-party candidates.

Contributions of this Thesis

With the cry for a third-party that is so often repeated, particularly in the current politically polarized climate in the United States, why has no group successfully formed a competitive third-party?[27] It cannot be a completely structural thing, as the literature review has demonstrated. There is no law against a third-party being formed and many have been formed throughout history. Looking for other reasons, there must be a psychological factor that affirms Duverger's Law. The clear majority of Americans do not know what Duverger's Law is but have observed it for decades with their voting behavior. This indicates that people have a similar mentality about voting for third parties, a mentality that causes them to shy away from voting from third-party candidates. My thesis focuses on this psychological factor. I asked voters "Would you vote for a candidate other than Hillary Clinton or Donald Trump if you thought they had a chance to get the most votes in Utah?" A similar question about third-party preferences, in a campaign with a serious third-party contender, has only been asked once before. During a Voter Research and Surveys (VRS) exit poll in the 1992 election, Gordon S. Black, then CEO of the Gordon S. Black Corporation (which was later merged with Harris Insights and Analytics) asked 3,900 people if they would have voted for Ross Perot if they thought he had a chance to win. He found that Perot would have won the election with 40% of the vote.[28] Black did not use this to explain Duverger's Law. He concluded that the improper polling had led the public to believe Perot did not have a chance, which is why people did not vote for him. Gordon Black used this conclusion to chastise the pre-election

pollsters across the country and never did anything more with the data.[29] His finding hints at the psychological aspect, but the connection was never explicitly made. His data and survey methods are not publicly available.

Because his data and survey methods are not publicly available, it is hard to hold up his findings as conclusive proof of the psychological effect of Duverger's Law. For the reasons stated in the sections above, it is hard to quantitatively test this aspect of Duverger's Law. Because of my question in the UCEP, the strength of the methods used to survey voters, and the simplicity of my analysis, I have a unique data set that quantitatively proves the impact of the psychological factor on Duverger's Law.

Context of the 2016 Election in Utah

The election of 2016 was one of the most unusual elections that the United States has ever seen because Hillary Clinton and Donald Trump were viewed more unfavorably than any other set of presidential candidates since Gallup began tracking candidate favorability ratings in 1956. On the week leading up to Election Day, Gallup reported that Clinton's 52% unfavorable score was the second worse favorability score ever by a candidate, beaten only by Trump's 61% unfavorable score.[30] Many people were repelled by the personality and behavior of Donald Trump, the Republican candidate. He regularly made offensive comments about Mexicans, Muslims, and women. He also ran on a populist, protectionist platform that differed from traditional Republican stances, causing many Republicans to shy away from voting for him. On the other hand, Hillary Clinton was seen by many as a deeply flawed candidate. Her decades in the public eye had led to

an accumulation of a lot of baggage, including her comments about young black males as 'super-predators,' her mishandling of classified emails, the Benghazi incident, and her marriage to former president Bill Clinton. The unpopularity of these candidates pushed voters into an uncomfortable zone where many voters in the middle felt they had to pick a candidate whose baggage they felt most comfortable with.

In Utah the cross pressure was even more extreme. The majority of people in the state are members of the Church of Jesus Christ of Latter-day Saints (also referred to as the Mormon or LDS Church). Traditionally, most members of the LDS Church lean to the right of the political spectrum. This has led to Utah voting Republican in presidential elections. In fact, the last time a Democrat won Utah's electoral votes was in 1964. In addition to a tendency to vote Republican, Mormons are known for being a moral people.[31] One of their Articles of Faith states "We believe in being honest, true, chaste, benevolent, virtuous, and in doing good to all men…"[32] Donald Trump's behavior, both before and after he became the Republican nominee, did not reflect those virtues. However, most people in the state of Utah did not want to vote for Hillary Clinton. The Clinton image was never good in the state of Utah, due to a mix of their political views, the immorality of Bill Clinton while he was in office, the executive decision by then President Clinton to create the Grand Staircase-Escalante National Monument, and the scandals that marred Hillary Clinton's time as Secretary of State.[33]

This frustration was felt not just by average Utah voters, but by Utah's elected officials, such as Governor Gary Herbert, Senator Mike Lee, and Representatives Jason Chaffetz, Mia Love, and Chris Stewart. This frustration boiled over after the Access Hollywood tapes with Trump's extremely lewd and graphic comments about women

were reported in the news in October 2016.[34] Upon hearing Trump's recorded comments, prominent Utahns led the way in withdrawing their endorsements and asking him to step aside. Governor Gary Herbert was the "first elected official to pull his endorsement from Donald Trump."[35] Representative Jason Chaffetz was the first member of the US House of Representatives to withdraw his endorsement of Donald Trump, stating "I'm out. I can no longer in good conscience endorse this person for president… I can't tell the good people of Utah that I endorse a person who acts like this."[36] Former Utah governor and 2012 presidential candidate Jon Huntsman also withdrew his support, as did Utah's favorite son Mitt Romney.[37] The backlash against Trump in Utah was so intense that "the Deseret News, a media outlet owned by the Church of Jesus Christ of Latter Day Saints, broke with an 80-year tradition of refraining from presidential endorsements to publish an editorial calling on Mr. Trump to step aside."[38]

The majority of voters could not choose which candidate they felt less uncomfortable with! They didn't want to go against generations of Republican voting but didn't feel comfortable with Trump's morality. Then, if they were wavering on voting for Trump, they were faced with the prospect of voting for Clinton, a daunting prospect that was a tough pill to swallow for many voters. Donald Trump's running mate, Michael Pence, reminded Utahns of what was at stake, promising that they would fight against abortion, make it easier for religions to speak in the public forum, and appoint a conservative, pro-life justice to the Supreme Court.[39]

They also lacked clear cues from their elected officials about which candidates they should support. While Senator Orrin Hatch and Representative Rob Bishop continued to support Donald Trump's candidacy, they were fairly muted in their support

as they both strongly disapproved of Trump's statements towards women.[40] Utahns also received mixed cues from other elected officials. Governor Herbert declared that he would not vote for Donald Trump or Hillary Clinton, but did not say who he would vote for. Representative Jason Chaffetz said he would not endorse Trump but would vote for him because "HRC is that bad."[41] Caught in this cross pressure, many people felt unsure what to do, and neighbors began having discussions, both in person and via social media, about choosing the "lesser of two evils."[42] With no party agreement or statewide consensus about which candidate felt like the "lesser of two evils," many Utahns felt trapped, frustrated with a system that had led them to having to choose between two candidates that they did not like.

