Legislators Off Their Leash:
Cognitive Shirking and Impending Retirement in the U.S. House*

Michael K. Romano
Department of Political Science
Shenandoah University
1460 University Drive, Davis Hall 205
Winchester, VA 22601
(540) 665-4697
mromano@su.edu

Objective
This article investigates whether public officials exhibit “cognitive shirking” prior to announcing retirement by changing the way they communicate during their final term.

Method
I analyze monthly speeches made by members of the U.S. House between the 105 and 109th terms, and collect data on psychological indicators found to indicate changes in cognition. A mixed-effect logistic regression examines whether these indicators increase the probability of retirement before the end of the term.

Results
The probability of retirement is amplified by increases in the level of cognitive inconsistency they display in public speeches.

Conclusion
Public officials, when deciding whether to retire from politics, display patterns of shifting priorities before and after making their retirement announcement. This suggests that representatives' justifications for policy choices go through significant reorganization as the electoral connection is severed.

*Please direct all correspondence to Michael K. Romano, Shenandoah University, 1460 University Drive, Davis Hall 205. Winchester, VA 22601. mromano@su.edu. An earlier version of this paper was presented at the 2015 meeting of the American Political Science Association in San Francisco, CA. The author would like to thank Burdett Loomis, Andrew J. Taylor, Michael Crespin, and Andrew B. Hall and the anonymous reviewers for their valuable comments in the early drafts of this paper. The data and coding used in this article are available upon request from the author for replication purposes.
In September 2015, Speaker of the House John Boehner (R-OH) resigned his post and announced his retirement. In his remarks prior to the announcement, Speaker Boehner spoke reservedly about ‘problematic’ factionalism in the party, attempting to bridge gaps between growing fissures as Tea Party and Freedom Caucus Republicans began to mount more power in the chamber. Post-resignation, Speaker Boehner changed. In April of 2016, the New York Times ran a story titled, “Out of Office, Ex-Speaker John Boehner Gleefully Releases Mute Button,” in which the public got their first glimpse of John Boehner out of office and, apparently, off his leash (Hulse 2016). In his interview, Boehner revealed his true feelings about the current state of American politics and his own party, speaking more openly about the current factionalism in the Republican Party. Most notable was Boehner’s particular animosity for then Republican presidential nominee Ted Cruz, calling him specifically, “Lucifer in the flesh.”

What led to this sudden change in former Speaker Boehner? Was it catharsis on the part of a former congressional leader finally free of partisan bonds? Or was this John Boehner, revealing his “true colors?” No matter how we answer these questions, the use of language in Boehner’s interview asks us to consider congressional behavior in a slightly different manner. Examinations of legislative behavior, and elite behavior more generally, are often conducted through the frame of goal theory. As a discipline we understand that representatives attempt to work within their power to create good public policy and gain power, with the overwhelming desire to maintain office via reelection from one term to the next (Fenno 1973; Mayhew 1974). This focus on legislative goals within the legislature, however, overshadows a significant question for understanding legislative institutions and representative behavior. Specifically, what happens after those goals are complete? Do elected officials act differently upon deciding that public office is no longer for them?
In order to answer such questions, I argue that examinations of exiting elected officials—here members of the House of Representatives—should consider how representatives communicate with constituents about their work. A fundamental political activity for representatives while in office is providing explanations for their actions to the public in order to justify their decisions. Communication activities are an extension of a representative’s *home-style*, conducted in order to maintain a personal (though mediated) connection with constituents to maintain support from election to election (Grimmer 2009). A growing body of literature has begun to focus more heavily on how political actors craft communications to the public and contextualize their decisions (Gershon 2012; Grimmer 2009; Kernell 2007), and has expanded our understanding of the decision making process by focusing on what Fenno (1978, 162) referred to as, “theories that explain explaining.” Here, I extend our understanding further by showing how the language of exiting public officials go through a significant change leading up to and post-retirement announcement, providing evidence that representatives “cognitively shirk” their constituencies once they have decided to exit political office.

