The 2014 U.S. Senate Race in North Carolina: Randomized Experiments in an Online Survey of North Carolina Voters September 28 – October 5

SUMMARY OF FINDINGS

The Elon University Poll conducted a series of randomized experiments using a sample obtained from an opt-in online panel. The online survey was conducted from September 28th to October 5th and obtained a sample of 763 registered voters. The survey was designed to answer several questions relevant to the 2014 U.S. Senate race in North Carolina.

1. How do perceptions of the president influence evaluations of Kay Hagan?

The effect the president has on perceptions of Hagan was measured by showing an image of Kay Hagan to half the respondents and a picture of Senator Kay Hagan with President Obama to the other half. The results of the experiment show Obama had a negative effect on Hagan’s favorability rating for all respondents, Republicans, Democrats, and Independents (although the negative effect for Democrats and Independents was modest and not statistically significant). Respondents who said they approved of the president’s job performance were slightly more likely to see Hagan in a more positive light, but the effect was extremely small and not statistically significant.

2. How do perceptions of the governor of North Carolina influence evaluations of Thom Tillis?

When North Carolina House Speaker Thom Tillis was shown in a picture with Governor Pat McCrory his favorability rating also declined, but this negative effect was much smaller than Obama’s negative effect on Hagan. Even Republican’s viewed Tillis more negatively when seen with the governor. Independents saw almost no change in their perception of Tillis when he is depicted in an image with McCrory.
3. Could the presence of the Libertarian Candidate on the ballot influence the Senate race?

The academic literature and past election results strongly suggest public opinion polls frequently exaggerate the number of votes a third party candidate will receive in an election. But by just being on the ballot Sean Haugh is guaranteed to get a share of the vote. In 2010 the previous Libertarian candidate received approximately 2 percent of the vote. In a close race that 2 percent could make a difference. The survey randomly assigned respondents to the full ballot that voters will see in the voting booth and a shortened ballot without the Libertarian candidate. The results show that in a close race Sean Haugh would siphon more votes from Kay Hagan than he would Thom Tillis, twice as many in fact. Tillis should be thankful that Haugh is on the ballot.

4. Which issues tend to help or hurt Hagan and Tillis?

Respondents were shown different digital postcards with the candidates’ names (and sometimes images) and a policy message. Each respondent viewed eight policy messages, but only half had Hagan’s name/image on them and the other half had Tillis’s name/image associated with the policy message. Overall, Hagan’s favorability was much higher than Tillis’s when respondents viewed postcards about education and women’s health. Hagan’s advantage over Tillis shrank considerably when respondents viewed postcards about immigration, national defense, and what makes a family (gay marriage).

5. Could candidate order on the ballot make a difference in the U.S. Senate race?

The political science literature on ballot order generally has found that being listed first on a ballot gives a candidate a small advantage, especially in low information elections. In presidential elections where most people have made up their minds before entering the voting booth, ballot order may have much smaller effects. Yet past studies have found in some cases being listed second or last on a ballot gives a candidate the advantage. This is what the experiment in this study found. Hagan does better against Tillis when Tillis is listed first and Tillis does better when Hagan is listed first. Hagan gains 6 percentage points when being listed second and Tillis gains 6 percentage points when listed second. State law determines the ballot order in general elections. Because Pat McCrory won the race for governor in 2012 the Republican candidate will appear first on the ballot in the 2014 midterm election. The results here suggest that Tillis will lose some votes because his party won the gubernatorial election in 2012.

An elaboration of the findings and descriptions of the study can be found in the full report that follows.