In August 2016, a potential alternative arose. Evan McMullin, a member of the LDS faith and a graduate of Utah-based Brigham Young University, announced his candidacy. He ran as an Independent, emphasizing that he did not have the baggage that Trump and Clinton were perceived as having. His talking point that resonated best with people was "I'm not Trump or Clinton!" He presented himself as a moderate who was frustrated with the candidates that the primary system had created. In practice, he was a typical Republican. He had been the chief policy director to the House Republican Conference and worked with GOP heavyweights like Paul Ryan and John Boehner. He also had been a member of the CIA, which boosted his appeal in the patriotic state of Utah.[43] Evan McMullin became a much discussed third option in the state of Utah and people wondered if they should vote for him so that they would feel comfortable with their vote. McMullin's candidacy gained ground and multiple polls suggested that he was either tied with Trump or within striking distance of winning Utah.[44] McMullin's

popularity surge in Utah amazed national observers who were stunned that a third-party candidate was putting together a competitive campaign.

This is the context of Utah leading up to Election Day in 2016. Utah had always been a state that Republicans could count on for electoral votes in the presidential race. However, due to the cross pressures Utahns felt as they decided between Donald Trump and Hillary Clinton, there was no certainty on how Utah would vote, a stark difference to decades of previous presidential elections.

Methodology

I participated in the 2016 Utah Colleges Exit Poll (UCEP). The Utah Colleges Exit Poll has been run since 1982 and has been the most accurate exit poll in the state of Utah. It has been referred to both as "the gold standard of polling" and as the "Cadillac of exit polling" by Fritz Scheuren, former head of the American Statistics Association.[45] The UCEP is run by Professor David Magleby of Brigham Young University. He teaches the classes of students that plan the exit poll, including writing the poll itself, creating the statistical model of how the state of Utah will be sampled, recruiting and training volunteer student pollsters, assigning the pollsters to Election Day locations, inputting the data, and solving crises that invariably arise on Election Day itself. All of this is done in conjunction with other colleges and universities in the state of Utah. In 2016, this included Brigham Young University, the University of Utah, Utah Valley University, Utah State University, Weber State University, Southern Utah University, and Dixie State University. The UCEP also worked in conjunction with the Lieutenant Governor's Office of the State of Utah. All told, there were approximately 2400 volunteers that participated

as pollsters on Election Day, which gives an idea of the magnitude of the Utah Colleges Exit Poll.[46]

Dr. Magleby explained how the sampling was done in his paper to the American Political Science Association in 2017. He wrote,

The sample is a multi-mode stratified random sample of Utah Voters designed to represent the population of voters in each of Utah's four congressional districts. The sample is not representative of state legislative districts and not all counties are in the sample… The modes of the sample were a series of random samples of early and by-mail voters drawn from the list of voters whose ballots had been returned to our sample counties. They were contacted by postcard asking them to go online and complete the poll, and to the extent we could access phone numbers for these samples multiple attempts were made to contact these voters by telephone. Our Election Day sample was stratified at the congressional district and county levels, and for in-person voting counties the voting places were randomly selected (using a probability proportional to size (PPS) method) as was the sample of voters (using an interval method). For vote-by-mail counties we erred on the side of including all vote centers in the Salt Lake, Davis, Weber, and Cache counties.[47] … Sampling weights are applied to account for the PPS sampling design.[48]

These sampling weights were done by Professor Dan Williams and some of his statistic students that were involved with the Exit Poll. My study uses this weighted data to ensure accuracy of the findings across the state of Utah.

The wording of the third-party question was "Would you vote for a candidate other than Hillary Clinton or Donald Trump if you thought they had a chance to get the

most votes in Utah?" The answers were "Yes, No, or Don't Know." To maximize the questions that could be asked in the Exit Poll while minimizing survey fatigue by those responding, we decided to use four different forms—white, green, yellow, and blue. Each respondent only received one of the four forms. While many of the questions were the same, such as demographic questions and their votes for their specific races, other academic questions, like mine, only appeared on one form. Mine appeared on the blue form.

Our pollsters were given specific instructions. If they asked a person to participate in our voluntary poll and the individual declined, our pollsters were to fill out a survey form that included the time of contact and a few facts about the individual who had just turned down the survey. These "nonresponse" forms were included in the total n of the survey to ensure that there was no systematic bias in non-responses. Including those nonresponses to the survey, 51,269 people were surveyed in the 2016 Utah Colleges Exit Poll. I dropped all the nonresponses which left me with 31,778 responses. From those 31,778 responses, I dropped all the nonresponses to those who did not answer my question on the blue form. This eliminated individuals who were given the white, green, and yellow forms, as well as individuals who did answer my question on the blue form. I also dropped individuals who did not record who they voted for in the presidential race. This left me with 7,747 people in my subsample.

While this appears to be a lot of drops of data points, there are reasons for these drops. I cannot run tests on individual responses for people's views of third-party candidates if they did not specify their views on third-party candidates. As such, all the drops were done to narrow in on the specific subset of people who had responded to my

question. This narrowing in process eliminated three-quarters of those who had participated in the Utah Colleges Exit Poll and over four-fifths of the total people surveyed.

Theoretically, these drops make sense. When exit polling is occurring, a necessary assumption is made by the pollsters that there is no systematic non-response bias. To be positive that there was no systematic non-response bias, I used a dataset that was weighted in the weeks after the election to accurately reflect the final vote totals of the state of Utah. This weighting was done so that political scientists would be able to use the results of the Exit Poll after the election for projects like this.

The next question is whether or not it is appropriate to drop all the other forms as I created my subset sample. The blue form was given out to every fourth person surveyed, and each person surveyed was chosen based on a preset interval. Because the blue form was given to individuals who were randomly chosen, the blue form theoretically represents an accurate sub-sample of the entire sample.

Two of the key assumptions that my thesis rests on are that a) the survey was properly done and that b) my subsample is representative of the sample as a whole. The statistics professor responsible for weighting this dataset, Dan Williams of BYU, wrote that the data was weighted to make it representative of Utah's ten most populous counties. He also wrote that "What we have found is that the difference in excluding the least populated counties affects the vote totals only very minimally - not enough to cause concern that our data estimates particularly on the vote percentage estimates would not be accurate."[49] This weighting method, in addition to the proper survey methodology, ensures that our sample represents an accurate view of Utah voters.