The paper here extends our understanding of congressional retirement specifically, and political communications more generally by examining the rhetoric of 182 members of the House of Representatives between the 105th and 109th Congresses, including 103 representatives whom chose to retire during that time frame. Utilizing longitudinal data that spans multiple terms, I create a variable of cognitive complexity based on a linguistic examination of member’s monthly statements made on the chamber floor. I argue that as representatives get closer to retirement, they begin exhibiting instances of “cognitive shirking;” wherein representatives’ attitudes and mindset shift from being focused on constituency based rationales to more personal, ideological views. In order to test this theory, I borrow from studies in cognitive and political
psychology on the level of awareness individuals have about their emotional state when writing and speaking, and develop a measure of cognitive complexity. I argue that changes in cognition can be used in order to predict whether a representative signals retirement prior to making an official announcement, and that these changes have an impact on how legislators speak on the floor.\

**Severing the Electoral Bonds**

A central paradox of democratic representation is how a single individual or small group may balance their individual self-interests with the desires of the public that holds them accountable. No matter what level of government they serve, all political actors have goals (Baum 2006; Cohen 1999; Fenno 1973; Mayhew 1974), and remaining in political office best satisfies many of these goals. The incentives to stay in office generally leave representatives satiated enough to remain in office over a long period of time, with members leaving, “only in pine boxes or in a few cases kicking and screaming” (Frantzich 1978, 110). However with the end of every term, some representatives voluntarily choose to exit office. In order to ensure a member of Congress gains power within the chamber, for instance, they must remain in the chamber for a prolonged period of time. Brace (1985) notes that members in positions of power are generally expected to derive greater utility from their service and prolong their stay in the legislature. In general, public officials are assumed to be motivated to maintain a career in office over the long term, however, “changes in the probabilities, utilities, and/or costs associated with continued service, conditioned by the member’s predisposition toward risk, leads that alternative to have a lower expected utility than the costless and certain alternative of retirement” (Brace 1985, 109; see also Jacobson 2013).
In the literature, the prevailing wisdom recognizes the rationale that members of Congress are single minded in their quest for reelection (Mayhew 1974). Indeed the predominant argument for congressional retirement tends to be based upon electoral concerns following a particularly difficult campaign (Bullock 1972; Cooper and West 1981; Kiewiet and Zeng 1993; Wolak 2007). Members who barely scrape past their last election, have their districts changed due to reapportionment, find themselves simply facing a new constituency in light of demographic changes in the district, or believe that decisions made during the course of the legislative term will cause them to lose respect may opt for retirement rather than face a hostile constituency (Fenno 1978; Hibbing 1982; Moore and Hibbing 1992; 1998; Rhode 1979; Wolak 2007). Barring such circumstances, representatives are not supposed to want to retire (Hibbing 1982) unless retirement will allow for progressive ambition (Grofman et al. 1995; Herrick and Moore 1993; Hibbing 1986; Schlesinger 1966). Aside from electoral concerns, the reasoning behind retirement is generally attributed to one of several factors, including personal concerns such as age, health problems, or other circumstances that may preclude a representative from continuing in office for another term (Brace 1985; Cooper and West 1981; Fukumoto 2009; Hibbing 1982; Lawless and Theriault 2005), political career ambition (Bullock 1972; Fisher and Herrick 2002; Theriault, 1998), or limitations of their current institutional standing (Lawless and Theriault 2005).

Once a political actor has chosen retirement, however, a new set of questions emerges about their motivations and behavior with their remaining time in office. Particularly, how might political actors avoid or neglect their representative responsibilities just prior to and post retirement announcement? In the literature on congressional behavior, the concept of “shirking” by representatives has produced several competing explanations as to why, how, and specifically
if legislators behave differently when they are no longer “beholden” to monitoring or electoral punishment (Bender and Lott 1996; Lawrence 2000; Rothenberg and Sanders 2000a; 2000b). Specifically, shirking is defined by Bender and Lott (1996, 68) as the, “failure by the legislator to act in the interests of his constituents,” however they further note that this definition is ambiguous and open to several interpretations. Representatives are not supposed to shirk their duties, the argument goes, and support-maximizing behavior should mitigate shirking from political actors over the long-term. Retirement, however, changes this calculus and allows representatives’ behaviors to change when the electoral connection is severed. Examinations of this phenomenon generally focus on examining if legislators vote “differently” after announcing retirement, or avoid responsibilities normatively believed to be linked to the concept of representation and representative government. There is little evidence that a representative shirks ideologically from the electorate after announcing retirement, however (but see Rothenberg and Sanders 2000a; 2000b; Lawrence 2000), but Rothenberg and Sanders do provide evidence that representatives may engage in participatory shirking (attending fewer votes) once deciding to exit office.

