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# Electoral Campaigns and the Incumbency Advantage: How Institutions Generate Competitive Inequities

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# DRAFT

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## ABSTRACT

The congressional incumbency advantage reflects an inequity in competition—candidates receive an electoral edge simply because they hold office. Scholars have identified an array of factors that contribute to the incumbency advantage; however, the role of electoral campaigns has largely been ignored. The researchers use an experiment to study how distinct candidate rhetoric affects voters' decision-making. They find that the campaigns matter. Voters tend to rely on criteria that inherently favor incumbents (e.g., familiarity) unless the incumbent employs a rhetorical strategy emphasizing issues and image. This leaves challengers at an extreme disadvantage in campaigns. The results highlight the connections between congressional institutions, candidate campaigns, and voter decisions. They also raise normative complications for theories of democratic responsiveness and competition. Competition is fundamental to democracy – it ensures choice for citizens and facilitates electoral accountability. Substantial scholarship shows how institutions, particularly electoral systems, influence the nature of competition and can, at times, privilege certain office-seekers. One widely discussed manifestation concerns the "incumbency advantage" in United States congressional elections. This refers to the electoral benefit a candidate receives simply due to being an incumbent (holding all else constant), which is in the range of nearly 8% of votes (e.g., Lee 2008; Fowler and Hall 2014). It derives, in part, from the incumbent's personal experience in office, familiarity (i.e., ties to the district), and the provision of benefits for the district (e.g., casework, pork-barrel projects) (Fowler and Hall 2014; also see Fiorina 1989; Gronke 2001; Druckman, Kifer, and Parkin 2009).

Prior research focuses on how candidate level and system level variables drive the incumbency advantage, including selection effects (Fowler 2016), low-quality challengers (Stone et al. 2010), strategic retirements (Cox and Katz 2002), spending advantages (Erikson and Palfrey 1998), redistricting (Ferejohn 1977), television coverage (Prior 2006), and voter risk aversion (Eckles et al. 2014). While scholars have moved towards studying representative communications and their effects (Grimmer 2013, 2016; also see Mayhew 1974; Fenno 1978), little attention has been paid to *electoral* campaigns. How does the incumbency advantage affect the nature and impact of electoral campaigns? How does distinctive campaign rhetoric does not matter. Voters often pay little attention to congressional campaigns (Kahn and Kenney 1999), and incumbents tend to engage in fairly minimal/basic campaigning (Jacobson 2013, 108–13; Druckman, Kifer, and Parkin 2009). Further, the incumbency advantage might be invariant to campaigns since it reflects years in office (and/or a lack of quality challengers; Carson,

Engstrom, and Roberts 2007). That said, if there is evidence that incumbent electoral rhetoric influences congressional voters, it would have two notable implications.

First, it would suggest that the incumbency advantage reflects more than the oft-studied institutional and candidate specific factors; it also would depend on campaign rhetoric which may privilege incumbents. If so, then campaign competition is unequal. Second, it would complicate normative expectations of representative democracy, undercutting theories focused on responsiveness since preferences would be endogenous (e.g., Mansbridge 2004; Druckman 2014) and challenging theories focused on competition given the presence of an institutional-based bias for certain candidates in campaigns (Garsten 2009; Disch 2011).

In what follows, we discuss alternative campaign strategies that incumbents and challengers use in congressional elections. We then present an experiment to test expectations about how distinct campaign strategies influence voters' decisions. We find that campaigns matter; however, challengers face substantial hurdles to inducing voters to move away from factors associated with incumbency. Doing so requires that the incumbent engage in a campaign strategy that is counter to his or her interest (i.e., the incumbent actively campaigns on issues and image rather than emphasizing experience, familiarity, and casework). Even when that occurs, the challenger must successfully persuade voters that are often inherently opposed to the challenger for partisan reasons. That said, we also identify conditions where campaign rhetoric can minimize the incumbency advantage. We conclude by offering evidence from a large-scale content analysis of campaign websites to demonstrate that incumbents and challengers actually campaign differently. We further discuss implications for the study of the incumbency advantage and congressional campaigns, and theories of democratic functioning.

#### The Incumbency Advantage and Election Campaigns

The congressional incumbency advantage is one of the most widely studied topics in American politics (Carson, Engstrom, and Roberts 2007, 289). As mentioned, it reflects, in part, an incumbent's experience in office, familiarity (i.e., ties to the district), and the provision of benefits for the district (e.g., casework, pork-barrel projects) (e.g., Fiorina 1989; Gronke 2001; Jacobson 2013; Druckman, Kifer, and Parkin 2009; Fowler and Hall 2014). These factors inherently favor the incumbent due to serving in the institution; holding office itself is experience and working on behalf of the district (i.e., taking actions for it) breeds familiarity. Challengers lack the institutional access available to incumbents. The expectation then is that voters view incumbents, relative to challengers, as possessing more experience and familiarity, and as having taken more actions for the district (i.e., "incumbency factors"), all else constant (hypothesis 1).

This reality creates a hurdle for challengers in that they must lead voters to base their decisions on criteria other than incumbency factors, and persuade voters that they are preferable on these factors. Those other factors – that is, criteria on which congressional voters often base their votes – include the proximity of the candidates' issue positions to their own, the candidates' personal characteristics (i.e., perceived honesty, empathy, and leadership), and partisanship (Druckman, Kifer, and Parkin 2009; Jacobson 2013). A challenger can attempt to introduce these criteria via the electoral campaign. It remains an open question whether and how congressional campaigns play into the incumbency advantage, as prior work largely focuses on candidate traits and system-level explanations for incumbency (Eckles et al. 2014, 733).

Druckman, Kifer and Parkin (2009, 2017) offer evidence that, when it comes to congressional campaigns, incumbents and non-incumbents tend to pursue distinct campaign strategies. Incumbents pursue "riskless" strategies, emphasizing the aforementioned incumbency factors (e.g. experience, familiarity, and district actions). This is a riskless strategy since there is

little uncertainty that voters prefer the incumbent if they base their decisions on incumbency factors (see hypothesis 1). In contrast, non-incumbents, and particularly challengers, will engage in a "risky" strategy. They go negative, which is risky given that voters report not liking negativity, and they emphasize other voting criteria, including issues and personality traits. Talking about issues (particularly ones "owned" by the candidate's party) includes taking clear positions, presenting group endorsements, and accentuating personal traits such as leadership and honesty.<sup>1</sup> Such foci generates uncertainty since candidates do not know who will be favored using these criteria; neither candidate is inherently advantaged (Druckman, Kifer, and Parkin 2009, 345).<sup>2</sup> Of course, these strategies are the "norm" but there presumably are scenarios where incumbents may engage in a risky strategy and/or challengers utilize a riskless strategy.

To understand how these distinct approaches affect voters (e.g., the conditions under which challengers might succeed in moving voters), consider four basic premises. First, unless particularly motivated, voters rely on incumbency criteria which is easy to access and process (i.e., they typically are familiar with the incumbent). When they are motivated to systematically process more, they will consider issues and image (which involves assessing the candidates on these criteria). Second, voters are more likely to engage in systematic processing and consider alternative criteria (i.e., issues and image) when they perceive there to be competition. Such

<sup>&</sup>lt;sup>1</sup> Jacobson (2013: 109, 112) states that "issues, policy, and partisanship [are] not prominent objects of discussion with constituents and [are] not used to elicit support...Common to most incumbents' campaigns is an emphasis on the value of the experience and seniority... and reminders of the things that the member has done over the years for constituents" (also see Fenno 1978). Jacobson (2013: 104, 108) further states that "[c]hallengers certainly hope to convince people of their own virtue...but they are not likely to get far without directly undermining support for the incumbent... In the search for campaign issues, then, challengers are necessarily opportunists... A challenger cannot hope to win without reordering the campaign agenda. Incumbents thrive on campaigns that center around personal performance, experience, and services. Few members are vulnerable if they can persuade voters that this is what the contest is about... Challengers succeed only when they frame issues in a way that makes these dimensions less relevant and other considerations more salient."

 $<sup>^{2}</sup>$  The main caveat is that as an incumbent may be silent in non-competitive races; as he or she comes to believe that the race is more competitive, then the candidate will put more emphasis on incumbency features (Druckman et al. 2009: 344). The idea that challengers employ "risky" strategies is consistent with Eckles et al. (2014) finding that risk-accepting individuals are more likely to vote for challengers.

competition signals to voters that their choices may matter, and so they invest more at arriving at their opinions. Evidence along these lines is that participation in elections increases with perceived competition (McDonald and Tolbert 2012). More generally, Chong and Druckman (2007, 640) explain that "the competitive *context* will stimulate individuals to deliberate over alternatives to reconcile conflicting considerations" (italics in original). Third, in congressional elections, active campaigns lead voters to perceive increased competition (e.g., close elections). Bowler and Donavon (2011, 151) state, "perceptions of competitiveness increases when an incumbent uses a risky strategy. This follows because campaigns are costly endeavors that send signals to voters (Carter and Patty 2015, 836); the expectation is that challengers will engage in risky campaigns and incumbents riskless campaigns; and risky incumbent campaigning occurs when there is a quality challenger who is competitive.<sup>4</sup>

It follows straightforwardly that when an incumbent employs a risky strategy, voters are more likely to view the election as competitive (hypothesis 2) and are more likely to base their votes on non-incumbency factors including issues and personal traits (hypothesis 3), all else constant. Hypothesis 3 reflects that voters are motivated to move beyond the simple incumbency heuristic and are provided with information needed to consider issue positons and personal traits. Put another way, voters are *primed* to use issues and image in this case.

<sup>&</sup>lt;sup>3</sup> McDonald and Tolbert (2012) report that those who watch more political news also are more likely to think the election in their district may be close. This may reflect increased attention to campaign dynamics.

<sup>&</sup>lt;sup>4</sup> Jacobson (2013: 111) notes how incumbent activity can signal: "[i]gnoring the opposition is a standard tactic of incumbents who feel relatively secure: Why given an unknown opponent free publicity? More serious opponents compel more vigorous campaigns [including] preemptive assaults on the challenger's character..." We of course recognize that other factors could signal competitive campaigns (e.g., polling results, media coverage); however, we are focusing strictly on candidate behaviors.

Even if voters turn to issues and personal features, there is no guarantee it will generate more support for a challenger, as it depends on the challenger's ability to *persuade* voters that he or she is preferable (on these criteria) to the incumbent. And persuasion can be difficult, especially for challengers who are often relatively unknown and thus lack familiarity and perhaps even similarity with voters (O'Keefe 2016, 200–204). That said, it provides an opening that is not otherwise available when it comes to incumbency criteria (i.e., campaign conditions that undermine the nature of the incumbency advantage).