I also statistically validated the representativeness of my subsample (the sample I used after all the drops) by comparing that subsample to the rest of the sample. Using STATA, I generated means and confidence intervals for a variety of demographic characteristics for my subsample and for the other respondents to the survey.[50] I examined the 95% confidence intervals to ensure that there was overlap. The 95% confidence intervals on "Other" for Party ID do not line up. This is not much of a problem because on every other demographic variable the confidence intervals overlap, meaning that p values would be greater than .05 on every other variable when comparing the subset to the rest of the sample. This strengthens my case that my subsample is representative of the sample as a whole. To see these 95% confidence intervals, please refer to Appendix B.

In summary, my subsample does not include respondents who did not fill out the blue form (which we know was random) and people who did not answer that question but did fill out the rest of the blue form (which we have to assume was unsystematic, especially since there is no reason to think that it was systematic). I also dropped those who did not say who they voted for in the presidential race. These drops were statistically appropriate and my subsample still represents the state of Utah.

After all those drops, I have 7,747 responses to that question, which is a large number of respondents. This subsample is the group that I used to examine the strength of Duverger's Law.

Findings and Discussion

The Conflicted Voters

Table 1 shows the distribution of presidential votes from the sample of people who filled out the blue form and answered my question.

Table 1- Voters from Survey

Candidate	Survey Vote Percentages
Donald Trump	40% WINNER
Hillary Clinton	31%
Gary Johnson	4%
Evan McMullin	21%
Someone else	3%
Don't remember	.4%
Did not vote	.6%
	100%

I created a new variable to pull out the voters who voted for Trump or Clinton but preferred a third-party candidate. I coded the variable so that an individual would be marked as a 1 if they had voted for Trump but would have voted for a third party if they

thought the third-party candidates had a chance of winning. This created a category of Trump voters who would have changed their vote. For Clinton voters, I coded the variable so that an individual would be marked as a 2 if they had voted for Clinton but preferred a third-party candidate. This created a category of Clinton voters who would have changed their vote if they had believed their preferred choice could win. When these individuals marked as a 1 or 2 are summed up, they are the total of voters who voted for Clinton and Trump but would have voted for a third candidate, assuming that third-party candidate was electable. I could have made them both the same number but I wanted them coded differently because they had acted differently in which mainstream candidate they had voted for.

After isolating the Trump voters who preferred McMullin but didn't think McMullin could win (who I will refer to as conflicted Trump voters), I found there were 1,210 voters who would have changed their vote. After isolating the Clinton voters who didn't think a third-party candidate could win. I found there were 860 Clinton voters who preferred a third-party candidate but would have changed their vote (who I will refer to as conflicted Clinton voters). These were surprisingly large numbers. Clearly a large number of voters wanted to defect from their candidates but had not done so. Table 2 shows what happens to the total vote shares of Trump and Clinton in the presidential race if, hypothetically, their conflicted voters decided to not vote for them.

Table 2- Support Gained from Conflicted Voters

	Trump Total Vote Share	Clinton Total Vote Share
With Conflicted Voters	40%	31%
Without Conflicted Voters	24%	20%

Clinton and Trump both picked up a large number of voters who would have voted for someone else if they thought the other candidate could win. The fact that they had so many conflicted voters voting for them is a testament to the strength of Duverger's Law. Even when voters felt a strong dislike for both candidates, they still chose one or the other instead of voting for a third-party candidate. They did not believe a third-party candidate could win and consequently did not vote for a third-party candidate. This validates the psychological factor Duverger pointed to as being an integral part of his law.

The Feelings Thermometer

One of the assumptions that these findings of a severely diminished vote share for Trump and Clinton rest on is that voters who indicated that they would vote for an electable third-party would actually do so. If they would have done what they said, then it

is completely appropriate to remove their votes from their chosen candidate and reallocate their vote to a third-party candidate's vote share for this analysis. This section examines the likelihood that conflicted voters would actually have voted for a third-party candidate. Their feelings towards McMullin are the basis for analysis in this section for two reasons. First, McMullin was the most popular third-party candidate in the state of Utah and it is natural to assume more of the Republican votes would have gone to him than to other third-party candidates. His popularity is shown by the fact that he had been tied with Trump and Clinton in many of the polls right before the election.[51] He lost by a significantly larger margin than polls had shown in the weeks leading up to the election, which this data indicates is because voters decided that he did not have a chance to win in Utah. The second reason is that data on feelings towards Johnson and Stein were not gathered by the UCEP, which is a limitation of this study. It is therefore unknown which third-party candidate conflicted Clinton voters would have preferred.

This necessary assumption that people who indicated that they would have voted for an electable third-party candidate, such as McMullin, is strengthened by looking at the feelings of voters towards Trump, Clinton, and McMullin. One of the other questions on the UCEP asked how voters viewed Donald Trump, Hillary Clinton, and Evan McMullin. Using the categories of conflicted and non-conflicted voters, I compared the feelings between the groups that they have towards their preferred candidate and towards Evan McMullin. If the conflicted voters who responded that they would vote for a third-party candidate view McMullin more favorably than their chosen candidate (Trump or Clinton), they are more likely to have actually voted for McMullin if they believed he could win. Their answers, aggregated by groups, are below.

Table 3- Feelings of Voters Towards Trump, Clinton, and McMullin[52]