-Dr. Kenneth E. Fernandez and Dr. Jason A. Husser
FULL REPORT

Randomized experiments embedded in an online survey

Although social science research sometimes simply aims to describe the world accurately, most scholarship eventually hopes to provide explanations. Yet such explanations require the identification of causal relationships which requires certain criteria to be met. Randomized experiments are considered the “gold-standard” for demonstrating cause and effect.¹ Scholars have traditionally conducted experiments on a readily available population (often college students). Unfortunately, findings based on such samples might not be generalizable to larger populations. Embedding randomized experiments inside a population-based survey combines the best aspects of experiments and surveys and can be applied to a large and diverse population.² This can be done using a telephone survey, unless the experiments require respondents to view different images. In these cases an online survey is usually the most effective method. Potential voters are given different images and information based on random assignment. This is done to see if different information will produce different responses to survey questions. The study collected information from 763 registered voters using an opt-in online panel. Because respondents were not randomly selected the sample it is NOT a probability sample. Therefore it is NOT designed to provide an accurate measure of how much of a lead one candidate has over another. Instead, the study is designed to answer several complex questions which are salient to the 2014 midterm election in North Carolina. These include:

- How do perceptions of the president influence evaluations of Kay Hagan?
- How do perceptions of the governor influence evaluations of Thom Tillis?
- Could the presence of the Libertarian candidate on the ballot influence the Senate race?
- Which issues tend to help or hurt Hagan and Tillis?
- Could candidate order on the ballot make a difference in the U.S. Senate race?

These questions are difficult, if not impossible to answer with simple percentages, cross-tabulations, and even multivariate statistical models. Because a single survey collects information at a single point in time and doesn’t follow respondents over a period of time, it is difficult to determine causality. Experiments using random assignment and conducted on large, diverse samples can overcome some of these limitations. Below are the results from this online survey.
How do perceptions of the president influence evaluations of Kay Hagan?

Whether a person approves or disapproves of the president’s job performance is a pretty good predictor of whether or not that person plans to vote for Kay Hagan. The September 2014 Elon University Poll found 88% of respondents who approved of Barack Obama’s job performance said they were planning to vote for Senator Hagan this November. But what about the 12% of the president’s supporters who don’t plan to vote for Hagan? And what about the people who don’t approve of the president? 19% of them still plan to vote for Hagan. Perceptions of the president influence elections and voters in complex ways. Very consistently the president’s party loses seats in a midterm election, but how much of a loss will it be and how does this play out in specific elections? We designed an experiment to see how perceptions of Obama might influence potential voters. For approximately half of respondents we show a digital postcard with Kay Hagan’s name and image and ask how they felt about the candidate and for the other half we showed a postcard with Kay Hagan with the President (see images above).

The experiment found that for most respondents, seeing Hagan with Obama reduced favorability (see figure 1). This was especially true for Republicans and respondents who said they disapproved of the president’s job performance. The only group where the presence of Obama increased Hagan’s favorability score was with respondents who said they approve of the job Obama is doing, and the positive
effect on this group was extremely small and not statistically significant. Given that the president’s approval rating is fairly low with registered voters (38% in the September 2014 Elon University Poll), Hagan should continue distancing herself from the president.

How do perceptions of the governor influence evaluations of Thom Tillis?

Numerous studies have been conducted on how presidential approval ratings and evaluations influence congressional elections. Yet almost nothing has been published on how gubernatorial approval influences a U.S. Senate race. According to the September 2014 Elon University Poll 67% of respondents who approve of Governor McCrory’s job performance said they plan to vote for Tillis this November. But much of this overlap is likely due to partisan attachments, not the evaluation a voter has of the governor.

How do we determine how helpful or harmful the governor is to Thom Tillis? One method is to conduct a randomized experiment which presents half of respondents with an image of Thom Tillis by himself and the other half an image of Thom Tillis next to the governor (See images above).

The experiment found that when respondents saw Thom Tillis with Governor Pat McCrory their perceptions of Tillis were negatively affected. Although the negative effect that McCrory has on respondents was statistically significant for several groups (see asterisks in Figure 2), the effect was much smaller overall than Obama had on Hagan’s favorability.