**Cognition and Complexity in Political Speech**

While the literature is mixed with regard to the potential for legislators to shirk their duties when leaving office (Bender and Lott 1996), it is possible public officials shirk in less obvious ways than previously examined. I hypothesize that it may be the case that representatives will display *cognitive shirking* leading up to the retirement announcement and post-retirement decision, while still voting along ideologically proximate lines. That is, leading up to announcing retirement legislators may reveal new, unique legislative preferences by changing the way in which they speak publically. Used effectively, cognitive shirking can prime
the electorate prior to a retirement announcement by adjusting the way in which legislators talk about legislative proposals and their own behavior. By choosing to exit, representatives are afforded the opportunity to cast off the “shackles” of the electoral connection and use their remaining time in the legislature to speak on a more personal level with constituents as well. This form of cognitive shirking acts as a signal that representatives are trying to adjust to a decision-making strategy unburdened by electoral concerns, thus producing inconsistencies with previous rhetoric. Anecdotally, this may be one reason why former Speaker Boehner was more willing to speak so openly about his issues with the current state of the Republican Party post-retirement, something he would not have done so openly if he had to face voters in November.

Vital to the argument for cognitive shirking is understanding the way in which transmitters (in this case, members of the House) use language to convey meaning to receivers (the public). Language is key to our understanding of the social and political world, and the examination of language allows researchers to peer into an individual’s thought processes in order to better understand human behavior (Owens and Wedeking 2012; Tausczik and Pennebaker 2010). Words act as signals to the audience, which can be used to convey more than just substantive expressions of intentions (Dunn and Neuman 2016). Examinations of language and political psychology have focused primarily on the extent to which individuals display variation in the differentiation and integration of perspectives when evaluating particular events and issues; referred to as “cognitive complexity.” When cognitive complexity is low, individuals tend to form simple and rigid attitudes, while when cognition is high we see more diversity in opinion formation (Suedfeld, Tetlock and Streufert 1992). The argument presented here is that representatives, when considering retirement, may begin to change their language when speaking on the chamber floor. Speeches on the chamber floor can serve numerous purposes for members,
such as advancing electoral prospects and policy initiatives (Box-Steffensmeier et al. 1997; Maltzman and Sigelman 1996; Morris 2001), announcing support for symbolic purposes or paying respects to notable events and public figures (Hall 2002; Hill and Hurley 2002; Schickler, Pearson, and Feinstein 2010), supporting or condemning the party for their actions in the chamber (Diermeier et al. 2012; Proksch and Slapin 2012), or generally increase the visibility of a given member at both the local and national level (Pearson and Daney 2011). Over time, public officials should develop a natural cognitive pattern as they find their legislative style when speaking with colleagues and constituents. Retirement disrupts this style, leading retiring officials to “shirk” the way they utilize rhetoric as they begin to readjust to account for their immanent exit from office.

In order to examine whether public officials change their language as they move closer to retirement, speeches on the chamber floor were collected from the Congressional Record for 141 members of the House between the 105th and 112th Congresses, including eighty-one representatives whom chose to retire during the timeframe. Once the documents were collected for each member in the sample, cognitive complexity scores were calculated for each representative. In order to calculate complexity, I employ here the content analysis program, “Linguistic Inquiry and Word Count” (LIWC) to analyze the level of integration and differentiation in members’ speeches. LIWC is valuable for examinations of political speech, since it looks for key indicators of cognition and emotional responses by individuals in speech, which can be useful when examining the way that political actors may “drift” from their ideological stances (see Owens and Wedeking 2012; Tausczik and Pennebaker 2010). The measure of cognitive complexity was calculated utilizing the formula suggested by Owens and Wedeking (2012) and Gruenfeld (1995), and is based on several key indicators such as
tentativeness and inclusivity in language. Indicators for cognitive complexity were collected for each speech given on the floor by members in the sample between 1997 and 2013, and then standardized and aggregated by month in order to examine the average consistency a member displays from month to month.