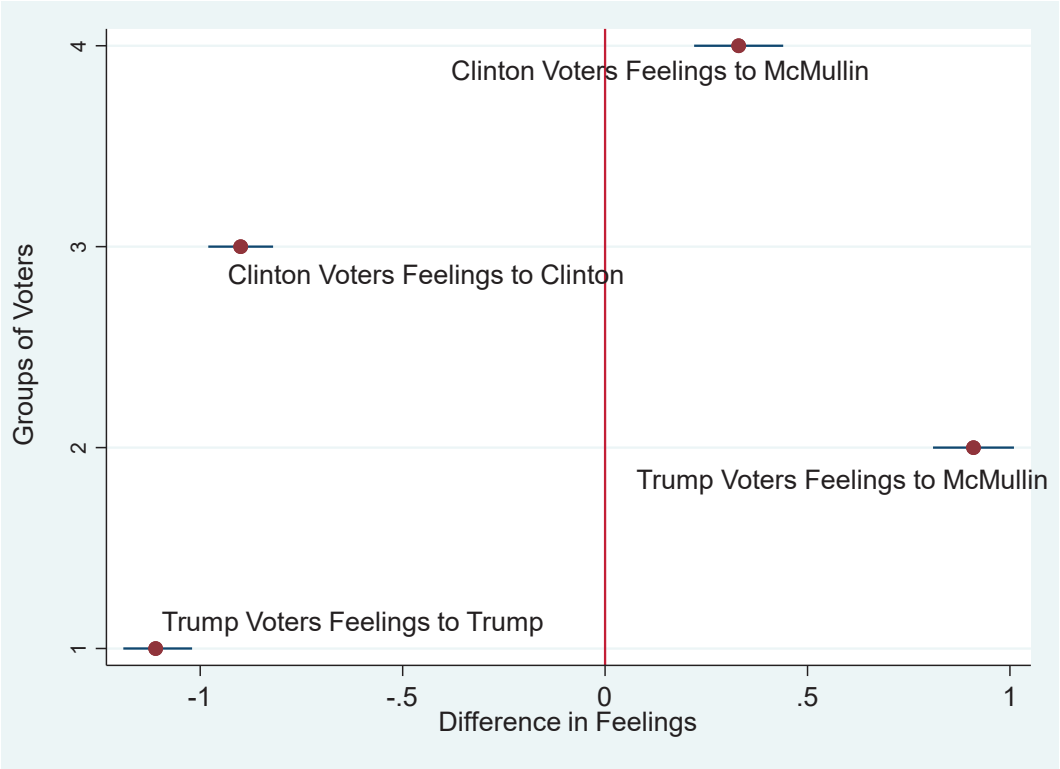
	All Trump Voters	All Clinton Voters	All McMullin Voters	Non-Conflicted Trump Voters	Conflicted Trump Voters	Non-Conflicted Clinton Voters	Conflicted Clinton Voters
n	3,108	2,403	1,587	1,898	1,210	1,543	860
Mean Feelings towards Trump	3.448	1.087	1.391	3.833	2.838	1.084	1.09
Median Feelings towards Trump	3	1	1	4	3	1	1
Standard Deviation, Feelings towards Trump	1.202	0.392	0.701	1.118	1.072	0.392	0.392
Mean Feelings towards Clinton	1.111	3.737	1.372	1.088	1.146	4.034	3.206
Median Feelings towards Clinton	1	4	1	1	1	4	3
Standard Deviation, Feelings towards Clinton	0.439	.991	0.728	0.394	0.653	0.877	0.963
Mean Feelings towards McMullin	2.625	2.665	4.114	2.322	3.128	2.564	2.846
Median Feelings Towards McMullin	3	3	4	2	3	3	3
Standard Deviation, Feelings towards McMullin	1.230	1.055	0.787	1.187	1.131	1.037	1.065

There are stark differences between conflicted Trump voters and non-conflicted Trump voters. Non-conflicted Trump voters had a mean feeling of 3.833 towards Trump, while conflicted Trump voters had a mean feeling of 2.838. This is a large difference, a difference which is statistically significant with a p value of less than .001. There is also a significant difference between non-conflicted Trump voters and conflicted Trump voters feelings towards McMullin. Non-conflicted Trump voters had a mean feeling of 2.322 towards McMullin, while conflicted Trump voters had a mean feeling of 3.128. This large difference also has a p value of less than .001. This indicates that conflicted Trump voters viewed McMullin as an acceptable alternative to Trump, strengthening my claim that they would have actually voted for McMullin if they thought he had a chance to win Utah.

These findings are also consistent when comparing the mean feelings of non-conflicted Clinton voters and conflicted Clinton voters. Non-conflicted Clinton voters had a mean feeling of 4.034 towards Clinton, while conflicted Clinton voters had a mean feeling of 3.206. The p value of that difference in means is less than .001. When comparing the two groups feelings towards McMullin, non-conflicted Clinton voters had a mean feeling of 2.564, while conflicted Clinton voters had a mean feeling of 2.846. This is also statistically significant, with a p value of less than .05. When comparing the mean feelings of conflicted Clinton voters between McMullin and Clinton, conflicted Clinton voters did feel more favorably towards Clinton than they did towards McMullin. However, that difference in the means is less, and the medians are the same. This difference can be explained by McMullin's de facto status as a Republican and would have a few different policy preferences than some conflicted Clinton voters. Because the

difference is so small and is explainable, it still is realistic that at least some conflicted Clinton voters would have voted for a third-party candidate. This was demonstrated in the feelings thermometer apportionment method. These differences between conflicted and non-conflicted voters are shown in the following figure.

Figure 1- The Difference of Mean Feelings That Conflicted and Non-Conflicted Voters Have Towards Their Chosen Candidate and to Evan McMullin



This figure illustrates the differences that conflicted voters feel compared to non-conflicted voters. On the top line, we see the difference of conflicted Clinton voters and non-conflicted Clinton voters to McMullin. The other labels explain which groups the difference of means and confidence intervals are for. A point along the zero line would indicate that conflicted and non-conflicted voters felt the same way about a candidate. When the point and its confidence interval are on the negative side of the chart, it

indicates that conflicted voters feel less favorable towards the candidate than the non-conflicted voters. Conversely, when the point and its confidence interval are on the positive side of the chart, the conflicted voters had a more favorable view of the candidate than the non-conflicted voters.

Figure 1 demonstrates that conflicted Trump voters had significantly lower views of Trump than non-conflicted Trump voters did (Group 1). The second point shows that conflicted Trump voters had higher views of McMullin than non-conflicted Trump voters did (Group 2). Groups 3 and 4 demonstrate similar findings for Clinton voters views on their chosen candidate and McMullin. Because there is such a strong difference in feelings between conflicted Trump voters and non-conflicted Trump voters both of their views on their chosen candidate and the most popular alternative (McMullin), it is likely that those conflicted voters would actually have voted for a third-party. This finding is also true for Clinton voters. There is such a strong difference in feelings between conflicted Clinton voters and non-conflicted Clinton voters towards Clinton and towards McMullin that they likely would have actually voted for a third-party candidate.

The assumption that those conflicted voters would have actually voted for Evan McMullin if they believed he was electable was also supported by his favorability rating in Utah. In the middle of October, a month before the election, Rasmussen Reports found that 51% of likely Utah voters had a favorable or somewhat favorable view of McMullin. Only 26% had a very unfavorable or somewhat unfavorable view of McMullin.[53] With such a high favorability rating, and the large difference in feelings between conflicted voters and non-conflicted voters, it is very likely that those conflicted voters would have actually voted for a third-party candidate.