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**Figure 2:** McCrory's Image Hurts Tillis Favorability Less than Obama Hurts Hagan's Favorability

<table>
<thead>
<tr>
<th>Group</th>
<th>Change in Favorability</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Registered Voters*</td>
<td>-0.3</td>
</tr>
<tr>
<td>Democrats*</td>
<td>-0.4</td>
</tr>
<tr>
<td>Independents</td>
<td>-0.1</td>
</tr>
<tr>
<td>Republicans*</td>
<td>-0.3</td>
</tr>
<tr>
<td>McCrory Approvers</td>
<td>-0.2</td>
</tr>
<tr>
<td>McCrory Disapprovers*</td>
<td>-0.4</td>
</tr>
</tbody>
</table>

Source: Elon Poll, October 2014. Figure depicts average change when a picture of Pat McCrory is shown in a treatment group compared to not being shown in a control group. 7-pt scale -3 (worst) to +3 (best). * = statistically significant effect
Tillis should probably also distance himself from the governor but the ramifications of being tied to McCrory is not as detrimental as being tied to President Barack Obama.

**Could the presence of the Sean Haugh on the ballot influence the Senate race?**

Last month the Elon University Poll did not list Sean Haugh’s name when asking about the U.S. Senate race in North Carolina. Instead the Elon University Poll asked voters the following question: “If the election for U.S. Senate was held today would you vote for [Republican Thom Tillis, Democrat Kay Hagan], or someone else? With Tillis’s and Hagan’s names rotated randomly to avoid ordering bias. The poll found 9% of likely voters said “someone else” but when pressed who the someone else was most (73%) said they didn’t know and only 4 respondents mentioned the Libertarian party or Sean Haugh’s name. This is very different from recent polls conducted by other organizations which find 7% to 9% of likely voters planning to vote for the Libertarian candidate. These numbers for Sean Haugh should be looked at in a larger context.

Michael Beitler ran for U.S. Senate in North Carolina in 2010 as a Libertarian and received approximately 2% of the vote. Surveys from PPP and SurveyUSA both had Beitler receiving 6% of the vote. Elections surveys in the United States which list third party candidates often exaggerate the proportion of the electorate that will actually vote for such a candidate. Why is that? Many political scientists believe it is because voters are strategic and rational and realize voting for a minor party candidate would be essentially throwing their vote away. But there are elections where some voters are dissatisfied with both candidates. In these cases these voters can either not vote or cast a protest vote for a third party candidate.

The randomized experiment described here is not designed to estimate how much of the vote Haugh will receive in November. Instead, it is designed to see which of the two major party candidates is hurt more by Haugh being on the ballot. Assuming Haugh will receive a similar proportion of the vote his counterpart did in 2010 (2%), could this small amount influence the election if the race between Tillis and Hagan is close? Would Haugh take more votes from Hagan or Tillis? To answer this question we developed an experiment that showed different respondents different ballots, some with the Libertarian candidate listed and some that excluded the candidate (see ballot above).
Table 1: Third-Party Candidate Being on the Ballot Helps Thom Tillis

<table>
<thead>
<tr>
<th>Vote Choice</th>
<th>Haugh Not On Ballot</th>
<th>Haugh Included On Ballot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kay Hagan</td>
<td>59% (205)</td>
<td>51% (193)</td>
</tr>
<tr>
<td>Thom Tillis</td>
<td>41% (143)</td>
<td>37% (138)</td>
</tr>
<tr>
<td>Sean Haugh</td>
<td>n.a.</td>
<td>12% (46)</td>
</tr>
<tr>
<td>Total</td>
<td>100% (348)</td>
<td>100% (376)</td>
</tr>
</tbody>
</table>


The following table presents the results of the experiment to determine which candidate would likely lose more votes to Haugh. The experiment uses survey data obtained from an opt-in online panel and was not designed to measure how much of a lead a candidate has (See the September 2014 Elon University Poll which uses a RDD/Wireless telephone sample if interested in how likely voters plan to vote in November). The experiment found that Hagan is hurt more than Tillis by the presence of Sean Haugh on the ballot. Hagan loses 8 percentage points to Haugh, while Tillis only loses 4 percentage points. This suggests that if the race is extremely close, Haugh’s presence on the ballot could influence the outcome by benefiting one candidate, specifically Tillis.

Could Candidate Order on the Ballot Make a Difference in the Election?