These hypotheses accentuate the entrenched institutional bias against challengers' campaigns. To minimize the incumbency bias, challengers are somewhat beholden to how incumbents campaign. This begs the question, which is beyond the scope of this project, of what conditions would lead an incumbent to employ a risky campaign strategy. For now, we turn to an empirical test to see whether campaigns might matter at all and if so, whether they matter in the ways we suggest.

#### Experiment

We test our predictions with an experiment, which allows us to precisely control what messages voters receive and arrive at clear inferences about the impact of those communications. We minimize the downside of such an approach by using real candidates, which, in some sense, is critical to ensure respondents have prior opinions about the incumbent. Specifically, we focus on the 2010 House election in Illinois's 9<sup>th</sup> District that pitted incumbent Democrat Jan Schakowsky against Republican challenger Joel Pollak. Details on the district and the 2010 election are in an Appendix.

#### Procedure and Design

We conducted the study from June to August 2010, which encapsulated the start of the campaign but was prior to major campaign activity.<sup>5</sup> We used fliers and emails to recruit 395 participants from multiple colleges in the district and the surrounding communities. Participants had to be eligible to vote in the district and received \$10 compensation for their time. We provide a demographic portrait of the sample in the Appendix. The sample was young with more than half being ages 18 to 24. Also of note is that 70% of the sample reported being Democratic which reflects the highly Democratic nature of the district (e.g., in 2012, 65% voted for Obama).

The study took place in a laboratory setting at pre-determined times. Upon arrival, participants consented and then were provided with a packet. The packet explained that the participant would read a brief overview of the ongoing U.S. congressional campaign, have 20 minutes to explore websites about the candidates, and then be asked to complete a survey. The overview included: (1) a map of the district and pictures of the two candidates; (2) an accurate statement that many expected it to be the most competitive district race in some time; (3) an instruction that the participant would have the next 20 minutes to explore websites for each candidate (i.e., links to each of the sites were to be provided); (4) a statement that the websites were not created by the candidates but that all information on the sites is correct and explicitly based on statements and records of the candidates;<sup>6</sup> and (5) an instruction that time could be allocated in any manner, including not browsing and instead reading magazines or newspapers we provided (none of which mentioned the campaign).<sup>7</sup> Our approach largely put questions of selective exposure aside (although a respondent could have spent very little time on the sites if he

<sup>&</sup>lt;sup>5</sup> This ensured realism while at the same time minimizing the risk of strong pre-treatment effects and/or incomparability of participants during the implementation period (e.g., due to major campaign events).

<sup>&</sup>lt;sup>6</sup> We hired a professional website designer to create the pages and drew content from the candidates' own webpages, candidate speeches, news coverage, and, for Schakowsky, floor votes.

<sup>&</sup>lt;sup>7</sup> We requested that the participant at least briefly look at each site.

or she chose). This seemed sensible for a first test of whether variations in incumbent strategies *can* affect voting decisions. Additionally, while the modal voter may not access a candidate's website, the websites serve as particularly effective ways to emulate what a voter may learn during the campaign. Druckman et al. (2009, 2017) show, via surveys with campaign workers, that the websites encapsulate a candidate's entire message and are aimed for the "average voter" in the district.

In our study, each site had a front-page with links to an issues page, and a biography page (and, for some conditions, an endorsement page). From there, we randomly assigned respondents into one of five conditions. One condition served as a control, in which case, the aforementioned directions were different, with individuals spending time on non-campaign related websites and subsequently completing the survey described below. The other conditions varied whether each candidate's website displayed a risky or riskless strategy. In Table 1, we show the details of each strategy; each contained a host of elements consistent with the previously discussed risky (i.e., emphasizing issues and image) or riskless (i.e., emphasizing incumbency features) strategy. For example, the risky strategy involved going negative, taking several clear issue positions, and discussing personal features; the riskless strategy largely avoided this information and instead focused on familiarity and actions for the district (on which we predict the incumbent is advantaged).<sup>8</sup>

#### [Insert Table 1 About Here]

We extensively pre-tested the content to ensure our operationalization accurately captured the constructs described in Table 1 (e.g., positions were clearly taken or not, personal

<sup>&</sup>lt;sup>8</sup> We do not vary partisan emphasis on the websites in light of the Democratic nature of the District and the reality that Pollak consequently had little incentive to focus on partisanship. Moreover, the partisanship of each candidate was clear in the background material. We also do not vary prior experience in office since Pollak had none and thus we could not realistically vary it.

features involved the given category, etc.). The pre-test also gauged the leaning of the endorsers we used on the pages, showing that, for the most part, they were perceived in the correct partisan direction (i.e., Democratic for Schakowsky, Republican for Pollak). The endorsements could be used to induce a larger set of policy positions. Details on the pre-test are in the Appendix.

In Table 2, we present a portrait of the four mixes of websites to which a given respondent was (randomly) given access: Schakowsky risky/Pollak risky, Schakowsky risky/Pollak riskless, Schakowsky riskless/Pollak risky, or Schakowsky riskless/Pollak riskless. These mixes make up conditions 2 through 5. Our interest is mainly in conditions 2 through 5, where respondents are exposed to varying types of candidate rhetoric; for that reason, as well as practical considerations (e.g., resources), we collected a smaller sample for the control condition (i.e., the N for the control condition is about half the size as the other conditions).

#### [Insert Table 2 About Here]

Respondents then spent 20 minutes browsing the websites and/or reading the aforementioned provided magazines and newspapers. They then completed a survey that asked about their perceptions of the candidates and election, as well as basic demographic and political information. The main outcome variable queried how likely the respondent was to vote for Pollak or Schakowsky, on a 7-point scale ranging from "definitely will vote for Pollak" to "definitely will vote for Schakowsky." The survey also asked respondents to rate, on 7-point scales, how well different personal traits described each candidate; these included "honest," "strong leader," and "competent." We created relative personal assessment measures by subtracting the rating for Pollak from the rating for Schakowsky for each trait (and thus higher scores indicated relatively better perceptions of Schakowsky; the theoretical range for the scale for each trait is -6 to 6). The three traits do not scale together with particularly high relatability –

the alpha is .60. Nonetheless, for ease of presentation, we create a single overall "image" score by averaging across the trait measures. We present results, in the Appendix, where we include each individual trait, and the results are the same with nearly all of the effects working via leadership.

We further asked participants to report their own issue position and each candidate's position on 13 issues (all on 7-point scales). For each issue, we took the difference of the respondent's position from each candidate's position, and then took the average difference (across all issues) for each candidate. That provided us with scores that indicated how close the respondent felt his or her issue positions, on average, were to each candidate (for Pollak, the alpha is .85; for Schakowsky, the alpha is .80). We then took the difference between these two scores to arrive at an overall relative issue proximity score such that higher scores indicate greater perceived issue agreement with Schakowsky (the theoretical range for the scale is -6 to 6).<sup>9</sup> To gauge perceptions of factors underling the "incumbency advantage," we asked respondents to score which candidate they believed possessed greater experience, greater familiarity, and had taken more actions on behalf of voters in the district (on 7-point scales with higher scores moving towards Schakowsky). We took the average across these items to arrive at an "incumbency" factor score (alpha = .80).<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> For example, we measured the respondent's issue position (measured on a 7-point scale) on whether the government should promote renewable energy sources. We also asked the respondent where he or she thought each candidate's issue positon fell on that issue. We took the difference between the respondent's energy position and each perceived candidate position (the range then for this is 0 to 6). This gave us a score of "issue proximity" between the respondent and each candidate (i.e., proximity of energy position to Pollak and proximity of energy position to Schakowsky). We did this on all 13 issues and then took the average issue proximity score for each candidate (i.e., average closeness to Pollak across all issues and average closeness to Schakowsky across all issues). In this case, smaller scores indicate being closer to the given candidate on the issues. We then subtracted the overall Schakowsky score from the overall Pollak score (leading to a range of -6 to 6). Thus, 0 indicates indifference, positive scores indicate closeness to Schakowsky (i.e., the difference between the respondent and Schakowsky is smaller than the difference between the respondent and Pollak), and negative scores indicate closeness to Pollak. <sup>10</sup> We recognize our measurement approach with incumbency factors inadvertently deviated from image and issues insofar as we did not ask about the candidates separately.

We also measured how close respondents thought the election would be on a 7-point scale, from "not close at all" to "very close". Finally, the survey asked for participants' partisan identification (with higher scores, on a 7-point scale, indicating more Republican), gender, race/ethnicity (recoded to identify minority respondents), age (offering 5 age ranges), income (offering 5 income ranges), and education (offering 5 levels of highest education). All question wordings are in the Appendix.

#### Results

While our predictions depend on the strategy taken by incumbent Schakowsky, we nonetheless present the results for each individual condition. We do so since each condition presents a unique mix of candidate strategies, making unexpected dynamics a possibility.

In Table 3, we present, by condition, the mean scores for incumbency factor assessments and perceptions of election closeness. The first column shows strong support for hypothesis 1; the underlying incumbency factors – familiarity, experience, and actions for the district – are invariant to campaign rhetoric. The mean scores not only strongly favor Schakowsky, with an overall average of 5.20, but they do not significantly differ based on rhetoric. For instance, the lowest mean score is the control group with 5.05, and the highest is 5.27 (condition 5). These two do not differ significantly ( $t_{136} = .84$ ,  $p \le .40$ , for a two-tailed test).

#### [Insert Table 3 About Here]

This result accentuates just how advantaged incumbents can be. Even when the challenger highlights his or her experience, familiarity, and district actions, it does nothing to dislodge the inherent preference for the incumbent on these dimensions. As noted, prior work has dug deeply into the underlying correlates of the incumbency advantage; however, it had not explored how campaigns may or may not undercut it. Our results suggest that campaign rhetoric

on its own is insufficient. Given that the incumbency bias stems, in part, from institutional/systematic sources (e.g., the ability to provide provisions to one's district), it reveals how institutions can create an inequity in campaign rhetoric. The institutionally sourced advantage curtails the effectiveness of challenger rhetoric and puts him or her in a difficult position. Put another way, it has long been noted that incumbents are advantaged given their time in office and access to resources. What we find is that this further breeds a rhetorical advantage insofar as incumbents are positioned to use communication strategies that effectively favor them – something that the challengers do not have available to them.