How to Reapportion The Conflicted Voters?

If, hypothetically, the conflicted voters had followed their preference and voted for a third-party candidate, which one would they have voted for? This is important because their decision on which third-party candidate they voted for would determine who wins the electoral votes of Utah. I used two methods to reapportion conflicted voters to third-party candidates. Both methods have benefits and drawbacks.

The first way of reapportioning the conflicted voters is by reapportioning them proportionally. Table 4 shows the initial distribution of presidential votes from the sample of people who filled out the blue form and answered my question.

Table 4- Voters from Survey

Candidate	Survey Vote Percentages
Donald Trump	40% WINNER
Hillary Clinton	31%
Gary Johnson	4%
Evan McMullin	21%
Someone else	3%
Don’t remember	.4%
Did not vote	.6%

	100%

Because we don't know which third-party candidate the conflicted voters would have gone for, we will reapportion the conflicted Trump voters and conflicted Clinton voters between McMullin, Johnson, and others in a proportional manner. In the initial vote count in our subsample, McMullin had 1,587 votes, Johnson had 303, and "someone else" had 270. We will not apportion any to those who said, "Don't remember" and those who did not vote for U.S. president. Proportionally, of the third-party vote, McMullin had 73%, Johnson had 14%, and "someone else" had 13% (all rounded).

Of conflicted Trump voters, McMullin picked up 883 votes (1,210*.73), Johnson picked up 170 votes (1,210*.14), and "someone else" picked up 157 (1210*.13). (I gave Johnson the extra vote because he was closest to rounding up. Otherwise it would have been 169 for Johnson, which is 1,209 overall). Table 5 holds the results of what happens when we reapportion those who voted for Trump believing that McMullin had little chance of winning.

Table 5- Voters from Survey, Moving Conflicted Trump Voters to Third-Party Candidates

Candidate	Survey Vote Percentages
Donald Trump	24%

Hillary Clinton	31%
Gary Johnson	6%
Evan McMullin	32%
Someone else	6%
Don’t remember	.4%
Did not vote	.6%
	100%

As you can see, McMullin would have come close to winning the state of Utah with just conflicted Trump voters. The next step is to factor in conflicted Clinton voters. Of conflicted Clinton voters, McMullin would have picked up 628 votes (860*.73), Johnson would have picked up 120 votes (860*.14), and “someone else” would have picked up 112 votes (860*.13). Table 6 adds the conflicted Clinton voters into the results in Table 4, which already includes Conflicted Trump voters after they were reapportioned.

Table 6- Voters from Survey, Moving Conflicted Trump and Clinton Voters to Third-Party Candidates

Candidate	Survey Vote Percentages
Donald Trump	24%
Hillary Clinton	20%
Gary Johnson	8%
Evan McMullin	40% WINNER
Someone else	7%
Don't remember	.4%
Did not vote	.6%
	100%

This finding has some benefits and drawbacks. This method of proportional reapportionment is done based on the proportion of the third-party vote share that McMullin, Johnson, and others received in the 2016 election. The reasoning behind this proportional reapportionment is that it is logical to assume that the third-party vote share in the election is representative of how Utah voters felt about each candidate. This method is also simple.

However, there are no guarantees that this is exactly the percentages of people that would have voted for McMullin, Johnson, and Stein, although it is plausible. The biggest drawback with this method is reapportioning Clinton voters. It is very likely that conflicted Trump voters would have transferred their vote to McMullin if they believed McMullin could have won. It is much less likely that Clinton voters would have transferred their vote to McMullin. Many conflicted Clinton voters would have had substantive policy differences with McMullin, who essentially was a traditional Republican. As conflicted Clinton voters they would have had less reason than conflicted Trump voters to throw their support behind McMullin as their third-party candidate, it is likely that the above table exaggerates the number of votes McMullin would have received from conflicted Clinton voters.

Because this method probably overstates the support McMullin would have gotten from conflicted Clinton voters, I reexamined vote shares for third party candidates by using a different method to reapportion conflicted voters. Instead of using the question "Would you vote for a candidate other than Hillary Clinton or Donald Trump if you thought they had a chance to get the most votes in Utah?" I used the feeling thermometer. This is similar to the methodology used by Abramson in his study.[54] I examined the feelings that all Clinton voters had for McMullin and that all Trump voters had for McMullin. If a voter had higher feelings for McMullin than their preferred candidate, I moved their vote from Clinton or Trump into McMullin's total vote share. After doing so, I found that 1,242 Trump voters preferred McMullin over Trump. This is higher than what we found using the proportional reapportionment method in Tables 4, 5, and 6. Only 200 Clinton voters preferred McMullin over Clinton, which is 428 less than in the

proportional reapportionment method. This may be closer to the true amount of Clinton voters that would have voted for McMullin if they thought he had a chance to win. Table 7 has the results after reapportioning the voters according to the feelings thermometer, pulling out the 1,242 Trump voters and the 200 Clinton voters to add to McMullin's vote share. Voters were not asked about their feelings towards Johnson and Stein, which is a limitation of this analysis, as we cannot predict how many conflicted voters would have voted for Johnson or Stein.

Table 7- Voters from Survey, Moving Trump and Clinton Voters According to the Feelings Thermometer

Candidate	Survey Vote Percentages
Donald Trump	24%
Hillary Clinton	29%
Gary Johnson	4%
Evan McMullin	39% WINNER
Someone else	3%
Don't remember	.4%
Did not vote	.6%

	100%

In the feelings reapportionment method, McMullin picked up much more of Trump voters than he did when proportionally splitting the votes with other third-party candidates. McMullin received substantially less support from Clinton voters, which makes more sense considering that Clinton voters have little reason (other than the fact McMullin is not Clinton) to support a third-party candidate who acts like a traditional Republican. There are drawbacks to this method though. First, all reapportionment decisions are made using the feelings thermometer. The UCEP data that asks voters whether or not they would have voted for an electable third-party candidate is not used in this method. Because this method of reapportionment does not use that data, the analysis of Duverger's Law is more roundabout than if we used the question about third-party electability. Another drawback is that the voters were not asked about their feelings towards Gary Johnson and Jill Stein. Because they were not asked, we cannot see what proportion of votes should be reapportioned to those two candidates.

In What Scenario Could McMullin Have Actually Won Utah?