Once the measure of consistency was finalized, cognitive inconsistency was calculated using the standard deviation for each representative’s set of document, and is bounded between zero and one. These two measures, when examined together help us to understand how retirement affects cognition in public officials. I argue that members of the House whom exhibit a wider range complex cognition and thus and display more cognitive inconsistency in their language are likely preparing to retire from office. Representatives who display more stable cognitive patterns with lower inconsistency scores will likely find greater advantage to remaining in the chamber and thus continuing from one term to the next. If cognitive inconsistency goes up, this should be an indication of cognitive shirking by representatives, and should be more likely to occur the closer a representative gets to retirement. On average, representatives do not display a high degree of inconsistency, the mean level being 0.306. This matches the theoretical expectations for cognitive shirking. Representatives, on average, should be fairly consistent in the way they process information and decide on their behavior (thus, inconsistency should be close to or approaching zero). Cognitive shirking should shift the way in which representatives make decisions, moving the inconsistency variable closer to one. The expectation here is that this shirking should be more prevalent when a representative is approaching retirement, or post making the retirement announcement.

Cognitive shirking occurs as representatives begin to shift their thoughts toward a future outside of public office, and consider their post-retirement life. As such, public officials whom
choose retirement over another term in office ought to go through noticeable fluctuations in their cognitive complexity as their time in office draws shorter. Visually, we can see this flux in cognitive patterns occur in Figure 1. As the figure shows, representatives whom choose to exit the legislature go through noticeable, substantial shocks rhetorically as the term progresses. At the beginning of their last term in office, retiring members on average display higher levels of cognitive inconsistency compared to their counterparts in the House. This shock then decreases dramatically over the first six months in the term before climbing again and reaching a status quo at the midway point in the term. Most interestingly, during their final six months in office, representatives look to go through another substantial spike in inconsistency before leveling off during their last three months. During their last few months in office, representatives’ speech topics do not venture far from the standard norm; the Congressional Record shows a number of speeches on matters of public policy, recognition of public officials and district-based matters, and so forth. However, the complexity of these speeches, according to the Figures presented here, indicate a dramatic change in the subconscious thought processes that drive these speeches. A cursory examination of the underlying LIWC scores indicate that retiring members begin to focus less on determining the causation of topics under discussion, and likewise became less interested in examining the insight that we may gather from different perspectives.

[Insert Figure 1 about here]

While cognitive complexity and inconsistency are the key covariates of interest here, several other controls are included in the model based on the literature examining the choice to retire from political office. These covariates may be separated specifically into the three broad categories – including demographic (such as age, gender, and race), institutional (such as being either a party or committee leader in the chamber, congressional term, and minority party
memberships), and strategic considerations (such as ideological location, or electoral pledges to retire after a set amount of time). Table 1 provides a descriptive breakdown for each of these variables, as well as their hypothesized affect on retirement based on the literature. A positive sign indicates the variable should increase the likelihood of retirement, while a negative sign would indicate an increased chance the member chooses to remain into the next term. The model also includes an interaction term measuring marginal effect of ideological extremity within the Republican Party. I hypothesize that members will take into account the benefit of remaining in the chamber, as they grow ideologically distant from the median voter. This should, theoretically, keep more extreme members of the Republican Party from leaving, while incentivizing moderate members to exit as they lose power in the party.

[Insert Table 1 about here]

**Predicting the Announcement to Retire**

In order to examine whether public officials signal retirement through their communications on the floor of the chamber, we require a modeling strategy that can account for how behaviors change depending on discrete choices made at a given time point leading up to a decision. In such cases, Table 2 presents a generalize mixed-effect logistic regression of selecting retirement with a varying intercept and varying slope. The model is fit with varying slope and varying intercept for each Congressional term, as well as a nested time counter for each month left in the term. The model’s slope is allowed to vary for each individual member in the sample as well. An examination of a Hosmer-Lemeshow goodness-of-fit test indicates that there are no significant differences between the model and the observed data, indicating a well-fitted model.

[Insert Table 2 about here]
Starting with the primary variable of interest, the initial hypothesis was that the level of cognitive inconsistency displayed in speeches positively affects the probability of retirement. This stems from the theory that representatives considering retirement are more likely to cognitively shirk when speaking, as they are no longer bound to consider the opinions of their electorate. The results in Table 2 support this hypothesis. An increase in the level of cognitive inconsistency a representative presents in floor speeches increases the marginal likelihood of retirement by 3.379 points. Figure 2 shows how cognitive inconsistency increasingly affects the marginal probability of retirement. Overall, an increase from zero to one on the cognitive inconsistency scale is found to increase the probability of retirement by 4.14%, shifting from a probability of 8.37% with zero cognitive inconsistency to 12.5% when an inconsistency score of one. Representatives with an average level of inconsistency are 10.30% more likely to be seeking retirement, an increase of approximately 1.95% compared to representatives with no discernable inconsistency.