The order in which the candidates appear on the ballot is determined by a process designated by state law (G.S. 163-165.6). Candidates are listed on the ballot “in alphabetical order by party beginning with the party whose nominee for Governor received the most votes in the most recent gubernatorial election.” Because Pat McCrory won the governor’s race in 2012 Tillis will be listed first on the ballot. Could this ballot order influence the election outcome?

Prior research suggests that for low information races ballot order can matter.\(^5\) Low information races are races where there is little media attention, such as local elections or nonpartisan elections. The North Carolina U.S. Senate rate does not resemble a “low information” race and therefore one might expect that ballot ordering will not influence the outcome of this election. We test this hypothesis by conducting a randomized experiment within an online survey which presents different ballot options to different respondents. For one ballot Tillis is listed first, for an alternative ballot Hagan is listed first (See image).
Table 2: Hagan Benefits from ‘Recency Effects” of Ballot Ordering

<table>
<thead>
<tr>
<th>Vote Choice</th>
<th>Hagan 1st on Ballot</th>
<th>Tillis 1st on Ballot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kay Hagan</td>
<td>52% (185)</td>
<td>58% (213)</td>
</tr>
<tr>
<td>Thom Tillis</td>
<td>42% (150)</td>
<td>36% (131)</td>
</tr>
<tr>
<td>Sean Haugh</td>
<td>6% (21)</td>
<td>7% (25)</td>
</tr>
<tr>
<td>Total</td>
<td>100% (356)</td>
<td>100% (368)</td>
</tr>
</tbody>
</table>

763 Registered NC Voters. Cell sizes in subscripts. Split Ballot Experiment.

Surprisingly, the experiment found that being first on the ballot is not an advantage but a disadvantage. Hagan does much better when Tillis is listed first and Tillis does better when Hagan is listed first. This may seem counter intuitive but other studies have also found evidence of a recency effects on ballot order (the benefit of be listed later on the ballot). Recency effects are thought to be more likely in telephone surveys because respondents tend to remember the last name they hear, but studies have also found recency effects in online environments as well. The results here suggest Thom Tillis is harmed by being placed first on the ballot.

Which Issues Help or Hurt the Two Major Party Candidates?

Elections are about choosing candidates but they are also about issues, but it is not always easy for voters to evaluate a candidate’s stance on a particular issue. Candidates often have an incentive to remain vague or ambiguous regarding various policy issues, for fear a strong stance on an issue could alienate some voters. Because of this it isn’t always easy to observe how policy issues might influence an election. Complicating matters further is that voters frequently stereotype candidates based on race, gender, and age. For example women are often seen as more apt at dealing with issues regarding education, healthcare, and welfare; while men are often seen as more capable of addressing issues such as national defense, foreign policy, terrorism, and crime.

A randomized experiment was designed and embedded in an online survey to explore which issues seem to evoke more positive or negative evaluations for each of the two major party candidates. Furthermore, the experiment was designed to examine if gender influences how potential voters perceives a candidate’s policy position. Does the gender gap increase or decrease depending on different policy contexts? Do women perceive Thom Tillis in a more positive light depending on the issue being discussed?

A battery of digital postcards was shown to respondents. Each respondent was shown one postcard for each policy area (education, healthcare, national defense, the economy, immigration,
voter identification, women’s health, and family values). For half the respondents a postcard would only contain the name of the candidate and a brief policy message, the other half the postcard would also contained the candidates’ image. For example, a respondent would see only one of the four digital postcards regarding national defense in the image above. The remaining postcards for the other policy issues can be found in the Appendix B of this report.

Table 3 below presents the results of the randomized experiment. Because the data was not obtained through a random sample the absolute numbers cannot be interpreted as representing the size of Hagan’s advantage. Instead, the experiment is designed to see if there are any differences in evaluations by policy issue. The overall results suggest that Hagan’s favorability (relative to Tillis) is largest when respondents are primed with the education (.60) and the women’s health postcards (.56). Hagan’s favorability (relative to Tillis) is not as large when respondents are shown postcards dealing with families (.27) and national defense (.27) and immigration (.23). This suggests that respondents are less likely to see Tillis in a favorable view when they are reminded of education and women’s health. Hagan’s relative advantage drops when respondents are reminded of issue related to families, national defense and immigration.