The two methods of reapportionment, the proportional method and the feeling thermometer method, both have benefits and drawbacks. The drawbacks are significant enough that it is unwise to use either method as definitive proof that McMullin would have won the state of Utah if people had voted for their preference. However, it is within the realm of reality that Evan McMullin potentially could have won the state of Utah if he had procured enough votes from the conflicted voters. In Table 1, I found that after

removing conflicted voters from Trump and Clinton's vote share but not reapportioning them to specific third-party candidates, Trump had 24% of the total vote and Clinton had 20%. McMullin already had 21% of the total vote. If even a simple majority of conflicted Trump voters move over to vote for McMullin, he would have won the state of Utah, regardless of which third-party candidate conflicted Clinton voters support.

Implications

These results are informative. A significant number of those who voted for Trump and Clinton did not want to do so. They would have voted for a third-party candidate if they had believed a third-party candidate could have won the state of Utah. Regardless of the method used, when these conflicted voters are reapportioned to third-party candidates Evan McMullin would have won significantly more votes if people had believed he was electable. He clearly was more preferred by voters than the actual vote count reveals. The fact he failed to win reflects the strength of the psychological factor of Duverger's Law—people will not vote for third-party candidates if they do not think those candidates can actually win.

The external validity of this study is strong. The candidates and events of the 2016 presidential election, combined with the demographic makeup of Utah, were a perfect storm of events that gave the UCEP this opportunity to view how voters thought about third parties in a situation where a third-party could have been seen as a viable alternative. This situation is not likely to be often repeated. In elections where the candidates of the two main parties are more popular and the demographic is different, third-party candidates may not be looked on as favorably as Evan McMullin was in 2016.

This does not weaken the external validity because the lessons learned about third-party candidates and Duverger's Law are still applicable even though most voters will never be this cross pressured.

These findings are generalizable to other situations. One of the benefits to the federalist system in the United States is that each state acts as a "laboratory" of democracy.[55] This is the situation in our study. In this case, Utah placed Duverger's Law under extreme stress. Utahns traditionally vote Republican, strongly disliked the Republican candidate, strongly disliked the Democrat candidate, and had a fairly appealing candidate in McMullin. Even in this situation, a lot of people did not vote for their true preference because they did not think a third-party candidate could actually win. This finding that Duverger's Law holds up under extreme stress is generalizable to other states, the United States on a national level, and to other countries.

One lesson from these findings are changes that third-party candidates need to make in their messaging while they campaign. The results make it clear that people knew who Evan McMullin was. He had a high recognition level in the state and was considered favorably by a majority of the voters. This name recognition and favorability was not enough to win though. Because voters did not believe that McMullin had a chance of winning, the power of his name recognition and favorability was muted. While McMullin did make some attempts to tell voters that their vote mattered, that Utah had the power to deny Trump and Clinton the necessary 270 votes to secure the presidency, and that a Utah poll as late as November 4 showed that he had a chance to hang with Trump in the Utah election, most of his branding was focused on the fact that he was not Donald J. Trump.[56] That is ultimately what stuck with voters when they went to the polls.

Future third-party candidates need to make sure that a substantial portion of their messaging and branding is focused on the viability of their candidacy. A third-party candidate will benefit more from convincing voters that their campaign can win than from chasing 100% name recognition with voters. The countries that have notable exceptions to Duverger's Law, Canada and India, do so because they have "strong local minority parties"[57] If a third-party is to successfully establish itself in the United States, they would have to start on a local level and convince the people in one particular region that they are a viable alternative and can win, rather than focusing on the entire country at once.

A second lesson from this study is that Duverger's Law seems to work in part because people do not believe that a third-party can actually win an election. If they did, they would vote for a third-party candidate. This finding does not come from a fancy regression or a complicated index of voters. Rather, it comes from a simple question. "Would you vote for a candidate other than Hillary Clinton or Donald Trump if you thought they had a chance to get the most votes in Utah?" This finding is validated by the feelings thermometer, showing that conflicted voters viewed McMullin favorably enough to have actually voted for him. The sample size of the people that answered was large enough that by the Law of Large Numbers we can have a significant amount in the accuracy of the results. This study statistically validates Duverger's theory that his law worked because of psychological aspect of the electoral system, not merely because of mechanical factors in the system itself.

Conclusion

A key reason that Duverger's Law stands is because people will vote for parties that have a chance at winning the election. This is why in a first past the post system the electorate coalesces into two distinct parties, with some fringe parties that do not realistically compete. In the 2016 Utah election, the voters were extremely cross pressured because they were trapped between two candidates with serious flaws—Donald Trump and Hillary Clinton. In the Utah College Exit Poll, we found that more people would have voted for McMullin if they thought he had a chance at winning the election. While there are too many obstacles to definitively say if he could have actually won or not, the data is clear that a significantly larger number of people would have voted for him than actually did. This demonstrates the role that the psychological effect plays in Duverger's Law stands because in this example, even though Evan McMullin potentially had the votes to win Utah, he lost because the voters were convinced that a third-party candidate did not stand a chance at winning.

Appendix A- Front Side of Blue Form

BLUE 2016 CD1

UTAH COLLEGES
★ ★ ★ ★ ★ ★ EXIT POLL

YOUR ANSWERS ARE **CONFIDENTIAL**
Please give only ONE response for each question unless otherwise directed.

[A] In today's election for U.S. President, did you vote for

1 ☐ Donald Trump, Republican
2 ☐ Hillary Clinton, Democrat
3 ☐ Gary Johnson, Libertarian
4 ☐ Evan McMullin, Independent
5 ☐ Someone else
6 ☐ Don't remember
7 ☐ Did not vote for U.S. President

[B] In today's election for U.S. Senate, did you vote for

1 ☐ Mike Lee, Republican
2 ☐ Misty Snow, Democrat
3 ☐ Someone else
4 ☐ Don't remember
5 ☐ Did not vote for U.S. Senate

[C] In today's election for U.S. House of Representatives, did you vote for

1 ☐ Rob Bishop, Republican
2 ☐ Peter Clemens, Democrat
3 ☐ Someone else
4 ☐ Don't remember
5 ☐ Did not vote for U.S. House

[D] In today's election for Utah Governor, did you vote for

1 ☐ Gary Herbert, Republican
2 ☐ Mike Weinholtz, Democrat
3 ☐ Someone else
4 ☐ Don't remember
5 ☐ Did not vote for Utah Governor

[E] Would you vote for a candidate other than Hillary Clinton or Donald Trump if you thought they had a chance to get the most votes in Utah?