While inconsistency is signed appropriately in the model and acts as hypothesized, the results for cognitive complexity in Table 2 equally interesting to examine. For members seeking retirement we would expect for cognitive complexity to increase as representative’s views severe from electoral concerns, which generally require a degree of determinism in order to justify their views to constituents. A shift in complexity, as the results in Table 2 show, results in an increase in the likelihood of announcing retirement by 1.201 points. Representatives, on average, were 9% more likely to choose retirement as their cognitive complexity scores increased, based on the findings in the model; providing a secondary confirmation for cognitive shirking. If representatives normal behavior is to consider their constituents when making a determination of
their language, then once the electoral bonds are severed, we should expect that the complexity of an individual representative should increase as they try to readjust to a new equilibrium point now that they no obligation to consider constituency. Thus, the level of integration and differentiation should change, and increase as representatives attempt to rationalize how they will make decisions if they do not have to concern themselves with constituent reactions.

Along with the measures of cognition included in the model, several other factors included in the model were found to increase the likelihood of a retirement announcement, based on the data. As should be expected, there is a strategic element of timing involved in seeking retirement from office. In particular, there was a clear partisan difference in retirement in the sample, with Republican members having a much higher likelihood of retirement compared to their Democratic counterparts. As we see in Figure 3, Republicans and Democrats begin the term with similar likelihoods of announcing retirement, however the likelihood of announcing quickly increases for Republicans while Democrats probability decreases slightly. Finally, some results such as age, pledging retirement, and favorability in the electorate display consistent patterns found in the literature previously published on retirement.

[Insert Figure 3 about here]

Conclusion

In order to be effective as representatives of the public, political actors must communicate about the ways in which they are standing for the public’s interests and the public good. Modern representatives, likewise, use communication as a tool to inform the public about their current standings on policy and to signal to constituents their current goals. Strong, consistent signals are key if a representative is going to maintain office over time, and representatives must be careful not to ‘play their hand’ too early or else they risk losing support
with the public. Cognitive consistency, as tested here, is a useful methodological tool for political scientists interested in predicting whether a representative is drifting in their convictions or ideological stances, which can be useful in indicating whether a representative is signaling to the public that they are prepared to exit or seek other opportunities.

Here, I examined monthly speeches made by members of the House of Representatives on the chamber floor to determine whether their use of language can be used to predict whether they were preparing to retire. The contribution of the results here, that cognitive inconsistency as measured using language used by exiting officials, is a significant methodological tool for researchers interested in legislative exit specifically, but also elite behavior generally. Future research should take time to consider whether public officials’ use of language can be utilized to indicate shifts in political stances, beliefs, or party agendas. Just as significant, the primary theory backed up by the findings here is that representatives who display a greater level of cognitive inconsistency in their language are more likely to be considering retirement than their more cognitively stable counterparts. Representatives who are seeking retirement are also most likely to “cognitively shirk” by changing the way in which they think and speak about political questions as they move closer to retirement. Examining whether speech patterns signal legislative exit in this way allows us to potentially forecast retirement of representatives, thus adding to our understanding of a representative’s behavior while in office.

Despite a high level of consistency in the reelection of congressional incumbents, we know that representatives exhibit a high degree of uncertainty about their prospects for maintaining office (Fenno 1978). By signaling retirement, legislators are providing themselves with an opportunity to be less accountable to public pressure, thus changing the nature of what it means to be “representative.” Legislators, unburdened by the uncertainty of voter approval in the
next election, may engage in more “risky” behavior since the hazard of electoral defeat has been removed from the decision-making calculus. This may lead a retiring representative to rethink their role within the representative system; engaging in more “trustee” style actions and allocating more resources to projects they believe will significantly impact their districts after they leave office. By focusing on the consistency and complexity of language provides us with a greater understanding of discourse affects the representational role of political actors. A key aspect of home-style is determining how representatives communicate with constituents in order to cultivate a personal vote. However by examining the level of cognitive differences between representatives speeches over time, we may be able to better indicate retirement by watching more closely how a representative speaks to the public, and whether they are more open to “speaking their mind” the closer they are to exiting the legislature.
References