The overall numbers are useful but candidates may want to know how Independents see the two candidates when primed with different policy issues. Hagan again has her strongest advantage when Independent registered voters are shown the education postcard and the smallest relative advantage when respondents are shown the economy and voter identification postcards.

Among men Hagan’s advantage disappears when male respondents are shown the national defense postcard and nearly disappears when shown the family (gay marriage) and the economy postcard. Hagan’s advantage also declines with women when female respondents were shown the immigration postcard.

The results suggest that Tillis would benefit by attacking Hagan on issues such as immigration, national defense, voter identification and the economy. It also suggests that Tillis needs to improve his image regarding a number of policy issues, but especially with education, and women’s health.
Table 3: Hagan – Tillis Favorability Ratings on Various Policy Issues (Differences)

<table>
<thead>
<tr>
<th>Policy Area</th>
<th>Party</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>National Defense</td>
<td>Democrats*</td>
<td>1.7</td>
<td>Men</td>
<td>0.0</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Independents*</td>
<td>0.5</td>
<td>Women*</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Republicans*</td>
<td>-1.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economy</td>
<td>Democrats*</td>
<td>1.8</td>
<td>Men</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independents*</td>
<td>0.3</td>
<td>Women*</td>
<td>0.5</td>
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</tr>
<tr>
<td></td>
<td>Republicans*</td>
<td>-1.6</td>
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<td></td>
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<tr>
<td>Immigration</td>
<td>Democrats*</td>
<td>1.6</td>
<td>Men</td>
<td>0.3</td>
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</tr>
<tr>
<td></td>
<td>Independents*</td>
<td>0.4</td>
<td>Women*</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Republicans*</td>
<td>-1.8</td>
<td></td>
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<tr>
<td>Women’s Health</td>
<td>Democrats*</td>
<td>2.2</td>
<td>Men</td>
<td>0.5</td>
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<td></td>
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<tr>
<td></td>
<td>Independents*</td>
<td>0.5</td>
<td>Women*</td>
<td>0.7</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Republicans*</td>
<td>-1.5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Education</td>
<td>Democrats*</td>
<td>1.8</td>
<td>Men</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independents*</td>
<td>0.7</td>
<td>Women*</td>
<td>0.7</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Republicans*</td>
<td>-1.1</td>
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<tr>
<td>Healthcare</td>
<td>Democrats*</td>
<td>2.0</td>
<td>Men</td>
<td>0.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independents</td>
<td>0.4</td>
<td>Women*</td>
<td>0.5</td>
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<tr>
<td></td>
<td>Republicans*</td>
<td>-1.9</td>
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<td></td>
<td></td>
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<tr>
<td>Voter ID</td>
<td>Democrats*</td>
<td>1.9</td>
<td>Men</td>
<td>0.4</td>
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<tr>
<td></td>
<td>Independents</td>
<td>0.1</td>
<td>Women*</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Republicans*</td>
<td>-1.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>&quot;What makes a Family&quot;</td>
<td>Democrats*</td>
<td>1.7</td>
<td>Men</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independents*</td>
<td>0.4</td>
<td>Women*</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Republicans*</td>
<td>-1.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Elon University Poll, October 2014.