1 ☐ Yes
2 ☐ No
3 ☐ Don't know

[F] Who was your preferred candidate in the 2016 Presidential Primary period?

1 ☐ Hillary Clinton
2 ☐ Bernie Sanders
3 ☐ Donald Trump
4 ☐ Ted Cruz
5 ☐ John Kasich
6 ☐ Someone else
7 ☐ Did not have a preference

[G] How satisfied were you with the presidential candidate you preferred in the 2016 Primary period?

1 ☐ Very satisfied
2 ☐ Satisfied
3 ☐ Somewhat satisfied
4 ☐ Not satisfied
5 ☐ Don't remember

[H] Thinking about the following characteristics and qualities, please indicate how you think each one applies to Hillary Clinton / to Donald Trump.

Mark only ONE box for EACH candidate on each row.	Hillary Clinton Yes ▼	Hillary Clinton No ▼	Donald Trump Yes ▼	Donald Trump No ▼
A. Respects your values	1☐	2☐	1☐	2☐
B. Respects Utahns' values	1☐	2☐	1☐	2☐
C. Is honest and trustworthy	1☐	2☐	1☐	2☐
D. Is a role model for youth	1☐	2☐	1☐	2☐
E. Is a person you consider to be moral	1☐	2☐	1☐	2☐

[I] Internet users will often use social media (Facebook, Twitter, etc.) to share politically themed messages, images, and videos. How often, if ever, have you shared these types of posts using a social media account?

1 ☐ I do not use social media
2 ☐ Never, but I do use social media
3 ☐ Rarely
4 ☐ About once or more per month
5 ☐ About once or more per week
6 ☐ About once or more per day
7 ☐ Don't know

[J] Hypothetically, if both Mitt Romney and Barack Obama were running against the current candidates in the 2016 election, how would you have voted?

1 ☐ No change in my vote
2 ☐ Changed my vote to Mitt Romney
3 ☐ Changed my vote to Barack Obama
4 ☐ Don't know

[K] On a scale of one to five, one being negative and five being positive, please rate your feelings on the following individuals:

Circle ONE number per row.	Negative ▼				Positive ▼	Don't know ▼
A. Donald Trump	1	2	3	4	5	6☐
B. Hillary Clinton	1	2	3	4	5	6☐
C. Barack Obama	1	2	3	4	5	6☐
D. Mitt Romney	1	2	3	4	5	6☐
E. Mike Pence	1	2	3	4	5	6☐
F. Gary Johnson	1	2	3	4	5	6☐
G. Evan McMullin	1	2	3	4	5	6☐

Please continue on other side →

Appendix B- Confidence Intervals of the Demographics of the Subset and the Rest of the UCEP Sample to Prove Representativeness of the Subset

			Bottom of 95% Confidence Interval	Top of 95% Confidence Interval
Gender	Male	Rest of Sample	.485325	.4997595
		Subset	.473389	.4978699
	Female	Rest of Sample	.5002405	.514675
		Subset	.5021301	.526611
Party ID	Strong Democrat	Rest of Sample	.0897472	.1321007
		Subset	.0994943	.1539464
	Not So Strong Democrat	Rest of Sample	.0388003	.0513248
		Subset	.0316029	.0438707
	Independent Leaning Democrat	Rest of Sample	.10961	.1514957
		Subset	.1019476	.133522
	Independent	Rest of Sample	.1080053	.119148
		Subset	.1140717	.1382902
	Independent Leaning Republican	Rest of Sample	.1744762	.2059907
		Subset	.1503035	.1846217
	Not So Strong Republican	Rest of Sample	.0936327	.115749
		Subset	.0818986	.1049749
	Strong Republican	Rest of Sample	.1888437	.2427773
		Subset	.2334997	.2894597
	Other	Rest of Sample	.0583828	.0711839
		Subset	.0443346	.0544072
	Don’t Know	Rest of Sample	.0268583	.0350124
		Subset	.0229131	.031519

Ideology	Strongly Liberal	Rest of Sample	.0645612	.10529
		Subset	.060718	.1108211
	Moderately Liberal	Rest of Sample	.1572032	.2058952
		Subset	.1578571	.2042599
	Middle of the road	Rest of Sample	.1495121	.1644825
		Subset	.1362446	.1578138
	Moderately Conservative	Rest of Sample	.2520284	.2981576
		Subset	.2485689	.2915071
	Strongly Conservative	Rest of Sample	.2044661	.2618033
		Subset	.2222937	.2786693
	Other	Rest of Sample	.0258961	.0369539
		Subset	.0237742	.0365634
	Don’t Know	Rest of Sample	.0380204	.0482958
		Subset	.0378621	.0479395
Education	Some High School	Rest of Sample	.0115144	.015198
		Subset	.008462	.0134398
	High School Graduate	Rest of Sample	.1012366	.1181451
		Subset	.0991522	.1199904
	Some college	Rest of Sample	.3140823	.3416244
		Subset	.3080121	.3431913
	College	Rest of Sample	.3492506	.3796127
		Subset	.3456686	.3753309
	Postgraduate	Rest of Sample	.1644774	.2082405
		Subset	.1726469	.2183342
Religion	Protestant	Rest of Sample	.0441967	.0572251
		Subset	.0412135	.0578093
	Catholic	Rest of Sample	.0491757	.0716062

		Subset	.0443531	.0683223
	LDS/Mormon	Rest of Sample	.5108528	.6348362
		Subset	.5283191	.6489459
	Jewish	Rest of Sample	.0029044	.0056926
		Subset	.0022556	.0051555
	Muslim	Rest of Sample	.0020432	.0036785
		Subset	.0015532	.0063304
	Other	Rest of Sample	.0632903	.085479
		Subset	.0622154	.0864262
	No preference/No affiliation	Rest of Sample	.1991511	.276962
		Subset	.1910288	.2654704
Religious Activity	Very Active	Rest of Sample	.4565268	.5530238
		Subset	.4756506	.57213
	Somewhat active	Rest of Sample	.1349353	.1519571
		Subset	.1235676	.1487658
	Not very active	Rest of Sample	.0682569	.0813057
		Subset	.0688529	.087368
	Not Active	Rest of Sample	.085818	.1230133
		Subset	.0835061	.1152409
	Does not apply/ prefer not to say	Rest of Sample	.1494888	.2026697
		Subset	.1402429	.1917148
Employment	Self-employed	Rest of Sample	.1292277	.1477585
		Subset	.1286023	.1520961
	Employed by someone else	Rest of Sample	.5119527	.5868435
		Subset	.4954777	.5814599
	Unemployed	Rest of Sample	.0191349	.0242982
		Subset	.0155621	.0247059