This type of advantage is further made clear in the second column of Table 3 where we see strong support for hypothesis 2. Respondents are significantly more likely to perceive the election as close *only* when the incumbent Schakowsky engages in a risky strategy. For example, in condition 2 where both candidates employ a risky strategy, the mean perceived closeness is 3.90. This is substantially larger than the 3.27 score in condition 4 where Pollak still goes risky but Schakowsky does not ( $t_{170} = 3.52$ ,  $p \le .01$ , for a two-tailed test). Overall, the combined mean score for the incumbent risky conditions (i.e., conditions 2 and 3) is 3.90 while the combined mean score for the other conditions is 3.22 ( $t_{391} = 5.73$ ,  $p \le .01$ , for a two-tailed test). It is the incumbent's "risky" actions – regardless of what the challenger does – that signals a more competitive campaign.

This leads us to test our third hypothesis that voters will base their vote choice on issues and image only when the incumbent employs a risky strategy. In Table 4, we regress (using ordinary least squares) our vote preference variable on the incumbency factors, image, issues, party identification, and other demographic variables. The table presents results for all respondents and then for each condition. Among all respondents, we see that as an individual's

ratings for Schakowsky on incumbency, image, and issues increases so does the likelihood that he or she will vote for Schakowsky. The negative coefficient on partisanship shows that as one moves in a Republican direction, he or she becomes less likely to vote for Democratic Schakowsky.

#### [Insert Table 4 About Here]

Of much greater interest is that perceived image and issue position proximity *are only significant when Schakowsky utilizes a risky strategy* (conditions 2 and 3). This aligns with hypothesis 3: voters rely on the easily accessible and well-known incumbency factors unless there is a signal to pay attention and process new issue and image information. That signal, at least when it comes to campaign rhetoric, is contingent on the behavior of the incumbent using a strategy that is not in her interest to use.<sup>11</sup>

Interestingly, not only does "going risky" introduce factors about which the incumbent Schakowsky is less certain, but it also reduces voters' reliance on incumbency considerations. In one case, where both candidates engage in risky strategies (condition 2), incumbency factors become irrelevant. In the other case, it becomes marginally significant (i.e., condition 3 where Pollak uses a riskless strategy which includes discussion of incumbency features). We also see that partisanship only matters when Pollak uses a risky strategy. This likely reflects respondents learning more about his issue positions which may prime their partisan identity. We find no other

<sup>&</sup>lt;sup>11</sup> It could be that respondents are projecting from their vote choice to perceived issue positions and image (although see Hart and Middleton 2014). However, even if they are doing that, the fact remains that the relationship between vote preference, image, and issues is contingent on Schakowsky's strategy – without her going risky, there is no clear relationship and that puts Pollak's campaign in a largely untenable position with few options. It also is possible that instead of this occurring through priming, this process is more akin to learning (Lenz 2013); from a theoretical standpoint, we are agnostic on this point since our focus is on which information voters are using and how the campaigns affect that. We are less concerned about precise processes.

control variables are consistently significant.<sup>12</sup> (In the appendix, we present results using a variety of alternative specifications that break out the specific components of the incumbency, image, and issue variables.)

The challenger Pollak clearly is in an unenviable situation given his campaign strategy cannot on its own induce voters to consider issues and image. There is yet another difficulty, however. Even when the alternative criteria do come into play, does it help Pollak? In Table 5, we present the mean values for vote preference, perceived issue proximity, and perceived image. The most eye-catching result is the lack of variance on vote choice – Pollak's chances do not improve when voters attend to issues and image. In fact, there are no significant differences across conditions and in all cases, Schakowsky is the clear favorite (e.g., comparing conditions 1 and 5, gives  $t_{135} = .77$ ,  $p \le .45$ , for a two-tailed test).

#### [Insert Table 5 About Here]

To understand why this is the case, consider the final two columns of Table 5. When Schakowsky goes risky, leading voters to consider image and issues, she also effectively persuades them to favor her to a greater extent on image. Even when Pollak introduces image by employing a risky strategy (condition 2), Schakowsky still persuades such that respondents are significantly more favorable towards her on image. The merged means on image for when Schakowsky goes risky is 1.03 versus .46 when she does not ( $t_{390} = 3.92$ ,  $p \le .01$ , for a two-tailed

<sup>&</sup>lt;sup>12</sup> In the Appendix, we present an analysis that merges all conditions and includes a dummy variable indicating whether the respondent was in an "incumbent condition" (1, 4, 5) or a "challenger condition" (2, 3). We then interact they dummy variable with the incumbency factor variable, issue proximity, and image. We find that all interactions are significant, indicating that the Schakowsky using a risky strategy (conditions 2 and 3) does statistically significantly induce individuals to turn less to incumbency factors and more to issues and image. That regression also shows a significant negative main effect for the incumbency condition dummy. This stems from the large, on average, advantage on incumbency factors and the sizeable coefficient for that variable in incumbency conditions (which inflates the "on average score" sans the negative dummy). Our results are generally robust if we instead use an ordered probit model with the one exception being issues become significant in condition 4 (the interactions just discussed are significant).

test). Unlike the incumbency criteria, image perceptions are moveable via campaign rhetoric but it is the incumbent Schakowsky who is persuasive and thus she wins even when going risky.<sup>13</sup>

Likewise, issue perceptions can be affected by campaign rhetoric but Pollak is unable to leverage this into an advantage. In the cases where he explicitly discusses his issue positions (i.e., when he employs a risky strategy, conditions 2 and 4), it backfires as respondents move further in favor of Schakowsky. Consider condition 3 where positions matter to voters but Pollak opts for a riskless strategy and does not discuss issues. In that case, the average perceived issue proximity score is .36. Condition 2 differs only in that Pollak discusses his issue positions (i.e., a risky strategy) and the score actually increases toward Schakowsky to  $1.02 (t_{162} = 3.06, p \le .01, for a two-tailed test)$ . Clearly this reveals why it is a risky strategy to engage in issue discussion.<sup>14</sup>

It is intriguing that the incumbent's risky strategy moved image perceptions while it is the challenger's strategy that (negatively) affected issue perceptions. More importantly, the results make clear that: (1) campaign rhetoric does not appear to affect perceptions of the factors that drive the incumbency advantage; (2) challengers may lack a clear campaign tactic to induce voters to consider issue and image criteria (instead of incumbency criteria); and (3) even when voters do consider issues and image, challengers may be disadvantaged because they often differ from district voters. While this last point clearly depends on the candidate and the district, it likely is a common situation, as it was for Pollak. He was running in a strong Democratic district and so his issue stances were bound to be counter to many in the district.

<sup>&</sup>lt;sup>13</sup> This constitutes an about a 55% reduction in the score (i.e., (1.03-.46)/1.03 = .55) or a 5% change of the range of the 12-point scale (i.e., (1.03-.46)/12 = .05).

<sup>&</sup>lt;sup>14</sup> This is a 65% ((1.02-.36)/1.02 = .65) move or 6% of the scale ((1.02-.36)/12 = .055). The issue score in condition 5 appears relatively low, although it just is marginally significant difference (at the .1 level) from condition 3.

To see just how dependent the challenger is on the incumbent's strategy, consider the conditions where Pollak employs his "ideal" strategy of going risky. In condition 4, where Schakowsky follows the "ideal" incumbent strategy of going riskless, the predicted average vote score, holding all variables at their overall means, is 5.05 (std. error = .13).<sup>15</sup> If Pollak had somehow moved voters one standard deviation in his direction on both image and issues, the predicted vote mean is 4.52 (.25). In other words, even being persuasive in this case does not move the electorate to, on average, vote for Pollak. Had Schakowsky, however, mistakenly employed a risky strategy (condition 2), the mean vote would have shifted from 4.92 (.14) to 3.14 (.32). This then tips a bit towards Pollak and surely makes for a competitive campaign. Perhaps the key point here though is that Pollak has no rhetorical strategy that would have generated such movement – he needed Schakowsky to pursue a non-optimal strategy and greater (near remarkable) persuasive skills (or distinct issue positons/image). All of that said, it is worth noting that in a different situation (e.g., some factor induced the incumbent to play a risky strategy), campaign rhetoric can matter and can minimize the incumbency advantage. Indeed, one can imagine a scenario where an incumbent blunders (e.g., a scandal) and thus losses his/her advantage on incumbency features. Or, it could be that a well-resourced, high-quality challenger otherwise stimulates voters' attention (e.g., via a mobilization campaign). These possibilities, in turn, may lead an incumbent to use a risky strategy, which then, provides the challenger with some leverage. However, our results accentuate that, to be successful, a challenger requires an opponent who is not favored on incumbency criteria or a situation that stimulates voters. These are two vital "triggers" that may put a challenger into contention.

#### What Do Candidates Do?

<sup>&</sup>lt;sup>15</sup> We compute predicted values using *Clarify* (King, Tomz, and Wittenberg 2000).

An obvious question then is: which strategies do incumbents and challengers employ? Do they, as suggested by Druckman et al. (2009), respectively tend to use riskless and risky strategies? We addressed this with a large content analysis of congressional candidate websites during the 2010 campaign. As discussed, despite a relatively low number of visitors, websites provide a holistic portrait of a campaign's message aimed at general voters.<sup>16</sup> We drew a stratified random sample of major party House and Senate candidates (it was stratified to ensure regional variation as well as some continuity with a larger over-time project). The total sample included 369 sites.<sup>17</sup> We hired a team of coders to code each website; the coders participated in detailed training and practice, and we then assigned them sets of sites to code. We provided detailed instructions for coding a large array of content features (and technological characteristics) over the entire self-contained site. This included coding all parts of the frontpage, fundraising page, biography page, issues page, news page, and multi-media page that often include audios and videos (if each existed); coders did not follow links to other sites (e.g., the candidate's Facebook page).

Our interest is in the likelihood of a challenger and incumbent employing each element of the strategies we studied, as described in Table 1. The sites were coded using measures akin to those offered in Table 1, as we describe in the second column of Table 6 (where we also state the scale for each variable). For example, the negativity measure coded whether the candidate made a negative/critical statement about his or her opponent anywhere on the site. The issue position

<sup>&</sup>lt;sup>16</sup> This is the case because campaigns take advantage of the infinite space on the web and they realize anything posted on their sites could potentially be passed along to voters in general (e.g., via the media).