Experimental effects of policy primes on (Kay Hagan Evaluation – Thom Tillis) evaluation. Positive values indicate an advantage for Hagan. Negative values indicate an advantage for Tillis. Asterisks by label imply the advantage is statistically significant (not due to random chance). Results are for registered NC voters.
RELEVANT ACADEMIC PUBLICATIONS


### Basic Methodological Information

<table>
<thead>
<tr>
<th>Survey Mode:</th>
<th>Online using opt-in panel from Survey Sampling International (with quotas to balance sample to reflect U.S. Census information for North Carolina)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Population &amp; Sample Area</td>
<td>Registered Voters in North Carolina</td>
</tr>
<tr>
<td>Dates in the field:</td>
<td>September 28 – October 5, 2014</td>
</tr>
<tr>
<td>Sample Size of Registered Voters</td>
<td>763</td>
</tr>
<tr>
<td>Margin of Error</td>
<td>Not Applicable (See Below)</td>
</tr>
<tr>
<td>Weighting Variables</td>
<td>Age, Race, &amp; Gender</td>
</tr>
</tbody>
</table>

Respondents for this survey were selected from among those who have volunteered to participate in the opt-in online panel for Survey Sampling International (SSI). A quota system was used to obtain a balanced sample that reflects the North Carolina adult population on age, gender and race and then weighted to match U.S. Census information. Subjects who said they were not registered to vote in North Carolina were allowed to complete the survey but were excluded from the analysis. Although SSI goes to great length to produce high quality online panels that can produce samples that reflect the demographics of the target population, these samples are still considered nonprobability samples. Because the sample is based on those who initially volunteered or have been recruited for participation in the online panel rather than randomly selected from the broader state population, estimates of sampling error (margin of error) can be misleading. Although opt-in online surveys are used by numerous organizations and have produced interesting and often accurate results the American Association of Public Opinion recommends organizations not produce margins of errors when using opt-in survey data because audiences may interpret the findings as coming from a probability sample. Information on Survey Sampling International’s online panel can be found at: [http://www.surveysampling.com/who-we-are/awards](http://www.surveysampling.com/who-we-are/awards). Please direct questions about the survey’s methodology to the Director of the Elon University Poll, Dr. Kenneth Fernandez at 336-278-6438 or kfernandez@elon.edu.
APPENDIX A: SURVEY QUESTIONNAIRE

Because respondents are shown slightly different survey items based on random assignment the following list of questions is not comprehensive. To view the survey as it appears to a random respondent you can take the survey yourself at:

http://elon.co1.qualtrics.com/SE/?SId=SV_cvHO0huZ557hFYh

This is a public opinion survey of adults (18 years of age or older) living in North Carolina. The survey is being conducted on behalf of the Elon University Poll, an independent survey research center located at Elon University. The survey takes approximately 5 minutes to complete and consists of questions regarding national and state politics. The survey is completely voluntary and all of your responses will be kept confidential. If you have any questions about the survey feel free to contact the director of the Elon University Poll, at elonpoll@elon.edu. For further information about the Poll and our University you can visit our website: http://elon.edu/elonpoll

Thank you for your time.

Q1. Are you a resident of North Carolina?
   - Yes
   - No

Q2. Are you registered to vote in North Carolina?
   - Yes
   - No

Q3. How old are you? [Enter number below]

Q4. What is your gender?
   - Male
   - Female

Q5. What racial or ethnic group best describes you?
   - White
   - African American or Black
   - Hispanic or Latino
   - Asian
   - Native American
   - Other

Q6. Do you [approve or disapprove] of the way Barack Obama is handling his job as president? [Responses Rotated]
   - Approve
   - Disapprove
   - Don't Know
Q7. Do you approve or disapprove of the way Pat McCrory is handling his job as governor?

- Approve
- Disapprove
- Don't Know

The next set of questions will ask you to view a series of hypothetical postcards for candidates for US Senate. Please examine each postcard carefully. Regardless of who you plan to vote for, please indicate if it makes you feel better or worse about the candidate mentioned in the question.

Q8. How do you feel about Kay Hagan after viewing this postcard?

- Much Better
- Somewhat Better
- A Little Better
- Neither Better Nor Worse
- A Little Worse
- Somewhat Worse
- Much Worse

Q9. How do you feel about Thom Tillis after viewing this postcard?