	Homemaker	Rest of Sample	.0743008	.098175
		Subset	.0739836	.1045541
	Retired	Rest of Sample	.1163231	.202419
		Subset	.1242298	.2193378
	Student	Rest of Sample	.0420073	.0606097
		Subset	.0364977	.0608281
Race	American Indian/Native American	Rest of Sample	.0111783	.0153386
		Subset	.0091035	.0170344
	Asian	Rest of Sample	.0103009	.0184212
		Subset	.0110296	.0183693
	Black/African American	Rest of Sample	.0070118	.01368
		Subset	.0077635	.013937
	Hispanic/Latino	Rest of Sample	.0491532	.0828667
		Subset	.0471415	.0826283
	White/Caucasian	Rest of Sample	.8377551	.8932193
		Subset	.8390566	.8944611
	Pacific Islander	Rest of Sample	.0057354	.0101898
		Subset	.005812	.0112198
	Other	Rest of Sample	.0211095	.0267474
		Subset	.0191859	.0275611
Marital Status	Married	Rest of Sample	.6224566	.7139177
		Subset	.6233161	.7240138
	Divorced	Rest of Sample	.0646121	.0772653
		Subset	.0594072	.0743177
	Widowed	Rest of Sample	.0241718	.0406005
		Subset	.0232222	.0410421
	Single	Rest of Sample	.1576636	.2314623

		Subset	.1519157	.2273256
	Living With a partner	Rest of Sample	.0277709	.047318
		Subset	.0288947	.0557115
Income	Under $25,000	Rest of Sample	.1053209	.1411217
		Subset	.102842	.134078
	$25,000 - $39,999	Rest of Sample	.1192797	.1416954
		Subset	.1198158	.1520579
	$40,000 - $54,999	Rest of Sample	.123407	.1390442
		Subset	.1171928	.1418855
	$55,000 - $69,999	Rest of Sample	.1131779	.1249969
		Subset	.1103073	.1309677
	$70,000 - $84,999	Rest of Sample	.1119062	.126096
		Subset	.1109836	.1292791
	$85,000 - $99,999	Rest of Sample	.0917261	.1064934
		Subset	.0903969	.1120509
	$100,000 - $149,999	Rest of Sample	.1511534	.1790246
		Subset	.1525606	.1776685
	Over $150,000	Rest of Sample	.1023656	.1301639
		Subset	.0976904	.1297924
Sexual Orientation	Heterosexual or Straight	Rest of Sample	.9376824	.9629339
		Subset	.9347431	.9637687
	Gay or Lesbian	Rest of Sample	.0166617	.0294549
		Subset	.0176565	.0339182
	Bisexual	Rest of Sample	.0197973	.034
		Subset	.0175268	.0334047
Transgender	Yes	Rest of Sample	.0054044	.0087292
		Subset	.0051537	.0088393

	No	Rest of Sample	.9912708	.9945956
		Subset	.9911607	.9948463

Notes

[1] A single-ballot system is when individuals only have one vote and do not rank their next best candidate option.
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[5] Duverger, Maurice. 1963. *Political Parties: Their Organization and Activity in the Modern State*, Second English Revised ed. (London: Meuthen & Co, 1963) 228.
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Carl J. Friedrich, *Constitutional Government and Democracy*. (Boston: Ginn & Co., 1950).
V.O. Key Jr, *Politics, Parties, and Pressure Groups*, 3rd ed. (New York: Crowell, 1952).
[7] William H. Riker, "The Two-Party System and Duverger's Law: An Essay on the History of Political Science," *The American Political Science Review* 76, no. 4 (1982): 753-766. It should be noted that this is one of the best literature reviews on the topic of Duverger's Law as Riker sets out to demonstrate the growth of Duverger's Law through time, citing dozens of articles.
[8] See, for example, Stacy Berg Dale and Alan B. Krueger, "Estimating the Payoff to Attending a More Selective College: An Application of Selection on Observables and Unobservables." *The Quarterly Journal of Economics* 117, no. 4 (November 2002): 1491-1527.
[9] Kenneth Benoit, "Duverger's Law and the Study of Electoral Systems." French Politics 4, no. 1 (April 2006): 69-83. It should be noted that this is currently the most recent comprehensive literature review on Duverger's Law. Any serious study of Duverger's Law should begin with this article.
[10] Kenneth Benoit, "Duverger's Law and the Study of Electoral Systems." French Politics 4, no. 1 (April 2006): 69-83.
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[12] Bradley A. Smith, "Judicial Protection of Ballot-Access Rights: Third Parties Need Not Apply." *Harvard Journal on Legislation* 128, no. 1 (1991): 167-219, http://heinonline.org/HOL/Page?handle=hein.journals/hjl28&div=9&g_sent=1&casa_token=&collection=journals
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[15] Arend Lijphart, "The Political Consequences of Electoral Laws, 1945-85." *American Political Science Review* 84 no. 2 (1990):481-96, DOI: 10.2307/1963530
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[47] Each person in the sample was assigned a unique identification which was part of the log-in for the on-line survey and was included in the database for the telephone survey. If a respondent had done the survey on-line they were removed from the phone survey sample.

[48] David B. Magleby and Damon Cann, "Voter Reaction to a Shift to Vote-By-Mail: The Trump Effect?" Paper presented at the 113th APSA Annual Meeting and Exhibition, August 30-September 2, 2017.

[49]Dan Williams, Email with author, Provo, March 22, 2018.

[50] Using the command svy: proportion (demographic variable), over(subset) I saw how my subset looked compared to the other ¾ of the sample.

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[52] There were three responses for our electability question ("Would you vote for a candidate other than Clinton/Trump if you thought they had a chance to get the most votes in Utah?): Yes, No, and Don't Know. Table 4 groups the Don't Knows in with the No's for our analysis. People who would not have changed their vote or didn't know if they would change their vote are both grouped with the "Trump Voters who prefer Trump" category. That grouping decision was made for Clinton voters as well. On the feelings thermometer, there also was the option of putting Don't Know as an answer. In this table, we have coded them as missing. When they are not coded as missing they are coded as a 6, which slightly skews the feelings thermometer.

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