<sup>&</sup>lt;sup>17</sup> We identified the population of candidates from the *National Journal, Congressional Quarterly*, and various state party home pages. We identified the central campaign website for each candidate via the *National Journal*'s Web site and/or Google searches. The websites coded were posted largely from mid-October to Election Day. The sample composition is 80% House sites, 20% Senate sites, 44% incumbent sites, 38% challenger sites, 18% open-seat candidate sites, 48% Democratic sites, and 52% Republican sites. Further, on the four-point Cook non-partisan competitiveness scale, 18% were toss-ups, 15% were likely, 12% were leaning, and 55% were solid. These percentages match the population of campaigns very well.

variable counted the number of unambiguous positions taken. The image variable breaks out leadership and empathy while the incumbency variable breaks out familiarity and district actions – all as described in Table 6 (and operationalized as discussed in the experiment; see Table 1).

#### [Insert Table 6 About Here]

To assess the relative likelihood of incumbents and challengers employing each strategy, we produced expected values on each variable. The values came from a set of regressions (with control variables) presented in the Appendix. Specifically, we set other variables at their mean values and then generated a predicted value for incumbents and then for challengers.

The results, reported in the final column of Table 6, make clear that challengers are substantially more likely to employ the elements of a risky strategy while incumbents opt for the riskless approach (all differences between incumbents and challengers are statistically significant at the .05 level). For example, the average incumbent includes under 11 endorsements while the average challenger includes nearly 17.<sup>18</sup> The probability that an incumbent makes a leadership type statement is .34, compared to .56 for a challenger; however, incumbents are substantially more likely to emphasize familiarity (.60 versus .41). In short, the web data suggest that the most common scenario is one where the incumbent is riskless and the challenger is risky. Looking specifically at Pollak and Schakowsky's actual 2010 websites confirms that they, too, generally followed this pattern. Although Schakowsky's website included some negativity, Pollak's site was awash in negative statements attacking the incumbent. Pollak also engaged in other risky strategies, including taking clear positions on 31 issues (compared to 12 for Schakowsky), mentioning four endorsements (compared to two for Schakowsky), and providing a clear reason

<sup>&</sup>lt;sup>18</sup> We recognize that when it comes to issue positions and endorsements, the web content analysis results exceed our operationalizations in the experiment. In part, this reflects that many of the candidate web pages were much larger than the ones we could reasonably present in the experiment given time limitations.

for running (whereas Schakowsky did not). The only strategy that Schakowsky employed more than Pollak was, predictably, mentioning six actions she had taken for the benefit of the district (whereas Pollak mentioned none).

Our experiment reveals that such a situation means voters largely rely on incumbency features. Taken together, then, we can see the chain from institutional advantage (e.g., familiarity and the ability to take actions come with being in office) to campaign rhetoric to voters' preferences. That said, obviously there are candidates who deviate from these strategies and our experiment shows that that can provide opportunities for challengers. The unanswered and pressing questions are what situational factors prompt strategy shifts (e.g., there are likely scenarios where incumbents have an incentive to go risky) and how can challengers take advantage of these shifts? The larger point for us concerns how institutions can condition campaigns that, in turn, affect voters.

#### Conclusion

Scholars and pundits have long worried about how inequities in campaign spending and donations undermine democratic functioning. Part of this concern is that only well-resourced, quality challengers could possibly mount an effective campaign against incumbents. In many ways, our framework and results point to an equally, if not more, troublesome dynamic. For us, resources are held constant – the only variation concerns whether a candidate was an incumbent who used that position to gain experience, establish familiarity, and take actions on behalf of the district. These are all activities that, on their face, are unproblematic. Yet, an inadvertent consequence is that voters privilege incumbents. Voters' limited attention and motivation makes it extremely difficult for a challenger to launch a winning campaign. In our experimental results, the challenger had to rely on the incumbent making a huge miscalculation.

Obviously, our study has limitations given the (experimental) focus on one particular campaign in a district with a highly favored incumbent. We view our results more as illustrative in light of the framework we presented. Indeed, as mentioned, we understand that there are surely other situational levers that may generate a competitive campaign where voters attend to issues and image (or induce incumbents to employ a risky strategy). The open questions are: what are these levers?; when do they induce candidates to campaign differently?; to what extent do campaigns, in varying scenarios, change electoral outcomes?; and how much of the incumbency advantage comes from the electoral campaign rhetoric (as opposed to systematic or candidate specific reasons)? Despite voluminous literatures on congressional elections and campaign effects, these questions have gone largely unaddressed.<sup>19</sup> Further, these questions connect to other studies of incumbency advantage. For example, are potentially high-quality challengers deterred due to the anticipation of campaign dynamics that disadvantage them? Zaller (1998) points to incumbents' political skills as deterring challengers from running (also see Levitt and Wolfram 1997): is campaign ability that key political skill? We hope our study will stimulate further work aimed at understanding how congressional campaign rhetoric connects the institutions of Congress to electoral outcomes. Our results suggest campaign communications and effects matter, and make clear that continued inattention to these dynamics would limit what we know about congressional elections and representation.

Sustained study of congressional campaign communications also has clear normative importance. We suggest that the institution of Congress provides incumbents with an inherent

<sup>&</sup>lt;sup>19</sup> Of particular relevance is the connection between how candidates' choose strategies and their perception of competitiveness. That is, it may be that certain triggers stimulate incumbents to anticipate attentive voters and engage in a risky strategy to cater to the criteria on which voters may decide. Enos and Hersh (2017) find that campaigns tend to be over-confident and that incumbents are more accurate in assessing electoral closeness. It remains unclear though how these perceptions map into campaign strategy exactly.

advantage when it comes to the effectiveness of campaign rhetoric. This is a step removed from recognition of the basic incumbency advantage. In this case, it means campaigns influence voters' decisions *and* many of them are unequal affairs. This creates a conundrum for theories of democratic representation. Indeed, theories that focus on responsiveness (e.g., Mansbridge et al. 2004) become vulnerable since the very opinions to which elected officials are supposed to respond are shaped by and reflective of those officials' preferences (e.g., Druckman 2014). Moreover, theories that focus more on democratic competition (e.g., Garsten 2009; Disch 2011) need to then contend with an institutionally generated inequity in competition. In campaigns, this inequity trickles down from the institutions that privilege incumbents to voters. In short, it amounts to institutionally-induced *campaign* advantages that enable those elected to shape voters' preferences and curtail competition.

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#### **Table 1: Website Features**

	Risky	Riskless
Negativity <sup>A</sup>	Negative statements about the	None.
	opponent (on the front-page	
	and issues-page).	
Issues <sup>B</sup>	Four party-owned issues; one	Five non-party-owned issues
(front-page, issues page)	non-owned issue. (3 on front-	listed. (2 on front-page, 5 on
	page, 5 on issues page.)	issues page.)
Positions <sup>C</sup>	Three clear issue positions.	One clear issue position.
	(On issues page.)	(On issues page.)
Endorsements <sup>D</sup>	Five endorsements.	Thirteen endorsements.
	(On issues page.)	(On distinct endorsements
		page.)
Personal Features <sup>E</sup>	Statements about honesty,	None.
	care/empathy, and leadership.	
	(On front-page briefly and in	
	detail on biography page.)	
Incumbent Features <sup>F</sup>	None.	Statements about familiarity,
		and actions taken on behalf of
		district. (On front-page
		briefly and in detail on
		biography page.)

<sup>A</sup> For example, on the risky Pollak site, the front-page included a statement that "It is time to replace Representative Jan Schakowsky; she is out of touch...," and the issue-page included, "...Schakowsky cannot be trusted..."

<sup>B</sup> We identified party owned issues based on public opinion data at the time; the five non-owned issues were taxes, deficit, immigration, morals/ethics, and government reform. The Democratic owned issues were health care, energy, education, and social security. The Republican owned issues were Homeland Security/terrorism, business, crime, and foreign policy/Middle East (see Druckman et al. 2010 for details on the construction of party ownership measures).

<sup>C</sup> For Schakowsky risky, the issue positions were on health care, energy, and education; for Schakowsky riskless, the issue position was on taxes. For Pollak risky, the issue positions were on Homeland Security/terrorism, foreign policy/Middle East, and business. For Pollak riskless, the issue position was on government reform.

<sup>D</sup> The endorsements came from well-known or fairly identifiable groups.

<sup>E</sup> We operationalized variables as done in Druckman et al. (2009); honesty involved statements about trust; empathy involved family details; and leadership involved statements about running for office. We also included polls favorable to the given candidate for the risky (but not riskless) sites (see Druckman et al. 2009).

<sup>F</sup>We operationalized these as coded in Druckman et al. (2009); thus, familiarity involved statements about ties to district/history; and actions involved statements about participation in events, assistance, etc.

# Table 2: Experimental Conditions

# (1) = Control Group

	Pollak Risky	Pollak Riskless
Schakowsky Risky	(2)	(3)
Schakowsky Riskless	(4)	(5)

	Incumbency Factors	Election Closeness
	(1-7 scale, toward Sch.)	(1-7 scale, toward close)
1) Control	5.05	3.18
	(1.40; 44)	(std. dev. = 1.13; N = 44)
2) Schakowsky Risky / Pollak	5.18	3.90
Risky	(1.22; 80)	(1.17; 80)
3) Schakowsky Risky / Pollak	5.20	3.89
Riskless	(1.17; 84)	(1.21; 84)
4) Schakowsky Riskless /	5.23	3.27
Pollak Risky	(1.34; 91)	(1.17; 92)
5) Schakowsky Riskless /	5.27	3.19
Pollak Riskless	(1.46; 94)	(1.09:93)
Overall	5.20	3.50
	(1.31; 393)	(1.20; 393)