- Much Better
- Somewhat Better
- A Little Better
- Neither Better Nor Worse
- A Little Worse
- Somewhat Worse
- Much Worse
Q10. How do you feel about Kay Hagan after viewing this postcard?
   How do you feel about Thom Tillis after viewing this postcard?
   [Questions and Images Randomly Rotated]
   o  Much Better
   o  Somewhat Better
   o  A Little Better
   o  Neither Better Nor Worse
   o  A Little Worse
   o  Somewhat Worse
   o  Much Worse

Q11 – 18 POLICY POSTCARDS

How do you feel about Thom Tillis after viewing this postcard?
How do you feel about Kay Hagan after viewing this postcard?
[Questions and Images Randomly Rotated]
   o  Much Better
   o  Somewhat Better
   o  A Little Better
   o  Neither Better Nor Worse
   o  A Little Worse
   o  Somewhat Worse
   o  Much Worse

*See Appendix B for the remaining digital postcards for the 7 other Policy Issues
Q19. The next question will present to you candidates appearing on the ballot for U.S. Senate in November. Please indicate who you plan to vote for in the upcoming U.S. Senate election. Please respond as if you were in the voting booth.

Q20a. Generally speaking, do you usually think of yourself as a Republican, Independent, or something else?

- Republican
- Democrat
- Independent
- Something else
- Don't Know

Q20b. Would you call yourself a strong Democrat or not a strong Democrat?

- Strong Democrat
- Not a Strong Democrat
- Don't Know

Q20c. Would you call yourself a strong Republican or not a strong Republican?

- Strong Republican
- Not a Strong Republican
- Don't Know

Q20d. Do you think of yourself as closer to the Republican Party or Democratic Party?

- Republican
- Democrat
- Neither
- Don't Know

Q21. When it comes to politics, do you usually think of yourself as ... [Responses Rotated]

- Very Liberal
- Liberal
- Slightly Liberal
- Moderate
- Slightly Conservative
- Conservative
- Very Conservative
- Haven't Thought Much about This
Q21a. If you had to choose, would you consider yourself a liberal, a conservative, or a moderate?

- Liberal
- Conservative
- Moderate
- Don't Know

Q22. How much school have you completed?

- Less than high school
- High school diploma or GED
- Vocational or Technical School
- Some college
- College graduate
- Some graduate school
- Professional or graduate degree

Q23. What is your marital status?

- Single
- Married
- Separated
- Divorced
- Widowed
- Other

Q24. What is your annual household income?

- Less than $20,000
- $20,000 to $39,999
- $40,000 to $59,999
- $60,000 to $79,999
- $80,000 to $99,999
- $100,000 to $119,999
- $120,000 to $139,999
- $140,000 to $159,999
- $160,000 to $179,999
- $180,000 to $199,999
- $200,000 or more

Q25. Do you have a land line phone?

- Yes
- No

Q26. Do you own a cell phone?

- Yes
- No

Q27. For geographic purposes, please enter your 5-digit ZIP code.
APPENDIX B: DIGITAL POSTCARDS USED IN EXPERIMENTS
APPENDIX C: Online Sample Demographics

### Age

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-30</td>
<td>165</td>
<td>22%</td>
</tr>
<tr>
<td>31-40</td>
<td>128</td>
<td>17%</td>
</tr>
<tr>
<td>41-50</td>
<td>126</td>
<td>17%</td>
</tr>
<tr>
<td>51-65</td>
<td>227</td>
<td>30%</td>
</tr>
<tr>
<td>65+</td>
<td>117</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>763</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>375</td>
<td>49%</td>
</tr>
<tr>
<td>Female</td>
<td>388</td>
<td>51%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>763</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>557</td>
<td>73%</td>
</tr>
<tr>
<td>Black</td>
<td>166</td>
<td>22%</td>
</tr>
<tr>
<td>Other</td>
<td>40</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>763</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Party ID

<table>
<thead>
<tr>
<th>Party</th>
<th>Number</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Democrats</td>
<td>274</td>
<td>36%</td>
</tr>
<tr>
<td>Independents</td>
<td>247</td>
<td>32%</td>
</tr>
<tr>
<td>Republicans</td>
<td>208</td>
<td>27%</td>
</tr>
<tr>
<td>Don't Know / Refused</td>
<td>34</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>763</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>