Table 1: Descriptive Statistics and Assumed Hypotheses for Independent Variables

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<th>Variable</th>
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<th>St.Dev</th>
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<th>Min.</th>
<th>Max.</th>
<th>Range</th>
<th>Hypothesis</th>
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<td>0.680</td>
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<td>1</td>
<td>2</td>
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<td>29</td>
<td>90</td>
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<td>0</td>
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<td>1</td>
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<td>47.900</td>
<td>100</td>
<td>52.100</td>
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<td>Redistricted: 2000</td>
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<td>0.391</td>
<td>0</td>
<td>0</td>
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<td>1</td>
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<td>0.327</td>
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<td>0</td>
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<td>1</td>
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<td>0.166</td>
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<td>0</td>
<td>0.936</td>
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Table 2: Generalized Mixed-Effect Logistic Regression of Choice to Retire for Political Office

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<td>Term Time</td>
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<tr>
<td>Congressional Term</td>
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<tr>
<td>106th Congress</td>
<td>11.102 ***</td>
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</tr>
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<td>107th Congress</td>
<td>18.801 ***</td>
<td>1.582</td>
</tr>
<tr>
<td>108th Congress</td>
<td>28.044 ***</td>
<td>1.744</td>
</tr>
<tr>
<td>109th Congress</td>
<td>44.864 ***</td>
<td>3.385</td>
</tr>
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<td>Cognitive Inconsistency</td>
<td>3.379 *</td>
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<td>Cognitive Complexity</td>
<td>1.201 *</td>
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<td>Age</td>
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<td>Female Member</td>
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Age*Congressional Term     -0.965 * 0.383
Republican*Ideological Extremity -1.805 1.366
(Intercept)                  -22.036 *** 5.363

**Random Effects**

τ₀₀, TTime²:Congress 0.899
τ₀₀, Congress 686.106
ρ₀₁ -1.000
NₜTime²:Congress 120
N_Congress 5
N_Members 141

Observations 11616
Tjur's D .800
Hosmer-Lemeshow Test \( \text{Chi}^2 = 0.393 \)
AIC 1392.756

**Notes**  
* p<.05  ** p<.01  *** p<.001
Figure 1: Cognitive Inconsistency of Retiring and Remaining Members, by Time Left in the Congressional Term

Figure 2: Predicted Retirement by Cognitive Inconsistency of Member’s Rhetoric
Figure 3: Predicted Retirement of Democrats and Republicans by Time Left in the Congressional Term

\[ i \] I choose to differentiate here between retirement and resignation based upon the rationale for deciding to leave office. Public officials may choose to exit the public political arena for a variety of reasons, but in order to do so this requires they retire from political office. Contrarily, political actors may resign from office for a variety of reasons. In such instances the representative has not chosen to exit politics, just replace one position for another; thus allowing them to pursue other political ambitions. Retiring public officials, however, officially end their political goal-seeking behavior.

\[ ii \] These speeches are perhaps most important because they can be viewed as an unfiltered venue for members to speak with constituents and highlight their concerns. Since these speeches are documented, however, members must also be careful to display a level of consistency in their rhetoric, which makes them impeccable for the examination here.

\[ iii \] Speeches were collected utilizing python web-scraping coding specific to gathering data from the congressional record as presented by: http://www.congress.gov. Further
information on the data collection procedure can be provided by the author upon request, or can be found in an online appendix provided at: https://www.su.edu/faculty-staff/faculty/michael-romano/.

Specifically, Owens and Wedeking (2012) and Gruenfeld (1995) suggest identifying ten measures commonly associated with cognitive complexity. More information about LIWC and the indicators utilized to calculate cognitive consistency are provided in an online appendix provided at: https://www.su.edu/faculty-staff/faculty/michael-romano/.

LIWC is a text-analysis tool developed by psychologists in order to analyze language selection and make judgments on the cognitive processes of individual subjects. More information about LIWC can be found at: http://www.liwc.net

Cognitive inconsistency, as originally measured, varied between 0 and 3.932; however only a small number of cases display inconsistency higher than one. Binding the variable was not found to significantly affect the estimators or model according to alternative model specifications.