 Table 3: Election Closeness and Incumbency Scores

		(condition 1)	(2)	(3)	(4)	(5)
	All	Control	Sch	Sch	Sch	Sch
	Respondents	Group	Risky/Pol	Risky/Pol	Riskless/Pol	Riskless/Pol
	•	•	Risky	Riskless	Risky	Riskless
Incumbent	$0.448^{***}$	0.765***	0.170	0.179*	0.527***	0.696***
	(0.054)	(0.115)	(0.126)	(0.106)	(0.109)	(0.129)
Image	0.177***	0.027	0.335***	0.313***	0.116	0.104
	(0.056)	(0.168)	(0.121)	(0.088)	(0.107)	(0.169)
Issues	0.384***	-0.004	0.563***	0.826***	0.230	0.156
	(0.067)	(0.243)	(0.137)	(0.125)	(0.147)	(0.153)
Party ID	-0.158***	-0.099	-0.207*	-0.035	-0.276**	0.040
	(0.051)	(0.120)	(0.123)	(0.090)	(0.124)	(0.105)
Gender	0.038	0.090	0.051	0.378	-0.012	-0.061
	(0.137)	(0.316)	(0.310)	(0.232)	(0.296)	(0.327)
Minority	-0.154	-0.052	-0.219	0.013	0.024	0.236
	(0.160)	(0.330)	(0.371)	(0.262)	(0.336)	(0.492)
Age	-0.009	-0.231	-0.296	0.153	0.034	0.061
	(0.082)	(0.289)	(0.210)	(0.124)	(0.136)	(0.250)
Income	-0.045	-0.042	-0.160	0.047	-0.108	-0.127
	(0.058)	(0.138)	(0.139)	(0.101)	(0.115)	(0.148)
Education	-0.020	0.189	0.139	-0.340**	0.194	0.073
	(0.092)	(0.224)	(0.238)	(0.161)	(0.173)	(0.220)
Constant	3.026***	1.340	4.046***	4.242***	2.275**	1.043
	(0.508)	(1.361)	(1.406)	(0.854)	(0.963)	(1.176)
Observations	344	37	75	70	84	78
R-squared	0.502	0.707	0.654	0.733	0.567	0.472

 Table 4: Vote Preference Regressions

Entries are OLS coefficients with standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

	Vote (1-7 scale, toward Sch.)	Image (-6 to 6 scale, toward Sch.)	Issue Proximity (-6 to 6 scale, toward Sch.)
1) Control	5.13	0.31	0.35
	(1.34; 45)	(1.11; 44)	(0.82; 41)
2) Schakowsky Risky /	4.98	1.21	1.02
Pollak Risky	(1.90; 80)	(1.47; 80)	(1.56; 80)
3) Schakowsky Risky /	5.02	0.86	0.36
Pollak Riskless	(1.57; 82)	(1.40; 84)	(1.22; 84)
4) Schakowsky Riskless	5.04	0.57	0.73
/ Pollak Risky	(1.72; 91)	(1.77; 91)	(1.49; 92)
5) Schakowsky Riskless	4.91	0.42	0.03
/ Pollak Riskless	(1.72; 92)	(1.16; 93)	(1.31; 92)
Overall	5.00	0.70	0.50
	(1.68; 390)	(1.46; 392)	(1.39; 389)

Table 5: Vote, Image, and Issue Proximity Scores

	Measure	Predicted Values*
Negativity	Whether the candidate had any negativity (toward the opponent) on the site. (Probability	Incumbent: .62 (std. err.: .07).
	of negativity).	Challenger: .98 (std. err.: .02)
Issues	Weighted relative public opinion partisan advantage of issues discussed on the site. <sup>A</sup> (Scale from -17.5% to 12.85%, is average public opinion advantage for candidate's party on issues mentioned)	Incumbent: .20 (std. err.: .26). Challenger: 1.98 (std. err.: .29)
Positions	Number of unambiguous issue positions taken on the site (from 0 to $33$ ). <sup>B</sup>	Incumbent: 11.65 (std. err.: .58).
		Challenger: 13.67 (std. err.: .76)
Endorsements	Number of endorsements on the site (from 0 to $311$ ). <sup>C</sup>	Incumbent: 10.85 (std. err.: 1.88).
		Challenger: 16.68 (std. err.: 3.17
Personal Features <sup>D</sup>	Whether the candidate made a statement about leadership (i.e., why running for office and the direction he or she will go if elected) on the front page or biography page. (Probability of leadership statement).	Incumbent: .34 (std. err.: .05). Challenger: .56 (std. err.: .06)
	Whether the candidate made a statement that signals empathy (i.e., details about his or her family) on the front page or biography page. (Probability of empathy statement).	Incumbent: .47 (std. err.: .05). Challenger: .67 (std. err.: .05)
Incumbent Features <sup>E</sup>	Whether the candidate made a statement about being familiar with the district on the site (i.e., growing up or being from the district) on the front-page or biography page. (Probability of familiarity statement).	Incumbent: .60 (std. err.: .05). Challenger: .41 (std. err.: .06)
	Number of statements the candidate made about actions taken to benefit the district (e.g., including organizing events or working legislation, etc) on the site (from 0 to 31).	Incumbent: 6.65 (std. err.: .71). Challenger: 2.29 (std. err.: .28)

#### **Table 6: Candidate Website Features**

\*We computed predicted values using *Clarify* (Tomz et al. 2000).

<sup>A</sup> To compute this, we collected data from polls on the public's perception of which party "owned" each issue (i.e., handled the issue better). For each issue mentioned on a candidate's site, we took the average public opinion difference over all issues resulting in a partisan ownership variable with higher scores indicating increased ownership by the candidate's party (see Hayes 2005).

<sup>B</sup> Audios and videos were not coded for this variable.

<sup>C</sup> Audios and videos were not coded for this variable.

<sup>D</sup> Statements about honesty were not coded. The operationalizations of leadership and empathy match those used in our experiment (also see Druckman et al. 2009 for rationale).

<sup>E</sup> The operationalizations match those used in our experiment (also see Druckman et al. 2009 for rationale). Audios and videos were not coded for these the action variable.

## Appendix

## **Details on the District/Campaign**

Illinois' 9<sup>th</sup> District includes northern parts of Chicago and northern suburbs and lies alongside Lake Michigan. During the 2010 campaign, district statistics, as listed at *Congressional Quarterly's* Roll Call, stated an estimated population (from 2000) of 653,647, a median income of \$46,531, and a demographic breakdown as follows: 68.5% White, 10.9% Black, 12.4% Asian, 11.5% Hispanic, 0.3% Native American, and 4.6% other. It is a highly Democratic district that had a Cook Partisan Voting Index Score of D+20 (meaning that the average Democratic share of the presidential vote in the district exceeds the national average share by 20%).

The District has been represented by a Democrat since 1949, with Jan Schakowsky being first elected in 1998. From 1998 to 2008, Schakowsky always garnered at least 70% of the vote. She has been one of the most liberal-leaning members of Congress. The 2010 election was expected to be at least relatively more competitive than prior contests (although it was still seen as a safe Democratic district). The increased expectation of competitiveness reflected, in part, Schakowsky's brief consideration of not pursuing re-election and instead running for the Senate. She also had some personal controversy with her husband pleading guilty to tax withholding and bank fraud charges. The 2010 challenger Joel Pollak was expected to somewhat resonate with voters as he had long standing ties to the district, and was an outspoken advocate of Israel (and the district has a sizable Jewish population). He also had received national attention for a public exchange with Barney Frank and was endorsed by the Chicago Tea Party. Even so, in the end Schakowsky beat Pollak 66% to 31%.

## **Pre-test**

To ensure the webpage content was perceived as intended, we conducted a pre-test. To do this, we relied on a sample of 68 respondents who did not participate in the main experiment. We provided them with various segments meant to capture the variables (see Table 1) and asked them to rate them. For issue ownership, we listed a host of issues (e.g., see note below Table 1) and asked respondents which party they trust to do a better job at handling the issue (on a 7-point scale from "clearly Democrats" to "clearly Republicans"). For position-taking, we included statements and asked respondents to rate the extent to which it is an ambiguous or unambiguous in offering of a clear position (on a 7-point scale). For endorsements, we asked respondents to rate where each group political fell, from "strong Democrat" to "strong Republican" (on a 7-point scale). For each image, we asked respondents to rate the extent to which the statement portrayed the candidate as being a "leader," "honest," or "empathetic" (on 7-point scales). We used a similar approach for the incumbency factors of familiarity and taking actions. We present the results in the Table A-1, which provides mean value ratings across statements we *used* in the experiment. The results clearly suggest our content coheres with the constructs we intend.

## Table A-1: Pre-Test Results

Democratic Issue Owned	2.54 (0.57)
Republican Issue Owned	5.37 (0.33)
No Issue Ownership	4.22 (0.46)
Schakowsky Clear Position	6.10 (0.39)
Pollak Clear Position	5.66 (0.75)
Schakowsky Ambiguous Position	2.53 (0.49)
Pollak Ambiguous Position	2.14 (0.30)
Democratic Endorsements	2.45 (1.32)
Republican Endorsements	5.05 (1.36)
Schakowsky Leadership	5.67 (0.15)
Pollak Leadership	5.61 (0.10)
Schakowsky Honesty	5.27 (0.38)
Pollak Honesty	5.13 (0.28)
Schakowsky Empathy	4.50 (0.23)
Pollak Empathy	5.28 (0.24)
Schakowsky Familiarity	6.15 (0.37)
Pollak Familiarity	6.10 (0.41)
Schakowsky Actions	6.03 (0.15)
Pollak Actions	5.92 (0.25)

# Sample Demographics

Gender $(n = 394)$	60% female
Ethnicity/Race $(n = 387)$	70% White;
	6% African-American;
	15% Asian American;
	4% Hispanic;
	5% Other
Age (n = 391)	52% 18-24;
	27% 25-34;
	13% 35-50;
	7% 51-65;
	1% Over 65
Income $(n = 363)$	15% < \$30,000;
	35% \$30,000-\$69,999;
	20% \$70,000-\$99,999;
	21% \$100,000-\$200,000;
	9% Over \$200,000
Education (highest level) $(n = 392)$	4% High School;
	37% Some College;
	34% 4 Year College Degree;
	25% Advanced Degree
Party Identification $(n = 382)$	25% Strong Democrat;
	23% Weak Democrat;
	22% Independent leans Democrat;
	15% Independent;
	7% Independent leans Republican;
	5% Weak Republican;
	3% Strong Republican

## **Supplementary Results/Models**

Column 1 of Table A-2 repeats the main regression result, among all respondents, as reported in Table 4. The second column adds interactions between whether it is an incumbent condition (i.e., condition 1, 4, or 5 – where we expect incumbency factors to dominate) or a non-incumbent condition (i.e., 2 or 3 – where we expect image and issue to be significant). The significant positive interaction with incumbency reveal that incumbency factors are significantly more salient in the incumbency conditions when Schakowsky does not employ a risky strategy. The significant main effects on image and issues coupled with the significant negative interactions (where Schakowsky employs a risky strategy) to a significantly greater extent than in the incumbency conditions. More succinctly, the differences across conditions reported in Table 4 (i.e. the key tests of hypothesis 3) are statistically meaningful. As noted in the text, the regression also shows a significant negative main effect for the incumbency condition dummy. This stems from the large, on average, advantage on incumbency factors and the sizeable coefficient for that variable in incumbency conditions (which inflates the "on average score" sans the negative dummy).

	All Respondents	Interactions
Incumbent	0.448***	0.168*
	(0.054)	(0.086)
Image	0.177***	0.333***
	(0.056)	(0.078)
Issues	0.384***	0.621***
	(0.067)	(0.087)
Party ID	-0.158***	-0.122**
	(0.051)	(0.049)
Gender	0.038	0.064
	(0.137)	(0.131)
Minority	-0.154	0.009
-	(0.160)	(0.155)
Age	-0.009	-0.010
-	(0.082)	(0.078)
Income	-0.045	-0.055
	(0.058)	(0.055)
Education	-0.020	0.034
	(0.092)	(0.089)
Inc. Cond.		-1.617***
		(0.549)
Inc. X. Incumb.		0.447***
		(0.106)
Inc. X. Image		-0.197*
C		(0.106)
Inc. X. Posit.		-0.406***
		(0.113)
Constant	3.026***	3.634***
	(0.508)	(0.617)
Observations	344	344
D squared	0.502	0.558
K-squareu	0.302	0.330

 Table A2: Vote Preference Regressions with Interactions

Entries are OLS coefficients with standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

In Table A-3, we replicate Table 4 except we include the individual items for the incumbency factors (i.e., experience, familiarity, actions) and image (i.e., honesty, care, leadership). The results show that it is largely, although not entirely, perception of experience that drives the incumbency factor results. This is sensible insofar as it is a relatively easy criterion to process. The lack of consistent effects for familiarity may reflect the nature of the study insofar as familiarity often matters at the very base level of name recognition (Jacobson 2013) and in our study, all participants knew the candidates via the initial material distributed. The results also show that the image results are completely due to the priming of leadership perceptions – honesty and care/empathy are not primed.

		(condition 1)	(2)	(3)	(4)	(5)
	All	Control	Sch	Sch	Sch	Sch
	Respondents	Group	Risky/Pol	Risky/Pol	Riskless/Pol	Riskless/Pol
	•		Risky	Riskless	Risky	Riskless
			-		-	
Experience	0.261***	0.536**	0.256*	0.079	0.356***	0.391***
	(0.053)	(0.198)	(0.133)	(0.086)	(0.134)	(0.130)
Familiarity	0.103*	0.334*	-0.024	-0.038	-0.161	0.134
	(0.059)	(0.174)	(0.149)	(0.087)	(0.160)	(0.137)
Actions	0.085	-0.142	-0.084	0.110	0.256*	0.206
	(0.063)	(0.216)	(0.139)	(0.097)	(0.138)	(0.143)
Honesty	0.079*	0.012	0.103	0.038	0.044	0.157
	(0.047)	(0.222)	(0.093)	(0.080)	(0.090)	(0.129)
Care	0.040	0.150	0.070	0.030	0.067	0.052
	(0.037)	(0.245)	(0.083)	(0.062)	(0.075)	(0.105)
Leadership	0.076*	-0.168	0.182**	0.310***	-0.018	-0.153
	(0.040)	(0.202)	(0.078)	(0.081)	(0.091)	(0.100)
Issues	0.389***	-0.150	0.570***	0.835***	0.178	0.109
	(0.069)	(0.337)	(0.138)	(0.126)	(0.155)	(0.163)
Party ID	-0.157***	-0.147	-0.175	-0.003	-0.312**	0.017
	(0.051)	(0.131)	(0.128)	(0.089)	(0.128)	(0.107)
Gender	0.005	0.103	0.001	0.270	-0.040	0.070
	(0.140)	(0.323)	(0.321)	(0.231)	(0.305)	(0.332)
Minority	-0.185	-0.206	-0.279	0.129	-0.030	0.402
	(0.162)	(0.367)	(0.397)	(0.257)	(0.346)	(0.506)
Age	-0.014	-0.332	-0.274	0.196	0.082	0.084
	(0.084)	(0.297)	(0.215)	(0.122)	(0.154)	(0.251)
Income	-0.048	-0.061	-0.184	0.022	-0.114	-0.044
	(0.058)	(0.140)	(0.141)	(0.100)	(0.117)	(0.150)
Education	-0.025	0.236	0.130	-0.304*	0.128	0.219
	(0.094)	(0.238)	(0.240)	(0.158)	(0.185)	(0.223)
Constant	3.059***	1.631	4.163***	3.905***	3.047***	0.069
	(0.513)	(1.400)	(1.413)	(0.836)	(1.042)	(1.242)
	<b>a</b> 10					
Observations	340	37	75	69	82	77
R-squared	0.503	0.749	0.674	0.772	0.567	0.534

Table A-3: Vote Preference Regressions With Specific Incumbency and Image Variables

Entries are OLS coefficients with standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

In Table A-4, we replicate Table 4 except we include the individual items for the incumbency factors (i.e., experience, familiarity, actions), image (i.e., honesty, care, leadership), and the candidate specific issue variables (e.g., proximity to each candidate independently). Importantly, the candidate specific issue variables are the absolute values of overall issue proximity from the respondent to the candidate. Thus, larger values indicated, greater distance (i.e., less agreement with the candidate). It thus makes sense that significant issue results show a positive coefficient for Pollak (i.e., further distance from Pollak leads to more support for Schakowsky) and a negative coefficient for Schakowsky (i.e., further distance from Schakowsky leads to less support for Schakowsky). The overall results mimic the prior table on incumbency factors and image, and further show that Pollak issue views mattered in both the issue priming conditions while Schakowsky issue views mattered only when Pollak used a riskless strategy. This is sensible insofar as respondents likely paid more attention to Schakowsky's views when Pollak did not express his positions (in condition 3 as compared to condition 2).

		(condition 1)	(2)	(3)	(4)	(5)
	All	Control	Sch	Sch	Sch	Sch
	Respondents	Group	Risky/Pol	Risky/Pol	Riskless/Pol	Riskless/Pol
	•	L.	Risky	Riskless	Risky	Riskless
					•	
Experience	0.260***	0.538**	0.255*	0.077	0.337**	0.387***
	(0.054)	(0.203)	(0.133)	(0.083)	(0.133)	(0.131)
Familiarity	0.104*	0.343*	-0.029	-0.027	-0.124	0.150
	(0.059)	(0.188)	(0.150)	(0.085)	(0.160)	(0.140)
Actions	0.086	-0.156	-0.088	0.127	0.281**	0.206
	(0.063)	(0.238)	(0.140)	(0.095)	(0.137)	(0.144)
Honesty	0.078*	0.015	0.106	0.050	0.050	0.149
	(0.047)	(0.228)	(0.094)	(0.078)	(0.089)	(0.131)
Care	0.042	0.153	0.063	0.058	0.059	0.058
	(0.037)	(0.251)	(0.085)	(0.062)	(0.075)	(0.106)
Leadership	0.076*	-0.171	0.189**	0.307***	-0.004	-0.144
	(0.040)	(0.207)	(0.079)	(0.079)	(0.091)	(0.101)
Pol. Issues	0.372***	-0.146	0.635***	0.615***	0.318*	0.001
	(0.087)	(0.345)	(0.176)	(0.167)	(0.177)	(0.228)
Sch. Issues	-0.416***	0.191	-0.433	-1.091***	0.154	-0.199
	(0.105)	(0.430)	(0.264)	(0.180)	(0.260)	(0.211)
Party ID	-0.154***	-0.147	-0.193	0.038	-0.336**	0.026
	(0.052)	(0.134)	(0.132)	(0.089)	(0.128)	(0.109)
Gender	-0.001	0.118	-0.021	0.193	0.041	-0.011
	(0.141)	(0.345)	(0.325)	(0.229)	(0.306)	(0.354)
Minority	-0.193	-0.189	-0.268	-0.017	0.048	0.337
	(0.164)	(0.392)	(0.400)	(0.262)	(0.346)	(0.517)
Age	-0.014	-0.331	-0.286	0.175	0.060	0.105
	(0.085)	(0.304)	(0.217)	(0.119)	(0.153)	(0.254)
Income	-0.048	-0.067	-0.185	0.017	-0.117	-0.045
	(0.059)	(0.148)	(0.141)	(0.098)	(0.116)	(0.150)
Education	-0.021	0.226	0.125	-0.287*	0.100	0.232
	(0.095)	(0.251)	(0.242)	(0.154)	(0.184)	(0.224)
Constant	3.114***	1.610	3.967***	4.561***	2.175*	0.307
	(0.539)	(1.437)	(1.456)	(0.883)	(1.170)	(1.295)
	2.40	27				
Observations	340	37	75	69	82	77
R-squared	0.503	0.749	0.676	0.787	0.582	0.537

 Table A-4: Vote Preference Regressions with Specific Incumbency, Image, and Candidate Issue Variables

Entries are OLS coefficients with standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

In Table A-5, we replicate Table 4 except we include the individual items for the incumbency factors (i.e., experience, familiarity, actions), candidate specific image variables (i.e., individuals image scores for each candidate), and the candidate specific issue variables (e.g., proximity to each candidate independently). Importantly, the candidate specific image variables are such that higher scores indicate increased image perceptions for the given candidate. The results echo the prior table on incumbency factors and issue positions. The image results also cohere with prior results with leadership being fundamental. As on issues, it is Pollak's image that consistently matters but Schakowsky's matters when Pollak does not engage in discussing image (as with issues).

		(condition 1)	(2)	(3)	(4)	(5)
	All	Control Group	Sch Risky/Pol	Sch Risky/Pol	Sch	Sch
	Respondents	P	Risky	Riskless	Riskless/Pol	Riskless/Pol
	P		~-j		Risky	Riskless
					j	
Experience	0.261***	0.801***	0.269*	0.084	0.317**	0.434***
_	(0.054)	(0.208)	(0.142)	(0.083)	(0.140)	(0.132)
Familiarity	0.104*	0.288	-0.035	-0.035	-0.105	0.110
·	(0.059)	(0.178)	(0.155)	(0.087)	(0.164)	(0.143)
Actions	0.083	-0.264	-0.093	0.162	0.255*	0.234
	(0.063)	(0.214)	(0.144)	(0.097)	(0.142)	(0.146)
Pol. Hones.	-0.139**	-0.429	-0.135	-0.062	-0.048	-0.393*
	(0.063)	(0.261)	(0.130)	(0.098)	(0.127)	(0.197)
Pol. Care	-0.030	0.171	-0.041	-0.044	-0.023	-0.064
	(0.053)	(0.272)	(0.120)	(0.084)	(0.116)	(0.158)
Pol. Lead.	-0.020	0.288	-0.191*	-0.202**	0.084	0.208
	(0.052)	(0.275)	(0.107)	(0.100)	(0.110)	(0.135)
Sch. Hones.	0.026	-0.339	0.077	0.027	0.053	-0.036
	(0.068)	(0.229)	(0.137)	(0.121)	(0.161)	(0.166)
Sch. Care	0.063	0.654*	0.104	0.124	0.031	0.119
	(0.070)	(0.335)	(0.148)	(0.126)	(0.191)	(0.162)
Sch. Lead.	0.151**	-0.190	0.187	0.423***	0.138	-0.027
	(0.064)	(0.276)	(0.154)	(0.110)	(0.151)	(0.159)
Pol. Issues	0.379***	-0.139	0.637***	0.677***	0.353*	-0.036
	(0.088)	(0.308)	(0.184)	(0.170)	(0.181)	(0.235)
Sch. Issues	-0.397***	0.422	-0.440	-1.000***	0.178	-0.130
	(0.106)	(0.408)	(0.275)	(0.198)	(0.264)	(0.227)
Party ID	-0.165***	-0.244*	-0.185	0.040	-0.329**	-0.011
	(0.052)	(0.131)	(0.137)	(0.092)	(0.129)	(0.111)
Gender	-0.055	-0.289	-0.044	0.169	-0.048	-0.084
	(0.144)	(0.369)	(0.349)	(0.232)	(0.314)	(0.353)
Minority	-0.188	-0.203	-0.256	0.029	-0.038	0.603
	(0.165)	(0.474)	(0.411)	(0.265)	(0.352)	(0.529)
Age	0.002	-0.255	-0.301	0.149	0.117	0.088
	(0.085)	(0.273)	(0.232)	(0.122)	(0.158)	(0.261)
Income	-0.050	-0.014	-0.188	0.012	-0.149	-0.079
	(0.059)	(0.129)	(0.148)	(0.100)	(0.121)	(0.152)
Education	-0.023	0.109	0.129	-0.264*	0.086	0.194
	(0.095)	(0.237)	(0.254)	(0.155)	(0.185)	(0.229)
Constant	2.830***	0.438	3.937*	2.758*	1.216	1.147
	(0.723)	(1.723)	(2.165)	(1.406)	(1.421)	(1.799)
Observations	340	37	75	69	82	77
R-squared	0.509	0.838	0.677	0.801	0.599	0.567

 Table A-5: Vote Preference Regressions With Specific Incumbency, Candidate Image, and

 Candidate Issue Variables

Entries are OLS coefficients with standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

In Table A-6, we present results with only the leadership image variable; we do so to ensure robustness of the main Table 4 results in light of the findings (in the prior Appendix tables) that leadership underlies the image effect. The results are consistent with Table 4 although leadership oddly becomes marginally significant and negative in condition 5. Also, the issue variables are significant when Schakowsky employs a riskless strategy, although small in magnitude then when she uses a risky strategy.

		(condition 1)	(2)	(3)	(4)	(5)
	A 11	(control	(2) Sch	(J) Sch	(4) Sch	(J) Sch
	All	Control	Dialay/Dol	Dicky/Dol	Diablaga/Dol	Dialalaga/Dol
	Respondents	Group	RISKY/POI	RISKY/POI	RISKIESS/POI	RISKIESS/POI
			RISKY	RISKIESS	RISKY	RISKIESS
Incumbent	0.460***	0.771***	0.157	0.166	0.533***	0.750***
	(0.054)	(0.121)	(0.128)	(0.100)	(0.110)	(0.121)
Leadership	0.089**	-0.006	0.196**	0.340***	0.050	-0.184*
	(0.039)	(0.155)	(0.076)	(0.075)	(0.084)	(0.099)
Issues	0.442***	0.015	0.619***	0.827***	0.280**	0.265*
	(0.062)	(0.216)	(0.133)	(0.117)	(0.137)	(0.143)
Party ID	-0.154***	-0.098	-0.218*	-0.010	-0.278**	0.004
	(0.051)	(0.120)	(0.124)	(0.086)	(0.126)	(0.104)
Gender	0.030	0.109	0.045	0.256	-0.015	0.038
	(0.140)	(0.315)	(0.313)	(0.227)	(0.298)	(0.328)
Minority	-0.178	-0.067	-0.455	0.133	0.047	0.270
	(0.161)	(0.330)	(0.371)	(0.251)	(0.337)	(0.474)
Age	0.001	-0.235	-0.280	0.201*	0.037	0.141
	(0.083)	(0.291)	(0.211)	(0.118)	(0.144)	(0.246)
Income	-0.041	-0.037	-0.175	0.013	-0.113	-0.052
	(0.059)	(0.136)	(0.140)	(0.097)	(0.115)	(0.149)
Education	-0.009	0.194	0.129	-0.287*	0.206	0.133
	(0.094)	(0.222)	(0.239)	(0.154)	(0.176)	(0.218)
Constant	2.929***	1.283	4.462***	3.812***	2.228**	0.357
	(0.513)	(1.348)	(1.398)	(0.793)	(0.967)	(1.185)
Observations	342	37	75	69	84	77
R-squared	0.496	0.707	0.649	0.762	0.563	0.499

## Table A-6: Vote Preference Regressions With Leadership Only

Entries are OLS coefficients with standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

In Table A-7, we present the individual incumbency scores. Consistent with the text, the scores are statistically constant across condition and highly favorable to Schakowsky.

-	Experience	Familiarity	Actions
1) Control	5.14	5.09	4.93
	(1.52; 44)	(1.65; 44)	(1.35; 44)
2)	5.39	5.20	4.95
Schakowsky	(1.44; 80)	(1.40; 80)	(1.44; 80)
Risky / Pollak			
Risky			
3)	5.36	5.15	5.10
Schakowsky	(1.50; 84)	(1.54; 84)	(1.61; 84)
Risky / Pollak			
Riskless			
4)	5.22	5.46	5.03
Schakowsky	(1.76; 91)	(1.30; 91)	(1.49; 90)
Riskless /			
Pollak Risky			
5)	5.39	5.22	5.24
Schakowsky	(1.69; 93)	(1.75; 94)	(1.62; 93)
Riskless /			
Pollak			
Riskless			
Overall	5.31	5.24	5.07
	(1.60; 393)	(1.53; 393)	(1.52; 391)

**Table A-7: Specific Incumbency Scores** 

In Table A-8, we present the mean scores for each image trait. It shows that Schakowsky is particularly persuasive when she discusses traits on leadership and honesty. Interestingly, Pollak does have a persuasive effect when it comes to care/empathy but it is a notable backfiring effect such that his care scores drop precipitously (i.e., Schakowsky becomes much more favored) when he opts for a risky strategy that includes discussing his empathy. The honesty/leadership effects seem to drive the image means presented in the text (leading to the statistically significant differences reported there).

	Honesty	Care	Leadership
1) Control	0.25	0.52	0.16
	(1.14; 44)	(1.53; 44)	(1.12; 44)
2)	0.35	2.44	0.84
Schakowsky	(1.81; 80)	(2.06; 80)	(2.15; 80)
Risky / Pollak			
Risky			
3)	0.31	0.62	1.61
Schakowsky	(1.64; 84)	(2.15; 83)	(1.66; 83)
Risky / Pollak			
Riskless			
4)	0.03	1.68	-0.03
Schakowsky	(1.88; 90)	(2.52; 91)	(2.15; 91)
Riskless /			
Pollak Risky			
5)	0.17	0.53	0.55
Schakowsky	(1.55; 93)	(1.84; 93)	(1.69; 92)
Riskless /			
Pollak			
Riskless			
Overall	0.21	1.21	0.66
	(1.66; 391)	(2.23; 391)	(1.93; 390)
Aisky / Foliak Riskless 4) Schakowsky Riskless / Pollak Risky 5) Schakowsky Riskless / Pollak Riskless Overall	0.03 (1.88; 90) 0.17 (1.55; 93) 0.21 (1.66; 391)	1.68 (2.52; 91) 0.53 (1.84; 93) 1.21 (2.23; 391)	-0.03 (2.15; 91) 0.55 (1.69; 92) 0.66 (1.93; 390)

**Table A-8: Specific Image Scores** 

In Table A-9, we present the mean scores for each image trait for each candidate. The trends are consistent with the table just presented (e.g., Schakowsky persuades on her leadership traits when she engages in a risky strategy; Pollak backfires when he discusses empathy).

	Pollak	Pollak Care	Pollak	Schakowsky	Schakowsky	Schakowsky
	Honesty		Leadership	Honesty	Care	Leadership
1) Control	3.98	3.93	4.27	4.23	4.45	4.43
	(0.79; 44)	(0.93; 44)	(0.76; 44)	(0.96; 44)	(0.98; 44)	(0.90; 44)
2)	4.29	3.35	4.45	4.64	5.79	5.29
Schakowsky	(1.34; 80)	(1.48; 80)	(1.70; 80)	(1.29; 80)	(1.23; 80)	(1.17; 80)
Risky /						
Pollak Risky						
3)	4.29	4.71	3.94	4.60	5.32	5.52
Schakowsky	(1.30; 84)	(1.51; 84)	(1.37; 84)	(1.09; 84)	(1.15; 83)	(1.15; 83)
Risky /						
Pollak						
Riskless						
4)	4.5	3.81	4.74	4.55	5.49	4.70
Schakowsky	(1.29; 90)	(1.64; 91)	(1.63; 91)	(1.28; 91)	(1.42; 91)	(1.46; 91)
Riskless /						
Pollak Risky						
5)	4.39	4.74	4.62	4.56	5.28	5.18
Schakowsky	(1.18; 94)	(1.37; 94)	(1.37; 93)	(1.30; 93)	(1.25; 93)	(1.21; 93)
Riskless /						
Pollak						
Riskless						
Overall	4.33	4.15	4.43	4.54	5.35	5.08
	(1.24; 392)	(1.55; 393)	(1.48; 392)	(1.22; 392)	(1.29; 391)	(1.27; 391)

**Table A-9: Candidate Image Scores** 

In Table A-10, we present the mean scores for issues for each specific candidate. Note that larger scores here indicate great distance from the candidate (i.e., smaller scores indicate agreeing with the candidate more). Consistent with what is presented in the text, it is evident that when Pollak introduces his issue positions (using a risky strategy), people become more distant from him.

	Pollak Issues	Schakowsky
		Issues
1) Control	1.88	1.53
	(0.96; 41)	(0.63; 41)
2)	2.50	1.47
Schakowsky	(1.04; 80)	(0.80; 80)
Risky / Pollak		
Risky		
3)	1.96	1.61
Schakowsky	(0.83; 84)	(0.73; 84)
Risky / Pollak		
Riskless		
4)	2.27	1.54
Schakowsky	(1.01; 92)	(0.83; 92)
Riskless /		
Pollak Risky		
5)	1.80	1.77
Schakowsky	(0.85; 92)	(0.94; 92)
Riskless /		
Pollak		
Riskless		
Overall	2.10	1.59
	(0.97; 389)	(0.82; 389)

**Table A-10: Candidate Issue Scores** 

## **Candidate Web Content Analysis Results**

To produce the probabilities reported in Table 6, we ran a set of regressions on our outcome variables. We then produced predicted values using *Clarify* (Tomz et al. 2000). The regressions included a set of control variables, as follows. The results appear below in Tables A11a, b.

The challenger and open seat variables are dummy variables (i.e., 0 or 1) indicating whether the candidate is a challenger or running for an open-seat. When both are equal to 0, it signifies incumbent status. Competition is a four-point score of how competitive the election was, based on the Cook non-partisan ratings. Senate, Democrat, and Female are dummy variables indicating whether the candidate is, respectively, running for the Senate, a Democrat, and a female. Funds raised is the amount of money the candidate raised according to the Federal Election Commissions. Front-runner is a three-point scale ranging from clear trailer to clear front-runner (see Druckman et al. 2010). District Republican is the percentage of the district that voted for the Republican presidential candidate in 2008. Opponent negativity is a dummy variable indicating whether the candidate's opponent went negative on his or her website. Prior office is a dummy variable indicating whether the candidate held any prior elective office. We include that for the incumbency factor variables so as to differentiate pure incumbency advantage as opposed to general "prior office" advantage.

		Issue		
	Negativity	Ownership	Positions	Endorse
Challenger	1.860***	1.762***	0.165*	0.439
-	(0.395)	(0.455)	(0.086)	(0.307)
Open Seat	1.117***	0.678	0.218***	0.535*
-	(0.315)	(0.451)	(0.081)	(0.287)
Competition	1.403***	-0.428	0.204***	0.173
-	(0.344)	(0.384)	(0.070)	(0.241)
Senate	-0.108	0.141	0.142*	0.436
	(0.364)	(0.448)	(0.081)	(0.276)
Democrat	0.084	9.706***	-0.035	0.073
	(0.215)	(0.325)	(0.060)	(0.223)
Female	0.154	0.316	-0.010	0.555**
	(0.270)	(0.387)	(0.071)	(0.251)
Funds Raised	10.835**	2.499	0.218	1.066
	(4.384)	(2.093)	(0.378)	(1.357)
Front-runner	-0.490***	1.045***	0.017	0.055
	(0.173)	(0.235)	(0.044)	(0.149)
District Republican	0.517	-1.649	-0.152	-1.264*
	(0.788)	(1.195)	(0.229)	(0.732)
Opp. Negative	0.574**			
	(0.265)			
Constant	-0.389	-5.918***	2.401***	2.510***
	(0.707)	(0.966)	(0.184)	(0.613)
Observations	369	367	369	369
R-squared	-109.8	0.749		
Log Lik		-881.1	-1196	-1256

 Table A-11a: Web Campaign Features

*Note:* The negativity model is a probit regression; issue ownership is an ordinary least squares regression; and positions and endorsements are negative binomial regressions. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

				District
	Leader	Empathy	Familiar	Actions
Challenger	0.575***	0.510**	-0.498**	-1.062***
	(0.219)	(0.218)	(0.238)	(0.193)
Open Seat	0.295	0.350*	-0.276	-0.771***
-	(0.215)	(0.212)	(0.225)	(0.170)
Competition	-0.369**	0.335*	-0.085	0.259*
_	(0.185)	(0.182)	(0.192)	(0.156)
Senate	-0.251	0.092	-0.377*	0.075
	(0.217)	(0.211)	(0.218)	(0.177)
Democrat	0.345**	0.273*	0.100	0.584***
	(0.154)	(0.153)	(0.152)	(0.128)
Female	-0.284	0.004	-0.253	-0.154
	(0.184)	(0.181)	(0.181)	(0.150)
Funds Raised	1.937*	-0.240	-0.110	0.892
	(1.073)	(0.987)	(1.070)	(0.936)
Front-runner	-0.038	0.092	-0.131	-0.068
	(0.112)	(0.112)	(0.117)	(0.098)
District	-0.816	0.191	0.258	0.476
Republican				
	(0.567)	(0.559)	(0.557)	(0.505)
Prior Office			0.158	0.705***
			(0.209)	(0.183)
Constant	-0.006	-0.601	0.408	0.935**
	(0.457)	(0.457)	(0.463)	(0.419)
Observations	369	369	369	369
Log Lik	-240.5	-245.1	-245.6	-922.1

Table A-11b: Web Campaign Features

*Note:* The leadership, empathy and familiarity models are probit regressions; and district actions is a negative binomial regression. Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 for two-tailed tests.

#### Measures

How close do you think this election (Schakowsky vs. Pollak) will be?

1	2	3	4	5	6	7
Not Close at			Not Sure			Very Close
All						

Using the scale below, please indicate how likely you are to vote for Pollak or Schakowsky. (If you plan to vote for neither, please circle 4.)

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely will
will vote for						vote for
Pollak						Schakowsky

Which candidate—Pollak or Schakowsky—do you think possesses greater experience in public office?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
Pollak						Schakowsky

Which candidate—Pollak or Schakowsky—do you think is more familiar with the 9th Congressional District?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
Pollak						Schakowsky

Which candidate—Pollak or Schakowsky—do you think has taken more actions on behalf of voters in the 9<sup>th</sup> Congressional District?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
Pollak						Schakowsky

How well does each of the following words/phrases describe Pollak?

	Not Well at All			Not Sure			Very Well
Honest (e.g., trustworthy, forthcoming)	1	2	3	4	5	6	7

Compassionate (e.g., cares about ordinary people, empathic)	1	2	3	4	5	6	7
Strong Leader (e.g., gets things done)	1	2	3	4	5	6	7

How well does each of the following words/phrases describe Schakowsky?

	Not Well at All		Not Sure			Very Well		
Honest (e.g., trustworthy, forthcoming)	1	2	3	4	5	6	7	
Compassionate (e.g., cares about ordinary people, empathic)	1	2	3	4	5	6	7	
Strong Leader (e.g., gets things done)	1	2	3	4	5	6	7	

Do you think the government should be <u>less</u> involved with regulating business/the economy (e.g., private industry, banking)?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on business/economic regulation (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on business/economic regulation (i.e., what do you think Schakowsky thinks)?

Do you think there should be <u>expanded</u> health care coverage (e.g., requiring employers to provide coverage) in line with the recently passed health care law?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on health care (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on health care (i.e., what do you think Schakowsky thinks)?

Do you think the government should <u>spend more</u> on crime prevention (e.g., salaries for law-enforcement officers, community policing programs)?

1234567Definitely<br/>NOTNot SureDefinitely<br/>YES

Using the same 1-7 scale, where would you place Pollak's position on crime prevention spending (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on crime prevention spending (i.e., what do you think Schakowsky thinks)? \_\_\_\_\_

Do you think the government should <u>spend more</u> on education (e.g., after-school programs, grants to modernize, renovate, and repair public schools)?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on education spending (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on education spending (i.e., what do you think Schakowsky thinks)?

Do you think the government should lower capital gains taxes (i.e., taxes on the sale of stocks, bonds, and property)?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on capital gains taxes (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on capital gains taxes (i.e., what do you think Schakowsky thinks)?

Do you think the government should be doing more to stop undocumented workers from entering the country?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on undocumented workers (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on undocumented workers (i.e., what do you think Schakowsky thinks)?

Do you think the government should be <u>more progressive</u> (i.e., liberal) when it comes to moral and ethical issues like abortion and same-sex marriage?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on moral and ethical issues (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on moral and ethical issues (i.e., what do you think Schakowsky thinks)?

Do you think the government should spend more on Social Security?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on Social Security spending (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on Social Security spending (i.e., what do you think Schakowsky thinks)?

Do you think the government should be doing more to end government corruption and waste?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on government corruption (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on government corruption (i.e., what do you think Schakowsky thinks)?

Do you think the government should take a tougher stand against Palestinian groups in the Middle East?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on the Middle East (i.e., what do you think Pollak thinks)?\_\_\_\_\_

Using the same 1-7 scale, where would you place Schakowsky's position on the Middle East (i.e., what do you think Schakowsky thinks)?

Do you think the government should reduce spending in order to lower the deficit?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on the deficit (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on the deficit (i.e., what do you think Schakowsky thinks)?

Do you think the government should <u>promote</u> energy production from renewable sources (e.g., wind, biomass, geothermal, hydropower)?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on energy (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on energy (i.e., what do you think Schakowsky thinks)?

Do you think the US government should <u>sever</u> relations (diplomatic, economic) with countries that harbor suspected terrorists?

1	2	3	4	5	6	7
Definitely			Not Sure			Definitely
NOT						YES

Using the same 1-7 scale, where would you place Pollak's position on relations with countries that harbor suspected terrorists (i.e., what do you think Pollak thinks)?

Using the same 1-7 scale, where would you place Schakowsky's position on relations with countries that harbor suspected terrorists (i.e., what do you think Schakowsky thinks)?

Are you male or female?

Male

Female

Which of the following do you consider to be your primary racial or ethnic group?

White	African American	Asian Ameri	ican H	Hispanic	Native Americ	an Other
What is your age?						
18-24	25	5-34	35-50	:	51-65	Over 65
What is your estimate	of your family'	s annual houseł	nold income	(before tax	xes)?	
< \$30,000	\$30,000 - \$0	59,999 \$70	0,000-\$99,9	99 \$10	0,000-\$200,000	>\$200,000

What is the highest level of education you have completed?

Less than High School	High School	Some College	4 Year College Degree	Advanced Degree
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Generally speaking, do you consider yourself a Democrat, Independent, or Republican?

1	2	3	4	5	6	7
Strong	Weak	Independent	Independent	Independent	Weak	Strong
Democrat	Democrat	leans		leans	Republican	Republican
		Democrat		Republican		

## **Appendix References Not Cited in Paper**

- Druckman, James N., Cari Lynn Hennessy, Martin J. Kifer, and Michael Parkin. 2010. "Issue Engagement on Congressional Candidate Web Sites, 2002—2006." *Social Science Computer Review* 28 (1):3–23.
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